

A STUDY ON USING SIMULATION BASED TEACHING & TRAINING TO ENHANCE THE EDUCATION SYSTEM IN MANAGEMET

VIJAY.J MOHAMMED AMAAN A.R

Department Of Master Business Administration

Panimalar Engineering College ,Chennai, Tamilnadu , India

vijayectc@gmail.com¹, amaan97@outlook.com²

ABSTRACT

As per technology advancement education system also improved in way of teaching method but they not major impact in a way of students knowledge and capabilities... now past two decades all over world used most effective way teaching is called as simulation based teaching .in this study to analysis the students impact traditional v s simulation way of teaching along with the questionnaire method (descriptive study). Based on this study students are more interact with the simulation based education and also each every person easily adopt the simulation based education.in india most of medical education sector only used simulation based education and also proved out come of the students standards. We are suggesting to the all the education sector may include the simulation based education in way of deliver the high quality of the education .and also reduce the consumable things .

KEYWORDS: *simulation based education, traditional based education ,impact ,quality education .*

1. INTRODUCTION:

All over the world past two decades using the simulation based education in medical education ,engineering ,schools ,and driving schools, aerospace etc....simulation is the simulator product ,software solution ,that used with the educational curriculum to integrate the education delivering

Past education method used some pervious case study now the technology advancement they are used simulation . across the world adopted the simulation based studies last two decades but india not a major change in the simulation system without some educational institution . so we are analysis the problem in this study . to improve the educational system.

2. REVIEW OF LITERATURE

The review of some of the important studies are presented below

1.Simulation-Based Learning in Higher Education: A Meta-Analysis 2020

In this study evaluating the range of knowledge and practice the complex skills in the higher education. In the type of meta analysis in this study 145 studies are evaluated and giving the results . simulation-based learning environments to facilitate complex skills. The simulations had a large positive overall effect: $g = 0.85$, $SE = 0.08$; CIs [0.69, 1.02].

2.Using Simulation-Based Training to Enhance Management Education 2017

In this study they are suggest simulation based study and training method offer many advantages as an approach for the management education .in this study we providing how to best to implement the simulation based education in the classroom . in this study our hop is will increasing the high quality simulation based education and improve the performance of management and organization

3.Effectiveness of simulation-based nursing education depending on fidelity: a meta analysis 2016

In simulation based nursing education in increasingly popular approach in 21 century. It provide the opportunities to practice the clinical and practices in various scenario and various time . in this way we can practice n number of time . However, simulation approaches fall along a technology advancement they are available from low-fidelity to high-fidelity simulation. The purpose of this study was to determine the effect size of simulation-based educational interventions in nursing and compare effect sizes according to the fidelity level of the simulators through a meta-analysis

4. Investigating the Effect of 3D Simulation Based Learning on the Motivation and Performance of Engineering Students 2010

Simulation-based Learning (SBL) was used in Machining Technology, in the engineering sector a sixty hour module for second year engineering students, The aim of this study was to investigate the effect of SBL on learners' motivation and performance. In assessing students' motivation, we adopted a framework based on the Self-determination Theory (SDT), chosen on account of its comprehensive treatment of the relationship between students' perceived needs satisfaction and their motivation

5. Simulation in education and training 2009

Simulation based education important in some aspect of the training and educational fields . such as driving school,aviation , healthcare and etc....in current situation its included in the all the fields in way of training , it is increasingly moving away from traditional large hardware systems

3.1.OBJECTIVES OF THE STUDY

- **Primary objective** : to know about effectiveness of the simulation based teaching.
- **Secondary objective:** simulation based student trained student standards .
- Association between the education and simulation

3.2 Need For The Study

- to identified the students wants education system method .
- to give an idea to implementing the simulation based education all the education system.

4. METHODOLOGY

Research Design: Descriptive Research Design.

Research Approach: The research approach is quantitative approach.

Setting of the study: The setting of the study is randomly selected staffs in engineering,medical(MBBS,MD,MS,BDS,MDS, BSC&MSC IN MEDICAL RELATED COURSES), ARTS AND SCIENEC,AND ETC
....

Population: staffs of both gender in a all the selected areas.

Sample and sample size: there is time limitation so we only able to collected 30 sample only

Sampling technique: convenient sampling through the phone call interview method

After selecting the sample, demographic data was collected and the data was analyzed by using descriptive statistics.

6.MAJOR FINDINGS OF THE STUDY

Table 1

Figure 1

Shows the gender out of the 30 sample ,53% of the respondents are male , 47% of the respondents are female and majority of respondents male .

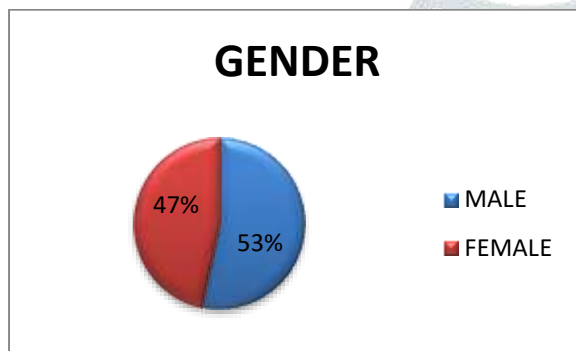


Figure 2

Regarding educational qualification out of 30 samples ,50% sample under the group UG , 23% sample were under the group of PG.14% samples were under the group of PHD,13% samples were under the other qualification .

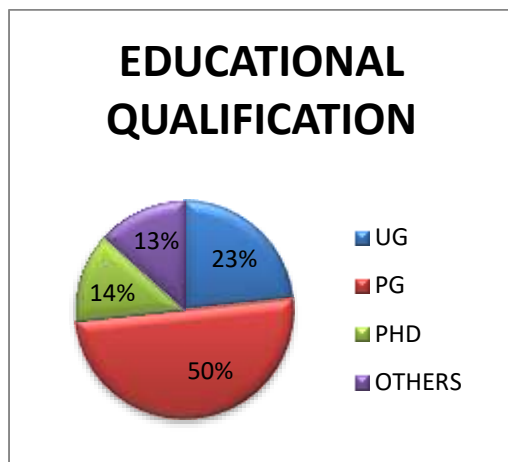


Figure 3

Regarding the educational experience out of 30 sample 33% people are up to 5 years , 33% sample are up to 10 years ,17% people are up to 15 years , 10 % are up to 20 years and 7% people are up to above 20 years educational experience staffs and etc..

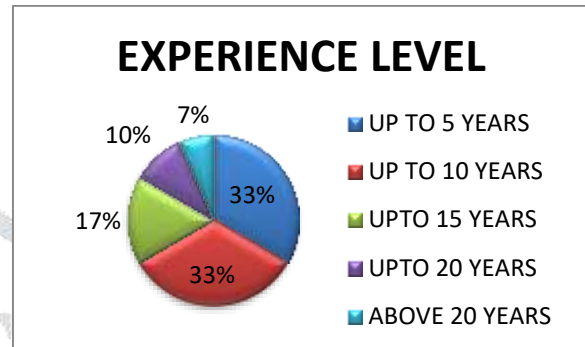


Figure 4

Regarding the educational sectors 67% of the respondents are medical educational sectors , 13% are engineering sectors ,13% of the are management and 7% are other teaching sectors .

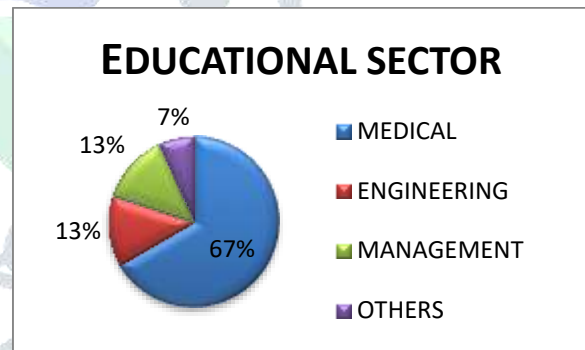


Table 2

In this table results showing about the traditional education vs simulation based education using the paired T test . all the questions are taken from the staffs in the traditional education and also taken simulation based education outcomes through the phone call . question are self structured question used .answer is based on five point likert scale based on the level of the skills . 5-skills are very

high ,4-high , 3.medium ,2- low , 1- very low . all

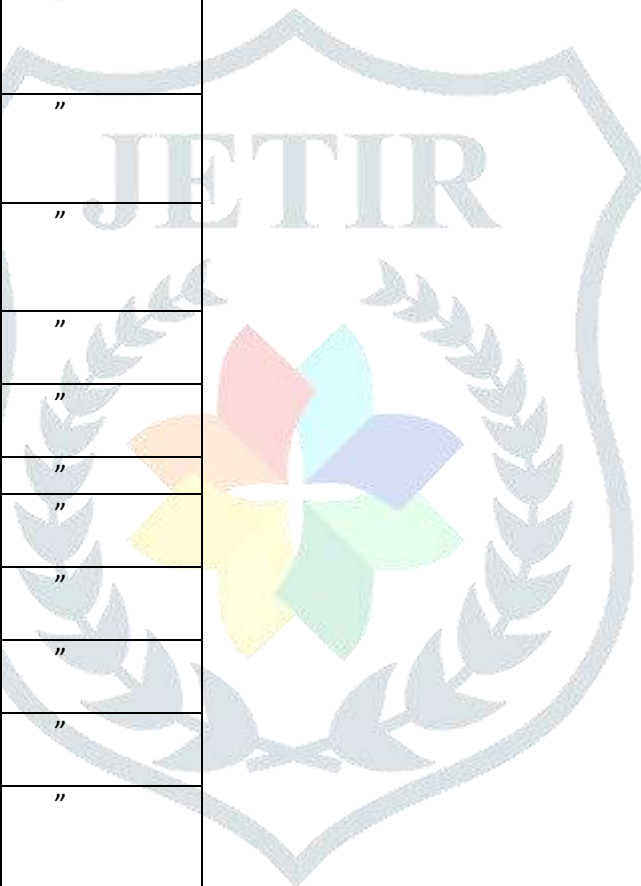
Q.NO	QUESTION (TARDITIONAL VS SBE)USED LIKERT SCALE	T VALUE	RESULT
1	LEARNING SKILLS	16.1093	SIGNIFICANCE DIFFERENT FIND
2	REASONING ABILITIES	11.3793	"
3	ERROR REDUCING AFTER TRAINING	11.2763	"
4	CONFIDENCE LEVEL OF STUDENTS	12.6871	"
5	CRITICAL THINKING ABILITIES	13.490	"
6	ANALYTICAL AND EVALUATING SKILLS	16.1093	"
7	OPEN ENDED MIND	7.5765	"
8	ENCOURAGE LEVEL	10.2506	"
9	REAL TIME FEEL	31.1614	"
10	INTRACTION LEVEL	9.1462	"
11	UNDERSTANDING LEVEL	11.7882	"
12	PRACTICAL EXPOSURE LEVEL	16.3092	"
13	GAIN OF KNOWLEDGE	8.8039	"
14	STUDENTS STATISFACTION LEVEL	8.8933	"
15	OUT COME STUDENTS STANDARDS	2.4105	"

the answer are taken based on above said method . all the answers are tabulated and analysed through the paired T test with alpha 0.05 level . in this analysis we are find each and every skills are significant different between the traditional education and simulation based education . in this analysis we are find the major positive responds to wards the simulation based education .in this

analysis we are find the students learning and practical skills are hugely developed through the simulation based education .

As per the results all the students and staffs are easily adopted the simulation based education .

In this analysis t value is 12.4927 its significance difference between the traditional and simulation based education.



5.CONCLUSION

Indian government realized the simulation based education system so they are issued the regulation for the medical collages in 2019 (as per NMC) guidelines need to be setup the simulation based education all the medical colleges . based on this study we are finding the major positive impact on the students due to simulation based education .SBE also used for increasing the skills of the staffs and the students .based on this study we are suggesting the all the educational management (engineering ,medical ,arts& science, and etc...) implementing the simulation based education . in this way they can provide the high quality of education . and also integrated the curriculum with simulation so we can provide the international standard of education .

6.REFERENCE

- 1.[sciencedirect.com/science/article/abs/pii/S1876139915000535](https://www.sciencedirect.com/science/article/abs/pii/S1876139915000535)
- 2.<https://educationaltechnologyjournal.springeropen.com/articles/10.1186/s41239-020-0181-y>
3. <https://laerdal.com/in/>

