



# “A comparative study between Traditional Teaching Learning Methods (TTLM) and Blended Teaching Learning Methods (BTLM) via using Social-media platforms for Physiology among Medical Students”



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## Introduction

Technology integration in education has revolutionized traditional classroom settings, offering new avenues for teaching and learning.

Social media (SM) is one of the most powerful tools of communication in the recent era. It is an extracurricular way of enhancing learning and teaching experience among medical students and educators.

The students and educators both have appreciated the role and availability of social media for their easy communication and continuous support for their educational activities. It has crossed the boundaries of classroom and engages the students in their formal and informal learnings. Different types of informations can be shared through these social networking platforms in the form of texts, videos, pictures, audios and references.

## Aim

Access the Effectiveness of E-Learning as an adjunct to the traditional Teaching and Learning Methods among Phase-1 MBBS Students.

## Objectives

### Primary Objective:

- To assess the effectiveness of Social media platforms in delivering knowledge to Phase-1 MBBS students.

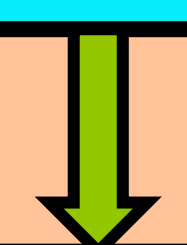
### Secondary Objectives:

- To compare the improvement of knowledge gain through E-learning along with TLMs and traditional didactic lecture.
- To access the collation of perception of learners about E-learning through various Social Media platforms.

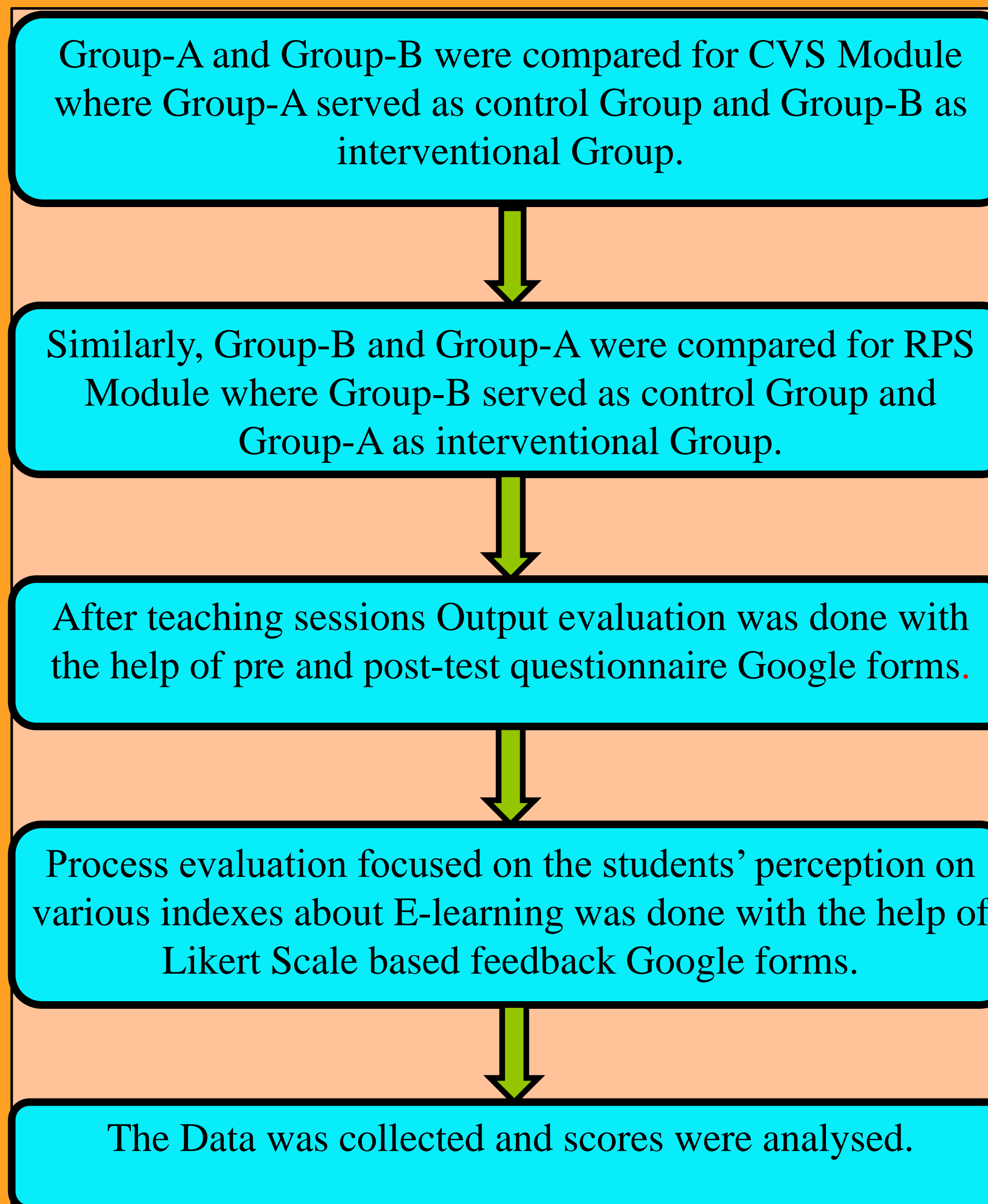
## Methodology

**Note:-** This Study was conducted in the Department of Physiology at MVASMC, Basti after obtaining IEC Clearance from the Institute. **IEC Approval Letter number:-** ASMCB/ETHICS/020. Informed written consent was taken from all the study participants.

Comparative cross-over analytical interventional study. Sample Size= 80



Two groups: Group-A=40 Students  
Group-B=40 Students  
Students in each Group were selected randomly.



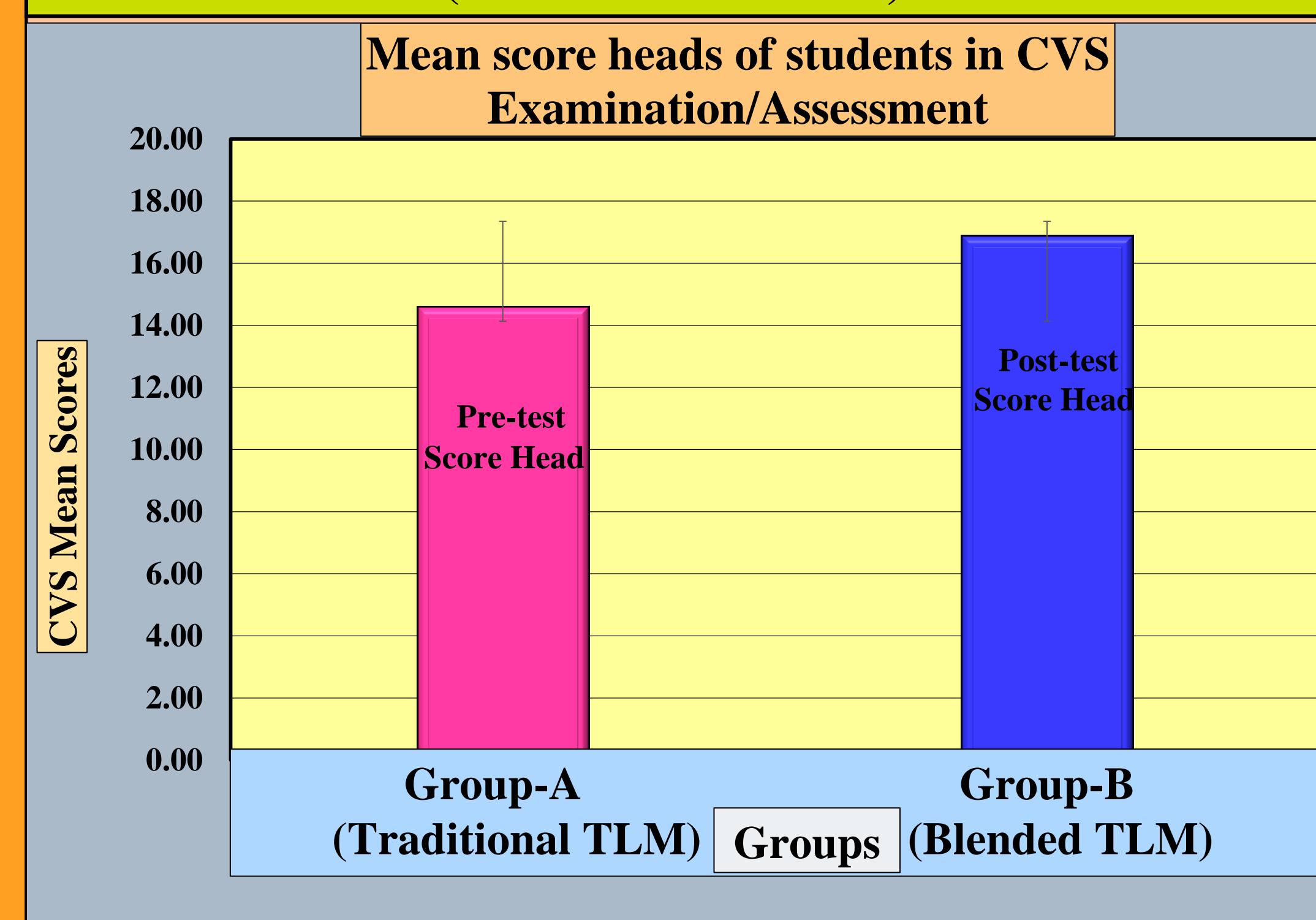
## Results and Discussion

**Table 1: Distribution of the group of students under Traditional & Hybrid/Blended Teaching Learning Methods according to their Age and Gender.**

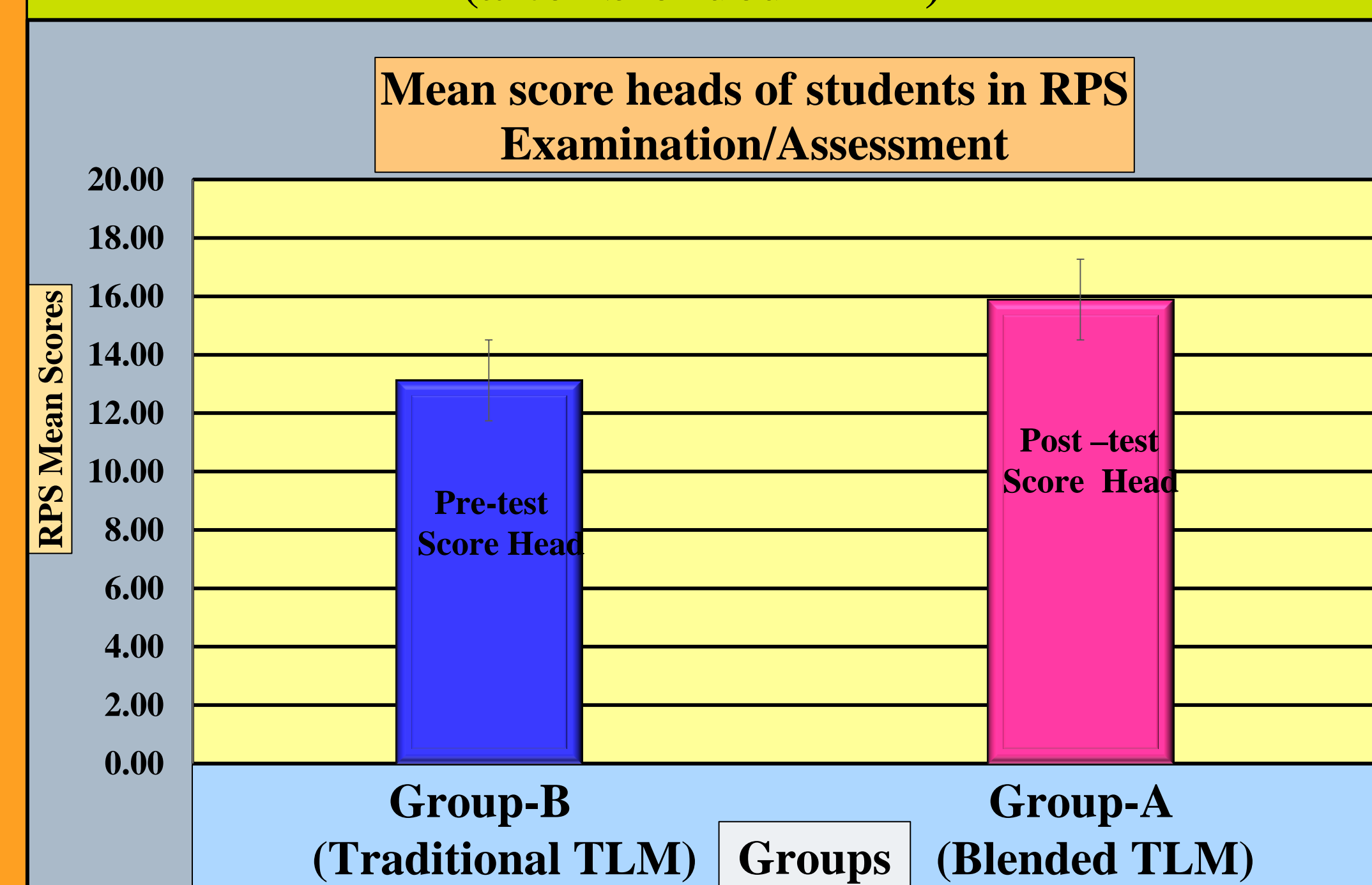
Variables	Traditional TLM (CVS)	Traditional TLM (RPS)
	Hybrid TLM (RPS)	Hybrid TLM (CVS)
	Group-A	Group-B
Age, Mean ± SD	21.18±2.23	21.37±1.70
Male, N (%)	22 (55.00)	26 (65.00)
Female, N (%)	18 (45.00)	14 (35.00)
Total (%)	40 (100.00)	40 (100.00)

TLM=Teaching Learning Method, CVS=Cardiovascular System, RPS=Respiratory System

**Figure 1: Mean scores of students after CVS Assessment in Group-A (after Traditional-TLM) and in Group-B (after blended TLM)**



**Figure 2: Mean scores of students after RPS Assessment in Group-B (after Traditional-TLM) and in Group-A (after blended TLM)**

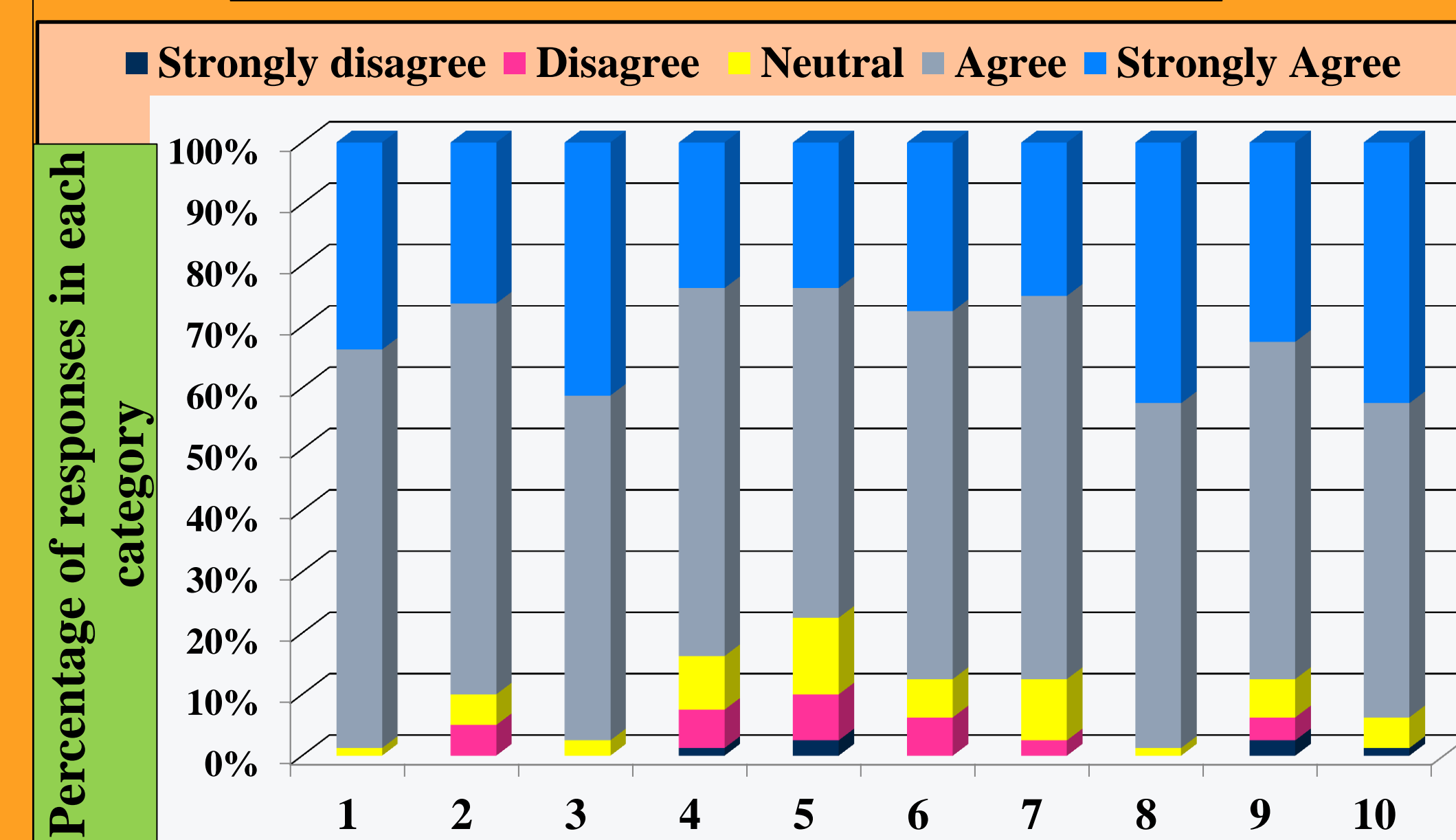


**Table 2: Distribution of students based on Examination/Assessment scores**

Exam/Assessment Questions	Control Group (n= 40 ) Mean ±SD	Study Group (n =40) Mean ±SD	p-value
Topic-1 (CVS)	14.60 ±4.24	16.88±2.79	P<0.000 *
Topic-2 (RPS)	13.40±4.88	15.86±4.92	P<0.000 *

In Table 2 Significant difference (p< 0.05) was observed between the examination scores of Group-A (Traditional) and Group-B (hybrid/blended Learning).

## Medical students' perception for interactive lectures



## Questions

Graph depicting comparative score of the students' opinion about the satisfaction level of Blended TLM based on 10 parameters.

## Conclusion

The study demonstrated that Blended TLM was more effective way of understanding and comprehension as compared to Traditional TLM and the students in Blended TLM had better academic performance after being exposed and guided properly on Social Media platforms.

Social Media has immense potential to enhance its role in educational settings. However to further enhance their utility and optimal benefits, sharing the right amount and quality of information keeping in mind the ethical principles and professional standards for SM use at institutional levels are the few challenges that need to be addressed.

## Key References

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## Take Home Message

Learners can develop analytical skills and have meaningful learning even for difficult topics in curriculum through Blended TLM using Social Media (SM) platforms which promotes student centric, self directed learning.