



# Impact of reflection writing on the learning ability of Indian medical students

Rekha Jiwane<sup>1,\*</sup>, Vivekanand Gajbhiye<sup>2</sup>, Sandip Hulke<sup>1</sup>, Ruchi Singh<sup>1</sup>, Ragini Shrivastava<sup>1</sup> & Varun Malhotra<sup>1</sup>

Department of Physiology AIIMS Bhopal , 2 Department of Anatomy, RKDF Medical Collage, Bhopal, India

## AIMS & OBJECTIVES:

- To develop reflective writing skills in first year MBBS students
- To compare the effectiveness of post lecture reflective writing to didactic lecture.
- To compare effectiveness between individual and group reflective writing.

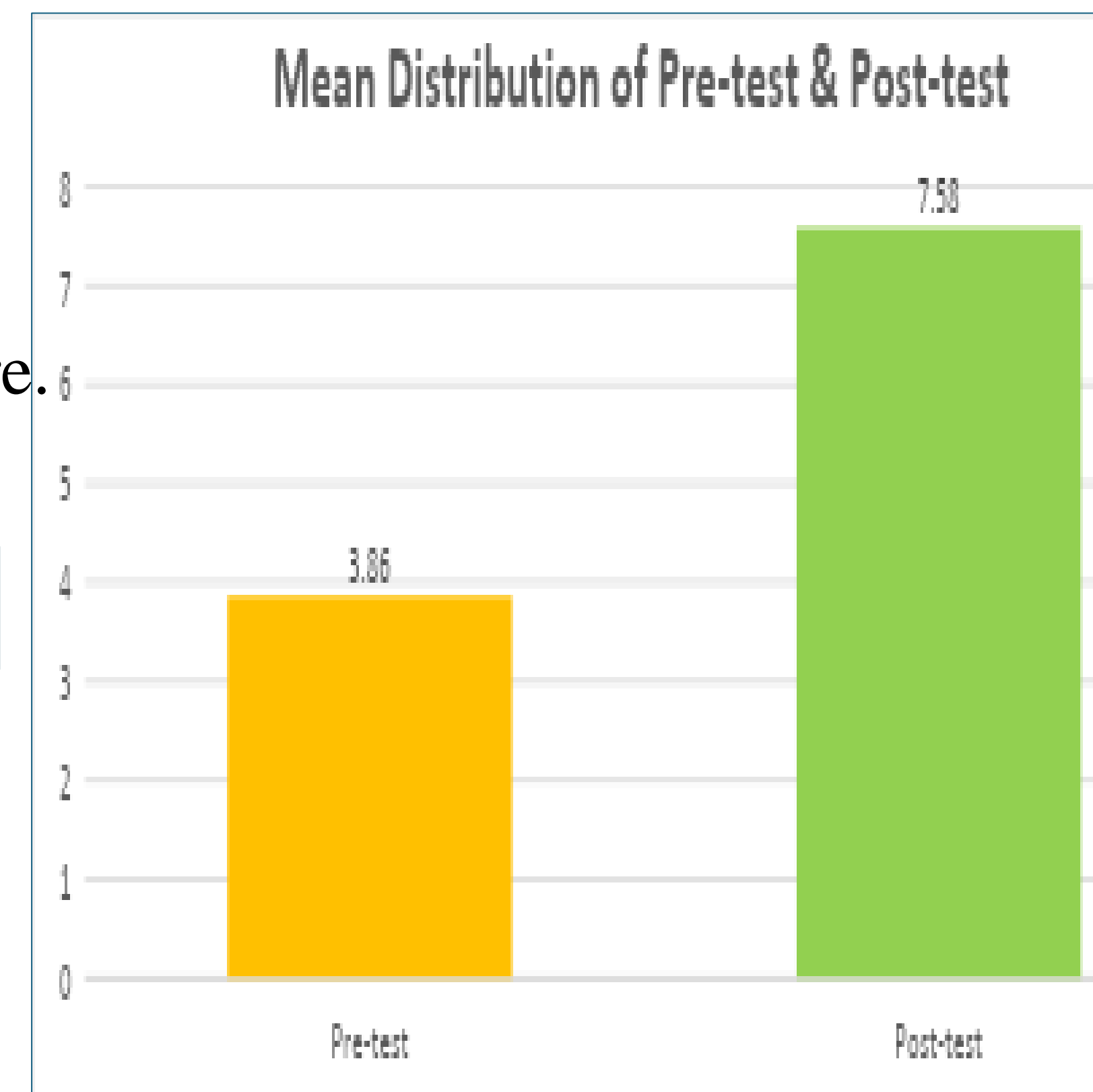
## MATERIAL AND METHODS:

**Study design:** This cross-sectional study was conducted in the Department of Physiology at AIIMS, Bhopal.

**Participants:** The study involved 124 first-year medical students.

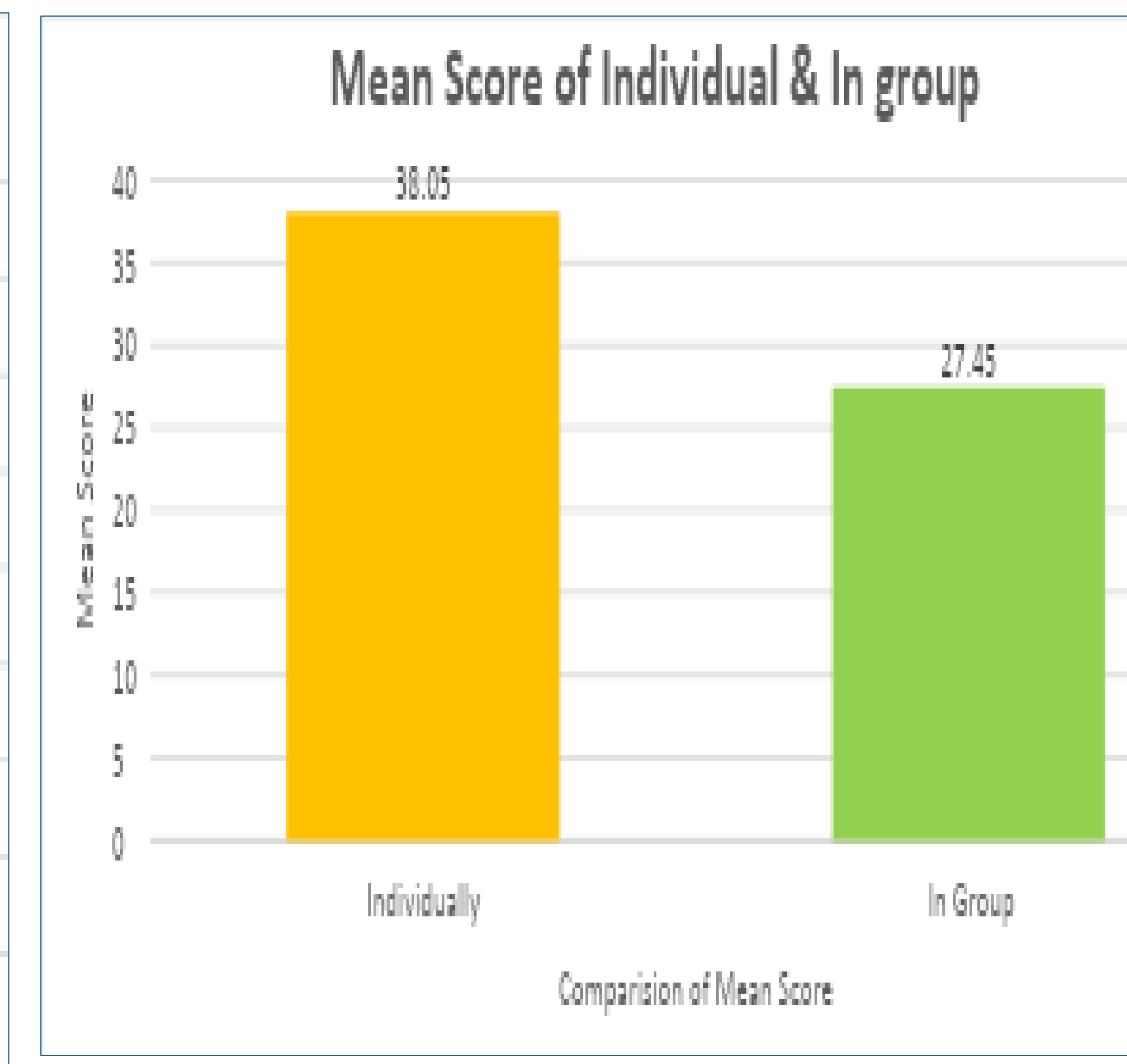
Ethical considerations was taken (Approval number: AIIMS/BPL/RRB/Approval/2022/25).

**Intervention:** Preparation and counseling: Before the study commenced, all students received counseling regarding the importance and utility of reflective writing in their academic careers. All students participated voluntarily in the study



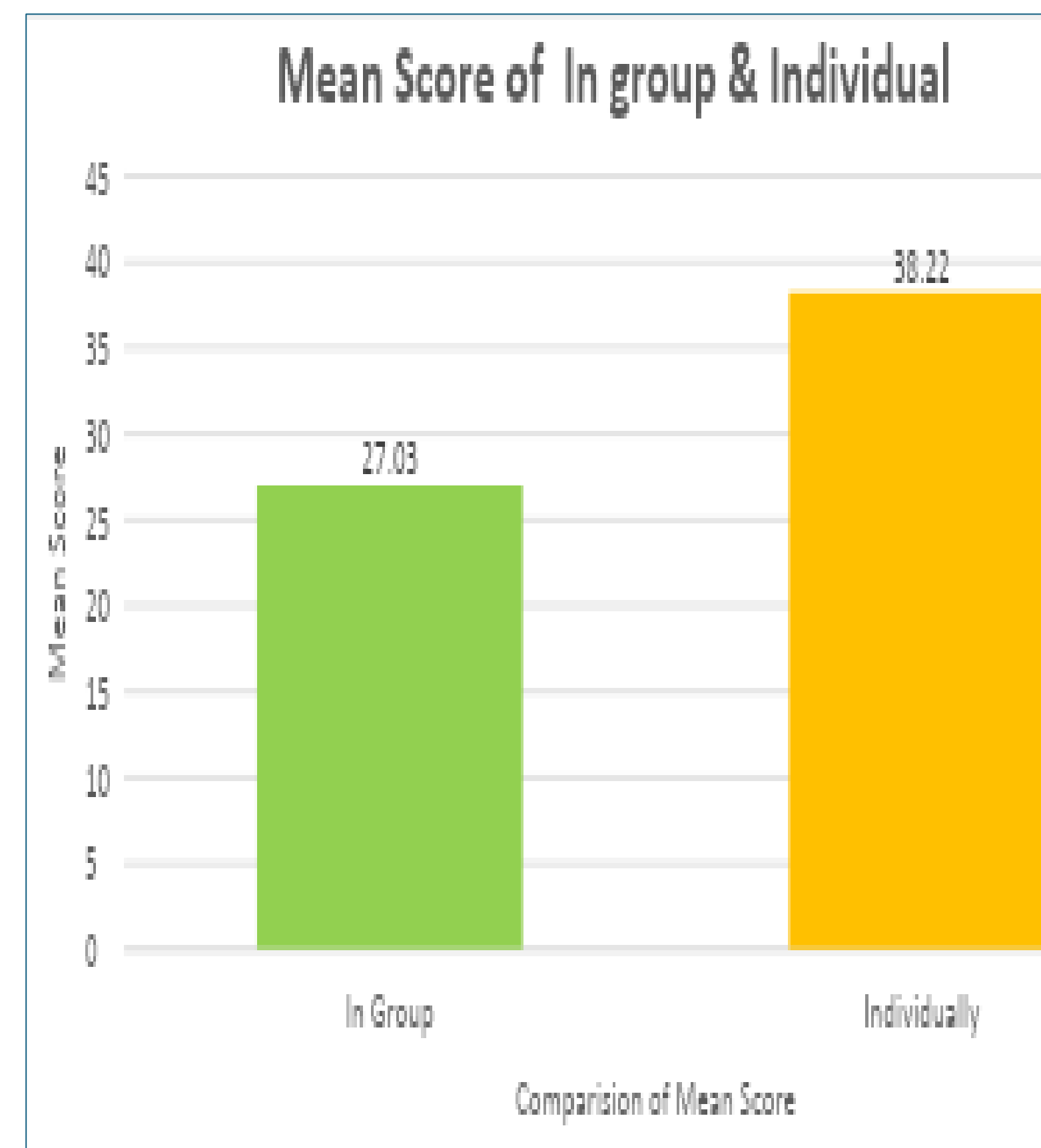
Graph 1

Comparison of pre-test and post-test scores: The mean and standard deviation for the pre-test were  $3.86 \pm 0.86$ , while for the post-test; they were  $7.58 \pm 1.01$ . The t-test value was 36.93, with a p-value  $< 0.001$  indicating statistically significant differences between the pre-test and post-test scores



Graph 2

Comparison of individual vs. group reflections: The mean and standard deviation for individual reflections were  $38.05 \pm 4.41$ , while for group reflections, they were  $27.45 \pm 3.93$ . The t-test value was 15.21, with a p-value  $< 0.001$  indicating statistically significant differences between individual and group reflections



Graph 3

The mean and standard deviation for individual reflections were  $38.22 \pm 4.64$ , while for group reflections, they were  $27.03 \pm 2.87$ . The mean difference between group and individual reflections was 11.19. The t-test value was 15.44, with a p-value  $< 0.001$ , indicating statistically significant differences between group and individual reflections

## CONCLUSION

Individual reflection leads to better academic performance compared to group reflection. This suggests that solitary reflection allows for deeper internalization and synthesis of material. Incorporating reflective writing activities into medical education provides valuable opportunities for students to process experiences and addresses emotional challenges and enhances professional growth.

## ACKNOWLEDGMENT

I express my gratitude toward ethical committee of AIIMS Bhopal for giving me permission to do the study . It will give me great pleasure to express my deep sense of gratitude to faculty members of physiology department as well as students of first profession how help me lot to complete this project

## REFERENCES

- Schön, Donald A. The reflective practitioner: how professionals think in action. New York: Basic Books. 1983.
- Loughran J. Effective reflective practice: in search of meaning in learning about teaching. J Teacher Edu. 2002;53(1):33-43.
- Cochran-Smith M, Lytle S. Relationships of knowl
- Edge and practice: teacher learning in communities". Rev Res Edu. 1999;24(1):249-305. 4.Graber M, Kissam S, Payne V, Meyer A, Sorensen A, Lenfestey N, et al. Cognitive interventions to reduce diagnostic error: a narrative review. BMJ Quality & Safety. 2012;21(7):535-57.

## RESULT

**Data analysis** of pre-post-test through paired and unpaired When we compare mean pre-test and post-test scores of Group A and Group B. (maximum marks = 10) Students have less knowledge about reflection writing. When we explain them about reflection writing and they implement it. They found reflection writing is useful for their further academic performance. Students who are writing reflection in groups is evaluated after lecture performance of these students are not satisfactory as students who wrote their reflection individually.