

# Title: Assessing the Impact of Reciprocal Peer Assessment and Peer Feedback Activities on Medical Students' Confidence in the Pharmacology Exam.

Name(s) of Author(s): Dr. Mangesh Bankar, Dr. Sachchidanant Tewari

Dept. of Pharmacology, AIIMS, Raebareli.

## Background

- ❑ Students struggle with confidence in pharmacology exam due to the complexity of the subject matter
- ❑ Peer assessment involves students actively in the assessment process
- ❑ Few studies have assessed the impact of reciprocal peer assessment and feedback (RPAF) on medical students' confidence
- ❑ Hence, this study was conducted to explore the relationship between engaging in RPAF and their 'self-reported confidence levels, specifically in the context of pharmacology exams.

## Objectives:

**Primary objective:** to evaluate the effectiveness of the RPAF activities on self-reported confidence levels about the Pharmacology exam.

### Secondary objectives:

1. to explore factors which may influence the baselines confidence scores
2. To know the perceptions of medical students about the RPAF activity

## Methodology

- ❑ **Study type:** Questionnaire based, pre and post-test design, intervention study
- ❑ **Study site:** Dept. of Pharmacology, AIIMS, Raebareli
- ❑ **Study Duration:** August 2024- Sept. 2024
- ❑ **Study population:** 96 second MBBS students

Routine Part completion test conducted

Pre-test in the form confidence questionnaire conducted  
Students were sensitized about the RPAF activity

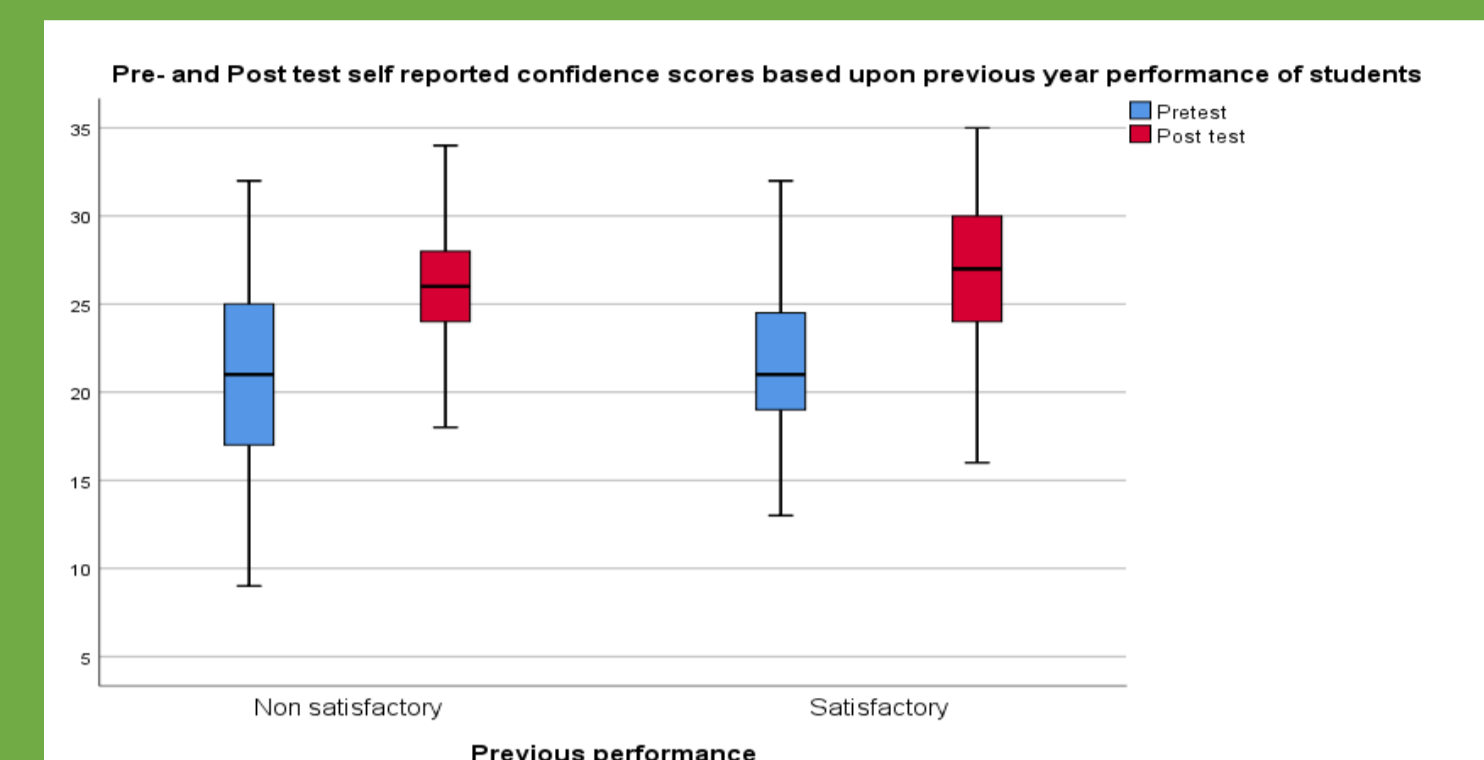
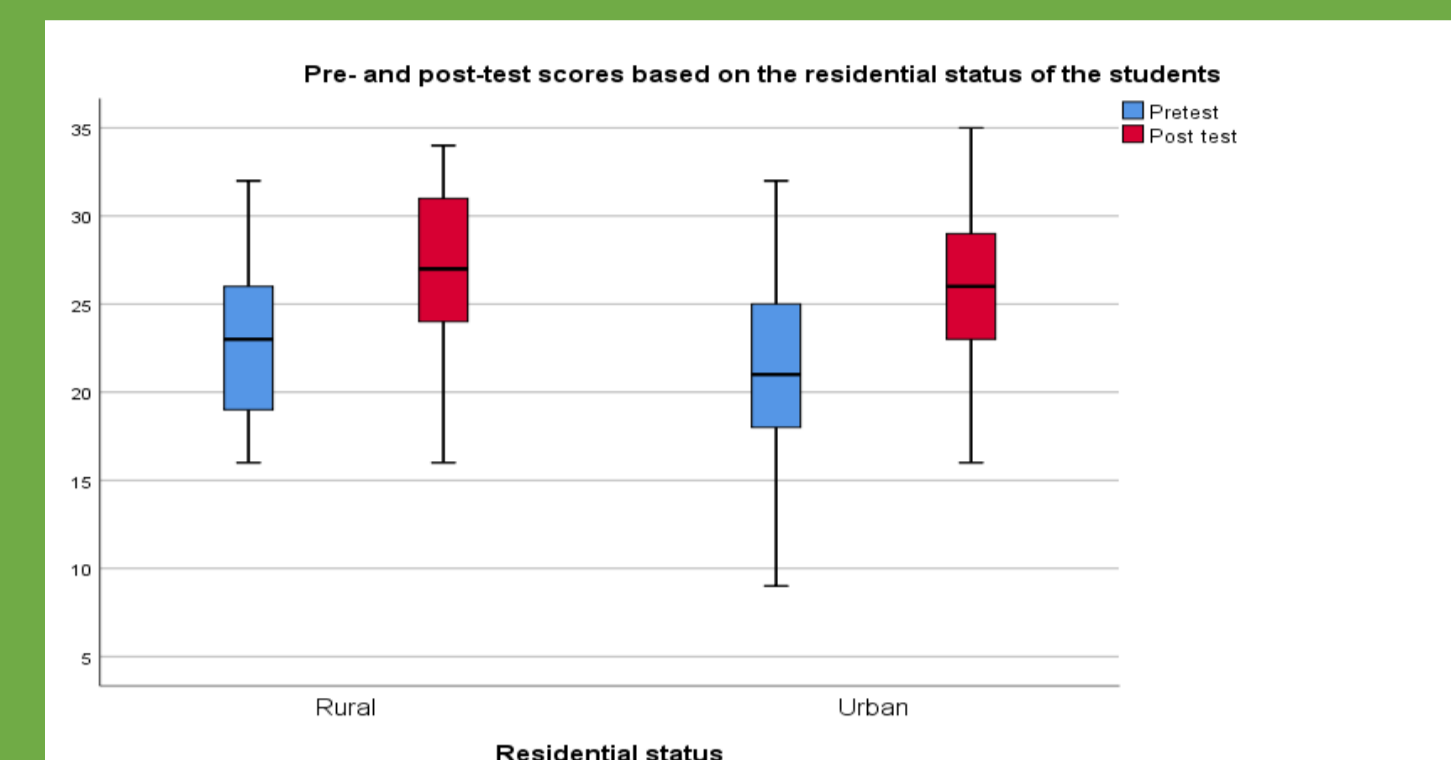
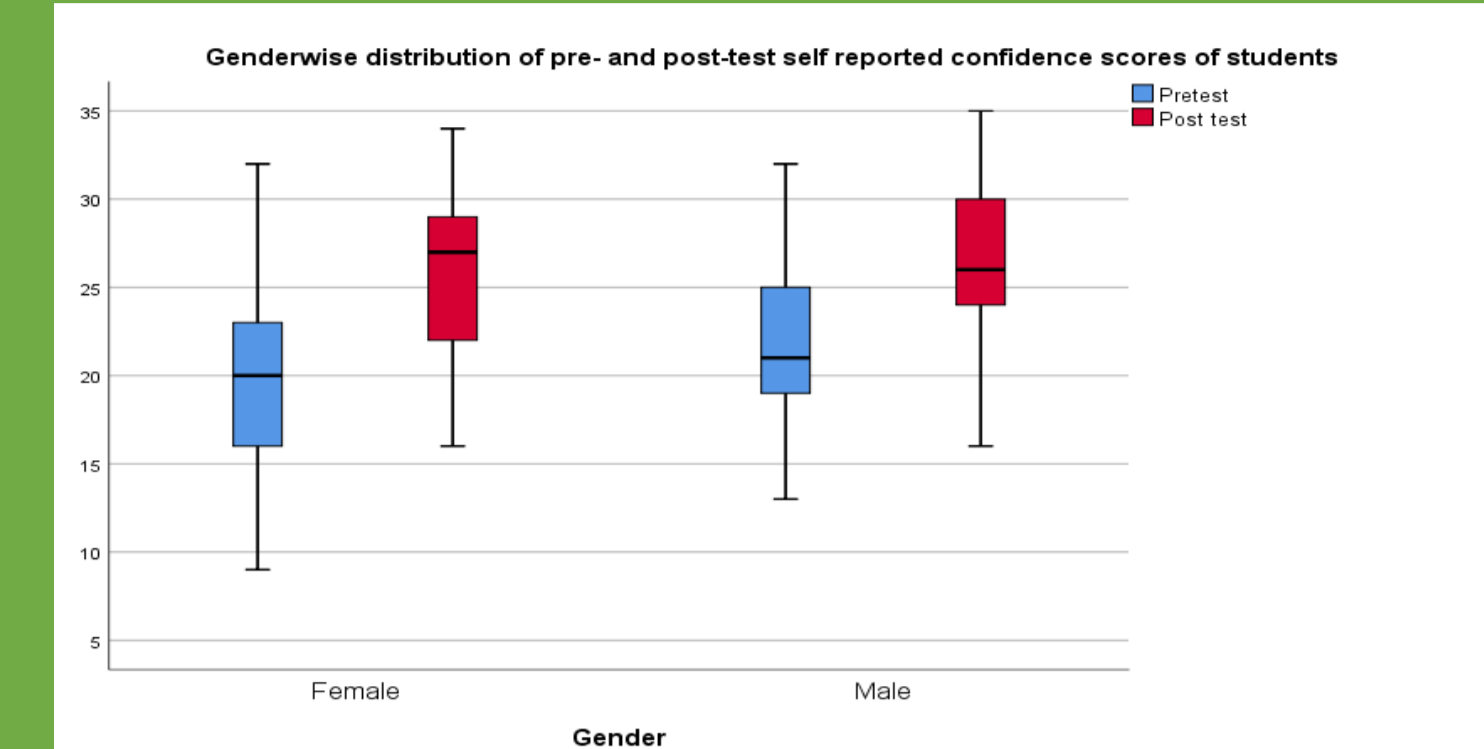
Model Answers were distributed.

Students evaluated the answer sheets in pairs and provided feedback after evaluation

Post test Confidence questionnaire and Perception questionnaire were administered

## Results

		N	Percent
Gender	Female	31	32.3%
	Male	65	67.7%
	Total	96	100.0%
Residential status	Rural	34	35.4%
	Urban	62	64.6%
	Total	96	100.0%
Previous performance	Non satisfactory	37	38.5%
	Satisfactory	59	61.5%
	Total	96	100.0%



### Comparison of Pre- and Post test self reported confidence scale scores of Students following intervention

	N	Mean	Std. Deviation	Minimum	Maximum
Pretest	96	21.71	4.847	9	32
Post test	96	26.25	4.262	16 <sup>a</sup>	35

a. Wilcoxon Signed Ranks Test, Z = -6.346, P = <0.001

### Medical Student Perception of Reciprocal Peer Assessment and Peer Feedback activity Questionnaire

Questions	SD	D	N	A	SA
1. Feedback received was constructive and helpful.	3 (3.13)	6 (6.25)	27 (28.14)	42 (43.75)	18 (18.75)
2. I was prompted to reflect my own performance by the RPAF activity	2 (2.08)	10 (10.41)	25 (26.04)	41 (42.70)	18 (18.75)
3. Peer assessment criteria were clear and easy to understand	1 (1.04)	10 (10.41)	31 (32.29)	39 (40.62)	15 (15.63)
4. I had no problem in offering feedback to my peers	3 (3.13)	17 (17.70)	32 (33.33)	27 (28.13)	17 (17.71)
5. I was able to pinpoint my areas of improvement following the activity	3 (3.13)	10 (10.41)	19 (19.79)	41 (42.71)	23 (23.95)
6. RPAF should be used in other subjects as well.	1 (1.04)	7 (7.29)	17 (17.70)	40 (41.66)	31 (32.29)

Student's Perception on RPAF Activity Values in parentheses indicate percentage; N=96; Likert scale: SD strongly disagree, D disagree, N neutral, A agree, SA strongly agree

## Conclusions:

- ❑ The RPAF was successful in improving student's confidence levels regardless of any demographic factor.
- ❑ Students perceived the RPAF activity well and found it to be a valuable learning experience.
- ❑ Further research could explore the long-term effects of reciprocal peer assessment and feedback session on academic performance and overall learning experience.

## References

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