



Original Research Article

EVALUATING THE IMPACT OF TUTORS TRAINING ON ENHANCING EFFECTIVENESS OF SMALL GROUP TEACHING AND STUDENT ENGAGEMENT

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ABSTRACT

Background: Small group teaching has become one of the best tools of learning anatomy and engaging the undergraduate medical students. Effectiveness of the small group teaching method often depends upon the tutors skills, experience, and approach. Many tutors may not be fully equipped with the knowledge and tools to maximize the impact of small group teaching on student learning outcomes and overall experiences. Hence, the present time demands more innovative techniques to be utilized for teaching Anatomy. The effort, adjustments and modifications made by the tutors to medical students needs to be evaluated and assessed at regular intervals for best results. The study aims to evaluate the effectiveness of a tutors training program designed to improve small group teaching strategies.

Materials and Methods: The study was conducted in HIMS Ataria, Sitapur, after Ethical approval from HIMS Institutional Ethics Committee. Informed consent was taken from students and tutors. A total 100 students was involved in the study. Validated questioners were prepared and data collection was done from Google form doing Pre- and post-tests. Data analysis was done with Excel software.

Results: The overall response of the students showed that the small group sessions were found to be beneficial to their learning in different concepts. Student feedback and participation metrics highlighted a notable increase in engagement. After completing the tutors training program tutors focused on active facilitation, inclusive teaching strategies, and managing group dynamics. Clear improvements were observed on tutors.

Conclusion: This study demonstrates that structured and well designed tutor training significantly enhances the effectiveness of small group teaching and positively influences student engagement.

Keywords: Small group, tutors training, teaching and learning, medical students.

INTRODUCTION

Small group teaching has become one of the best tools of learning anatomy and engaging the undergraduate medical students to achieve the Competency Based Medical Education.^[1] Small group teaching is an educational strategy that may be used to facilitate learning. Small group learning has grown in popularity in medical education as it

offers a dynamic and collaborative setting for learning.^[2]

Effective tutoring plays a vital role in enhancing student learning outcomes and academic success. Tutor training programs are designed to equip tutors with the necessary pedagogical skills, communication strategies, and subject-specific knowledge to provide meaningful academic support. However, the impact of such training programs on

tutor performance and student achievement remains an area requiring deeper exploration.^[3]

Numerous studies emphasize that the quality of tutoring directly affects student outcomes, and that well-prepared tutors are more likely to foster academic improvement and learner engagement.^[4] As such, structured tutor training programs have emerged as essential components of academic support services across educational levels.

Effective training programs often include workshops, role-playing, observation, feedback sessions, and modules on educational theory and practice. Such multi-dimensional approaches prepare tutors to be more reflective, adaptive, and student-centered in their methods.^[5] Furthermore, incorporating ongoing faculty development programs and mentoring has been shown improving teaching skills, learner satisfaction, and tutor confidence over time.^[6]

Effectiveness of the small group teaching method often depends upon the tutors skills, experience, and approach. Many tutors may not be fully equipped with the knowledge and tools to maximize the impact of small group teaching on student learning outcomes and overall experiences. Despite these positive findings, there remain gaps in the literature seems that there is a lack of consensus on the most effective components and duration of tutor training programs.

Hence, the present time demands more innovative techniques to be utilized for teaching Anatomy. The study was done to evaluate the effectiveness of a tutors training program designed to improve small group teaching strategies.

MATERIALS AND METHODS

The present interventional study was conducted in the Department of Anatomy, Hind Institute of Medical Sciences, Ataria, Sitapur over the period of six month (from May 2025 to October 2025). The Ethical approval was taken from HIMS Institutional Ethics Committee. Informed consent was taken from Students as well as from Tutors. A total 100 students and 4 tutors were involved in the study.

- Students were randomly divided into four groups each assigned to one tutor.
- Each group remained consistent for both pre- and post-training sessions.

Group Division

Groups	Assigned Tutors	Total students
A	1	25
B	1	25
C	1	25
D	1	25

Inclusion

Tutors who consent to participate in both pre- and post-training sessions. First year MBBS students enrolled in the Anatomy course that was present on the day of teaching session.

Exclusion

Tutors unable to participate to both phases. Students absent on the day of teaching session.

Intervention for Tutor Training Program- A structured faculty training was conducted to focus on Small group facilitation techniques, Questioning techniques, Managing group dynamics and Providing feedback

Teaching Sessions- Topics were selected from the same system and validated and approved by a panel of senior anatomists by consensus to ensure comparability of sessions.

Each Tutor Conducted

- 3 Pre-training session and
- 3 Post-training session.
- Each tutor conducted a teaching session before and after undergoing a structured tutor training program. Student performance and engagement was assessed after both sessions to measure the effect of the training.

Data Collection- through Google form.

- Participation was voluntary, and remained anonymous. We did qualitative analysis; the students were given the questions for the pre-test and post-test to measure students engagement, satisfaction, and learning experience before training and after training. The responses were submitted by the students was recorded. Data entry was done in MS excel software for data analysis. Significance if p value is < 0.05 .

After consultation with 4 faculty members, the questionnaire was made. The 20 items of the questionnaire were scored on a 5-point Likert scale ranging from 1 to 5. Participants respond to the items using a five-point Likert scale,^[7] are:

1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree and 5- Strongly Agree

The questionnaire for Small Group Effectiveness Factors comprises 5 domains.

- A. Learning experiences
- B. Team work
- B. Confidence
- C. Communication skills
- D. Tutors Role

RESULTS

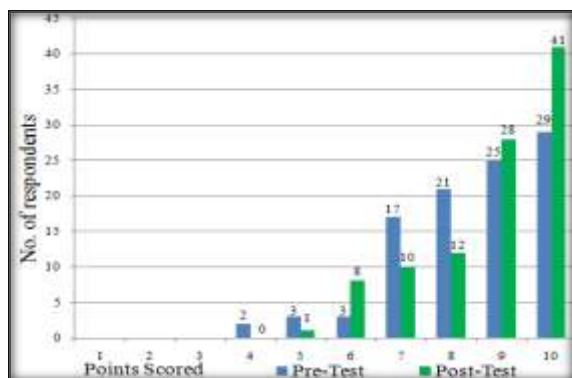


Figure 1: Bar chart showing the results of pre-test and post-test responses of students. Out of 100 students 29 students scored highest 10 marks while 2 students scored lowest 4 marks in pre-test. The range is from 4-10. Out of 100 students 41 students scored highest 10 marks, 1 student scored lowest 5 marks in post-test. The range is from 5-10. The results of figure 1 indicate that, there is significant increase in the small group teaching of tutors and students (P -value < 0.05).

Table 1: Showing Mean and SD on student's response on small group teaching by trained tutors.

Domains	S.N.	Questionnaires on Small Group Effectiveness Factors	Mean \pm SD
A. Learning experiences	1	Discussions held in small group helped in understanding the subject better.	4.22 \pm 1.18
	2	Learning in small group helped me improving my ability to think and solve problems rather than just memorizing information.	4.13 \pm 1.17
	3	The activities of small group taught me life-long learning.	4.18 \pm 1.06
	4	Small group sessions led me to deep and active learning.	4.10 \pm 1.17
	5	The knowledge and skills acquired in small group will help me in clinical practice	4.27 \pm 1.10
B. Team work	6	The activities in small group helped me to develop skills on working as a member of a team	4.18 \pm 1.15
	7	My group members made me feel as though, I am not as smart as they are.	4.34 \pm 2.11
	8	Group members were respectful to all the members.	4.22 \pm 1.16
	9	It becomes easier to learn when members of the group share their thoughts, ideas and information.	4.26 \pm 1.15
C. Confidence	10	Small group made the learning more challenging, interesting, motivating, engaging and fun.	4.30 \pm 1.11
	11	My interest in learning the subject increased while working in small group.	4.34 \pm 1.06
	12	I felt nervous when I was asked to express my thoughts in a small group.	3.27 \pm 1.42
	13	Learning in small group motivated me to work hard and participate actively in the group activities.	4.30 \pm 1.18
D. Communication skills	14	Small group activities improved my ability to communicate effectively.	4.23 \pm 1.14
	15	I listen more attentively to what other members talk in the group.	4.21 \pm 1.11
	16	I feel easier to express doubts and feelings in a small group.	4.14 \pm 1.17
	17	I developed the ability to summarize the views of others.	4.21 \pm 1.06
E. Role of the tutor	18	Tutor in the group provided proper guidance for learning.	4.19 \pm 1.15
	19	Tutor paid sufficient personal attention to the students during the small group session.	4.18 \pm 1.17
	20	Tutor provided useful feedback on my progress.	4.21 \pm 1.08

1. Tutor Performance Before and After Training:

Initial observations revealed that many tutors approached small group teaching in a predominantly didactic manner. Student engagement was uneven, with only a few students actively participating. After completing the training program, tutors focused on active facilitation, inclusive teaching strategies, and managing group dynamics. Clear improvements were observed.

2. Student Engagement and Participation:

Student feedback and participation metrics highlighted a notable increase in engagement: 80.3 % Students agreed that Tutor in the group provided proper guidance for learning.

To evaluate the impact of tutor training, both qualitative and quantitative data were collected before and after the training intervention. The observations were structured using a standardized rubric that assessed key aspects of effective small group teaching: facilitation skills, student participation, questioning techniques, group dynamics, and time management. In parallel, student engagement was measured through survey and brief reflective feedback through Google form. The results of the pre-test and post-test of the students response is shown in [Figure 1].

The overall response of the students showed that the small group sessions were found to be beneficial to their learning in different concepts, which is shown in [Table 1].

79 % Students agreed that Tutor paid sufficient personal attention to make the students participate during the small group session.

76.3 % Students agreed that Tutor provided useful feedback on my progress.

Qualitative Feedback: Students frequently mentioned that tutors were “more approachable,” “better at involving everyone,” and “made sessions feel more like a conversation than a lecture.”

DISCUSSION

Various teaching methodologies didactic lectures, practical classes, tutorials, small group teaching and

problem based learning have come into play for the benefit of medical students to improve their learning. Out of these small groups teaching has become an increasingly important and necessary component of undergraduate medical education. The present study was designed to evaluate the effectiveness of small group teaching methodologies by tutors training program which was achieved by a constant informal communication with the students in the form of designed questionnaires.

The findings of the present study states that structured tutor training improved the facilitation skills, greater sensitivity to group dynamics and a more consistent application of student-centered teaching practices. These findings are in accordance to the findings done by Saleh AM. 2015, which shows trained tutors significantly enhances the effectiveness of small group teaching and fosters greater student engagement.^[8]

The mean scores of the statements of present study were close to four (on a 5-point Likert scale). This indicates that trained tutors in small group teachings have a positive and significant influence on the students' educational perception. These findings are similar to the findings done by Edmunds S. 2010.^[9] The important notable outcomes of the present study are the marked shift in the tutors' ability to manage group discussions. Pre-training observations often revealed an over-reliance on didactic instruction, with limited student interaction. Post-training, however, tutors employed more open-ended questioning, fostered peer-to-peer dialogue, and actively drew quieter students into the discussion. The key summary of findings is shown Table 2. These changes closely align with the studies done by Sahu PK. 2018.^[10]

Table 2: The summary of key results before and after training of tutors & students participation:

Indicator	Before Training	After Training	Change
Tutors participation rate	Low-Moderate	Moderate-High	Improved
Student participation rate	Low-Moderate	Moderate-High	Improved
Student satisfaction (engagement)	Low-Moderate	Moderate-High	Improved
Tutor in small group provided proper guidance for learning to students	Neutral	Agree	Improved
Tutors in small group paid sufficient personal attention to the students	Neutral	Agreed	Improved

These findings support the conclusion that a tutor training meaningfully enhances both the quality of small group teaching and the degree of student engagement. Moreover, the student feedback in the present study strongly indicated the effectiveness of small group teaching methodologies by tutors. This is consistent with the work of Calma et al. 2012 who found that tutor development programs not only improve technical teaching skills but also help foster relational and emotional competencies that contribute to group cohesion and student motivation.^[11] According to Tripathi et al. more students felt comfortable and were satisfied with the tutorial mode of teaching than with active learning strategies.^[12]

Several studies have reported positive impacts of tutor training on both tutors and the students they support. Trained tutors demonstrate improved pedagogical approaches, greater professionalism, and higher satisfaction levels.^[13,14] For students, tutoring by trained individuals often leads to improved academic performance, increased motivation, and enhanced study habits.^[15]

In summary, this study affirms the value of structured tutor training as a catalyst for improving the quality of small group teaching and enriching student engagement. It underscores the need for institutions to invest in sustained, reflective, and practice-based training models. Embedding such initiatives into faculty development frameworks holds promise not only for enhancing teaching quality but also for advancing student learning outcomes and satisfaction in higher education

contexts. However, the study has few limitations that must be acknowledged. The relatively small sample size and the focus on a single institution may limit generalizability.

CONCLUSION

This study demonstrates that structured and well-designed tutor training significantly enhances the effectiveness of small group teaching and positively influences student engagement. Trained tutors were better equipped to facilitate interactive discussions, create inclusive and supportive learning environments, and employ learner-centered strategies that actively involved students in the learning process. The findings indicate that tutor training not only improves teaching practices but also contributes to greater student satisfaction, increased participation, and improved academic outcomes.

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