Impact of Regularity and Near-peer Mentors on Junior Medical Students' Personal Learning Plan Program: A Randomised Clinical Study

RITUPARNA BASU[1], ADARSHLATA SINGH[2]

ABSTRACT

Introduction: The practice of self-regulated learning and reflection has played a key role in the achievement of lifelong learning, continuous professional development and the delivery of standard healthcare. Self-regulated learning skills may be cultivated among medical students from the onset of their medical career through the diligent practice of specially designed tools of self-regulated learning, such as Personal Learning Plans (PLPs). Previous research has recommended the study of PLPs programs in different settings to observe the effectiveness of such programs.

Aim: To study the impact of PLPs' regularity and near-peer mentoring on first-year medical students through their academic performance.

Materials and Methods: This randomised, single-blinded, educational interventional study was conducted among 346 first-year students (batch 2023-24-172, batch 2024-25-174) of Jawaharlal Nehru Medical College (JNMC), Wardha, Maharashtra, India, from April 2023 to August 2025. Cases and controls were selected using simple randomisation. The cases were trained and used PLPs for Anatomy lectures for six months. Trained near-peer

mentors were assigned to cases 2024-25 batch. Regular users in both batches were noted. Three assessments were taken per batch and scores were recorded. Students' post-intervention feedback was documented. The collected data were analysed using Python-based statistical scripts.

Results: Academic scores of trained students who submitted PLPs regularly were consistently higher than those of trained students who did not, especially in the later assessments (cases regular 2023-24 vs cases irregular 2023-24 was 11.90±1.73 vs 8.79±2.02 and cases regular 2024-25 vs cases irregular 2024-25 was 17.27±0.75 vs15.60±0.83, respectively, in the third assessment). There was a significant performance gap between cases 2023-24 and 2024-25, with an extremely large effect size for the third assessment (d=3.4560, where d denoted Cohen's d effect size), which suggested that the use of near-peer mentors in PLP intervention had a substantial impact. Post intervention feedback on cases of both batches was positive.

Conclusion: There was a significant improvement among students with PLPs intervention and near-peer mentors when compared to the students taught using traditional teaching methods.

INTRODUCTION

All educational activities are centered on the enhancement of learning. This can be achieved by means of self-assessment and self-monitoring, which are the key elements of self-regulated learning. According to the Association for Medical Education in Europe (AMEE) Guide 58: Self-regulation theory: Applications to medical education, self-regulated learning has held the promise of improving learning and academic performance in medical education [1]. The AMEE Medical Education Guide 19 regarding PLPs [2] stipulated that a suitable means of practice of self-regulated learning was through systematic implementation of tools of self-regulated learning, such as the PLPs. This is because they provide a framework by which goals could be constructed and learning progress could be ascertained by learners themselves [3]. PLPs have been recognised as tools for promoting deep learning even as far back as 1984 by Marton F et al., [4]. According to the studies by Brookfield S and Knowles MS, such an approach was closely aligned to the principles of adult learning [5,6]. Lemire reiterated that PLP programs supported continuous professional development. She also reported that a widely represented PLP working group was already in action to evaluate the implementation of PLPs in different settings and gather feedback to improve and upgrade PLP programs [7].

A suitable approach for the stabilisation and sustenance of training and practice of PLPs was through the support of dedicated

mentors, since it had been demonstrated that mentoring learners goes a long way in instilling a positive attitude and improvement of learners' productivity, thereby assisting them towards developing into independent, self-sustaining learners [8]. Pearson R and Caylor TL recommended the use of coaching to develop effective Individualised Learning Plans (ILP) that could be utilised to attain optimum academic potential [9]. According to Zhang H et al. and Khapre M et al., near-peer mentoring was the best peer teaching method equalling or exceeding educational strategies chalked out by faculties for senior and junior medical students [10,11]. Moreover, the studies of Loda T et al., and Singh S et al., revealed that the potential of the proximity and the shared experiences between learners and their near-peer may be exploited by utilisation of near-peer mentors in addition to faculty mentors to seal the effectiveness of a system [12,13].

Following an intervention on self-monitoring exercises, which revealed greater self-efficacy, performance satisfaction and improvement in academic scores among students, Leggett H et al., recommended further studies in different settings to determine whether similar interventions resulted in the development of self-monitoring skills and long-term improvement in academic performance [14]. The study of Shepard ME et al., demonstrated positive feedback from students following a PLP program of four months, but the authors stressed the need for more robust, long-term outcome measures

[15]. Previous studies mostly focused on senior medical students [16,17]. None of the previous studies on PLPs were conducted on Anatomy lecture topics, although the Competency-based Medical Education (CBME) curriculum of India awarded it the maximum hours for large group teaching amongst all Phase I subjects, making it the most challenging for first-year students [18]. This highlighted the need to study whether near-peer mentorship and regular PLP use produced a positive impact on first-year medical students' academic achievement and feedback following a 6-month PLP intervention involving Anatomy lecture topics, which was the aim of the present study.

MATERIALS AND METHODS

The prospective educational interventional study was conducted in an academic setting among first-year medical students, batches 2023-24 and 2024-25, of JNMC, Wardha, Maharashtra, India, from April 2023 to August 2025. The study was carried out after obtaining approval from the Institutional Ethical Committee (IEC) (Letter no. DMIHER (DU)/IEC/2023/29) and written informed consent from students. The trial was registered with the Clinical Trials Registry of India (CTRI Registration no. CTRI/2023/08/056861).

Inclusion criteria: Consenting first-year medical students of JNMC, Wardha, batches 2023-24 and 2024-25, irrespective of gender.

Exclusion criteria: Students submitting incomplete PLPs or questionnaires (defaulters).

Sample size calculation: It was a single-centre, assessor-blinded, experimental, parallel-group, superiority study with an allocation ratio of 1:1.

Since no prior studies had evaluated the impact of PLPs among medical students in this setting, no baseline prevalence data were available. Therefore, a baseline proportion of $p_1=0$ was assumed, reflecting the absence of prior exposure to the PLP-related training module. An absolute improvement of 20% ($p_2=0.20$) was considered to be educationally meaningful and achievable after introducing PLPs. Similar effect sizes (10-25%) had been used in educational intervention research when prior estimates were unavailable [19].

Thus, the sample size calculation was based on detecting a difference between $p_1=0$ and $p_2=0.20$ with 90% power at $\alpha=0.05$ level of significance. A sensitivity analysis using slightly different assumed effect sizes (e.g., 15-25%) was considered to ensure robustness.

Using the formula:

$$n=f(\alpha/2, \beta)\times\{p_1\times(100-p_1)+p_2\times(100-p_2)\} / (p_2-p_1)^2$$

where p_1 and p_2 are the per cent success in the control and experimental group, respectively and

$$f(\alpha, \beta)=\{\Phi^{-1}(\alpha)+\Phi^{-1}(\beta)\}^2$$

where, Φ^{-1} is the cumulative distribution function of a standardised normal deviate, at 90% power and 0.5 significance level and equal number of samples in each group, 86 was the critical sample size. However, the study was conducted among all the available medical students of the 1st phase {1st professional Bachelor of Medicine and Bachelor of Surgery (MBBS)} fulfilling the inclusion criteria.
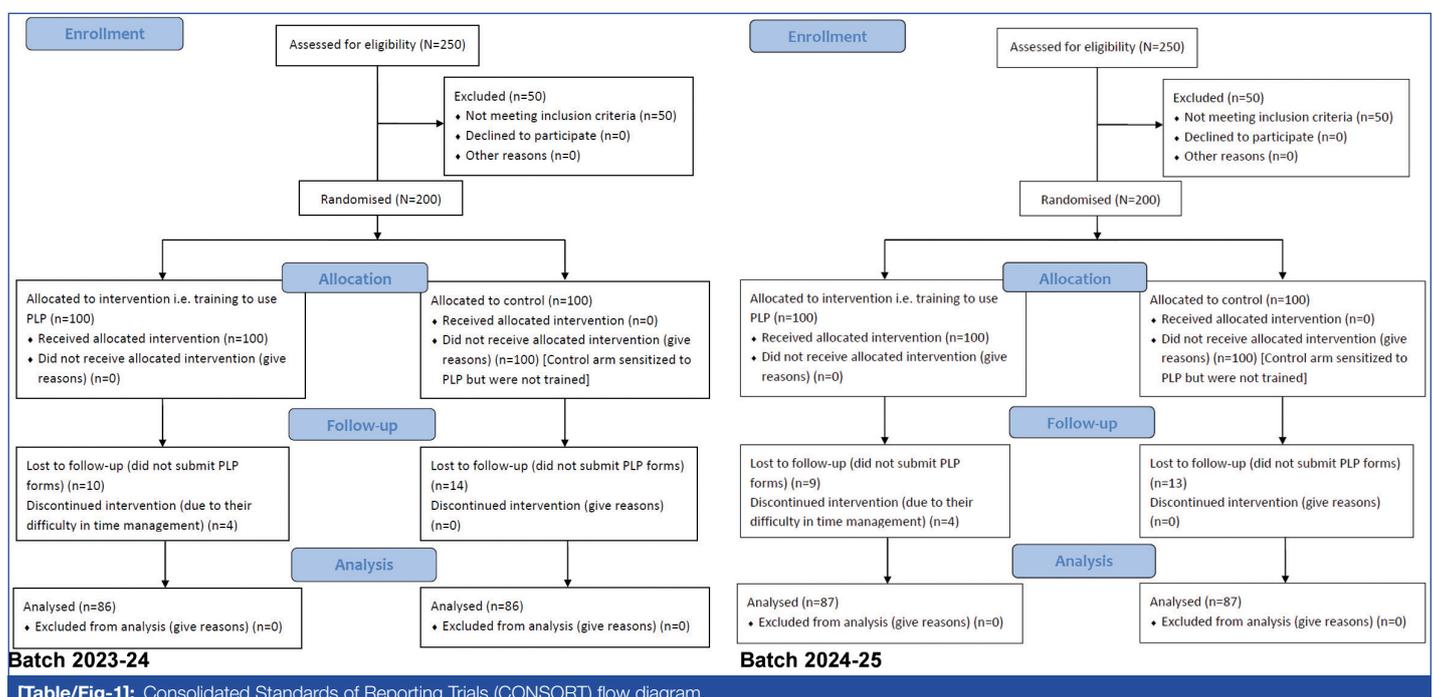
Study Procedure

After approval from the IEC, on-site sensitisation of first-year students batch 2023-2024 regarding PLPs and PLP form detailing its use on 4th December 2023 was conducted, followed by recruitment of consenting first-year medical students for the study. A total of 86 cases and 86 controls were selected using simple randomisation using a computer-generated random allocation sequence with an allocation ratio of 1:1. Allocation was concealed using sealed envelopes. The consent form was signed by cases and controls [Table/Fig-1].

The PLPs were pre-validated forms taken from AMEE Medical Education Guide No. 19: PLPs [2], which required users to set their personal learning objectives, learning strategies and resources, what was to be assessed, criteria for assessment and timescale of completion of the set task. These flexible planners could be modulated continuously by users to fulfil learning objectives within a set timescale or modulate the timescale as per need. Four sessions of practice and discussion regarding use of a personal learning plan to prepare for Anatomy lecture topics via Google Meet were held by the researcher acting as faculty mentor for the case group. However, the traditional teaching method was used for the control group.

Students were instructed to email PLP forms of Anatomy lecture topics set weekly to the researcher. Topics were selected from those covered in their weekly timetable. Reminders were sent via WhatsApp and email for timely submission. Regular users were earmarked. PLP forms were submitted by students on the following topics:

1. Development of the stomach and duodenum;
2. Anterior abdominal wall;

Batch 2023-24

Batch 2024-25

[Table/Fig-1]: Consolidated Standards of Reporting Trials (CONSORT) flow diagram.

3. Development of circulatory system;

4. Histology of liver;

5. Scalp;

6. Small intestine;

7. Face;

Development and congenital anomalies of testis and ovary.

Three assessments were taken from the PLP topics. One was taken by a researcher (assessment 1) and the other two included the second Part Completion Test/examination (PCT 2) and the Prelims (which were considered since they were held during the phase of intervention and included PLP topics) and the internal assessment scores were recorded. Each internal assessment was of 20 marks. Minimum and maximum scores recorded were 11 and 18, respectively.

At the sixth month, an on-site survey of students' feedback towards the use of a personal learning plan was conducted by means of a pre-validated questionnaire via Google Form. At the same time, eight consenting students were recruited to act as near-peer mentors to successive batches of first-year medical students.

The feedback questionnaire consisted of two parts, namely, the first part where personal information of students was documented and the second part where students were required to rate their views regarding the PLP intervention on a 5-point Likert scale, where 5 was regarded as strongly agree. It was based on previous research [17,20] and was designed by the researcher. Content validation of the questionnaire was done prior to the onset of intervention by subject experts and the Medical Education Unit of the Institution. A pilot study was done among 60 students and Cronbach's alpha of 0.9725 was obtained.

This was followed by on-site sensitisation of first-year students' batch 2024-25 regarding PLPs and PLP form detailing its use on 11th November 2024, followed by recruitment of consenting first-year medical students for study. A total of 87 cases and 87 controls were selected by simple randomisation using computer-generated random allocation sequence with an allocation ratio of 1:1. Allocation was concealed by use of sealed envelopes. The consent form was signed by cases and controls. The cases were divided into three groups of 22 students and one group of 21 students and two near-peer mentors were assigned to each group.

Students of case group met and discussed with their near-peer mentors during the weekly submission of their PLPs. PLP topics were selected from those covered in their weekly timetable. Reminders were sent via WhatsApp and email for timely submission. Regular PLP users were earmarked. PLP forms on the following topics were collected:

1. General connective tissue;

2. Radial nerve;

3. Porto-caval anastomosis;

4. Inguinal canal;

5. Large blood vessels of the gut;

6. Perineum;

7. Arches of the foot.

However, the traditional teaching method was followed for the control group.

Three assessments were taken covering the PLP topics. First and third were conducted by the researcher (Assessment 1 and Assessment 2) and the second comprised the first PCT 1 (which was considered since it was held during the phase of intervention and included PLPs topics) and the internal assessment scores were recorded. Out of the total 20 marks, the minimum and maximum scores recorded were 5 and 17, respectively.

In the sixth month, by April 2025, the intervention concluded and a survey of students' feedback towards the use of a personal learning plan was conducted by means of a validated questionnaire

Parameters under study were internal assessment scores of cases and controls of Batches 2023-2024 and 2024-2025; and internal assessment scores of cases regular and cases irregular. After deliberation with members of the Medical Education committee, it was decided that cases regular would encompass those cases that submitted ≥80% PLP forms of all assigned topics, whereas cases irregular would include those cases that submitted <80% PLP forms. All the collected data were compiled and subsequently analysed.

STATISTICAL ANALYSIS

Data were first assessed for normality using the Shapiro-Wilk test. Descriptive statistics were presented as mean±standard deviation for normally distributed variables. Between-group comparisons were performed using Welch's t-test for normally distributed data. Effect sizes were calculated using Cohen's d. A two-tailed p-value < 0.05 was considered statistically significant. Correlation was sought by calculation of Pearson's R. All statistical analyses were performed using Python-based statistical scripts.

RESULTS

The mean age of participating students of batch 2023-24 was determined to be 19.01±1.12 years, out of which 49 (28.57%) were males and 123 (71.43%) were females. In batch 2024-2025, students' mean age was 18.73±0.95 years, comprising 48 (27.66%) males and 126 (72.34%) females. Mean study hours of students varied between 3.79±1.43 hours (batch 2023-24) to 2.74±1.36 hours (batch 2024-25).

Analysis of Scores of Cases vs Control Batches 2023-2024 and 2024-2025

For batch 2023-2024, it was observed that control students did better in the initial assessments, but the case students caught up and outperformed in the final evaluation (mean scores cases: control was 9.92±2.43, 7.55±2.00). Additionally, cases showed a statistically significant improvement (p-value <0.001) over control in the third assessment and these scores were not dependent on performance in the previous two assessments. On the other hand, analysis of scores of batch 2024-25 revealed that cases significantly outperformed the control group in the second and third assessments [Table/Fig-2].

Batch 2023-24	First assessment	Second assessment	Third assessment
Cases	9.48±3.10	9.44±2.61	9.92±2.43
Control	10.26±2.72	10.12±2.42	7.55±2.00
p-value	0.082	0.081	<0.001
Batch 2024-25	First assessment	Second assessment	Third assessment
Cases	13.43±1.57	14.15±1.28	16.45±1.17
Control	15.15±1.81	10.37±1.74	12.44±1.24
p-value	<0.001	<0.001	<0.001

[Table/Fig-2]: Mean scores of cases vs control batches 2023-24 and 2024-25 in the three assessments.

Analysis of Scores of Cases, Regular vs Irregular Cases, Batches 2023-2024 and 2024-2025

It was observed that the academic scores of trained students who submitted PLPs regularly were consistently higher than those of trained students who did not, especially in the last two assessments (p-value <0.05) [Table/Fig-3,4].

Cases 2023-24	First assessment	Second assessment	Third assessment
Regular (n=30)	9.97±2.75	10.27±1.84	11.90±1.73

Irregular (n= 56)	9.34±3.35	9.09±2.89	8.79±2.02
p-value	0.38	0.046	< 0.001

[Table/Fig-3]: Mean scores in three assessments of cases, regular and irregular 2023-24.

Cases 2024-25	First assessment	Second assessment	Third assessment
Regular (n=45)	13.53±1.50	14.67±1.33	17.27±0.75
Irregular (n=42)	13.31±1.65	13.60±1.06	15.60±0.83
p-value	0.5196	0.0001	<0.01

[Table/Fig-4]: Mean scores in three assessments of cases regular and irregular 2024-25.

The present study revealed that more trained students supported by near-peer mentors (batch 2024-25) submitted PLPs regularly 45 (51.72%) in comparison to those trained students who did not receive near-peer mentor support (batch 2023-2024) 30 (34.88).

In addition, the case 2024-25 Regular students significantly outperformed the case 2023-24 Regular group across all three tests (p-value <0.05) [Table/Fig-5,6], which highlighted the positive effect of near-peer mentors and regular PLP use resulting in substantial improvement in performance of the regular cases from 2023-24 to 2024-25.

Cases regular	First assessment	Second assessment	Third assessment
Batch 2024-25	13.53±1.50	14.67±1.33	17.27±0.75
Batch 2023-24	9.97±2.75	10.27±1.84	11.90±1.73
p-value	<0.001	<0.001	<0.001

[Table/Fig-5]: Mean scores in three assessments of cases regular 2023-24 and 2024-25.
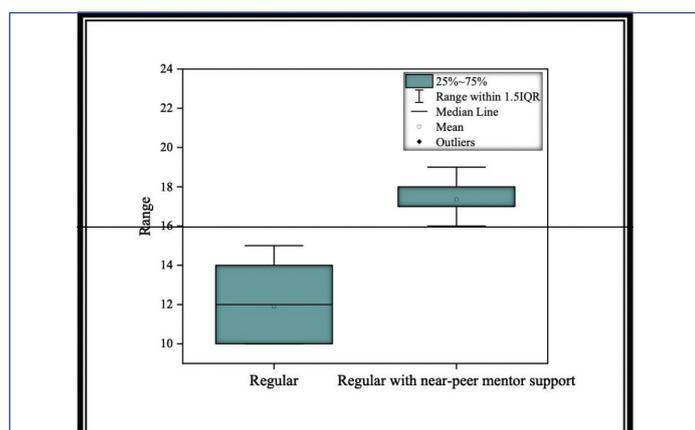
[Table/Fig-6]: Academic scores cases regular 2023-24 versus cases regular 2024-25 (with near-peer mentor support) in the third assessment showing that cases regular 2024-25 outperformed cases regular 2023-24 in the third assessment.

Analysis of Scores of Cases 2023-2024 vs Cases 2024-2025 (near-peer mentor effect)

The cases 2024-25 group significantly outperformed (p-value <0.05) the 2023-24 group across all three tests, with very large to extremely large effect sizes (d=1.5542 to 3.4560). This indicated a substantial improvement in performance from 2023-24 to 2024-25, particularly in the final assessment (assessment 2 vs. prelims), where the effect size is exceptionally large [Table/Fig-7].

Cases	First assessment	Second assessment	Third assessment
Batch 2023-24	9.56±3.15	9.5±2.62	9.87±2.43
Batch 2024-25	13.42±1.56	14.14±1.28	16.45±1.16
p-value	<0.001	<0.001	<0.001
Cohen's d	1.5542	2.2488	3.4560

[Table/Fig-7]: Descriptive and inferential statistics of the three assessments cases 2024-25 vs 2023-24 (Welch's t-test was used to compare means. Cohen's d was calculated to assess effect size).

The moderate correlations in the cases 2024-25 group suggested a more cohesive performance pattern, possibly due to a structured intervention involving near-peer mentors. The 2023-24 group's weak or negative correlations pointed to more variability in how students performed across tests, potentially indicating less standardised conditions [Table/Fig-8].

Batch	First assessment ↔ second assessment	First assessment ↔ third assessment	Second assessment ↔ third assessment
Cases 2023-24	r=0.37 p<0.01	r=-0.2 p<.01	r=0.09 p<0.01
Cases 2024-25	r=0.55 p<0.01	r=0.27 p<0.01	r= 0.51 p<0.01

[Table/Fig-8]: Correlation between the three assessment cases regular 2024-25 and 2023-24 (Pearson's r was calculated to measure linear relationships between scores within each group).

Analysis of Post Intervention Feedback of Cases 2023-24 vs Cases 2024-25

The post intervention feedback evaluation for the case 2023-24 (n=86) and 2024-25 (n=87) was based on five common Likert-scale questions. It revealed that the 2024-25 batch perceived PLPs more positively than 2023-24 for most aspects (easy to use, set academic targets, better performance, lifelong learning), with significant mean differences and medium effect sizes (d=0.37-0.56). The exception was training perception, where 2023-24 rated it significantly more interesting (mean=3.61±1.03 vs 2.35±1.04, d=-1.21) [Table/Fig-9]. This could indicate that 2024-25's training was more challenging or less engaging, possibly due to changes in delivery or higher expectations.

Metric	Mean score 2023-24	Mean score 2024-25	p-value	Cohen's d
Training to use PLPs was interesting process	3.61±1.03	2.35±1.04	<0.0001	1.21
PLPs was easy to use and incorporate in daily study routine	3.54±1.01	3.89±0.89	0.0041	0.37
PLPs assisted to set academic target	3.63±1.01	4.09±0.85	0.0002	0.49
PLPs helps to better academic performance	3.56±0.96	4.06±0.80	<0.0001	0.56
PLPs guided towards lifelong learning	3.64±0.89	4.08±0.81	<0.0001	0.53

[Table/Fig-9]: Post-intervention feedback analysis cases 2023-24 vs cases 2024-25.

DISCUSSION

The present study demonstrated the positive impact of PLPs and near-peer mentor support on first-year medical students' scores. Post-intervention feedback from students was also observed to be positive. As tools of self-regulation, personal learning plans have been utilised widely across the entire arena of medical education, including undergraduate medical education, post-graduate education and continuous professional development. However, Leggett H et al., recommended further studies to consolidate whether PLP intervention resulted in the development of self-monitoring skills and long-term improvement in academic performance [14].

Previous research on PLPs on undergraduate medical students mainly involved senior medical students [15-17,21]. First-year medical students faced different academic challenges as they transitioned to medical school [22,23]. These should be prioritised and resolved early in their medical career. Personalised strategies offered a means to overcome such academic challenges [23]. Therefore, the present study was undertaken on two successive batches of first-year medical students. Whereas previous studies focused on utilisation of PLPs as tools for faculty-student discussions [16] and appraisal of clinical skills [17] or simply as a means to facilitate smooth passage to residency [21], the present study implemented a PLP module

S. No.	Author's name and year	Place of study	Sample size	Objective	Parameters assessed	Conclusion
1.	Li STT et al., (2009) [20]	USA	98	To compare faculty and resident attitudes, knowledge and skills about self-assessment, self-directed learning and ILPs.	Students' attitude	Deliberate practice of ILPs, may facilitate self-directed, lifelong learning
2.	Leggett H et al., (2012) [14]	UK	51	To explore the impact of self-monitoring exercises on calibration accuracy and academic performance in undergraduate medical students.	Academic performance, calibration accuracy	PLP intervention was effective in producing improvement of academic scores of undergraduate students.
3.	Chitkara MB et al., (2016) [21]	USA	48	To study whether ILPs fostered self-directed learning in fourth year medical students.	Achievement of ILP goals and objectives, perception of preparedness for residency	ILPs improved Self-Directed Learning strategies among medical students by helping them (83%) attain their ILP goals.
4.	Guardiola A et al., (2016) [16]	USA	294	To study the perception of the ILPs in United States senior medical school students as a means to improve their learning experience during their advanced practice clerkship.	Students' perception	ILPs were regarded to be a useful tool for faculty-student discussions (61.6%) and was thought to provide a framework for learning (54.8%).
.5.	Neufeld A et al., (2020) [25]	Canada	38	To study the perception of first-year medical students towards near-mentorship program.	Students' perception	Near- peer mentor support was regarded to generate mental stimulation, cooperation and development of skills among students
6.	Present study (2026)	India	346	To study the impact of regularity and near-peer mentors in first-year medical students' personal learning plan program through their academic performance	Academic scores	Regular PLP use produced a positive impact on students' scores (Mean scores in Third Assessment Cases regular vs cases irregular batch 2023-24 was 11.90±1.73 vs 8.79±2.02 and in Batch 2024-25 was 17.27±0.75 vs 15.60±0.83 [Table/Fig-2,3]. Near-peer mentor support was effective in improving students' academic scores {Trained students who received near-peer mentor support i.e. Cases 2024-25, significantly outperformed those who did not i.e., Cases 2023-24, across all three tests, with very large to extremely large effect sizes (d=1.5542 to 3.4560, Table 5)}. Also, Regular PLP use and near-peer mentor support generated positive feedback among students (highest mean in post-intervention feedback among Cases Regular was for "Set Academic Target" (Batch 2023-24: ~3.63-3.64) and "Lifelong Learning" (Batch 2024-25: ~4.08-4.09, [Table/Fig-7], which indicated PLP was perceived as particularly helpful for goal-setting and lifelong learning.

[Table/Fig-10]: Comparison of present study with previous similar studies [14,16,20,21,25].

for anatomy lecture topics for first-year medical students. This was aligned with NMC CBME Guidelines 2024 [24], where maximum hours for large group teaching were allocated to Anatomy, marking it as more challenging for the first-year students.

Chitkara MB et al., found that 83% students achieved ILP goals and felt better prepared to enter residency and showed improvement in self-efficacy and self-regulation, reiterating the fact that ILP may serve as a useful tool to help shape future learning goals [21]. The PLP interventional study of Deane RP and Murphy DJ among undergraduate Obstetrics and Gynaecology students revealed that although students showed no difference in overall examination scores, 85% students perceived that PLPs and induction meeting enhanced their learning experience [17]. The study of Leggett H et al., concluded that undergraduate students showed self-efficacy and improvement in academic scores following PLP intervention [14]. In this study, the academic scores of trained students who submitted PLPs regularly showed that they consistently outperformed those trained students who did not, especially in the later assessments, possibly indicating better aptitude at framing and using PLPs and better exam preparation.

Neufeld A et al., introduced a seven month near peer mentorship program by pairing first-year with second-year medical students and reported that it generated mental stimulation, cooperation and

development of skills among students [25], similar to the study of Sethi S et al., [26]. Singh S et al., revealed that near-peer mentoring augmented faculty mentoring and strengthened the impact of the system [13] while Hui Wen Yap AF et al., paired final year medical students with resident mentors and concluded that it increased the confidence of students during examination, although they found no association between confidence and academic achievement of these students [27]. Similar to Singh S et al., the present study introduced near-peer mentorship by pairing first-year medical students with second-year medical students during the PLP intervention of six months duration [13] but contrary to the findings of Hui Wen Yap AF et al., comparison of academic achievements of students trained with and without near-peer mentors revealed that those trained students supported by near-peer mentors demonstrated a marked improvement over those trained without mentors, with higher scores, lower variability and stronger correlations, suggestive of a more effective intervention by use of near- peer mentors [27]. Also, the present study revealed that more trained students supported by near-peer mentors (batch 2024-2025) submitted PLPs regularly in comparison to those trained students who did not receive near-peer mentor support (batch 2023-2024). Similar studies from the literature are compared in [Table/Fig-10] [14,16,20,21,25].

Guardiola A et al. introduced ILPs among United States senior medical students and reported that 61.6% felt PLPs to be a useful

tool for faculty-student discussions, 54.8% felt PLPs to provide a framework for learning, while students expressed concern regarding faculty knowledge about PLPs, time to complete PLPs and uncertainty of appropriate goal setting [16]. Students' post-intervention feedback in the present study revealed that, compared to batch 2023-2024 (means 3.54-3.64 for five questions), batch 2024-2025 showed improved perceptions for most aspects (easy to use, set academic targets, better performance, lifelong learning), with significant mean differences and medium effect sizes (d=0.37-0.56). The findings of the present study, in comparison to previous studies on PLPs and highlighting that regular PLP use and near-peer mentor support may be utilised to increase the effectiveness of PLPs programs among junior medical students are documented [Table/Fig-8].

Limitation(s)

The impact of near-peer mentorship and regularity of PLP use was studied among first-year students of a single Institution for Anatomy lecture topics, which may limit generalisation. Therefore, it is recommended that multicentric studies with larger sample sizes, involving students of all phases and multiple disciplines, be conducted for multicentric, multidisciplinary validation.

CONCLUSION(S)

Students who regularly submitted PLPs and had near-peer support and those who regularly submitted PLPs with near-peer mentor support showed marked improvement in academic performance over those without such support. They also showed a positive response to PLPs intervention. Thus, efforts to boost regularity and involvement of near-peer mentors may be undertaken in future iterations of PLPs programs to strengthen their impact, especially among junior medical students.

Acknowledgement

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PARTICULARS OF CONTRIBUTORS:
1. Associate Professor, Department of Anatomy, Medical College, Kolkata, West Bengal, India.
2. Professor, Department of Dermatology, JNMC, Wardha, Maharashtra, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Rituparna Basu,
Mass Cooperative Housing Society Ltd., Flat No. 3, 142, Bagmari Road,
Kolkata-700054, West Bengal, India.
E-mail: rituparnabasu2016@gmail.com