

Research Article



Assessment of Medical Students' Perception Regarding Educational Environment at Different Phases of Medical Education in a Tertiary Centre Medical College using Dundee Ready Educational Environment Measure (DREEM) Questionnaire

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Received: 18-10-2021; Revised: 25-12-2021; Accepted: 03-01-2022; Published on: 15-01-2022.

ABSTRACT

The educational environment in a medical school is a crucial component in a student's learning and is also important in the development of personality, behavior, and work ethics. The objective of the study was to assess the perception of the educational environment among medical students. An observational cross-sectional study conducted on second, fourth, sixth, eighth semesters and interns. Dundee Ready Education Environment Measure (DREEM) inventory was used as study tool which contains 50 items and is subdivided into five domain subscales: students' perceptions of learning (SPoL); students' perceptions of teachers (SPoT); students' academic self-perception (SASP); students' perceptions of the atmosphere (SPoA); and students' social self-perception (SSSP). Data were presented as Mean+/-SD and analyzed using descriptive statistics. A total of 449 undergraduates of age group 18 to 25 years participated, the majority were males (72.6%) and studied from private (82%) and English medium schools (75%) without any additional qualifications (99.6%). The mean total DREEM score±SD was 130.85±19.24 and there was a significant difference between males and females (p=0.029). The mean total subscale scores (SD) were: SPoL=33.37(5.89), SPoT=27.95(3.98), SASP=21.41(4.47), SPoA=30.15(5.78) and SSSP=17.97(3.20). The mean total DREEM score ± SD of the fourth semester (134.45±19.02) was highest and the eighth semester (125.71±21.55) was the lowest and there was a significant difference between scores of various semesters(p=0.016). On analyzing the total DREEM score, 61 students had scores in 'excellent', 363 in 'more positive than negative', and 25 in the 'plenty of problems' category. The educational environment perceived by the medical undergraduates more positive than negative. The study findings would help modify the learning environment and curriculum.

Keywords: Medical education; Medical students; Educational environment; Learning; Perception.

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DOI:

10.47583/ijpsrr.2022.v72i01.010



DOI link: <http://dx.doi.org/10.47583/ijpsrr.2022.v72i01.010>

INTRODUCTION

High-quality medical education is crucial in the making of skillful doctors which is highly essential for an effective and functional healthcare system. For that, improving the undergraduate medical curriculum to an extent that could improve better understanding and build professionalism in the medical undergraduates is the most basic and crucial part of medical education.¹ For an effective medical education, the proper educational environment is an essential prerequisite that further relies on various factors like physical environment (lecture theatre and learning equipment), faculties, college environment and culture, batchmates, student assistance, and self-help groups which motivates and helps to engage the students in better learning.² The educational environment has always been a crucial area and one of the

most important parts of evaluating the medical education program as mentioned by the World Federation for Medical Education.³ The students' learning experiences and their nature of outcomes like behavior, educational performance, and feeling under comfort zone are highly dependable on the learning environment.⁴⁻⁶ The perception of students regarding the educational milieu, faculties, learning, self-satisfaction in learning, and social environment in the medical college is crucial as assessing these would help to customize the factors to achieve better results and educational outcomes.^{7,8}

Although the assessment of perception and satisfaction of the medical students can be done by various methods yet the instrument developed and constructed by the International Delphi panel, Dundee(Scotland), United Kingdom for assessment of learning environment particularly for medical students and other health professions titled "Dundee Ready Education Environment Measure (DREEM)" is the dependable and most widely utilized instrument round the world.⁹ The effectiveness of DREEM has made it customary to use in varied settings and has been translated in several languages to ensure its widespread use across countries and cultures to identify pitfalls in curricula and has also been used to assess the effect of any novel curricular modifications.^{7,9} In order to



improve medical education, various reforms are being made from time to time to make the medical curriculum and study atmosphere students affable without degrading the quality of teaching and the best way to assess them is to ensure feedback from the students regarding their perception.^{10,11} Previous studies conducted in India on medical or dental undergraduates have reported a positive perception or more positive than negative perception and were conducted on the students of four professional years and interns were not usually included.¹¹⁻²⁰ This study however included medical undergraduates along with the interns of All India Institute of Medical Sciences (AIIMS), Jodhpur. When the study was conducted, the institution was newly set up and approximately all the students stayed in the hostel and analyzing their perception was crucial to modify the educational environment in the college campus. Even though there are studies conducted in India however, very few studies were conducted on this region of the country, and assessment of the educational environment is a dynamic phenomenon that needs to be performed time and again to improve the educational condition hence this study was planned to assess the educational environment among medical undergraduates of AIIMS Jodhpur. The present study was conducted to assess the perception of undergraduate medical students for the educational environment and assess the variance of perceptions among students of various semesters of medical education (preclinical and clinical semesters like second, fourth, sixth, eighth semesters and interns).

MATERIAL AND METHODS

Study design and setting

This is a cross-sectional study conducted on the undergraduate medical students of AIIMS Jodhpur, Rajasthan, India. The study was conducted between Feb 2017 to Dec 2017.

Study participants and sampling

The study participants in the present study were from age group 18 to 25 years and studying in the first professional, second professional, third, and fourth professional MBBS students as well as interns working in AIIMS Jodhpur.

Study participants and sampling

The study tool was divided into two parts. The first part had the demographic characteristics of the students and the second part was the "DREEM Instrument" questionnaire developed by Roff S et al. which is comprised of 50-item, closed-ended questionnaire related to the quality of teaching, perception of faculty, involvement, personal life, and medical school atmosphere to combinedly assess the educational environment.⁹ Each item in the DREEM questionnaire was scored in a five-point Likert scale as follows: 4= strongly agree; 3 = agree; 2 = unsure; 1= disagree and 0 = strongly disagree. Reverse scoring was used for the nine negative items (item numbers 4, 8, 9, 17, 25, 35, 39, 48, and 50). The 50 DREEM questionnaire is further subdivided into five domain

subscales viz. Students' perceptions of Learning (SPoL) with 12 items and a maximum score of 48, Students' perceptions of Teachers (SPoT) with 11 items and a maximum score of 44, Students' Academic Self Perception (SASP) with 8 items and a maximum score of 32, Students' perceptions of Atmosphere (SPoA) with 12 items and a maximum score of 48 and Students' social self – perceptions (SSSP) with 7 items and a maximum score of 28.^{4,9,21} The responses of the students were interpreted on the basis of practical guide by McAleer and Roff et al. and few previous studies as follows: an overall score of 0-50(0-25%) = very poor; 51-100(25.1-50%) = plenty of problems; 101-150(50.1-75%) = more positive than negative; 151-200(75.1-100%) = excellent.^{5,14,22-25} The interpretation of the DREEM subscale score was done based on previous few studies as follows: Items whose mean score was ≥ 3.5 were considered real positive points; scores ≤ 2 were taken as problematic areas whereas scores between 2 and 3 were taken as areas which could be enhanced.^{12,26}

Ethical consideration

The students were made understand about the study and were enrolled after obtaining written informed consent. The information collected from the students was properly handled to maintain anonymity. The data collected were handled and stored in accordance with the tenets of the Declaration of Helsinki. The study was approved by the Institutional ethics committee, AIIMS, Jodhpur with certificate reference number AIIMS/IEC/2016/245.

Statistical Analysis

The data were entered in Microsoft Excel and presented as frequencies, percentages, mean \pm standard deviation (SD). The data was analyzed using SPSS® (*Statistical Package for the Social Sciences*), IBM® version 25 software. An independent t-test was used to analyze the difference of means between groups and ANOVA was used to analyze and identify significance between multiple groups. Tukey test was used for post hoc analysis. A p-value of <0.05 was considered significant.

RESULTS

Sociodemographic profile

A total of 449 medical undergraduate students of second, fourth, sixth, eighth semesters and interns participated in the study of which the majority were males (72.6%). The majority of the students had their schooling from an English medium (74.72%) and private institutions (81.72%). Most of the students were from the nuclear family (76.78%) and stayed inside the college campus (97.32%) for their studies. The majority of the students (99.55%) did not have any additional educational classification or degree before joining medical college and 89.43% of the students were interested in extracurricular activities (Table 1). Most of the parents (Mother and Father) had their education as graduate and postgraduate (Figure 1). The mothers of the majority of students were homemakers and fathers were in service (Figure 2).



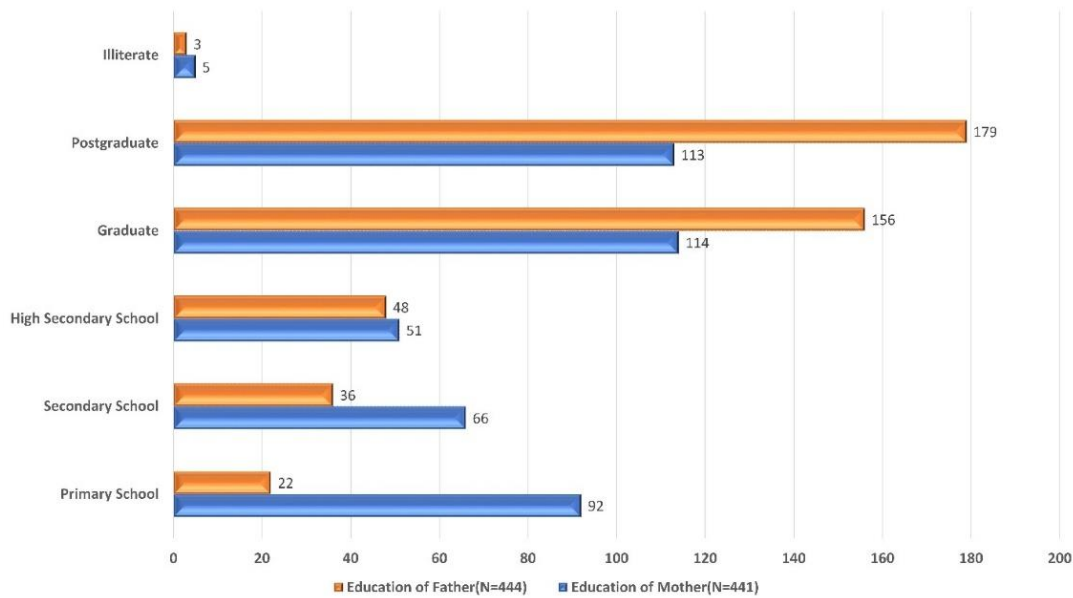


Figure 1: Educational status of parents of undergraduate medical students in the study

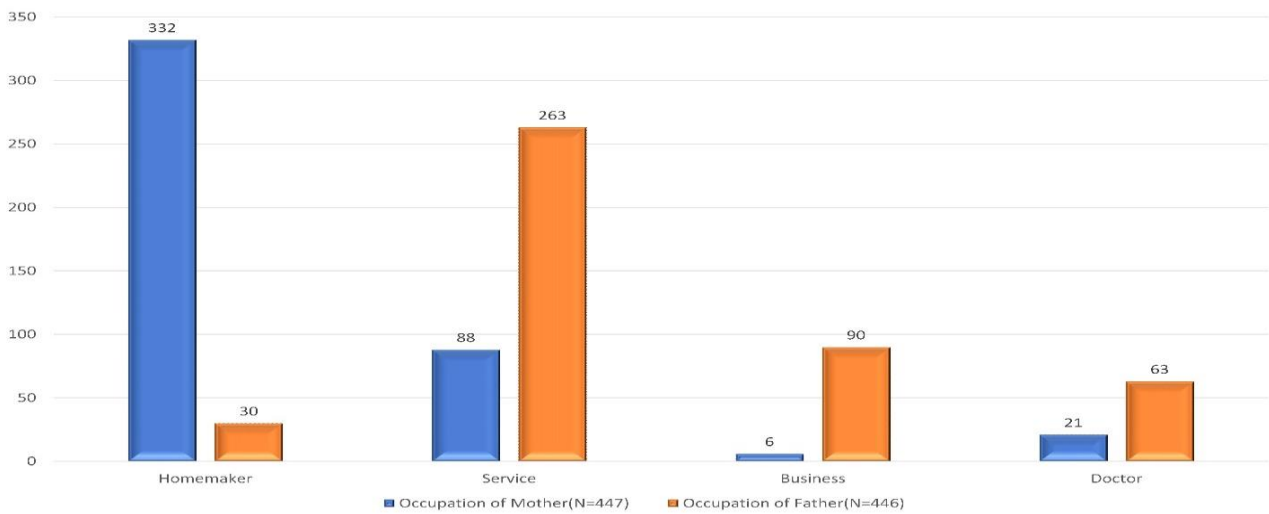


Figure 2: Occupation of the parents of undergraduate medical students in the study

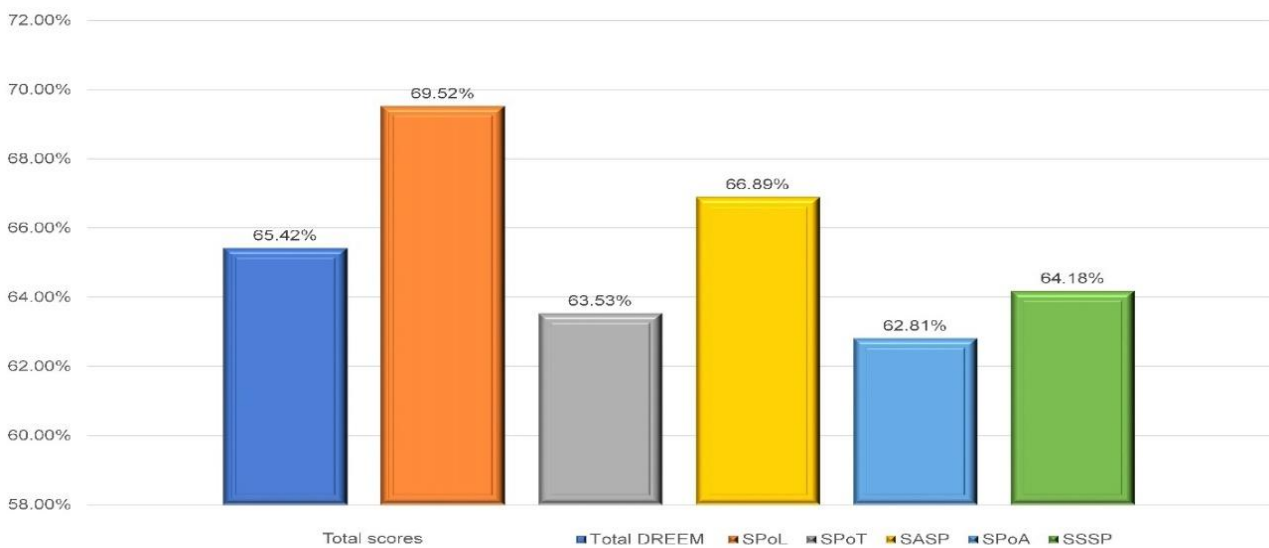


Figure 3: Comparison of percentage of mean scores of total DREEM and subscale domains.

Table 1: Sociodemographic Characteristics of the Medical Students

Sociodemographic variables (N)		Number (%)
Student Distribution (N=449)	Second semester	100(22.27)
	Fourth semester	100(22.27)
	Sixth semester	99(22)
	Eighth semester	100(22.27)
	Interns	50(11.13)
Gender (N=449)	Male	326(72.6)
	Female	123(27.4)
Medium of Schooling (N=447)	Hindi	111(24.83)
	English	334(74.72)
	Others	2(0.45)
High School Education (N=443)	Government Institution	81(18.28)
	Private Institution	362(81.72)
Type of Family (N=448)	Nuclear	344(76.78)
	Joint	104(23.21)
Current living arrangement (N=449)	With Parents	10(2.22)
	Rent Alone	2(0.44)
	Rent with Others	0
	Inside College Campus	437(97.32)
Education prior to MBBS admission	12 th standard Schooling	447(99.55)
	Diploma	0
	Bachelor's degree	2(0.45)
	Master's degree	0
Interest in Extracurricular Activities	Yes	398(89.43)
	No	47(10.56)

N= Number of students responded

DREEM scores and subscales

The mean total DREEM score \pm SD (%) was calculated as 130.85 \pm 19.24(65.42%) out of 200. The total mean scores

\pm SD for various subscales were as follows: SPoL was 33.37 \pm 5.89, SPoT was 27.95 \pm 3.98, SASP was 21.41 \pm 4.47, SPoA was 30.15 \pm 5.78 and SSSP was 17.97 \pm 3.20 (Figure 3). The mean total DREEM score \pm SD of the fourth semester was highest (134.45 \pm 19.02) followed by interns (133.82 \pm 11.38), sixth semester (131.60 \pm 20.07), second semester (130.15 \pm 18.45), the lowest mean score was observed with the eighth semester (125.71 \pm 21.55) and a significant difference was observed between scores of various semesters ($p=0.016$). A significant difference in the total aggregate DREEM score of the fourth and eighth semesters ($p=0.011$) was observed and the rest all semesters had a comparable total score.

Similar findings were also seen with the total SPoL score where a significant difference was noted between the fourth and eighth semesters ($p=0.039$). While comparing the total SPoT score among various semesters, a significant difference was observed between the score of the second and fourth semester ($p=0.002$), fourth and sixth semester ($p=0.003$) fourth and eighth semester ($p<0.001$). Rest all scores were comparable among various semesters ($p>0.05$). The semester-wise comparison is summarized in table 2.

DREEM score interpretation

On analyzing the total DREEM score, a total of 61(13.59%) scored between 151-200(Excellent), 363(80.85%) students scored between a total score of 101-150(More positive than negative) and 25(5.57%) students scored between a total score of 51-100 (Plenty of problems) and none of the students scored lesser than 50(Very poor). In the subgroup analysis of DREEM subscales, for SPoL, the majority of the students ($n=299$) had a 'more positive approach. For SPoT, the majority ($n=373$) felt that 'teachers were moving in the right direction. For SASP, most of them ($n=295$) felt their 'academics were more on the positive side'. For SPoA, majority ($n=333$) reported a 'more positive atmosphere'.

Table 2: Semester wise Comparison of Total DREEM and Subscale scores

DREEM Domains	Semester Mean score (SD)					p-value
	Second	Fourth	Sixth	Eighth	Interns	
Students' Perception of Learning	33.93(5.89)	34.25(5.79)	33.20(6.02)	31.91(6.62)	33.74(3.31)	$p=0.047$
Students' Perception of Teaching	27.53(3.66)	29.59(3.33)	27.58(5.04)	26.91(3.85)	28.34(2.48)	$p<0.00001$
Students' Academic Self-perception	21.29(4.39)	22.03(4.71)	21.40(4.06)	20.38(5.07)	22.44(3.19)	$p=0.041$
Students' Perception of Atmosphere	29.24(5.96)	30.94(5.74)	31.03(5.36)	28.90(6.45)	31.14(4.15)	$p=0.012$
Students' Social Self-perception	18.16(2.86)	17.64(3.37)	18.38(3.65)	17.61(3.22)	18.16(2.38)	$p=0.324$
Total DREEM Score	130.15(18.45)	134.45(19.02)	131.60(20.07)	125.71 (21.55)	133.82(11.38)	$p=0.016$



Table 3: Interpretation of DREEM subscale scores

DREEM Subscale Items	Scoring	Interpretation	Number of Students
Students' perception of learning	0-12	Very poor	0
	13– 24	Teaching is viewed negatively	35
	25– 36	A more positive approach	299
	37– 48	Teaching highly thought of	115
Students' perception of teachers	0-11,	Abysmal	0
	12– 22	In need of some retraining	34
	23– 33	Moving in the right direction	373
	34– 44	Model teachers	42
Students' academic self-perceptions	0-8	Feeling of total failure	2
	9– 16	Many negative aspects	50
	17– 24	Feeling more on the positive side	295
	25– 32	Confident	102
Students' perception of atmosphere	0-12	A terrible environment	3
	13– 24	There are many issues that need changing	58
	25– 36	A more positive atmosphere	333
	37– 48	A good feeling overall	55
Students' social self-perceptions	0-7	Miserable	3
	8– 14	Not a nice place	48
	15– 21	Not too bad	340
	22– 28	Very good socially	58

Table 4A: DREEM Subscale (Students' perception of learning) scores

Sl. No.	DREEM Domain items	Mean Score	Standard deviation
1	I am encouraged to participate during teaching	2.96	0.72
7	The teaching is often stimulating	2.8	0.85
13	The teaching is student-centered	2.78	0.82
16	The teaching helps to develop my competence	2.93	0.81
20	The teaching is well focused	3.01	0.82
22	The teaching helps to develop my confidence	2.75	0.88
24	The teaching time is put to good use	2.79	0.88
25	The teaching over-emphasizes factual learning	2.69	0.95
38	I am clear about the learning objectives of the course	2.89	0.83
44	The teaching encourages me to be an active learner	2.75	0.94
47	Long-term learning is emphasized over short-term learning	2.81	0.87
48	The teaching is too teacher-centered	2.21	0.98

Scoring of individual items of DREEM inventory

The maximum mean score was 3.45 for the item statement 'The teachers are knowledgeable' and the minimum mean score was 1.44 for the statement 'I find the experience disappointing'. The mean score of total seven DREEM items (item number 2,10,15,18,20,31 and 46) were above 3 and seven items (Item number 4,8,14,17,35,39 and 50)

had mean score less than 2 and were identified as 'Problematic areas'. There were no items that had their mean score of more than 3.5(True Positive). Rest 36 items had their mean score between 2-3 and were identified as 'areas that could be enhanced or improved'. (Table 4A, 4B, 4C, 4D, 4E)



Table 4B: DREEM Subscale (Students' perception of Teachers) scores

Sl. No.	DREEM Domain items	Mean Score	Standard deviation
2	The teachers are knowledgeable	3.45	0.64
6	The teachers espouse a patient centered approach to clinical work	2.84	0.79
8	The teachers ridicule the students	1.49	1.00
9	The teachers are authoritarian	2.42	0.97
18	The teachers have good communications skills with patients	3.08	0.78
29	The teachers are good at providing feedback to students	2.64	0.98
32	The teachers provide constructive criticism	2.66	0.87
37	The teachers give clear examples	2.87	0.76
39	The teachers get angry in teaching sessions	1.84	1.00
40	The teachers are well prepared for their teaching sessions	2.94	0.83
50	The students irritate the teachers	1.72	1.20

Table 4C: DREEM Subscale (Students' academic self-perceptions) scores

Sl. No.	DREEM Domain items	Mean Score	Standard deviation
5	Learning strategies which worked for me before continuing to work for me now	2.31	1.15
10	I am confident about my passing this year	3.11	0.81
21	I feel I am being well prepared for my profession	2.72	0.92
26	Last year's work has been a good preparation for this year's work	2.58	0.89
27	I am able to memorize all I need	2.01	1.07
31	I have learned a lot about empathy in my profession	3.05	0.72
41	My problem-solving skills are being well developed here	2.63	0.83
45	Much of what I have to learn seems relevant to a career in healthcare	2.99	0.86

Table 4D: DREEM Subscale (Students' perception of atmosphere) scores

Sl. No.	DREEM Domain items	Mean Score	Standard deviation
11	The atmosphere is relaxed during clinical ward teaching	2.85	0.88
12	This course is well time-tabled	2.69	1.06
17	Cheating is a problem in this course	1.85	1.17
23	The atmosphere is relaxed during the lectures	2.78	0.85
30	There are opportunities for me to develop inter-personal skills	2.94	0.85
33	I feel comfortable in teaching sessions socially	2.80	0.82
34	The atmosphere is relaxed during seminars/tutorials	2.75	0.91
35	I find the experience disappointing	1.44	0.98
36	I am able to concentrate well	2.47	0.94
42	The enjoyment outweighs the stress of studying the course	2.31	1.13
43	The atmosphere motivates me as a learner	2.71	0.97
49	I feel able to ask the questions I want	2.56	1.20

Table 4E: DREEM Subscale (Students' social self-perceptions) scores

Sl. No.	DREEM Domain items	Mean Score	Standard deviation
3	There is a good support system for students who get stressed	2.54	1.00
4	I am too tired to enjoy this course	2.00	1.08
14	I am rarely bored on this course	1.96	1.06
15	I have good friends in this course	3.13	0.88
19	My social life is good	2.87	0.96
28	I seldom feel lonely	2.30	1.16
46	My accommodation is pleasant	3.18	0.80

Comparison of scores among various sociodemographic variables

A significant difference was observed between the total DREEM score between males and females ($p=0.029$). In the DREEM Subscale domains, a significant difference in total SPOT score was observed ($p=0.013$) and the rest of the other subscale domains were comparable ($p>0.05$). (Table 5)



Table 5: Gender wise Comparison of total DREEM and subscale domain scores

DREEM Subscale Items	Maximum score	Male	Female	p-value
Students' Perception of Learning (%)	48	33.61(70.02)	32.74(68.21)	0.164
Students' Perception of Teaching (%)	44	28.24(64.17)	27.20(61.81)	0.013*
Students' Academic Self-perception (%)	32	21.61(67.54)	20.85(65.17)	0.108
Students' Perception of Atmosphere (%)	48	30.46(63.46)	29.33(61.09)	0.064
Students' Social Self-perception (%)	28	18.15(64.81)	17.50(62.51)	0.057
Total DREEM score (%)	200	132.06(66.03)	127.62(63.81)	0.029*

*p<0.05: Statistically significant

The mean scores of students with an education in Hindi medium in total DREEM score and all subscales were higher than English medium students. A significant difference in the total DREEM scores ($p<0.0001$) was observed when a comparison was done based on the medium of schooling (Hindi and English) of the students and a similar trend was also observed with the subscale domain scores like SPoL ($p<0.0001$), SPoT ($p=0.005$), SASP ($p<0.0001$), SPoA ($p<0.0001$), and SSSP ($p=0.002$).

The place of high school education (government and private) of the students did not affect the total DREEM score and subsequent subscale scores ($p>0.05$). No significant difference was observed when the total DREEM score and various subscales scores were compared based on the father's and mother's occupation ($p>0.05$).

While comparing the scores of students based on their living arrangements, although the mean total DREEM scores of the students and all subscale domain score were comparatively higher with students staying with parents than that of staying at the campus and staying in rent house but no significant difference was observed between the various scores ($p>0.05$). The students who liked extracurricular activities and those who didn't like them had no significant difference in their total DREEM score and subscale scores ($p>0.05$).

When comparing the total DREEM and various subscale scores based on any prior education or degree before enrolling into MBBS, no significant difference ($p>0.05$) was observed between students with various prior education and those who directly got admitted into MBBS after their 12th class.

A significant difference in scores was observed when the total DREEM score of students with family (Nuclear and Joint) type were compared ($p<0.0001$) with higher means in a joint family as compared to nuclear ones and a similar trend was also seen with the subscale scores such as SPoL ($p<0.0001$), SPoT ($p=0.013$), SASP ($p=0.013$), SPoA ($p=0.004$), and SSSP ($p<0.004$).

DISCUSSION

The present study was conducted on the medical undergraduates to assess the learning environment during their medical college. The majority of the students were males and studied from a private English medium school.

Most of them stayed on campus and from a nuclear family. The total DREEM score for the fourth semester was higher as compared to others. A major chunk of the students in the present study felt more positive vibes than negative ones yet they felt the majority of the areas could be enhanced to improve the educational environment.

The mean total DREEM score in the current study was 130.85. The total DREEM mean score by the studies conducted by Vaughan et al. (135.37), Hongkan et al. (131.1), Roff et al. (130), and Rani et al. (127.4) was comparable to our study.^{4,12,26,27} The Majority of the earlier national and international studies reported a lower total DREEM score as compared to the present study.^{1,4,7,11,13,18,21,28-32} On comparing, majority of the Indian studies conducted by Pai et al., (123), Abraham et al., (121.5), Gade et al., (119.25), Gupta et al. (118.4), Mayya et al. (107.44), and Kohli et al. (101.13) reported a lower total DREEM score.^{11,15,17-19,28} The observed higher total DREEM score in the present study denotes a better perceived educational environment by the students which can lead to better learning outcomes. Moreover, an approximate majority of the students in our study were exclusively staying at the hostel in the college campus which again allows us to assess the educational environment in a better way.

The mean subscale domain scores in the present study for SPoL was 33.37, SPoT was 27.95, SASP was 21.41, SPoA was 30.15 and SSSP was 17.97 respectively. Studies done by Vaughan et al., Roff et al., Hongkan et al., and Motghare et al. had their subscale domain scores comparable to the present study.^{4,13,26,27} Whereas studies conducted by Umber et al, Till et al, Bakhshialiabad et al. and Kohli et al. reported were comparatively lower subdomain scores to the current study.^{7,11,29,32}

The most highly rated item was for the statements 'The teachers are knowledgeable' which was consistent with studies conducted by Rani et al., Kohli et al. Motghare et al, Hongkan et al and Demirören et al.^{11-13,27,30} Minimum rated item was 'I find the experience disappointing' which was similar to a study conducted by Hongkan et al.²⁷ Rani et al and Kohli et al. reported that lowest score was given to statements like the emphasis on factual learning and authoritative teachers.^{11,12} This shows that the students were satisfied by the quality of teaching and faculties and



were not disappointed with the educational environment which is a positive takeaway from this study.

There were seven DREEM items whose mean score was above 3 and seven items were lesser than 2. A total of 36 items were between 2 and 3. A study by Motghare et al reported that four items got a mean score of 3 or more, nine items with ≤ 2 , and a total of 37 items between 2.1 and 3.¹³ Hongkan et al reported that eleven items had a mean score below 2.5, and nine items were above 3.0 and none below 2.0.²⁷ Demirören et al in their study found that two items had a mean score above 3.0 and nine had a score below 2.0 and the rest were between 2 and 3.³⁰ There were more items in this study that had a score of more than 3 which shows a better-perceived environment as compared to other studies.

The mean total DREEM score of the males in the present study was higher (132.06) than the females(127.62) which was similar to the studies conducted by Kim et al. (Male vs. Female; 95.22 vs. 93.69), Motghare et al. (Male vs. Female; 129.06 vs. 124.78) and Bakhshialiabad et al (Male vs. Female; 116.2 vs. 110.72).^{1,7,13} On the contrary, the studies conducted by Dunne et al (Male vs. Female; 123 vs. 126), Hongkan et al. (Male vs. Female; 130.8 vs. 131.3), and Bassaw et al. (Male vs. Female; 105.39 vs. 112.78) reported opposite results.^{21,24,27} However, studies by Mayya et al. and Vaughan et al. could not find any difference between the two genders.^{26,28}

This total mean DREEM score of second, fourth, sixth, eighth, and interns were 130.15, 134.45, 131.60, 125.71, and 133.82 respectively. The total DREEM score by first, second, third, fourth, and fifth-year by a study by Dunne et al (121, 118, 130, 123, and 125) and Umber et al (113.20, 113.20, 112.0, 111.70, and 112.1) respectively were lower as compared to our study.^{24,29} The mean total DREEM score mentioned by Bakhshialiabad et al for first, second, third, and fourth-year students (119.73, 112.49, 111.19 and 117.5), Kiran et al for final MBBS students and interns (120 and 121.5), Abraham et al for first year and clinical batch students(119 and 114) and Demirören M et al for first, third and fifth year (116.53, 123.65 and 109.39) respectively were also lower than present study scores.^{7,14,15,30}

The students coming from the joint family had significantly better DREEM scores as compared to ones belonging to the nuclear family. The probable reason could be that the children in joint families are emotionally stronger and can cope up with various stress and environmental changes as compared to one staying in nuclear families.

Literature also shows evidence that the educational-research environment which includes a wide range of education like internal sections which includes student-teacher interaction, students' psychological, and emotional factors, and external sections like physical structures and facilities also do affect the academic self-efficacy of the medical students.³³ Similar study on assessing the professional behaviors in medical students

reported it to be governed by several factors like medical education system, social and cultural flaws, and personal problems of students and can be improved by multipronged approach along with improving the medical education system.³⁴

The medical and professional education has also been affected to a great extent in the current scenario of prevailing pandemic of COVID-19 because of change of conventional teaching methods into online mode.^{35,36} However, with modifications and active involvement of the faculties and students the issues related to teaching and learning can be sorted out to a great extent.

Limitations and recommendation

This study was a single-centered study hence the findings cannot be generalized to other medical colleges. However, the findings of this study can serve as a baseline and a similar longitudinal study can be done to assess the same students at various years of their medical school curriculum.

CONCLUSION

The educational environment in a medical college plays a crucial role in the development of the personality and learning of the students. Grossly, the educational environment of the students in the present study was more positive than negative. The students identified few positive areas and also areas where improvement is needed in the medical school environment. The assessment of the educational environment is a dynamic process and should be done regularly for better outcomes and the findings of the current study would help the academicians and teachers to make changes in the curriculum and educational environment in order to improve the quality and impact of the medical education curriculum.

Acknowledgments: We would like to acknowledge Sue Roff et al for the DREEM questionnaire which was utilized as a study tool in this study and Neeti Rustagi for obtaining permission for the DREEM inventory. We thank the institutional ethics committee for permitting us to conduct this study and the study was conducted following the ethical principles and codes of research.

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Source of Support: The author(s) received no financial support for the research, authorship, and/or publication of this article.

Conflict of Interest: The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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