

A DREEM-based Assessment of the Educational Environment as Perceived by Paramedical Students

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Abstract

Background: Assessing the learning environment provides an overview of the current educational status and aids in identifying areas of concern. This study aimed to understand the students' perceptions of the educational environment at the Paramedical Faculty of Ilam University of Medical Sciences in 2021.

Methods: This cross-sectional research was conducted at Ilam University of Medical Sciences, where 300 paramedical students were recruited by census. The Dundee Ready Education Environment Measure (DREEM) was used as the data collection tool. An independent t-test and one-way analysis of variance were used to investigate the relationships between demographic variables and each dimension of the questionnaire. Data analysis was performed using SPSS-26 software.

Results: The sample studied included 166 female and 134 male students with an average age of 24.68 ± 7.837 years. The mean and SD of the perception of the educational environment were 112.34 (24.63). There was a significant relationship between marital status, education level, age, and academic semester with students' understanding of the educational environment ($P \leq 0.05$). Twenty percent of the items in the questionnaire indicated a "problematic" situation, while the rest were in a "need of attention" status.

Conclusion: The results of this study showed that paramedical students have a positive perception of the educational environment. The lowest mean and SD of the dimensions of the questionnaire were observed in students' understanding of learning and social self-perception. The other dimensions were in a more satisfactory condition.

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Introduction

The design and implementation of a curriculum are considered the learning environment for students in educational institutions worldwide.¹ The learning environment encompasses everything in a classroom, faculty, college, or university, which is crucial for success in medical and paramedical education courses.²

An effective learning environment includes suitable lecture rooms, teaching aids, laboratories, and motivated, experienced instructors, all of which enhance students' motivation, participation, attention, and performance.³ Evidence suggests that the educational environment in a health education institution can have a lasting impact on students' motivation, knowledge, critical thinking, and social life. There is also evidence that students'

psychological distress and academic burnout are largely influenced by their learning environment. Therefore, identifying the strengths and areas for improvement in the educational environment is vital for enhancing students' learning.⁴⁻⁶

In an ideal situation, logical activities and academic progress in an educational environment should be accompanied by encouragement of socialization, cooperation, and support among students. Moreover, students' feedback and perception of the educational environment should be considered to improve the educational setting.³ The perception of the educational environment signifies students' evaluation of various aspects of this environment, including the physical and social setting, educational atmosphere, and other characteristics.⁷

Given the aforementioned advantages, if the active elements of an educational environment at a higher education institution are identified and assessed from the student's perspective, a framework can be developed to reinforce their learning experience.⁸

What is more important than the university's educational environment is the students' perception of the educational environment. How the students perceive the educational environment and whether they think it is favorable and pleasant or unfavorable and unpleasant greatly affects their motivation and the amount of learning.⁶

According to the World Federation of Medical Education (1998), the assessment of an educational environment is a primary tool to evaluate the success or failure of a medical education program 1. Appraising the undergraduate learning environment using a quantitative approach has several advantages. The results provide an overview of the status of the educational environment and allow for comparisons between different studies. Quantitative subscale scores can provide information regarding specific learning environment components and suggest possible ways to address problem areas. Finally, these scores can be monitored over time to determine whether specific interventions have achieved their desired effect.⁹

There are different methods for evaluating the educational environment. According to a review study, the Dundee Ready Education Environment Measure (DREEM) is the most comprehensive tool with appropriate validity and reliability to evaluate the educational environment in medical sciences universities. It has been translated into eight languages and used in at least 20 countries. Therefore, the researchers found that DREEM is useful for detecting problems and implementing timely intervention measures in an educational environment.¹⁰

In medical schools, many researchers focus on the learning environment to compensate for the poor

performance of their students. Due to their diversity, especially in personal motivations and emotions, the curriculum should provide a learning environment that supports all students in delivering high-quality health care in their patients' best interests and safety.¹¹

Using this questionnaire, various medical sciences universities throughout Iran evaluated their educational environment. The results of these studies show that students have a positive attitude towards their educational environment. However, considering the different conditions of each environment, its strengths and weaknesses will differ across faculties.¹²⁻¹⁷

Since the educational environment of the Paramedical Faculty of Ilam University of Medical Sciences has not been evaluated so far, this study aims to determine the perception of paramedical students of Ilam University of Medical Sciences from the educational environment based on the DREEM inventory.

Methods

Design and Setting

The present study was part of a cross-sectional research conducted from February 19, 2021, to July 6, 2021, at Ilam University of Medical Sciences.

Participants and Sampling

The census method was used for sampling and included all operating room, anesthesia, and laboratory sciences students (N=340) from Ilam University of Medical Sciences. It should be noted that 40 students did not meet our inclusion criteria. Ultimately, the research sample included 110 students from the operating room department, 96 from the anesthesia department, and 94 from the laboratory science department. Inclusion criteria were voluntary participation and informed consent to participate in clinical research and engagement in academic courses. The exclusion criterion was an overall unwillingness to participate in research in all fields.

Data Collection Methods

The data collection tool was a questionnaire that was used to collect data by visiting the research environment after receiving permission from the ethics committee of Ilam University of Medical Sciences and coordination with university officials. To reduce the effect of interfering factors in completing the questionnaires, the authors presented sufficient and clear explanations to participants regarding the confidentiality of the information and the lack of judgment so that the responses could be close to reality. After obtaining informed consent, the questionnaires were provided to participants, which were completed by the self-report method in the presence of the researcher.

Tools/Instruments

Demographic Information Questionnaire

This questionnaire includes the following items: age (in years), gender (male, female), semester (1, 2, 3, 4, 5, 6, 7, and 8), academic major (continuous, discontinuous), and marital status (single, married).

Learning Environment Questionnaire (DREEM)

The Dundee Ready Education Environment Measure (DREEM) was used to assess the students' perception of the learning environment. This inventory includes five subdomains related to measuring perception and expectation from the learning environment based on a five-point Likert scale. Each item is scored from 0–4 (4 for strongly agree; 3 for agree; 2 for uncertain; 1 for disagree; 0 for strongly disagree). The subscales of DREEM are as follows:

12 questions: Student's perception of learning (SPL); 11 questions: Student's perception of teaching (SPT); 8 questions: Academic self-perception (SAP); 12 questions: perceptions of atmosphere (SPA); 7 questions: social self-perception (SSP).¹⁸

Among these questions, nine (4, 8, 9, 17, 25, 35, 39, 48, and 50) are negative and thus must be coded reversely. The maximum score of DREEM is 200. Higher scores indicate a more positive and convenient educational environment and lower scores vice versa. A score range of 0-50 indicates a poor environment, 51-100 a problematic (unfavorable) environment, 101-150 a positive attitude towards the environment, and 151-200 an excellent environment.

To identify the strengths and weaknesses in the educational environment in the study area, the authors considered statements with an average score of ≥ 3.5 as positive points, and any statements with an average score of ≤ 2 indicated problematic areas. Statements with an average score between 2 and 3 indicated aspects of the educational environment that should be reinforced.¹⁹ Table 1 shows the subscales' interpretation and average score and the total DREEM inventory score 3.

This tool has been used in many types of research in the country and is reliable and valid. In the study of Jafari et al. (2020), its reliability coefficient was reported as 0.83, using Cronbach's alpha method for the entire questionnaire.²⁰

Data Analysis

Descriptive analysis of variables, including mean indices, standard deviation, frequency variables, and percentages, was reported. The Kolmogorov-Smirnov test was used to evaluate the normality of scores. Furthermore, the independent t-test and One-Way ANOVA were applied to investigate the factors affecting students' perception of the educational environment. SPSS-26 software was employed for data analysis, and $P < 0.05$ was considered the significance level.

Results

The study sample included 300 paramedical students (166 females and 134 males) with a mean age of

Table 1: Score interpretation of mean subscale and total DREEM scores

Domain	Score	Interpretation
Domain 1. Student's perception of learning	0-12	Very weak
	13-24	Negative attitude towards education
	25-36	Positive perception
	37-48	Effective education
Domain 2. Student's perception of teaching	0-11	Very weak
	12-22	Needs relearning
	23-33	Moving in the right direction
	34-44	Distinguished professors
Domain 3. Students' social self-perceptions	0-8	General feeling of inadequacy
	9-16	High negative dimensions
	17-24	Positive feeling
	25-32	Confidence
Domain 4. Student's perception of the atmosphere	0-12	Terrible environment
	13-24	Considerable modifications are required
	25-36	More positive attitude
	37-48	General positive feeling
Domain 5. Students' academic self-perceptions	0-7	Highly undesirable
	8-14	Not a good place
	15-21	Not so bad
	22-28	Desirable social conditions
	29-35	Very good
Total Scores: 200	0-50	Completely unsatisfactory
	51-100	Denotes an environment with many problems
	101-150	Generally, it conveys a positive attitude
	151-200	A perfect environment

24.68±7.837. In addition, 110 students were engaged in the operating room department, 96 were from the anesthesia department, and 94 were involved in the laboratory science department. In the meantime, 258 students were single-degree BSc. and 41 were double-degree BSc. students. Table 2 shows all the demographic information of the samples.

According to the results, the mean and standard deviation (SD) of students' perception of the educational environment was 112.34 (24.63), indicating an overall positive attitude towards the educational environment. The lowest mean among the questionnaire dimensions was observed in students' perception of learning, which suggests a negative viewpoint toward education. Social self-perception followed this dimension, which also showed high

negative dimensions. The other dimensions, however, were in a more favorable condition (Table 3).

Based on the independent t-test results, a significant correlation was found between marital status and educational level with students' perception of the educational environment ($P \leq 0.05$). This finding suggests that married and double-degree undergraduate students held a more positive view of the educational environment than their single and single-degree undergraduate counterparts. However, no significant relationship was observed between gender and perception of the educational environment ($P \geq 0.05$) (Table 4).

The ANOVA results indicated a significant relationship between age and academic semester

Table 2: Demographic characteristics of the participants

Variable		Number	Percentage
Gender	Male	166	55.3
	Female	134	44.7
Age	≤20	80	26.7
	21-30	179	59.7
	≥31	41	13.7
Marital status	Single	250	83.3
	Married	50	16.7
Major	Continuous	259	86.3
	Discontinuous	41	13.7
Semester	1	62	20.9
	2	16	5.4
	3	27	9.0
	4	60	19.9
	5	4	1.3
	6	54	17.9
	7	24	8.0
	8	53	17.6

Table 3: Mean and standard deviation of variables: perception of the educational environment and its components

Variable	M (SD)	Interpretation
Student's perception of learning (SPL)	23.07 (7.12)	Negative attitude towards education
Student's perception of teaching (SPT)	27.1 (6.47)	Moving in the right direction
Students' academic self-perceptions (SAP)	19.5 (4.91)	Not so bad
Student's perception of atmosphere (SPA)	26.66 (6.80)	More positive attitude
Students' social self-perceptions (SSP)	16 (4.19)	High negative dimensions
Total Scores	112.34 (24.63)	Generally conveys a positive attitude

M (SD): Mean (Standard deviation)

Table 4: T-test results. Comparison of mean scores by demographic variables for the DREEM subscale and total scores

Variable		SPL M (SD)	SPT M (SD)	SAP M (SD)	SPA M (SD)	SSP M (SD)	Total Scores M (SD)
Gender	Male	22.96 (6.943)	27.54 (6.53)	19.45 (5.02)	26.91 (7.05)	15.92 (4.02)	112.78 (24.35)
	Female	23.12 (7.28)	26.77 (6.43)	19.54 (4.85)	26.49 (6.61)	16.05 (4.35)	111.96 (24.99)
	P	0.849	0.301	0.869	0.594	0.790	0.775
Marital status	Single	22.23 (6.77)	26.39 (6.36)	19.06 (4.76)	26.12 (6.57)	15.66 (4.1)	109.46 (23.33)
	Married	27 (7.35)	30.40 (5.84)	21.48 (4.99)	29.06 (7.17)	17.56 (4.26)	125.50 (25.55)
	P	0.000**	0.000**	0.001*	0.005*	0.003*	0.000**
Major	Continuous	22.14 (6.70)	26.41 (6.32)	19.09 (4.76)	26.14 (6.52)	15.60 (4.09)	109.38 (23.2)
	Discontinuous	28.56 (7.19)	31.05 (5.89)	21.98 (5.26)	29.63 (7.77)	18.27 (4.09)	129.49 (26.21)
	P	0.000**	0.000**	0.000**	0.002*	0.000**	0.000**

SPL: Student's perception of learning; SPT: Student's perception of teaching; SAP: Students' academic self-perceptions; SPA: Student's perception of atmosphere; SSP: Students' social self-perceptions; M (SD): Mean (Standard deviation); * $P \leq 0.01$; ** $P \leq 0.001$

Table 5: Results of analysis of One-Way ANOVA, Comparison of mean scores by demographic variables for DREEM subscale and total scores

Variable	SPL M (SD)	SPT M (SD)	SAP M (SD)	SPA M (SD)	SSP M (SD)	Total Scores M (SD)	
Age	≤20	24.43 (7.59)	27.51 (6.70)	20.73 (5.32)	26.84 (7.27)	16.19 (4.41)	115.69 (26.38)
	21-30	21.25 (5.97)	25.97 (6.07)	18.40 (4.32)	25.80 (6.09)	15.39 (3.94)	106.80 (20.90)
	≥31	28.39 (7.77)	31.20 (6.18)	21.98 (5.21)	30.17 (7.81)	18.32 (4.13)	130.05 (27.38)
	P	0.000**	0.000**	0.000**	0.001**	0.000**	0.000**
Semester	1	27.87 (7.30)	29.95 (6.36)	22.48 (4.79)	28.98 (7.40)	18.27 (4.05)	127.56 (25.50)
	2	25.31 (4.77)	29.56 (3.69)	21 (3.79)	30.75 (2.21)	16.44 (3.12)	123.06 (11.87)
	3	24.81 (11.17)	27.3 (9.40)	20 (6.28)	25.59 (11.94)	16.19 (6.01)	113.89 (41.23)
	4	20.32 (5.86)	23.82 (6.78)	17.10 (5.05)	24.08 (6.21)	14.63 (3.86)	99.95 (20.59)
	5	22.5 (4.36)	25.75 (2.63)	16 (3.74)	23.25 (2.36)	13 (3.56)	100.5 (14.15)
	6	21.7 (6.04)	26.41 (5.48)	18.04 (4.67)	26.04 (5.99)	14.63 (4.46)	106.81 (22.47)
	7	20.17 (6.53)	25.83 (7.28)	19.17 (3.96)	25.83 (5.32)	15.92 (3.19)	106.92 (20.83)
	8	21.68 (4.05)	27.96 (3.52)	19.89 (2.75)	27.42 (3.65)	16.28 (2.72)	113.23 (9.09)
	P	0.000**	0.000**	0.000**	0.001**	0.000**	0.000**

SPL: Student's perception of learning; SPT: Student's perception of teaching; SAP: Students' academic self-perceptions; SPA: Student's perception of atmosphere; SSP: Students' social self-perceptions; M (SD): Mean (Standard deviation); **P≤0.001

and students' educational environment perception ($P \leq 0.05$). This finding suggests that students older than 30 and those in their first academic semester held a more positive view of the educational environment (Table 5).

According to Table 6, the mean and standard deviation (SD) of questions 7, 13, 20, 22, 25, 44, and 48 from the learning subscale, questions 3 and 14 from the social self-perception subscale, and question 12 from the educational atmosphere subscale were less than 2. This finding indicates problematic areas. The rest of the questions scored between 2 and 5.3, suggesting areas that need reinforcement.

Discussion

The present study was conducted to determine students' perception of the educational environment in the Paramedical Faculty of Ilam University of Medical Sciences in 2020. This study also showed that the mean and SD of the perception of the educational environment (in the 100-120 range) indicate students' "more positive than negative" attitude toward the educational environment. This finding is in line with the studies conducted by Rokhafrooz et al. (2022), Fathi & Valiee (2018), Rahmani et al. (2020), Nasiri et al. (2017), Farajpour et al. (2017), Faraj Pour et al. (2016), and Bagheri et al. (2019) in Iran^{13, 15, 16, 19, 21-23} and Ikrou et al. (2022) abroad.²⁴

The mean and SD of our study results were lower than other investigations conducted by Afrazandeh et al. (2022), Bahrami et al. (2022), and Jafari et al. (2021) in Iran,^{14, 17, 25} and Maayah et al. (2021), Negash et al. (2022), Tang et al. (2022) and Xu & Yang (2022) overseas^{3, 26-28} among students of different fields of medical sciences. These were in the range of 120-150. However, these results were consistent with the classification of this questionnaire because a score range of 100-150 indicates a "more positive than

negative" attitude of the students.

According to studies, it seems that if traditional teaching methods are practiced in a university, the overall score of the quality of educational environment perception is less than 120. However, if student-centered teaching methods are used, the overall score increases by an average of 10 points.¹⁹

According to a review recently conducted by Chan et al., based on the DREEM inventory, most undergraduate students of various medical and paramedical majors evaluated their educational environments as "more positive than negative", and younger students had higher DREEM scores than older ones.⁹

Contrary to the present study, the results of research conducted among paramedical students of Behbahan Paramedical College showed an excellent attitude of students.⁸ The differences in the cultural context of students, the availability of facilities, the curriculum, the expectations of the students, and the quality of the faculty affect students' perception of the educational environment,¹⁰ leading to different results in studies in various faculties and majors.

Among the dimensions, the lowest score was in students' perception of learning (indicating a negative attitude toward education) and social self-perception (high negative dimensions), while other dimensions were in a better state. In studies conducted among nursing students in Ahvaz and various medical sciences majors in Saudi Arabia, the lowest score was observed in the social self-perception dimension.^{3, 13, 15} Studies conducted among students of various medical sciences majors at Mashhad University and Behbahan Paramedical College reported the lowest score in the learning dimension,^{8, 21} and their findings were comparable to ours. On the other hand, in research conducted among health students in China, the lowest score was

Table 6: Mean scores of each question of the DREEM inventory

	Question	M (SD)	Interpretation
SPL	1. I am encouraged to participate in the lectures	2.27 (1.20)	Could be enhanced
	7. The teaching is often stimulating.	1.85 (1.05)	Problematic areas
	13. Teachers' teaching is student-centered.	1.52 (1.11)	Problematic
	16. The teaching helps to develop my competence.	2.17 (1.06)	Could be enhanced
	20. The teaching is well focused.	1.96 (1.1)	Problematic areas
	22. The teaching helps to develop my confidence.	1.89 (1.12)	Problematic areas
	24. The teaching time is properly spent.	2.15 (1.09)	Could be enhanced
	25. Teaching relies too much on purely scientific content.	1.48 (1.04)	Problematic areas
	38. The learning objectives of each lesson are clear to me.	2.44 (0.96)	Could be enhanced
	44. Teachers teach in a way that encourages me to learn.	1.93 (1.16)	Problematic areas
SPT	47. Long-term learning is given more importance than short-term learning (and memorization).	2.05 (1.16)	Could be enhanced
	48. The teaching is too teacher-centered.	1.58 (1.06)	Problematic areas
	2. Professors have sufficient mastery of scientific content.	2.84 (0.914)	Could be enhanced
	6. The teachers espouse a patient-centered approach to consulting.	2.08 (1.12)	Could be enhanced
	8. The teachers ridicule their students.	2.83 (1.06)	Could be enhanced
	9. The teachers are authoritarian and force students to do assignments.	2.11 (1.11)	Could be enhanced
	18. Professors communicate well with patients.	2.34 (1.14)	Could be enhanced
	29. The teachers are good at providing feedback to students.	2.26 (1.60)	Could be enhanced
	32. Professors provide constructive criticism.	2.39 (1.02)	Could be enhanced
	37. Teachers use clear examples in their teaching.	2.44 (.95)	Could be enhanced
SAS	39. Teachers get angry in the classroom.	2.43 (1.1)	Could be enhanced
	40. Teachers come to class well-prepared.	2.46 (1.06)	Could be enhanced
	50. Students harass professors.	3.09 (0.93)	Could be enhanced
	5. Learning strategies that worked for me beforehand continue to work for me now.	2.42 (0.99)	Could be enhanced
	10. I am sure I will pass this year's lessons successfully.	3.12 (0.82)	Could be enhanced
	21. I feel I am well prepared for my profession.	2.37 (1.18)	Could be enhanced
	26. Last year's work has been a good preparation for this year's.	2.56 (0.98)	Could be enhanced
	27. I can memorize all I need.	2.41 (1.02)	Could be enhanced
	31. I have learned a lot about creating understanding and empathy.	2.45 (0.97)	Could be enhanced
	41. Skills in solving problems in this school will improve.	2.10 (0.10)	Could be enhanced
SPA	45. Most of what I must learn is related to my future job.	2.23 (1.22)	Could be enhanced
	11. The atmosphere is relaxed during consultation teaching	2.19 (1.10)	Could be enhanced
	12. The school has a good schedule.	1.77 (1.13)	Problematic areas
	17. In this period, cheating is considered a problem.	2.03 (1.09)	Could be enhanced
	23. The atmosphere is relaxed during lectures.	2.40 (1.02)	Could be enhanced
	30. I have the opportunity to improve my skills in communicating with others.	2.38 (1.05)	Could be enhanced
	33. I feel comfortable in teaching sessions.	2.40 (1.09)	Could be enhanced
	34. The atmosphere is relaxed during seminars/tutorials.	2.41 (.95)	Could be enhanced
	35. I find the experience disappointing.	2.10 (1.09)	Could be enhanced
	36. I can concentrate well.	2.36 (1.04)	Could be enhanced
SSS	42. The enjoyment outweighs the stress of studying medicine	2.19 (1.15)	Could be enhanced
	43. The atmosphere motivates me as a learner.	2.12 (1.13)	Could be enhanced
	49. I feel able to answer the course questions	2.56 (1.01)	Could be enhanced
	3. There is a suitable support system for students who suffer from stress.	1.37 (1.01)	Problematic areas
	4. I am too tired to enjoy this course	2.19 (1.14)	Could be enhanced
	14. I am rarely bored on this course.	1.78 (1.14)	Problematic areas
	15. I have good friends in college.	2.91 (0.94)	Could be enhanced
	19. My social life is good.	2.95 (0.87)	Could be enhanced
	28. I seldom feel lonely.	2.23 (1.17)	Could be enhanced
	46. I am satisfied with my place of residence at this university.	2.74 (1.06)	Could be enhanced

M (SD): Mean (Standard deviation)

reported in the dimension of academic performance, which was not in line with our study.²⁸ Based on the study's results, the college's teaching method is more traditional and professor-oriented, which may reduce students' motivation to participate actively in the education process. On the other hand, students expect more social support.

The results of the present study showed that there was a significant relationship between marital status and students' perception of the educational environment, indicating that married students had a more positive approach toward the educational environment compared to single students. This finding was not consistent with other studies because, in a

research carried out in Kerman, single students had a more positive attitude than married ones.²⁹ In other studies, no relationship was reported between marital status and students' perception of the educational environment.^{14, 23}

This study showed a significant correlation between educational level and students' perception of the educational environment. This notion means that double-degree undergraduate students had a more positive stance toward the educational environment than single-degree undergraduate students. This finding was in line with the research conducted by Nasiri Ziba and Fatollahi.³⁰ In the research carried out by Vali et al., no correlation was found between the levels of education and perception of the educational environment.²⁹

The findings of the present study revealed a significant relationship between age and students' perception of the educational environment, indicating that students over 30 years old had a more positive attitude toward the educational environment. This finding agreed with investigations conducted among Ferdows Paramedical College students and OR technology students from Iran University of Medical Sciences.^{14, 19} On the other hand, in a study from Kerman, no relationship was found between age and students' understanding of the educational environment.²⁹ Therefore, it can be inferred that the significant difference between the two groups of double-degree and single-degree undergraduate students could be due to their age difference. According to Vaughn, there is a relationship between learning styles and age, and as an advanced education program, these different learning styles should be considered because age is one of the variables in the demographic study of students.¹⁹

Our research revealed a significant relationship between academic semesters and students' perceptions of the educational environment. This finding shows that students in the first academic semesters had a more positive attitude toward the educational environment, consistent with other studies conducted among paramedical students.^{14, 24, 26} On the other hand, the findings of this research were not in line with Vali et al. research, in which there was no significant relationship between academic semesters and students' perception of the educational environment.²⁹ This discrepancy may be due to the increase in students' expectations in higher semesters and the need to acquire clinical skills in addition to theory courses. Therefore, the higher the expectation from the educational environment, the lower the level of satisfaction.

One of the limitations of this study was the cross-sectional method. Another limitation was the lack of separation of students' majors, and, as a result, the understanding of the educational environment was

not compared based on the field of study. Moreover, the present study involved gaining the students' trust to complete the questionnaire, and they were assured while maintaining the confidentiality of the answers, that there would be no effect on their evaluation. Because the educational environment has a great influence on the motivation and success of students, it is suggested to take advantage of studies concerning the evaluation of educational environments based on attitudes and expectations of students to find weak points in various areas for solving the identified challenges, take action to improve the educational environment, and conduct further research in order to follow up and obtain additional information in different majors and various faculties.

Conclusion

The findings of this research indicated students' positive attitudes concerning the educational environment, and the lowest average dimensions of the inventory were in the domain of students' perception of learning and their social self-perception, while other dimensions were in a more favorable status. In addition, the present study showed that married and double-degree students, students over 30 years old, and first-semester students have a more positive attitude regarding the educational environment.

Authors' Contribution

Study concept and design: Sara Mohammadi; Azra Kenarkoohi; Nasrin Kamali. Acquisition of data: Azra Kenarkoohi; Nasrin Kamali; Aghil Rostami. Analysis: Mostafa Sadeghi; Maryam Bastami. Statistical analysis: Payman Rezagholi; Aghil Rostami. Interpretation of data: Sajad Fatollahi; Bita Falahi. Drafting of the manuscript: All authors. Study supervision: Sara Mohammadi

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