STUDY ON ACADEMIC PERFORMANCE IN YOUNG ADULTS

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Abstract

The educational environment has a significant impact on students' satisfaction with the learning process. **Material and methods:** The study was conducted on a sample of 105 students. The Dundee Ready Education Environment Measure (DREEM) indicator was used to assess the educational environment**. Results:** Overall, students have positive perceptions of education. The average overall score of the DREEM indicator was 122.74/200, indicating that the university's academic environment is more positive than negative**. Conclusions:** Students have positively evaluated the educational environment.

Keywords: educational environment, Dundee Ready Education Environment Measure indicator

INTRODUCTION

The educational environment is described as the atmosphere perceived by students and teachers, playing a key role in the student's ability to learn (1). Among various factors, the degree of student engagement plays an important role and depends on their motivation, desire to learn, and perception of the subject's relevance. This can be influenced by previous learning experiences as well as the learning environment. Hutchinson suggests in adult learning theories that the teaching method depends more on the learning environment than on knowledge sharing (2, 4). The environment in which a student learns plays an important role in their academic progress, behavior, and well-being (8).

The purpose of medical education is to shape the knowledge, clinical skills, and professional attributes necessary for graduates to become successful doctors (6). To some extent, the level of competence of future doctors reflects the educational institution they attended and the medical education they received (5). Therefore, it is important to evaluate the educational environment in which medical students learn (including institutional ones), the curriculum, and the learning climate (General Medical Council). This is because the learning process positively correlates with students' perceptions of their educational environment, which can influence the answers to the questions: how, why, and what students learn (16).

There is evidence that the educational environment has a significant impact on students' satisfaction with the learning process, perceived well-being, aspirations, and academic achievements. It can be changed, thus enhancing the quality of medical education itself (17). Innovations in medical curricula and increased student diversity have led to an increased desire and need to assess the educational environment in medical universities (17).

For this reason, the aim of this study is to determine the academic performance of a group of students from the Faculty of Dental Medicine in Iași.

MATERIALS AND METHODS

The study was conducted on a sample of 105 fifth-year students from the Faculty of Dental Medicine, "Grigore T. Popa" University of Medicine and Pharmacy Iași, between October 2022 and October 2023. The data obtained were entered into the SPSS 20 database.

To assess the educational environment, the Dundee Ready Education Environment Measure (DREEM) indicator

was used. The DREEM is an educational environment measurement tool developed ten years ago by a group of professors from the Faculty of Medicine in Delphi. It was designed to evaluate the educational environment in medical universities (6). Although it is used to diagnose deficiencies in the current educational environment, DREEM can also be used to compare different groups, monitor the same cohort over time, and evaluate factors influencing the educational environment (11, 12). It is essentially a questionnaire consisting of 50 items that fall into one of the following five subscales: students' perception of learning (12 items), students' perception of teachers (11 items), self-perception of academic performance (8 items), perception of the university atmosphere (12 items), and self-perception of social life. In the database, each response option was assigned one of the numerical values as follows:

1- Completely agree
2- Agree
3- Uncertain
4- Disagree
5- Completely disagree

Each response option is scored on a scale from 0 to 4 points as follows: "Completely agree": 4 points, "Agree": 3 points, "Uncertain": 2 points, "Disagree": 1 point, and "Completely disagree": 0 points. For statements 4, 8, 9, 17, 25, 35, 39, 48, and 50, reverse coding is required. The scores obtained for the items that make up each of the five subscales are summed for each participant, and the average of this score determines the subscale score. To obtain the overall DREEM score, the subscale scores are summed. The average score obtained for each subscale allows for identifying the strengths and weaknesses of the educational environment.

DREEM has a maximum score of 200, representing an ideal educational environment. The higher the scores, the better the evaluation. Students' perception of the environment as determined by DREEM was classified as "very poor" if the score was between 0 and 50, "plenty of problems" with a score from 51 to 100, "more positive than negative" if 101 to 150, and "excellent" with a score between 151 and 200.

RESULTS AND DISCUSSION

30% of the study participants completely agree that the teaching method is student-centered, 28% are not sure about this, and 6% completely disagree with this statement (Fig. 1).

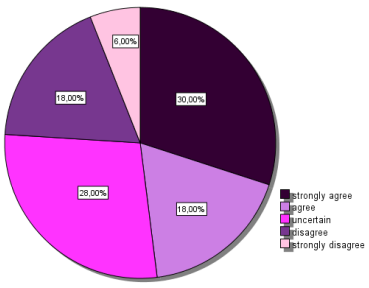

Fig. 1. Distribution of subjects based on responses to the statement "Teaching is student-centered"

Equal percentages of study participants disagree with the statement that there is no cheating at the university, unlike 20% of subjects who totally agree with this statement (Fig. 2).

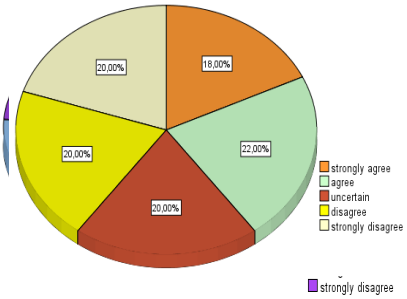

Fig. 2. Distribution of subjects based on responses to the statement "Cheating is a problem at this university."

30% of the subjects consider the atmosphere to be relaxing during teaching, unlike 16% of them who cannot decide how to respond (Fig. 3).

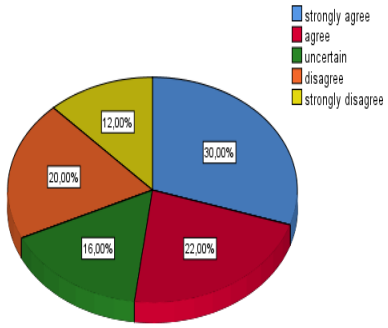

Fig. 3. Distribution of subjects based on responses to the statement "The atmosphere is relaxed during teaching."

30% of the subjects totally agree that the faculty provides opportunities for the development of interpersonal skills, while 8% of them totally disagree with this statement (Fig. 4).

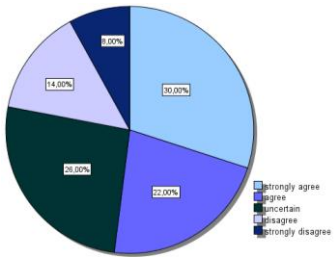

Fig. 4. Distribution of subjects based on responses to the statement "There are opportunities to develop my interpersonal skills."

18% of the subjects totally agree that they feel socially comfortable, 20% do not feel comfortable during teaching sessions, and 20% are unsure of how they feel (fig. 5).

Fig. 5. Distribution of subjects based on responses to the statement "I feel comfortable in the teaching sessions from a social point of view."

24% of the respondents agree that they are stimulated to learn by the atmosphere at the faculty, but the percentage is equal to that of the subjects who disagree with this statement (Fig. 6).

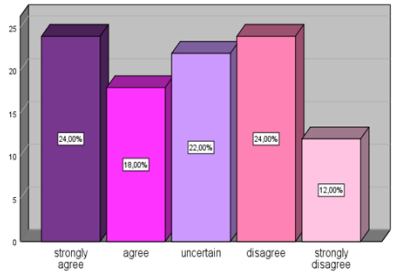

Fig. 6. Distribution of subjects based on responses to the statement "The atmosphere motivates me to learn."

The average score for each subscale is presented in Table I. According to the subscales, the mean scores were 59.123 for the perception of learning; 49.041 for the perception of teachers; 55 for the perception of social life; 66.15 for self-perception of academic ability; 59.068 for the perception of the academic environment. The average total DREEM score was 122.74.

Tabel I. Scors of DREEM subscale

SUBSCALE	MEDIA
Students perception of learning (SPL)	**59,123 ±1,46**
Students Perception of teachers (SPT)	**49,041 ±1,40**
Students Social Self- Perception (SSSP)	**55 ± 1,35**
Students' Academic self -Perception (SASP)	**66,15 ±1,50**
Students Perception of Atmosphere (SPA)	**59,068 ± 1,33**
SCOR	**122,74**

Students have evaluated the educational environment as having a series of issues. A total of 18 questions highlighted aspects of the learning environment that could be improved (on average, questions with a score ≤ 50). Problems were observed in the areas of the faculty atmosphere, learning, teachers, their teaching methods, and social self-perception. Some items had relatively low scores indicating concerns (such as the lack of a support system for stressed students, the university's schedule, some authoritarian teachers). The maximum average score was 66.15 (I am encouraged to participate in class).

Therefore, the SPL subscale was categorized as "there are several problems," the SPT subscale suggests "a more negative atmosphere," the SASP subscale indicates that "things are heading in the right direction," with "mostly positive results," and the SPA and SSSP subscales showed that there are still "several problems."

Overall, students have generally positive perceptions of education. The inclusion of subjects from different socio-

cultural backgrounds may influence the results. The overall average score of the DREEM indicator was 122.74/200, indicating that the university's academic environment is mostly positive rather than negative. Subscale analysis showed average confidence in student self-perception at 59.12%, while the lowest was in the area of students' perception of teachers at 49.04%. The perception of teachers is average, while self-perception of academic ability is high (66.15).

The results of this study are similar to the conclusions of existing studies in the literature. A recent study conducted in Pakistan reported an overall average score of 113.6/200 (10). Another study reported an overall average score of 114.4/200, while a study conducted in public and private medical colleges or a private medical school reported slightly lower average scores of 125.7/200 and 125/200, respectively (9, 13). Other studies have reported an average DREEM score ranging from 104 to 118 (3, 14, 15). Studies conducted in Athens, India, Australia, and Malaysia have shown increased self-perception of the academic environment among medical students (9, 15, 18, 19). Khan et al. (2016) studied the educational environment in four dental faculties in Islamabad, Pakistan, and reported average total scores ranging from 109.7±24.2 to 125.4±18.6 with an overall average of 120±18.9. There are studies showing significant differences between responses given by both sexes, suggesting that perceived factors such as curriculum, structure, emphasis, and objectives are different by gender. This is because courses are not perceived in the same way, and learning styles differ (7).

There are a multitude of tools that allow teachers to assess students' perceptions of the educational environment, tools that allow the identification of both problem areas at the curricular or institutional level and the need for curricular change, which will result in a significant improvement in the learning environment and, consequently, in student performance (20, 21).

CONCLUSIONS

The conclusions of this study suggest that students have appreciated the educational environment in a more positive manner. Furthermore, it is possible that students' perceptions of the educational environment may become more positive as they approach their final years. The overall DREEM score was 61.37%, with the highest score (66.15%) found in the area of students' self-perception of academic ability, while the lowest (49.04%) was in students' perception of teachers.

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