

Original Article

Perceptions of students about the educational environment in Gomal Medical College Dera Ismail Khan

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ABSTRACT

Introduction: Student satisfaction, academic performance, and learning effectiveness have all been related to the educational environmental perceptions in medical institutes. Students' opinions of their educational environment might help medical schools discover impediments and opportunities to improve student learning.

Objective: To evaluate student perception related to current traditional and integrated learning methodologies in the Gomal Medical College Dera Ismail Khan.

Methods: The Dundee Ready Education Environment Measure (DREEM) questionnaire was provided to students of Gomal Medical College Dera Ismail Khan after approval from the institute. One hundred and sixty-one students out of 190 returned the questionnaire. The data was analyzed with SPSS 27.0. All questions were evaluated on a 5-point Likert scale.

Results: The mean age of the students was 21.34 ± 1.73 years. There were 89 (55.34%) males and 72 (42.66%) female students. The mean DREEM score among the students was 116.15 ± 3.73 . The highest score among the students was 153 and the lowest score was 42. The scores were higher among males than females.

Conclusion: The students were more positive and self-assured. Students had a more positive attitude toward teachers, the learning environment, and the atmosphere. However, they were lacking in social perception requiring attention.

KEYWORDS: Dundee Ready Educational Environment Measure, educational environment, medical institutes, perception.

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INTRODUCTION

The perceptions of students about their educational environment have a substantial impact on their behavior and academic activities (Bakhshialiabad, Bakhshi, Hashemi, Bakhshi, & Abazari, 2019). Indicators of a good educational environment include better student performance, staff morale, student motivation, and excellent instructions. Evaluating the educational environment is critical in deciding whether an institute will succeed or fail (Bavdekar, Save, Pillai, & Kasbe, 2019). A favorable atmosphere promotes student achievement in learning, whereas a negative one inhibits student achievement. Disciplines that directly connect to healthcare and patient interaction require a learner-friendly environment (Soliman et al., 2017).

Intangible components of a learning environment such as climate, atmosphere, ambiance, culture, and personality have been studied extensively throughout the years. But in a healthcare institute, inadequate attention to students' learning issues leads to recurrent failures and unskilled professionals (Ahmed, Taha, Alneel, & Gaffar, 2018; Ellawala & Marasinghe, 2021). The

Dundee Ready Education Environment Measure (DREEM) questionnaire, developed in association with eighty global health academics, is one tool for assessing such student perceptions. It may also be used to identify areas of strength and weakness in a present educational atmosphere and to compare the outcomes of current teaching within a given institute and between medical schools (Kim, Jeon, Kim, Hong, & Kang, 2021; Prashanth & Ismail, 2018). The DREEM has been used widely throughout the world and in Pakistan, it has also been utilized by different authors and institutes (Mubeen, 2018; Nadeem, Iqbal, Yousaf, Daud, & Younis, 2014; Noreen, Khan, & Nehra, 2018).

The goal of this study was to gain insight into student perceptions of current traditional and integrated learning methodologies at Gomal Medical College Dera Ismail Khan. It is vital to regularly assess the institute's educational environment thus helping teachers identify problematic areas and improve them if necessary. It may also give data to support existing teaching and learning approaches that may be shared with other institutes seeking to emulate them.

METHODS

After taking permission from the institute (No. 67/E2/ME), a survey form utilizing 'Dundee Ready Education Environment Measure (DREEM)' questionnaire containing fifty Likert scale closed-ended statements (Hongkan, Arora, Muenpa, &

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Chamnan, 2018) was distributed among students of five MBBS classes of Gomal Medical College Dera Ismail Khan through non-probability convenience sampling during their class timings after explaining the purpose of study, assuring anonymity of the data and taking the informed written consent. The sample size of 218 was calculated keeping a population size of 500 medical students in five MBBS classes, 95% confidence interval, and 5% margin of error. Due to lock-down and Covid-19 issues, strength in the classes was low so the questionnaire was distributed to 190 students to achieve the required sample size. The students absent from the classes and those who refused to participate in this study were excluded. One hundred and sixty-one students returned the questionnaire, so the response rate was 84.73% and we achieved 73.85% of our sample size. The data were entered in excel sheets and later analyzed using SPSS version 27.0. All the questions were scored and reverse scored on a 5-point Likert scale using the standard technique (Al-Natour, 2019).

RESULTS

The mean age of the students was 21.34 ± 1.73 years. There were 89 (55.34%) males and 72 (42.66%) female students. The male to female ratio was 1.24:1. Twelve students (7.23%) from the first year, thirty students (18.45%) from the second year, forty one students (25.49%) from the third year, sixty six students (40.83%) from the fourth year, and thirteen students (8%) from final years returned the proforma. The mean DREEM score among the students was 116.15 ± 3.73 . The highest score among the students was 153 and the lowest score was 42. The scores were higher among males than females. The distribution of DREEM scores in different classes is given in table I.

Table I: DREEM score of different categories among different classes.

DREEM Category	Years of Class					Total	Mean \pm S.D
	1st	2nd	3rd	4th	Final		
Students' academic self perception	30.07	31.21	30.92	34	33.34	159.54	31.90 \pm 1.68
Students perception of teachers	24.61	23.61	23.61	25.96	27.29	125.08	25.01 \pm 1.59
Students perception of learning	19.21	17.92	21.87	22.07	21.3	102.37	20.47 \pm 1.82
Students perception of atmosphere	27.02	26.47	28.79	31.66	29.96	143.89	28.77 \pm 2.12
Students social self-perceptions	13.63	11.79	11.47	12.62	15.11	64.62	12.92 \pm 1.47

DISCUSSION

The Dundee Ready Education Environment Measurement (DREEM) was designed and verified for usage across cultures and countries (Bavdekar et al., 2019). It has been used in a variety of settings and for a variety of purposes, including determining how students perceive an ideal educational environment, examining climate expectations (Javed, K. 2019), comparing academic achievers and underachievers, comparing educational environments across schools and programs, comparing educational environments at various locations within a school,

and identifying problem areas within an education program (Hongkan et al., 2018; Soliman et al., 2017).

In our study DREEM score for student academic self-perception, perception for learning, atmosphere, and for teachers were more on a positive side, meanwhile, it was negative for social self-perception. These scores can help us understand where our institute is lacking concerning self-perception socially. Different Pakistani studies were conducted in this context. According to a study by Riaz et al., the median DREEM score was more on the positive side. This study helped them in recognizing areas of lesser strength and improving them subsequently (Riaz, Sadaf, & Talpur, 2016). According to a study by Jawaid et al., the total DREEM score was 114.4 and their higher score was found in students' academic self-perceptions (Jawaid, Raheel, Ahmed, & Aijaz, 2013). Al-Natour et al. did similar research in Saudi Arabia; the mean score was 126.4, suggesting that the educational environment is satisfactory (Naeem, N., Naeem, Z.-F., Ullah, S., Khan, A. H., Javed, K., & Khan, R. 2021). Academic self-perception and sense of learning were the two contributing domains with the lowest scores (Al-Natour, 2019). In a study by Hongkan in Thailand, the educational environment was more positive than negative, with the mean total DREEM score of 131.1 (SD=17.4) (Hongkan et al., 2018). It can be assumed that educational environments in Pakistani medical institutes have a higher score, but they need to improve more to reach the international standards (Javed, K., Rafique, S., & Azhar, T. (2022).

There were certain limitations in our study. We could not include a large sample size due to COVID-19 limitations. We also could not compare integrated and traditional curriculum systems adopted in our institute in different classes.

CONCLUSION

The children were more positive and confident as a result of the experience. Students exhibited a more positive attitude toward their teachers, as well as toward the classroom environment and the overall atmosphere. They were, however, weak in the social perception, which needed their attention. This study assisted us in identifying areas that require more investigation, such as student support systems for stress. Our educators may now concentrate on integrated curriculum rather than traditional ones and keep on improving the systems. Declaration of

INTEREST

The authors report no declaration of interest.

REFERENCES

Ahmed, Y., Taha, M. H., Alneel, S., & Gaffar, A. M. (2018). Evaluation of the learning environment and the perceived weakness of the curriculum: student perspective. *International Journal of Research in Medical Sciences*, 7(1), 165.

- Al-Natour, S. H. (2019). Medical Students' Perceptions of their Educational Environment at a Saudi University. *Saudi journal of medicine & medical sciences*, 7(3), 163.
- Bakhshialiabad, H., Bakhshi, G., Hashemi, Z., Bakhshi, A., & Abazari, F. (2019). Improving students' learning environment by DREEM: an educational experiment in an Iranian medical sciences university (2011–2016). *BMC medical education*, 19(1), 1-10.
- Bavdekar, S., Save, S., Pillai, A., & Kasbe, A. (2019). DREEM Study: Students Perceptions of Learning Environment in a Medical College in Mumbai, India. *The Journal of the Association of Physicians of India*, 67(4), 50-54.
- Ellawala, A., & Marasinghe, R. B. (2021). Measuring the educational environment in a Sri Lankan medical school following curricular revision. *BMC medical education*, 21(1), 1-9.
- Hongkan, W., Arora, R., Muenpa, R., & Chamnan, P. (2018). Perception of educational environment among medical students in Thailand. *International journal of medical education*, 9, 18.
- Jawaid, M., Raheel, S., Ahmed, F., & Aijaz, H. (2013). Students' perception of educational environment at Public Sector Medical University of Pakistan. *Journal of research in medical sciences: the official journal of Isfahan University of Medical Sciences*, 18(5), 417.
- Javed, K., Rafique, S., & Azhar, T. (2022). Impact of Gamification on Education Prime Time. *Pakistan Journal of Medical and Health Sciences*, 16(3), 18–19. <https://doi.org/10.53350/pjmhs2216318>.
- Javed, K. (2019). Smart Phones: A new modality to enhance knowledge for medical students [Review of Smart Phones: A new modality to enhance knowledge for medical students]. *PJMHS*, 13(1), 79–84. https://pjmhsonline.com/2019/jan_march/pdf/79.pdf
- Kim, H., Jeon, P., Kim, S., Hong, J., & Kang, Y. (2021). Cross-Cultural Adaptation and Validation of the Korean Version of the Dundee Ready Education Environment Measure (DREEM). *Evidence-Based Complementary and Alternative Medicine*, 2021.
- Mubeen, S. M. (2018). The Dundee Ready Education Environment Measure (DREEM): Perception of educational environment and its impact on academic performance of medical, dental and pharmacy students. *Annals of Jinnah Sindh Medical University*, 4(2), 59-63.
- Nadeem, A., Iqbal, N., Yousaf, A., Daud, M. A. B., & Younis, A. (2014). Students perception of educational environment at army medical college, rawalpindi: assessment by dreem (Dundee-ready education environment measure). *PAFMJ*, 64(2), 298-303.
- Noreen, K., Khan, K. A., & Nehra, R. A. (2018). Students' perception of learning environment using dundee ready education environment measure (DREEM) inventory. *Pakistan Journal of Public Health*, 8(2), 112-116.
- Naeem, N., Naeem, Z.-F., Ullah, S., Khan, A. H., Javed, K., & Khan, R. (2021). Exploring the “Ups and Downs” of using WhatsApp Messenger amongst postgraduate students.. *The Professional Medical Journal*, 28(09), 1351–1357. <https://doi.org/10.29309/tpmj/2021.28.09.6341>
- Prashanth, G. P., & Ismail, S. K. (2018). The Dundee Ready Education Environment Measure: A prospective comparative study of undergraduate medical students' and interns' perceptions in Oman. *Sultan Qaboos University Medical Journal*, 18(2), e173.
- Riaz, Q., Sadaf, S., & Talpur, A. H. (2016). Learning Environment: Students' Perceptions Using DREEM Inventory at an Optometry Institute in Pakistan. *Optometric Education*, 42(1).
- Soliman, M. M., Sattar, K., Alnassar, S., Alsaif, F., Alswat, K., Alghonaim, M., Al-Furaih, N. (2017). Medical students' perception of the learning environment at King Saud University Medical college, Saudi Arabia, using DrEEM inventory. *Advances in medical education and practice*, 8, 221.

AUTHORS CONTRIBUTION

1. Muhammad Muizz Hassan: Create concept design of research, prepared the initial draft of the manuscript, interpret data, make tables and graphs and finalize the manuscript
2. Azka Aijaz: Drafting the whole sequence of manuscript, interpret data, and critically revised the initial draft of the manuscript