

## Brief Communication

# Evaluation of Educational Environment of the School of Dentistry from the Perspective of Dental Students, Kermanshah University of Medical Sciences (2016)

Masoomeh Eivazi D.D.S., M.S.<sup>1</sup>, Fatemeh Rezaei D.D.S., M.S.<sup>2\*</sup>, Hoora Shadravan D.D.S.<sup>3</sup>

*1. Dept. of Periodontics, School of Dentistry, Kermanshah University of Medical Sciences, Kermanshah, Iran*

*2. Dept. of Oral Medicine, School of Dentistry, Kermanshah University of Medical Sciences, Kermanshah, Iran*

*3. School of Dentistry, Kermanshah University of Medical Sciences, Kermanshah, Iran*

*\*Address for Correspondence: School of Dentistry, Shariati Street, Kermanshah, Iran, Zip-code: 67139-54658, Tel: +98 9188316843, Email: f.rezaei@kums.ac.ir*

(Received: 1 Mar 2017      Accepted: 19 Dec 2017)

## Abstract

Educational environment plays an important role in the students' learning process. This descriptive study was conducted to evaluate the educational environment of Kermanshah School of Dentistry from the viewpoint of the last three-year dental students. All the last three-year students (115) were included in this descriptive study. Dental Student Learning Education Survey was used. The collected data were analyzed by SPSS.16 software. The mean score of educational environment assessment was  $3.54 \pm 0.5$  out of 4. The mean scores for interest in the major, flexibility of curriculum, student-student interaction, emotional atmosphere, attention to students' concerns, compatibility of educational activities with educational objectives, organization of curriculum and development of learning and extracurricular activities were  $3.55 \pm 0.47$ ,  $2.81 \pm 0.65$ ,  $3.01 \pm 0.57$ ,  $3.07 \pm 0.57$ ,  $2.68 \pm 0.62$ ,  $2.85 \pm 0.59$ ,  $3.22 \pm 0.55$  and  $3.34 \pm 0.5$ , respectively. The studied educational environment was evaluated to be at average level. The domains with shortages from the viewpoint of students are suggested to be promoted in order to increase students' efficiency.

**Keywords:** Educational, Environment, Questionnaires, Dental students

**Citation:** Eivazi M, Rezaei F, Shadravan H. Evaluation of educational environment of the School of Dentistry from the perspective of dental students, Kermanshah University of Medical Sciences (2016). Educ Res Med Sci. 2017; 6(2): 98-101.

## Introduction

Educational environment is one of the factors affecting students' learning. It is a behavioral determinant that depicts students' perception of their surroundings in the realm of learning. This perception plays a critical role in students' academic achievement (1).

Numerous studies have evaluated the atmosphere and environment governing education in clinical fields, which have reported several factors affecting educational atmosphere in clinical departments such as motivation,

teacher's role as a model and environmental factors (2). Evidence shows that the educational environment that students face influences their satisfaction with the program, sense of well-being, aspirations and academic achievement. Use of a standard questionnaire is one of the methods to assess educational environment from the perspective of students (3).

To date, no study has evaluated the educational environment of the School of Dentistry at Kermanshah University of Medical Sciences. Given the significance of this issue, the present study aimed to assess the educational environment in this school from the viewpoint of the last three-year dental students.

## Methods

In this descriptive study the population comprised of the last three-year dental students ( $n=115$ ), who were selected through census sampling. Data were collected using the Dental Student Learning Education Survey (DSLES). It was distributed among the students, and they were required to complete it. All the participants were informed of the confidentiality of data.

The validity and reliability of the Persian version of DSLES were confirmed by Mojtahezdadeh et al. in 2015. All the overall agreement and content validity indices were higher than 75%. Cronbach's alpha coefficient in all the domains was above 75%, and Kappa coefficient of all items was calculated to be 73% (4).

First, a set of demographic questions was added to the Persian version of the questionnaire. The Persian version consisted of two main sections: the first section included students' demographic characteristics and the second section involved assessment of educational environment, which comprised of 60 items. The Persian version of the questionnaire was rated from 0 to 4; 0=never, 1=seldom,

2=sometimes, 3=often and 4=almost always. Data were analyzed by SPSS.16 software using mean and standard deviation.

## Results

A total of 100 students, out of the 115 participants of the study, completed the questionnaires. Of them, 53 were female, 33 were male and 14 were anonymous. Also, 69 of them were single, 17 were married and 14 had not mentioned their marital status. The age range of the participants was 22-42. The mean score of educational environment among students was  $3.54 \pm 0.5$ . For the domains of interest in the major (7 items), flexibility of curriculum (6 items), student-student interaction (6 items), emotional atmosphere (8 items), attention to students' concerns (9 items), compatibility of educational activities with educational objectives (15 items), organization of curriculum and development of learning and extracurricular activities (9 items), the mean scores of  $3.55 \pm 0.47$ ,  $2.81 \pm 0.65$ ,  $3.01 \pm 0.57$ ,  $3.07 \pm 0.57$ ,  $2.68 \pm 0.62$ ,  $2.85 \pm 0.59$ ,  $3.22 \pm 0.55$  and  $3.34 \pm 0.5$ , (out of 4) were obtained (Table 1).

**Table 1.** Central indices and dispersion of scores of educational environment questionnaire along with its domains

	Number	Mean	SD	Maximum	Minimum	First quarter	Median
<b>Interest in the major</b>	100	3.55	0.47	4.00	1.88	3.25	3.63
<b>Flexibility of curriculum</b>	100	2.81	0.65	4.00	1.40	2.40	2.80
<b>Student-student interaction</b>	100	3.01	0.57	3.96	1.00	2.60	3.00
<b>Emotional atmosphere</b>	100	3.07	0.57	4.00	1.00	2.57	3.08
<b>Attention to students' concerns</b>	100	2.68	0.62	3.90	0.56	2.33	2.67
<b>Compatibility of educational activities with educational objectives</b>	100	2.85	0.59	4.00	0.78	2.56	2.78
<b>Organization of curriculum</b>	100	3.22	0.55	3.87	2.20	2.80	3.20
<b>Development of learning and extracurricular activities</b>	100	3.34	0.59	4.00	2.00	3.00	3.50
<b>Overall assessment of educational environment</b>	100	3.54	0.5	4.00	1.67	3.28	3.54

## Discussion

Educational environment, owing to its effects on the learning and teaching process, is of great significance in enhancing clinical learning quality. Improving the quality of educational environment plays a pivotal role in advancing learning, especially in clinical environments (5).

Among the educational environment indices based on the students' perspectives, attention to students' concerns obtained the minimum score. Data indicated that in the given educational environment, students' academic and well-fare concerns were not investigated.

The results of the present study were in line with those of Kamal & Mamata (6), Feletti & Clarke (7), Henzi et al. (8) and Sanatkhan et al. (9), showing that educational shortages, inflexibility of curricula and overlooking students' concerns reduced the quality of educational environment.

Interest in the major among students of this educational environment was found to have the maximum score. The study of Henzi et al. showed among the newly-admitted students, interest in the major acquired the highest score (8). Since acceptance to dentistry major requires a top ranking, most of the students selected this major based on their interest.

From the viewpoint of students, educational activities were not compatible with educational objectives, which requires planning to make educational objectives consistent with educational activities. The results of Feletti & Clarke (7) were in agreement with those of the present study in that the minimum percentage of scores in preclinical part was reported for compatibility of educational activities with educational objectives. However, the present results were not in line with those of Henzi et al. and Kamal & Mamata (6, 8) in that the highest score had been reported for compatibility of educational activities with educational objectives in the opinion of the newer students. This difference may be because the newer students had not started the clinical work. Hence, it is quite essential to modify the curriculum to eliminate this deficiency.

The findings of this study on communication models among students, which included student-student interaction and emotional atmosphere, indicated that from the participants' perspectives, these two domains were suitable in this educational environment. Moreover, the results confirmed the findings of Soltani Arabshahi & Kohpayeh Zadeh (10). The educational environments in which students have appropriate relationship provide favorable grounds for improving educational atmosphere and enhancing learning and healthy competition.

Henzi et al. reported the lowest score for emotional atmosphere among the newly-admitted students, which was in contrast to the results of the present study (8). This difference may be due to difference in the study population. Since the study population in the current research comprised of the last three-year students, who knew each other more than the new students and had better interaction, emotional atmosphere and student-student interaction obtained a higher score.

The analysis of flexibility of curriculum showed students reported a low flexibility for the curriculum. The findings of this study were in line with those of Jain et al. (11), in which flexibility of curriculum was found to be one of the problems of educational environments. Flexibility of curricula provides students with the possibility of using their time and preventing monotony, thereby increasing their efficiency. The results of the current study were in agreement with those of Henzi et al. among newly-admitted students (8). The flexibility index means modification of curricula based on students' needs, which enhances their efficiency consequently.

## Conclusion

In general, it can be argued that educational environment in this study was an appropriate one in which domains

such as interest in the major, emotional atmosphere and student-student interaction obtained a high score, and domains like development of learning and extracurricular activities, organization of curriculum, compatibility of educational activities with educational objectives and attention to students' concerns required planning and improvement.

## Acknowledgments

The authors appreciate all students who participated in this study and completed the questionnaires.

## References

1. Alavi M, Irajpour AR, Abedi HA. Some concepts in the evaluation of clinical education: A qualitative study on the experiences of nursing students and clinical teachers. *Strides Dev Med Educ.* 2007; 4(1): 10-18. [Persian]
2. Soemantri D, Herrera C, Riquelme A. Measuring the educational environment in health professions studies: A systematic review. *Med Teach.* 2010; 32(12): 947-952.
3. Hammond SM, O'Rourke M, Kelly M, Bennett D, O'Flynn S. A psychometric appraisal of the DREEM. *BMC Med Educ.* 2012; 12(1): 2.
4. Mojthadzadeh F, Yasini A, Rahmani N. Reliability and validity of the persian version of dental student learning education questionnaire and a researcher made questionnaire about interest of dental students in their field of study. *Journal of Islamic Dental Association of IRAN.* 2015; 27(1): 24-30.
5. Rezaei F, Nikkerdar N, Hadian Zarkesh Moghadam Y (in press). Assessing medical and dentistry students' perception of learning environment in Kermanshah University of Medical Sciences (2015-2016). *Educ Res Med Sci.* 2017; 6(2).
6. Kamal S, Mamata H. Assessment of the learning environment in prosthodontic department based on Dental College Learning Environment Survey by the graduates of a dental institute in India. *J Educ Eval Health Prof* 2014; 22: 11-34.
7. Feletti GI, Clarke RM. Review of psychometric features of the Medical School Learning Environment Survey. *Med Educ.* 1981; 15(2): 92-96.
8. Henzi D, Davis E, Jasinevicius R, Hendricson W, Cintron L, Isaacs M. Appraisal of the dental school

learning environment: The students' view. *J Dent Educ.* 2005; 69(10): 1137-1147.

9. Sanatkhani M, Molla Z, Akbari M. Evaluation of the students' perception about clinical education and examination in Mashhad School of Dentistry (Iran) in 2009. *J Mash Dent Sch.* 2012; 36(3): 211-222. [Persian]

10. Soltani Arabshahi SK, Kohpayeh Zadeh J. University teachers' point of view about educational environment in major clinical wards in educational hospitals of Iran University of Medical Sciences, based on modified DREEM model. *Strides in Development of Medical Education.* 2009; 6(1): 29-33. [Persian]

11. Jain L, Jain M, Mathur A, Paiwal K, Duraiswamy P, Kulkarni S. Perceptions of dental students towards learning environment in an Indian scenario. *Dent Res J.* 2010; 7(2): 56-63.