Educational Performance of Faculty Members from the Students and Faculty Members' Point of View in Golestan University of Medical Sciences

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ABSTRACT

Background and objectives: Educational appraisal plays a pivotal role in determining and promoting the educational quality and ensuring its continuous improvement. The performance of faculty members, characterized as the major building blocks of universities, makes significant contribution to the output of an educational system. Thus, the current study sets out to compare the results of the faculty members' self-assessment and the students' assessment of their educational performance in Golestan University of Medical Sciences, Iran.

Methods: This¬ cross-sectional, descriptive-analytical study was performed in academic years 2011-14 on faculty members and students at school of medicine in Golestan University of Medical Sciences, Iran. Data were collected using two questionnaires. Mean scores of educational performance were compared using the Mann-Whitney test. The Kappa and ICC agreement coefficient were used to assess the agreement between the professors and the students' views. All statistical analyses were performed in SPSS 18 at significance of 0.05.

Results: Overall, 191 completed questionnaires related to 49 professors were collected. In addition, 109 self-assessment questionnaires were collected from 48 faculty members. Of 191 professors, 34.6% were women, 65.4% were men, and 78.8% were assistant professors. In addition, the mean work experience was 12.3 ± 6.88 years. By comparing the highest and lowest self-assessment scores of the professors, of 191 professors, 31 (16.23%) assessed themselves with the highest score, which determined their strengths in explicit expression and full explanation of the content of the course, the perfect use of class time for educational activities, proper communication with colleagues, and responsibility for carrying out organizational tasks. Moreover, 25 (13.08%) of the professors assessed themselves with the lowest score mainly due to lack of research activities. A partially significant convergence was observed between the students and the faculty members' assessment scores.

Conclusion: The convergence between the students' ideas and that of the faculty members questions the practical value of evaluation programs and highlights the necessity to deliver the resulting outcome to the faculty members.

Keywords: Assessment; Student; Faculty member; Educational performance

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INTRODUCTION

Education is one of the most important tasks of a university and its faculty members. Promoting quality of education improves the academic level of the university. Assessment of faculty members is one of the processes that could help improve the quality of education (1). Educational effectiveness can be assessed using various models including assessment of authorities and colleagues, students and self-assessment (2,3). Faculty self-assessment is a process in which faculty members evaluate their own competence, knowledge, performance, beliefs and personal development (4). Faculty evaluation by students is also a common method of faculty assessment in universities authorities in decision making regarding improvement of educational effectiveness (5-7).

Aultman believes that assessment of professors by students is a valuable resource for feedback on teaching quality and professional development (8).

Assessment in Iran has recently become very common and universities have assessed their academic staff using various methods, including questionnaires (15).Previous studies in Iran reported that features including ability to understand concepts of curriculum, attention to learning understanding taught materials (16) have been addressed as factors that could affect how students assess professors. In other studies, factors such as the teacher-student relationships, transfer of concepts, organization and management of classroom, teaching and assessment quality, communication skills and professional skills have been identified as factors affecting faculty assessment (17). Students' academic performance components, gender and degree course, type of lesson, professors' gender, teaching ability, academic degree, teaching experience, time of presentation and marital status might affect how students assess academic staff (18).

A previous study reported a significant difference between the viewpoint of professors and students about the factors affecting the students' assessment of professors (19). In a study in the Arak University of Medical Sciences (Iran), the students graded professors between 15.03 and 16.45 over the course of six years (20).

Several studies have examined various aspects of faculty assessment by students and faculty self-assessment (21-24). However, only few studies have examined the viewpoints of both students and faculty members simultaneously (25).

In a study on members of faculty of medicine at Mazandaran University of Medical Sciences, the results of academic staff self-assessment and faculty assessment by students differed significantly (26). They believed that feedback on the results of these assessments would not change the quality of teaching.

Comparing the results of faculty self-assessment and student's assessment about the performance of professors can clarify strengths and weaknesses of the education system and help improve quality of education. In this study, we compare the results of self-assessment of professors and students' assessment of the faculty members of the Golestan University of Medical Sciences, Iran.

MATERIALS AND METHODS:

This was a cross-sectional study with a descriptive-analytic approach that was conducted during the academic years 2011-14. Study population included all medical students and members of faculty of medicine at Golestan University of Medical Sciences. The purpose of the educational performance is to evaluate the teacher's assessment in the areas of educational management, academic ability, speaking skills, counseling and ethics. The performance of academic staff during academic years 2011-14 from the students and their own point of view was assessed using two questionnaires. The questionnaire consisting of 15 questions on scientific, behavioral and teaching abilities of the faculty members was scored by students based on a 4-point Likert scale (from rarely to always) at the end of clinical courses. The second questionnaire consisted of 15 questions that were scored using a 5-point

Descriptive statistical methods were used to describe the data. To test the normality of data, the Shapiro-Wilk test was used. The

Table 1. The scores obtained from the two questionnaires regarding performance of faculty members during 2011-14.

	Academic year	Number of collected questionnaires	Lowest score	Highest score	Mean±standard deviation	First quartet	Second quartet	Third quartet
	2011-12	26	69.43	98.07	85.99±8.84	79.41	87.61	93.35
From the	2012-13	79	62.41	99.62	87.53±8.26	84.59	89.57	93.43
view of students	2013-14	86	61.33	99.33	89.43±7.58	85.54	91.75	94.37
	Total	191	61.33	99.62	88.18±8.09	84.59	90.5	93.95
Professors' self- assessment	2011-12	40	60	100	88.23±11.15	77.67	92	96.27
	2012-13	30	70.77	100	90.23±8.53	83.88	93.33	96.33
	2013-14	39	60	100	88.26±10.06	82.67	92	96
	Total	109	60	100	88.43±10.07	80	92	96

Table 2. Comparison of the mean scores of self-assessment and students' assessment based on the gender of the professors

			Academic year of 2011-12		Academic year of 2012-13		Academic year of 2013-14	
			Standard mean±deviation	P-value	Standard mean±deviation	P-value	Standardmean±deviation	P-value
Mean assessment score	From the views of the students	Female	90.47±8.32	0.034	90.89±6.83	0.002	89.89±4.8	0.59
		Male	83.63±8.39		85.68±8.45		89.2±8.69	
		Total	85.99±8.84		87.53±8.26		89.43±7.58	
	Self- assessment	Female	91.18±8.52	0.157	93.95±6.10	0.039	91.54±6.44	0.025
		Male	85.38±11.99		87.39±9.18		84.38±11.28	
		Total	87.39±11.05		90.23±8.53		87.12±10.23	

Likert scale (very few/ few/ moderate/ much/very much). This questionnaire was completed annually. A copy of the results of these questionnaires are kept in the archives of the Center of Studies. The content of these questionnaires was constant throughout the study period.

The students' questionnaire was distributed and collected from 5 Azar, Taleghani and Deziani hospitals. The other questionnaire was distributed individually, confidentially and collected one week later.

Mann–Whitney U test was used to compare the mean score of professors based on gender. The Kappa and ICC agreement coefficient were used to examine the agreement between results of professors' self-assessment and the students' views about them. All statistical analyses were performed in SPSS-18 at significance level of 0.05.

RESULTS

Overall, 191 completed questionnaires related to 49 professors were collected. In addition, 109 self-assessment questionnaires

were collected from 48 faculty members. There were 44 faculty members in common between the two assessment systems. Table 1 presents the scores obtained from the two questionnaires regarding performance of

difference between the mean scores of male and female professors from the students' point of view in 2011-2013, as well as between the mean scores of self-assessment of male and female professors in 2012-2014

Table 3. Kappa agreement coefficient and the significance between self-assessment and assessment scores from students' viewpoints divided by the three years

	Kappa agreement coefficient	P-value
Academic year 2011-12	0.276	0.025
Academic year 2012-13	0.073	0.516
Academic year 2013-14	0.063	0.493
Total	0.126	0.045

Table 4. Percentage of agreement between faculty members and students

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		First quartet	Second quartet	Third quartet	Fourth quartet	Total
Students' assessment	First quartet	7.8%	1.3%	3.9%	2.6%	15.6%
	Second quartet	14.3%	10.4%	6.5%	6.5%	37.7%
	Third quartet	3.9%	1.3%	10.4%	3.9%	19.5%
	Fourth quartet	3.8%	11.7%	6.5%	5.2%	27.2%
Total		29.8%	24.7%	27.3%	18.2%	100%

faculty members during 2011-14.

Of 191 professors, 34.6% were women, 65.4% were men, and 78.8% were assistant professors. In addition, the mean work experience was 12.3 ± 6.88 years.

During the study period, students assessed 24 (12.56%) and 23 (12.04%) professors with the highest and lowest scores, respectively. By comparing the highest and lowest selfassessment scores of the professors, of 191 professors, 31 (16.23%) assessed themselves with the highest score, which determined their strengths in explicit expression and full explanation of the content of the course, the perfect use of class time for educational activities, proper communication colleagues, and responsibility for carrying out organizational tasks. Moreover, 25 (13.08%) of the professors assessed themselves with the lowest score mainly due to lack of research activities.

According to the results of the Mann-Whitney test, there was a significant

(Table 2).

There was a very small agreement between students and professors regarding their performance. As shown in table 3, the degree of adaptation between students and professors decreased significantly over time.

In the three years, 33.8% of the professors agreed with the students on the academic, behavioral, and teaching performance. In this regard, 41.5% of the professors had lower scores than students and 24.7% of the professors had higher assessment scores than students (Table 4).

DISUCSSION

Certain features are important for the assessment system. Among these factors, the competence and desirability of the professors are important and must be quantitatively measured. In our study, the majority (85.1%) of students scored professors' competence moderate to high, which is in line with the results of Allaei et al. (27) and Haji Aghajani

(28) but inconsistent with findings of Shakournia et al. (29).

In other studies, the lowest score to professors was attributed to the use of teaching aids (27), while in the present study, almost 90% of the students were satisfied with the use of teaching aids. By examining the assessment scores of the professors from the point of view of the students, 85% of the students identified the teachers' strengths in communication skills and professional competence.

The agreement between the students' views and the professors' decreased gradually, which is similar to findings of the study by Allaei et al. (27).

The lack of access to the assessment information due to the confidentiality of the assessment forms was a limitation of our study, which was eliminated by negotiating with the authorities.

CONCLUSION

Our results indicate the importance of assessment studies and feedback to professors. Such approaches help educational managers improve educational skills. In addition, the majority of students believe that the annual assessment of academic staff does not affect the teaching quality.

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DECLARATIONS

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Ethics approvals and consent to participate
The work was approved by the Ethics
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Conflict of interest

The authors declare that there is no conflict of interest regarding the publication of this article.

REFERENCES

- 1. Bazargan A. Educational evaluation (Concepts, patterns, and operational process). Tehran: Samt. 2002:1-29. [Persian]
- 2. Pazargadi M, Khatibian M, Ashk Torab T. Evaluating performance of nusruing school teachers. Ir J Med Educ. 2008; 8(2): 27-213. [Persian]
- 3. Aghamolaei T, Abedini S. Comparison of self and students' evaluation of faculty members in school of Health of Hormozgan University of Medical Sciences. Iranian Journal of Medical Education. 2008;7(2):191-9. .[Persian]
- 4. Airasian PW, Gullickson AR. Teacher Self-Evaluation Tool Kit. Corwin Press, Inc., 2455 Teller Road, Thousand Oaks, CA 91320-2218 (hardcover: ISBN-0-8039-6516-8,).; 1997.
- 5. Greenwood GE, Bridges Jr CM, Ware WB, McLean JE. Student evaluation of college teaching behaviors instrument: a factor analysis. The Journal of Higher Education. 1973;44(8):596-604.. [DOI:10.2307/1980394]
- 6. McAllister B. Using all your legs: how student evaluations can fit into a holistic teaching assessment program.[cited 2006 Jul 2]. Available from: http. trc. virginia. edu/Publications/Teaching_Concerns/Fall_1999/T C_Fall_1999_McAllis.
- 7. Shakournia A, Torabpour M, Elhampour H. Correlation between student evaluation of teaching and students' grades. Iranian journal of medical education. 2006;6(1):51-8. [Persian]
- 8. Aultman LP. An unexpected benefit of formative student evaluations. College teaching. 2006;54(3):251-85. [DOI:10.3200/CTCH.54.3.251-285]
- 9. Chen Y, Hoshower LB. Student evaluation of teaching effectiveness: An assessment of student perception and motivation. Assessment & evaluation in higher education. 2003;28(1):71-88.

[DOI:10.1080/02602930301683]

10. Bardes CL, Hayes JG. Are the teachers teaching? Measuring the educational activities of clinical faculty. Academic medicine: journal of the Association of American

- Medical Colleges. 1995;70(2):111-4. [DOI:10.1097/00001888-199502000-00013]
- 11. Copeland HL, Hewson MG. Developing and testing an instrument to measure the effectiveness of clinical teaching in an academic medical center. Academic Medicine. 2000;75(2):161-6. [DOI:10.1097/00001888-200002000-00015]
- 12. Wright D, Gregory L. Portfolios as a component of faculty assessment. Radiol Sci Educ. 1995;21(1):44-9.
- 13. Aleamoni LM. Student rating myths versus research facts from 1924 to 1998. Journal of personnel evaluation in education. 1999;13(2):153-66.

[DOI:10.1023/A:1008168421283]

- 14. Schiekirka S, Raupach T. A systematic review of factors influencing student ratings in undergraduate medical education course evaluations. BMC medical education. 2015;15(1):30. [DOI:10.1186/s12909-015-0311-8]
- 15. Shakournia A, Elhampour H, DashtBozorgi B. Ten year trends in faculty members' evaluation results in Jondi Shapour University of Medical Sciences. Iranian Journal of Medical Education. 2008;7(2):309-16. .[Persian]
- 16. Ranjbar M VK, Mahmoodi M. A survey of the viewpoints of faculty members and students of Mazandaran University of Medical Sciences about the evaluation of professors by students in 2005. Journal of Mazandaran University of Medical Sciences. 2007;16(56):10.[Persian]
- 17. Joshi R, Ling FW, Jaeger J. Assessment of a 360-degree instrument to evaluate residents' competency in interpersonal and communication skills. Academic Medicine. 2004;79(5):458-63. [DOI:10.1097/00001888-200405000-00017]
- 18. Aghamirzayi T, Salehi Omran E, Rahimpour Kami B. Effective Factors on Student Evaluation of Faculty Members Performance. Education Strategies in Medical Sciences. 2014;7(1):57-62. [Persian]
- 19. Aliasgharpour M, Monjamed Z, Bahrani N. Factors affecting students' evaluation of

- teachers: Comparing viewpoints of teachers and students. Iranian Journal of Medical Education. 2010;10(2):186-95.[Persian]
- 20. Rafiei M, Mosayebi G, Nezam Am. Results Of Six Years Professors'evaluation In Arak University Of Medical Sciences. Arak Medical University Journal, 2010, 12(4, Supp 1): 52-62 [Persian]
- 21. Maroofi Y, Kiamanesh A, Ali Asgari M, Mehrehmmadi M. Assessing quality of teaching in higher education: reviewing some perspectives. Journal of Curriculum Studies, First Year. 2007;5:81-112.[Persian]
- 22. Asghari N, HosseiniTeshnizi S, Abedini S, Razmara A, Naderi N. Comparative evaluation of teaching by scholar and teacher self-assessment. Hormozgan Medical Journal. 2010;14(3):246-53. [Persian]
- 23. Mahdavi S, Zare S, Naeimi N. Comparison between student evaluation and faculty self-evaluation of instructional performance. Research in Medical Education. 2014;6(2):51-8. [Persian] [DOI:10.18869/acadpub.rme.6.2.51]
- 24. Abdolsamadi HR, Dalband M, Davoodi P, Bakhtiari В, Ahmadimotamayel Moghimbeigi A. Comparison of Selfevaluation and Students' Evaluation Hamadan Dental School Faculty Members. Iranian Journal of Medical Education. 2012;12(2):101-9. .[Persian]
- 25. ZIAEI M, Miri M, Hajiabadi M, Azarkar Gh, Eshbak P. Academic Staff And Students'impressions On Academic Evaluation Of Students In Birjand University Of Medical Sciences And Health Services. J Birjand Univ Med Sci. 2006, 13(4): 9-15 [persian].
- 26. Jafari H, Vahidshahi K, Kosarian M, Mahmoudi M. Comparison between the results of academic staff self assessment and those made by the students, Faculty of Medicine, Mazandaran University of Medical Sciences, 2006. Journal of Mazandaran University of Medical Sciences. 2007;17(57):67-74.[Persian]
- 27. Allaei M, Jalilian N, Purnajaf A, A'azami A, Mehdizadeh F. Comparative study of the

- students' self-assessment and evaluation of professors' training performance in Ilam University of Medical Sciences. J Ilam Univ Med Sci. 2011;18:50-5.[Persian]
- 28. Haji Aghajani S. Nursing college professors' opinions about evaluation effect on their teaching approaches in shahid Beheshti University. J of Isfahan University
- of Medical Sciences springedition1998.;1(36):8.[Persian]
- 29. Shakournia A, Motlagh ME, Malayeri A, Jahanmardi A, Keyamanesh A. Assessment of professors' opinions of Ahwaz Medical University (Doctoral dissertation, MA Thesis 2000.[Persian]