Comparison of Teacher Evaluation Indices from the Perspective of Students and Teachers at Alborz University of Medical Sciences

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Abstract

Background: Teacher evaluation is an essential and useful tool for decision making and determining appropriate teaching policies, especially in universities. The present study aimed to compare the teacher evaluation indices from the perspective of students and teachers at Alborz University of Medical Sciences, Iran.

Methods: The present descriptive-analytical study was conducted in 2013 on 34 faculty members and 418 students at Alborz University of Medical Sciences in Karaj, Iran. Data were collected using a researcher-made questionnaire on demographic characteristics, target group, appropriate time for teacher evaluation and opinions of faculty members and students about the twenty indices of teacher evaluation. The data were analyzed with SPSS 16 using descriptive statistics.

Results: The most effective target groups for teacher evaluation from the perspective of teachers were elite students (58.9%) and normal students (20.6%), while the most effective target groups for teacher evaluation from the perspective of students were normal students (42.1%) and teachers (14.1%).

Conclusion: Based on the results of the present study, we suggest using the criteria agreed by the teacher and students, revising the teacher evaluation forms, not limiting the evaluation process to the students' opinion, conducting self-evaluation by the teachers, conducting continuous evaluation at different times of the semester, a survey of teachers in preparing forms and summarizing and concluding the evaluations.

Highlights:

What is current knowledge?
Teachers believe that students do not have knowledge sufficient enough for teacher evaluation and believe that students involve their personal opinion in the evaluation process.

What is new here?
The most effective target groups for teacher evaluation from the perspective of teachers were elite students, while the most effective target groups for teacher evaluation from the perspective of students were normal students.

Introduction

Evaluation is a systematic process for collecting, analyzing and interpreting data to determine accuracy and extent to which goals can be achieved (1). Evaluation data provide feedback for curriculum planners and teachers to make more informed decisions about improving their teaching methods and be aware of their success rates (2). Teacher evaluation is an essential tool for decision making and determining appropriate teaching policies, especially in universities (3). In the higher education system, teacher evaluation is defined as a continuous and regular process to describe, guide and ensure the quality of learning activities (4) and also to determine the degrees of teachers' success in achieving educational goals (5). The most important method of evaluating faculty members' performance in scientific centers is teacher evaluation by principals, peers, students and self-evaluation (6). Teacher evaluation by students is most commonly used in large universities (7). This type of evaluation should not be relied upon alone for granting promotions and incentive awards (8). The evaluation of faculty members by students has long been a subject of debate (9-11). Some researchers believe that using students' opinions to evaluate the

activities of university teachers is the only tangible source of information (3) and students have a kind of metacognition that makes their evaluation of teachers correct (12). Meanwhile, others believe that the students' evaluation of teachers can be affected by factors such as students' scores, teachers and students' gender, academic position, teacher's popularity, number of students in the classroom, difficulty of lessons, type of lessons, education level, teacher's behavior and teaching technique (9, 13, 14). It has been argued that the use of learners' opinions has always been associated with some skepticism about robustness and cannot be easily measured (15). Teachers believe that students do not have knowledge sufficient enough for teacher evaluation (16). Others believe that students involve their personal opinion in the evaluation process (17).

The most important indices of teacher evaluation from the students' perspective are as follows: teacher's scientific mastery, good mood, teacher's self-confidence, consistent class attendance, utilizing practical teaching methods and the expression power (18). On the other hand, faculty members consider class management, leadership and lesson mastery as the most crucial criteria of teacher evaluation (19). Since most studies have only examined teacher evaluation based on the perspective of either faculty members or students, the present study aimed to compare the teacher evaluation indices from the perspective of both students and teachers at Alborz University of Medical Sciences, Iran.

Methods

This descriptive-analytical study was conducted in 2013 on faculty members and students at the Alborz University of Medical Sciences in Karaj, Iran. Morgan table was used to determine the sample size. According to the study population size (729 students and 51 faculty members), the minimum number of individuals required for this study was estimated to be 257. Overall, 452 subjects (34 faculty members and 418 students) were selected. Inclusion criteria were as follows; teaching as a faculty member, studying at the university during the study period and spending at least a semester at the university. Guest students and visiting teachers were not included in the study. Data collection tool consisted of a

questionnaire on demographic characteristics of teachers and students, target group, appropriate time for teacher evaluation and faculty members and students' opinions on the twenty indices of teacher evaluation. The answers were scored based on a four-point Likert scale ranging from 1 (poor) to 4 (excellent). The questionnaire was designed based on the evaluation forms available at the university. The validity of the questionnaire was assessed using the content validity and expert opinion surveys. The reliability of the questionnaire was verified by obtaining a Cronbach's alpha coefficient of 0.89. After explaining the research purposes and obtaining informed consent, the participants were asked to complete the questionnaire. Data were analyzed using SPSS Statistics for Windows, version 16 (SPSS Inc., Chicago, Ill., USA).

Results

The enrolled students were studying public health (6.5%), operating room (17.2%), occupational health (15.3%), anesthesia (15.6%), environmental health (18.4%), midwifery (3.1 %), nursing (15.1%) and medical emergency (8.9%). Of 34 teachers, 15 (44.25%) had permanent employment, 10 (29.5%) were officially employed and nine (26.25%) were employed on a contract basis. From the teachers' view, elite students (59%) were the most effective target group for teacher evaluation. However, 42.1% believed that students are the most effective target group for teacher evaluation, while 14.1% of them reported that teachers could be the effective target group for teacher evaluation (Table 1).

Table 1. Frequency distribution of the most effective target group for teacher evaluation from the perspective of students and teachers

Audience		Teachers		Students	
	Target group	N	%	N	%
Teachers		4	11.5	59	14.1
Colleagues		1	2.95	5	1.2
Group managers		1	2.95	14	3.3
Educational assistant		-	-	22	5.3
All students		7	20.65	176	42.1
Elite students		21	59	41	9.8
Simultaneous evaluation of two or three items		-	-	44	10.5
No answer		1	2.95	57	13.6
Sum		34	100	418	100

The most appropriate time for teacher evaluation was reported to be the three-stage method (at the beginning, in the middle and at the end of the semester) according to teachers (64.7%) and students (29.7%) (Table 2).

Table 2. Frequency distribution of the best time for teacher evaluation from the perspective of students and teachers

Audience	Teacher		Student	
Best time	N	%	N	%
The beginning of the semester	-	-	14	3.3
Midterm	5	14.75	89	21.3
In the last session and the end of the semester	4	11.5	78	18.7
Before the end of the semester exam	1	2.95	18	4.3
After the final exam	2	5.9	48	11.5
In 3 stages: at the beginning, middle and end of the semester	22	64.9	124	29.7
No answer	-	-	47	11.2
Sum	34	100	418	100

According to students, respectful behavior with students, organizing the subject of teaching in personal projects and programs and explaining the content in a clear and expressive voice were the first, second and third most important indices of teacher evaluation, respectively. The results of chi-square test for Friedman ranking of evaluation indices from students' perspective indicated a statistically significant difference (p=0.0001). Based on the teachers' views, providing clear and understandable explanations, the ability to motivate students to learn and study more and mastery over scientific concepts and curriculum were ranked first to third, respectively. The evaluation criteria differed significantly from the teachers' point of view according to the results of Friedman test (P=0.045).

Overall, organizing the subject of teaching in a personal plan and program, mastery over the scientific concepts and curriculum and explaining the content in a clear and expressive voice were ranked as first to third most important indices of teacher evaluation according to both students and teachers, respectively (Table 3). The rank of evaluation criteria differed significantly between the point of view of teachers and students (P=0.0001). The employment status of teachers had no significant association with the most effective evaluation target group and the most appropriate evaluation time. There were significant relationships between the students' field of study and evaluation criteria ranks, expect for midwifery and occupational health students.

Discussion

According to our results, students believe that teachers' personal and communication skills are the most important indices of teacher evaluation. However, the teachers' ability to present scientific content using new teaching techniques and in a clear and expressive voice while providing understandable explanations were also reported as other important indices of teacher evaluation. The results indicated no significant association between teachers' employment type and evaluation indices. There were statistically significant differences between the indices selected by students in different fields, which indicates the need for designing specific evaluation forms for different educational groups. According to teachers with different employment types, elite students were the most effective target group for teacher evaluation, while general students were the most appropriate group for teacher evaluation according to students. However, both teachers and students believed that the best time for teacher evaluation are at the beginning, in the middle and at the end of each semester.

Based on the results, both teachers and students identified mastery of the subject and having knowledge and experience as the highest-priority teaching skills. They also emphasized on the power of expression and transmission of content in terms of individual characteristics. In general, mastery of content and subject was considered as one of the most important characteristics of a teacher.. According to Gillespie, the lack of mastery over the content was a factor that decreased self-confidence in teachers, and the teachers' knowledge and experience in teaching were the most important characteristics (20). Previous studies in Iran also reported similar findings (21-24). Mastery over the content was reported as the most important characteristic of a teacher in studies of Mobaraki (22) and Ghorbani (25). In addition, Sharifi et al. reported mastery over the content as the second most important criterion of an ideal teacher (21). Ghadami et al. considered the power of expression and transfer of the content by teachers as an important feature (26). It should be noted that mastery over content is not the sole indicator of an ideal teacher, and teachers should be able to transfer their knowledge in an understandable manner (18). Teacher should also be capable of conducting research and become familiar with new teaching methods (24).

According to students, one of the most important communication skills was respect for students, which is a basic human need from Maslow's point of view (25). In the teaching process, respecting learners can facilitate achieving learning goals. Similar to our findings, previous studies found that students expect teachers' behavior to be respectful (18, 25, 26). Another study also emphasized on the importance of mutual respect for promoting communication. In the mentioned study, one of the criteria raised by half of the students was the availability of a teacher for counseling and guidance, which is neglected in the education system. Communicating with the teacher increases student's confidence and learning motivation. Younger students expect their teachers to have a supportive and guiding role and be able to provide solution to their problems (20).

In the present study, the most important criteria of teacher evaluation were teaching and evaluation skills from the teachers' perspective and communication skills and personal characteristics from the students' perspective. In general, factors such as popularity of teachers among students, administrative and executive positions, teaching methods, teacher's strictness and observance of educational rules and regulations by the teacher affect the students' evaluation. Nevertheless, it is also important to pay attention to what the students did not mention as a very important priority.. For instance, asking students for research assignments in the evaluation skills section and giving students responsibility for some of the lessons in the teaching skills section were considered as the least important indices of teacher evaluation. Perhaps the importance of the teachers' evaluation skills from the students' point of view is related to the quality of the final exam questions and grading. However, the concept of this field has been presented in a completely different way from the scientific point of view and from the point of view of professors in the evaluation form (21).

Conclusion

According to the findings of the present study, it is suggested to first assign coefficient to each priority and then calculate evaluation scores for a more realistic evaluation process. Other evaluation methods such as self-evaluation, evaluation by colleagues, evaluation by group manager and evaluation by elite students should be utilized for a more comprehensive evaluation of the teacher's performance. It is also suggested to measure the validity and reliability of the teacher evaluation tools using a qualitative method and to design evaluation forms according to the opinions of teachers and students in different disciplines. Performing teacher evaluation on a permanent basis according to scientific standards not only strengthen teaching and eliminate weaknesses, but also improve educational decision making and planning.

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Table3. Frequency distribution of the most effective target group for teacher evaluation from the perspective of students and teachers

Indicators	Average rating			Rank		
	Student	Teacher	Student/teacher	Student	Teacher	Student/teacher
Organizing the subject of teaching in the form of a specific plan and program	11.47	10.23	11.38	2	15	1
Present lesson materials in a coherent manner	10.73	10.81	10.74	9	10	7
Assess students before teaching	9.36	9.03	9.33	18	19	18
Summarize the contents and conclude after the lesson	9.07	9.7	9.12	12	16	19
Introducing new and valuable resources related to the lesson	10.47	10.56	10.47	11	12	10
Provide clear and understandable explanations	10.79	11.58	10.85	7	1	5
Proper use of class time for educational activities	10.37	8.81	10.25	12	20	14
Appropriate change of tone of voice during teaching	10.36	9.30	10.28	13	18	12
Explain the content in a clear and expressive voice	11.20	10.50	11/44	3	13	3
Communicate appropriately with students	10.98	11.17	10.99	5	5	4
Hold classes regularly	10.68	11.38	1.73	10	4	8
Respect for students	11.51	10.83	1.46	1	9	11
Expressing interest in a specialized field and enthusiasm for teaching and learning	10.75	10.58	10.74	8	11	7
Use of various educational methods in accordance with the educational goals	9.63	10.34	9.68	17	14	17
Assess student learning during the semester	9.83	9.34	9.8	16	17	16
Provide practical materials with examples	10.04	11.06	10.12	15	6	15
Mastery of scientific concepts and curriculum	11.14	11.47	11.17	4	3	2
Ability to present and convey lesson concepts	10.80	11.86	10.80	6	8	6
Ability to motivate students to learn and study further	10.14	11.50	10.24	14	2	13
Ability to involve students in discussions and activate the class	10.68	10.94	10.70	10	7	9