## **Original Article**

# Factors Affecting Teachers' Evaluation from the Viewpoint of the Students' at Kermanshah University of Medical Sciences

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#### **Abstract**

**Introduction:** Evaluation of teachers is considered among top priorities in an educational institution. Most of the universities around the world including universities in Iran have considered feedback from students as the only or main source of assessment of the quality of teaching process for many years. Regarding the existing disagreements in evaluation, the purpose of this study is to investigate the factors affecting teachers' evaluation from the viewpoint of the students' at Kermanshah University of Medical Sciences

**Methods:** This descriptive analytical study was performed with the participation of 848 students studying at second semester or above in 91-92 academic year. Self-administrated questionnaire was used to collect data. Content validity of the questionnaire was determined by the respective experts, and its reliability was calculated 0.73 through Chronbach's alpha test. The results were analyzed by SPSS-16 using descriptive statistics, Kolmogrov-Smirnov, Mann-Whitney, Kruskal-Wallis and Chi-square tests.

**Results:** Results showed that from the students' viewpoint, the areas of teaching skills  $(74.93\pm17.06)$ , teacher's personal characteristics  $(71.23\pm15.43)$ , physical features and time of course presentation  $(68.41\pm25.10)$ , student's personal characteristics and attitude  $(63.79\pm20.83)$ , and the quality of evaluation process in the university were important, respectively. In addition, there was a significant difference between two genders in the areas of teaching skills (P=0.007) and teacher's personal characteristics (P=0.015).

**Conclusion:** In scope of teaching skills, the most important effective factors on teachers' evaluation based on the students' viewpoint were teachers' knowledge and scientific proficiency in the course subject, teachers' efforts to convey the course materials, and teacher's manner of expression, respectively.

**Keywords:** Medical students, Evaluation, Medical sciences

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#### Introduction

ducational system as a dynamic and purposeful phenomenon has qualitative and quantitative aspects. Continuous improvement of the quality of education necessitates evaluation which can be done based on each of the constituent elements of educational system (input, process, product, output, and message). Accordingly, inputs' quality may be representative of the quality of educational system; three factors of learners, teachers, and curriculum have importance among inputs. Assessment of each of these three factors may have a considerable impact on improving the quality of educational system (1).

Different methods are used to evaluate teachers; one of these methods is the use of students' viewpoint (2). In most studies, evidence shows that most colleges and universities around the world use student assessment as part of the agenda for measuring the quality of education (3). University executives emphasize the importance of market status. They consider students as interested customers and their viewpoint as an essential source of information about the quality of university education (4). Obviously, if the continuous evaluation of teachers' performance is done correctly, part of which has been students' responsibility not only may indicate the qualification of teachers' performance but also along with detecting strengths and weaknesses can be effective as a contributory factor in improving educational activities (5).

Despite developing the educational evaluation by students, there is no ultimate consensus on the validity of this process, and many biases have been introduced in the student evaluation. Some unrelated factors to the quality of teacher's teaching including teacher's leniency, using easy examination questions, student's level of interest in both field of study and teacher have been known considerably important in evaluating teacher (6, 7). Researches show that teacher's characteristics including gender, teaching experience, scientific degree, and teaching method can affect the results of student evaluation. Also, class features including its size, scientific level of the course, time of course presentation, and observation of educational rules and regulations affect evaluation (8).

Rahimi (2012) mentioned the most important reasons of teacher's dissatisfaction with student evaluation are; (a) personal intention, (b) dishonesty in completing the form, (c) carelessness and lack of responsibility, and (d) lack of awareness (9). Although results of the studies conducted by Amini showed that 70.9 % of teachers were generally satisfied with student evaluation, 48.8% believed that students involved personal intentions in completing the

evaluation forms (10). In the study conducted by Tarhani (2002), 53.5% of medical students considered the evaluation of teachers as ineffective one in improving educational status, and 27.4% considered it somewhat effective. To some extent, the following factors considered as effective by students in completing the evaluation forms; the form and way of performing evaluation, their expression of expectations of teachers, effectiveness of teacher's personal characteristics, and intervention of personal reactions and emotional dealing (11).

However, many studies have been conducted on teachers' evaluation in various universities, but these studies have weaknesses including small sample size and lack of comprehensive questionnaire about effective factors in teachers' evaluation. On the other hand, studies have to be done to suit the educational environment of each university so educational managers will achieve the necessary awareness of the existing situation in different areas of teachers' evaluation and necessary awareness for improving and developing the quality of education. Thus, one can rewrite teachers' evaluation forms and improve its validity and reliability. Therefore, the present study was aimed to investigating the factors affecting teachers' evaluation from the viewpoint of the students' at Kermanshah University of Medical Sciences (KUMS).

#### **Methods**

The sample population of this descriptive analytical crosssectional study included students of Kermanshah University of Medical Sciences who were studying in different levels at the schools of Medicine, Dentistry, Nursing and Midwifery, Para-medicine, and Health in 91-92 academic years, selected via stratified random sampling. The sample size was estimated 978 people (about 163 students in each educational school) proportional to population size with 95% confidence and 5% accuracy. In this study, first-semester students were excluded from the study due to lack of necessary familiarity with evaluation process of teachers and to increase validity of the project. Before distributing the questionnaires among the students, informed consent was obtained from all the participants, and the purpose of the study.

Self-administrated questionnaire was used to assess the student's viewpoint of effective factors in teachers' evaluation (8). The questionnaire included 37 questions which were scored 1-5 based on Likert scale from "very high to very low". Questions contained five areas of teacher's teaching skills (7 questions), teacher's personal characteristics (16 questions), student's personal charact-

eristics and attitude (6 questions), physical features and time of course presentation (4 questions), and the quality of evaluation process in the university (4 questions).

Reliability of the test was conducted on 20 students through test-retest and its correlation coefficient was calculated about 0.8. Content validity of the questionnaire was determined by the experts of Evaluation Committee on Medical Education Development Center. Reliability of the questionnaire was estimated through Chronbach's alpha test that was 0.73. About items, Chronbach's alpha were determined for teacher's teaching, teacher's personal characteristics, student's personal characteristics and attitude, physical features and the time of course presentation, and the quality of evaluation process in the university 0.80, 0.86, 0.78, 0.84, and 0.75, respectively.

Then, the two-part questionnaire containing demographic features and effective factors on teachers' evaluation was distributed to students. Statistical analysis completed by the software SPSS-16 by descriptive analytical tests, including Kolmogorov-Smirnov to determine the normality of the scores, nonparametric Mann-Whitney and

Kruskal-Wallis tests in case of lack of normality of variables and Chi-square test to compare the factors affecting assessment in groups.

#### **Results**

848 students completed the questionnaire of them 172 were from Medical school, 159 from Pharmacy school, 171 from Nursing school, 184 from Para-medicine school, and 53 were from Dentistry school (being newly established and having small numbers of students). Of total, 546 students (64.4%) were females. The highest percentage of participants with 51.9% was related to undergraduate students, and the lowest percentage with 1.5% was related to Associate level students.

In scope of teacher's teaching skills, 51.1% of students mentioned the teacher's knowledge and proficiency of course subject as the most effective factor; and applying teaching aids and the type of course resources with 25.8% were known as the less effective factors in teachers' evaluation (Table 1).

Table 1: Distribution of responses to questions scope teacher's teaching skills

Teacher's teaching skills	Very low	Low	Mean	High	Very high
	N(%)	N(%)	N(%)	N(%)	N(%)
Teacher's knowledge and proficiency in course subject	14(1.7)	30(3.5)	62(7.3)	309(36.4)	433(51.1)
Teacher s' effort in conveying course materials and students' realization of course materials	12(1.4)	52(6.1)	67(7.9)	318(37.5)	399(47.1)
expression and course planning and arranging	13(1.5)	53(6.2)	104(12.3)	294(34.7)	384(45.3)
Applying of teaching aids and type of course resources	28(3.3)	97(11.4)	149(17.6)	355(41.9)	219(25.8)
Presenting old or new materials by teacher	17(2)	68(8.0)	163(19.2)	321(37.9)	279(32.9)
Teacher's expression of lesson importance at the beginning of each session	21(2.5)	90(10.6)	154(18.2)	338(39.9)	245(28.9)
Giving booklet in class	43(5.1)	79(9.3)	155(18.3)	310(36.6)	261(30.8)

In scope of teacher's personal characteristics, the most effective factor based on students' viewpoint has been reported as teachers' dignity and personality (54.7%) and the less effective factor as teachers' gender (18.6).

In scope of student's personal characteristics and attitude, interest in a course was declared by 43.2% of students as the most effective and by 15.9% as the less effective factors in student evaluation, respectively. About time of course presentation, 42.8% of students expressed the time of course presentation (morning or afternoon) and 31.1% (the beginning of the week or weekend) as an effective factor in teachers' evaluation. 55 students believed there was much little time to complete evaluation forms, and

10.5% believed that time of evaluation was not appropriate.

About the impact of student's gender in different areas of teacher's evaluation including teaching skills section (P=0.007) and teacher's personal characteristics (P=0.015), a significant difference was observed between two genders. No significant relationship was observed in other areas.

Considering the impact of students' college on different areas of teacher's evaluation including teaching skills section (P=0.032), student's personal characteristics and attitude (P=0.016), and quality of evaluation process in

the university (P=0.007), a significant difference was observed between students' viewpoint in different colleges. In scope of teaching skills, students of Medical College, in scope of student's personal characteristics and

attitude, students of Nursing College and in scope of quality of evaluation process in the university, students of Medical College believed in the greatest impact of mentioned factors in teachers' evaluation.

Table 2: Distribution of responses to questions in scope of teacher's personal characteristics

Teacher's personal characteristics	Very low	Low	Mean	High	Very high
	N(%)	N(%)	N(%)	N(%)	N(%)
Teacher's self-confidence	7(0.8)	43(5.1)	86(10.1)	328(38.7)	328(38.7)
Teacher s' dignity and personality	9(1.1)	26(3.1)	83(9.8)	266(31.4)	266(31.4)
Teacher's good behavior and dignity	6(0.7)	27(3.2)	80(9.4)	217(25.6)	217(25.6)
Seriousness, strictness, and the way of grading	31(3.70	81(9.6)	135(15.9)	336(39.6)	336(39.6)
Teacher's punctuality	18(2.1)	42(5.0)	102(12.0)	318(37.5)	318(37.5)
Having tidy appearance	30(3.5)	84(9.9)	172(20.3)	283(33.4)	283(33.4)
Teacher's sense of humor	25(2.9)	73(8.6)	155(18.3)	306(36.1)	306(36.1)
Teacher's observance of Islamic values	56(6.6)	67(7.9)	203(23.9)	247(29.1)	247(29.1)
Having a position and administrative activities	95(11.2)	110(13.0)	224(26.4)	218(25.7)	201(23.7)
Teacher's academic rank (teacher, assistant professor, associate professor, full professor)	48(5.7)	92(10.8)	184(21.7)	265(31.2)	265(31.2)
Teacher's teaching experience	21(2.5)	56(6.6)	121(14.3)	282(33.3)	282(33.3)
Teacher's extent of interest in the course and teaching	17(2.0)	24(2.8)	120(14.2)	296(34.9)	296(34.9)
Teacher's appearance	103(12.1)	113(13.3)	251(29.6)	205(24.2)	205(24.2)
Teacher s' gender (male or female)	136(16.0)	119(14.0)	271(32.0)	164(19.3)	164(19.3)
Teacher s' research activities	45(5.3)	86(10.1)	208(24.5)	302(35.6)	302(35.6)
Teacher's popularity and reputation among students	54(6.4)	75(8.8)	175(20.6)	281(33.1)	281(33.1)

We found different academic levels affect significantly differently on areas of teacher's evaluation including teaching skills section (P=0.009), teacher's personal characteristics (P<0.001), student's personal characteristics and attitude (P=0.001), and physical features and time of course presentation (P=0.009). Considering the achieved results in the teaching skills section, students of professional doctorate selected the component of this area and undergraduate students selected components of other areas as the most effective factors in teachers' evaluation. About the impact of the field of study on different areas of teacher's evaluation including teaching skills (P=0.001), student's personal characteristics and attitude (P<0.001), and physical features and time of course presentation (P=0.020), a significant difference was observed.

#### **Discussion**

The results of the present study showed that in the areas

of evaluation, teacher's teaching skills, teacher's personal characteristics, physical features and time of course presentation, student's attitude and personal characteristics, and quality of evaluation process in the university are important, respectively. In scope of teaching skills, knowledge and scientific proficiency of the course subject, effort in transferring course materials, and teacher's manner of expression and course planning and arranging have a high and relatively same importance for the students.

It seems these three factors affecting each other, and occasionally despite having scientific proficiency in the course subject, teacher has difficulty in expression power and transferring concepts which finally affects student evaluation. Also, using old or new course materials in the course subject has been considered effective in teachers' evaluation based on students' viewpoint. These findings show that teacher's presentation of new and up-to-date scientific information in the course subject is one of the

important variables in teacher's evaluation that should be given more consideration by university teachers.

In the studies conducted by Vakili and colleagues, effective factors in teachers' evaluation include teacher knowledge and scientific proficiency, teachers' effort in conveying course materials, manner of expression, and course planning and organizing, respectively, which is in line with the present study (8). Ghorbani and Haji-Aghajani expressed teachers' proficiency, eloquence of expression, the way of organizing and planning the course, and interest in teaching as the most important features of a good college teacher based on students' viewpoint, while, they found the criterion of teachers' proficiency in the courses taught in the area of research knowledge as the second priority (12, 13). Based on his studies conducted on this issue, Jacobson declared that a considerable percentage of the students put the greatest importance on teachers' personality features (14). Diversity in existing views is common because criteria of a good teacher undergo a variety and diversity considering different educational, cultural, and economic conditions and one cannot determine a fixed formula for teachers' merit (15).

In scope of teachers' personal characteristics, teacher's good behavior and dignity were found as the most important effective factors in teachers' evaluation based on the students' viewpoint. In scope of teacher's personal characteristic, Amini and colleagues considered communicative skills, sense of humor, and appearance tidiness as effective factors in student evaluation of teachers (10). In extensive studies conducted by researchers on this issue, ethics had priority on other areas, and student evaluation of a teacher considered as less affected by teaching quality and their learning, and more affected by procedure and methods, and good behavior considered as a key to communicate (17, 18). Teachers having good communication with students can transfer their scientific sources as well as teaching this good behavior. Results of the studies conducted by Turhon and Bergman showed that among different areas of evaluation, students placed more importance on teacher's communicative skills with students, transferring of concepts, and teachers' professional ability (18, 19). While Karimi and colleagues showed that teachers didn't believe in the student evaluation of their communicative and personality features (20).

In scope of student's attitude and personal characteristic in the present study, most students expressed the interest in a course and its practicality in clinic among effective factors in their evaluation of teachers. In studies conducted by Komeili, teachers mainly considered students academic level and theoretical or practical features of a course among the most important desired

factors in evaluation (21). Results of the study conducted by Aliasgharpour and colleagues showed the majority of students and teachers believed in the importance of interest rate in study and respective course in student evaluation of teacher (7). Students' interest in the type of course and its practicality in clinic might be possible reasons for found difference between evaluation scores. Students' attitude toward the course and the level of their motivation in that course and course relevancy with their interests may affect student evaluation of teacher. In other word, the more positive is student's attitude toward the course or more compatible the course is with their interests and experiences, the more increase will be in teacher's obtained scores in student evaluation (22).

These findings show that making students motivated and interested in a course and explaining the course importance in study for the student at the beginning of the class can influence teacher's evaluation score; however, this issue is mainly raised in general courses and is unavoidable. In preparing student evaluation forms for teachers, this issue is suggested to be taken into consideration and, an appropriate strategy should be applied on the evaluation of teachers of less important courses in study.

The results of this study show that time of course presentation (morning or afternoon) is among effective factors in teachers' evaluation based on students' viewpoint which is in line with the study conducted by Vakili (8). Some researches declared the time and day of a course presentation could affect the results of student evaluation of teacher. Students supposed that the effectiveness of course presented at the end of the day in a week schedule would reduce due to the fatigue during the day; however, there are some studies showing that course schedule has no significant relevancy to teaching general score (22).

Furthermore, in the present study we found a significant relationship between students' gender and their opinion about teaching skills and teacher's personal characteristics, as well. In this case, female students compared with males placed greater importance on teaching skills and teacher's personal characteristics. Rahimi and colleagues also considered the impact of both student and teacher's gender on the procedure of evaluation as the most important disadvantages of this evaluation method (9). Basow showed that male students compared with females rated female teachers lower than male counterparts (23), and in the study conducted by Kierstead, both male and female students rated female teachers lower than males. He thinks, students probably have different expectations from male and female teachers, they expect that teachers must not only have high competency but also act according to traditional expectations. He concludes if females show specific feminine behaviors, male and female teachers will gain same evaluation scores for the same professional work (24). Teacher's observance of individual aspects may satisfy more than half of the students. Teachers have to be observant about unexpected factors in evaluation and moderate the interference of these factors in student evaluation with precision and subtlety.

Results of the present study showed that students' viewpoint was significant in scope of teaching skills in different colleges, and more than two-thirds of students of Medical College, Dentistry, and Pharmacy considered teachers' teaching skills as the most effective factor in evaluation; and more than half of the students of Nursing School considered students' attitude and personal characteristics as the most important factors in teacher evaluation.

About academic levels of Ph.D. students, the area of teaching skills was considered as the greatest effective factor in teacher evaluation. In general, the available differences between students' viewpoint of various colleges and academic levels are related to differences in students' expectation level, judgment, and perception of university, teacher, and their educational motivation.

Students' lack of cooperation in completing the questionnaire was one of the limitations of the present study; in order to minimize the limit, students were explained about the significance and essence of this evaluation and the necessity of doing the research before distributing the questionnaires. Although different opinions have been presented about the evaluation of teaching quality in present study, they all agreed that student evaluation of teachers should be done along with other evaluation methods and sources of teaching quality. Many researchers have suggested strategies to reduce bias in evaluation; they also suggested that by weighting questions you could reduce bias and improve the scores of factors. In this case, one should consider fields of study and type of courses in preparing evaluation forms. It is also suggested that teacher' viewpoint on effective factors in evaluation should be discussed in future research.

#### Conclusion

Factors affecting evaluation areas, arranged in order of importance, include teachers' teaching skills, teachers' personal characteristics, physical features and time of course presentation, students' personal characteristics and attitude, and the quality of evaluation process in the university. We suggest evaluation forms should be changed according to results of this study.

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