

Content analysis of educational assistants views regarding the evaluation of Mashhad University of Medical Sciences' professors in educational clinical departments: a qualitative study

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Background: Instructors play an instrumental role in education, particularly in medical sciences where they are regarded as the most influential factor in the process of education. The present study was carried out with the aim of demonstrating assistants' views about professors' teaching in Mashhad School of Medicine.

Methods: The current study is a qualitative analysis in which the written views of 639 assistants in Mashhad School of Medicine was studied. Data was analyzed using the summative content analysis method.

Results: The themes that appeared in this study include professional qualification and personal features. Professional qualifications included command of knowledge, interest and practical skill. The theme of personal features included personality traits and ethical behavior.

Conclusion: Based on the findings of this study, it can be seen that while teaching, every behavior and aspect of an instructor is observed by assistants; which plays an important role in the training of the assistants. Thus, in addition to an instructor's knowledge and practical skills, which are important in their own right, their views and behavioral and personality traits are also influential as models for their assistants and will influence their lifestyle in their professional life in the future.

Keywords: Content Analysis, Education, Evaluation

تحليل محتوى وجهة نظر الأطباء المساعدين حول تقييم تدريس أعضاء الهيئة التدريسية في الأقسام المختلفة بكلية مشهد الطبية: دراسة نوعية

الخلفية والهدف: يعتبر دور الأستاذ الجامعي، لا سيما في العلوم الطبية، هام ومركزي للغاية ويعتبر عنصراً رئيسياً في العملية التعليمية. الغرض من هذه الدراسة هو شرح وجهات نظر المساعدين حول تدريس أعضاء هيئة التدريس بكلية مشهد الطبية.

الطريقة: الدراسة الحالية هي دراسة نوعية تم فيها تحري وجهة نظر ستمئة وتسع وثلاثين طبيب مساعد من كلية الطب في مشهد. تم تحليل البيانات عن طريق تحليل المحتوى النوعي مع نهج تلخيصي. النتائج: المواضيع الظاهرة في هذه الدراسة تشمل الكفاءة المهنية والخصائص الفردية. فئات الموضوعات في الكفاءة المهنية تشمل التسلسل العلمي والإهتمامات، والمهارات العملية، والفئات المواضيعية للخصائص الفردية تشمل الخصائص الشخصية والسلوك الأخلاقي.

الخلاصة: بناء على نتائج هذه الدراسة، يمكن ملاحظة أنه في التدريس والتعلم، تتم مراقبة جميع سلوكيات وتصرفات الأساندة من قبل المساعدين الذين يلعبون دوراً مهماً في التعلم. وبالتالي، ليس فقط المهارات الأكاديمية والعملية للمعلم مهمة في التدريس، ولكن أيضاً مواقف الأخلاقية والشخصية الذين يشكلان نموذجاً على نمط حياة المساعدين سيكون لها تأثير كبير على مستقبلهم الوظيفي والعملية.

الكلمات المفتاحية: التعليم، التقييم، تحليل المحتوى

تحليل محتوى نظرات دستياران آموزشی در خصوص ارزشیابی تدريس اساتید گروه های آموزشی بالینی دانشکده پزشکی مشهد: مطالعه کیفی

زمینه و هدف: نقش استاد خصوصاً در علوم پزشکی نقشی بسیار با اهمیت و محوری است و به عنوان مؤلفه اصلی تاثیرگذار در فرایند آموزش محسوب می شود. این مطالعه با هدف تبیین نظرات دستیاران در خصوص تدريس اساتید دانشکده پزشکی مشهد انجام شد.

روش: پژوهش حاضر یک مطالعه کیفی است که در آن نظرات کتبی 639 دستیار دانشکده پزشکی مشهد مورد بررسی قرار گرفت. داده ها با روش تحلیل محتوای کیفی با رویکرد تلخیصی تحلیل گردید.

یافته ها: تم های پدیدار شده در این مطالعه شامل صلاحیت حرفه ای و ویژگی های فردی بود. مقوله های تم صلاحیت حرفه ای شامل تسلط علمی، علاقه مندی و مهارت عملی و مقوله های تم ویژگی های فردی شامل خصوصیات فردی و رفتار اخلاقی بود.

نتیجه گیری: بر اساس یافته های حاصل از این مطالعه می توان دریافت که در آموزش و تدريس، تمامی سکناات و وجنات اساتید توسط دستیاران مورد رصد قرار می گیرد که در یادگیری نقش بسزایی دارند. از این رو، نه تنها مهارت های علمی و عملی استاد در آموزش و تدريس از اهمیت بسیاری برخوردار است، بلکه نگرش و ویژگی های اخلاقی و شخصیتی او نیز به عنوان الگوهای موثر بر سبک زندگی و تفکر دستیاران تأثیر بسزایی را در آینده شغلی و حرفه ای آنها خواهد گذاشت.

واژه های کلیدی: آموزش، ارزشیابی، تحلیل محتوا

مشهد یونیورسٹی آف میڈیکل سائنس میں اساتذہ کی تدریسی سرگرمیوں کا جائزہ لینے کے لئے اسسٹنٹ اساتذہ کے نظریات

بیک گراؤنڈ: کسی بھی تعلیمی ادارے بالخصوص میڈیکل یونیورسٹیوں میں اساتذہ تعلیمی ڈھانچے کی ریڑھ کی ہڈی ہوتے ہیں، وہی ہر طرح کی تعلیمی سرگرمیوں کو فروغ دیتے ہیں۔ اس تحقیق کا ہدف مشهد یونیورسٹی آف میڈیکل سائنس میں اسسٹنٹ اساتذہ کی نظر سے اساتذہ کی تدریسی سرگرمیوں کا جائزہ لینا ہے۔

روش: اس تحقیق میں مشهد یونیورسٹی آف میڈیکل سائنس میں چھ سے سو انتالیس نائب اساتذہ کی نظر معلوم کی گئی۔ ڈیٹا کا تجزیہ مضامین کے تجزیے کی روش سے کیا گیا۔

نتیجے: اس تحقیق میں اساتذہ کی پیشہ ورانہ اور فردی توانائیوں کا جائزہ لیا گیا تھا۔ پیشہ ورانہ توانائیوں میں موضوعات پر علمی عبور، اور عملی مہارت شامل تھیں جبکہ فردی توانائیوں میں فردی خصوصیات اور اخلاقی چال چلن کا جائزہ لیا گیا تھا۔

سفارش: اس تحقیق کے نتائج سے یہ کہا جاتا ہے کہ نائب اساتذہ نے یونیورسٹی کے اساتذہ کی شخصیت کا جامع طریقے سے جائزہ لیا ہے اور ان کی توانائیوں کو پرکھا جو تدریس میں موثر واقع ہوتی ہیں۔ اس سے ہمیں پتہ چلتا ہے کہ میڈیکل اساتذہ کی علمی صلاحیتوں کے ساتھ ساتھ اس کے اخلاقی اور صفات حسنہ بھی طلباء کی زندگی اور ان کے طرز تفکر کو تشکیل دینے میں اہم کردار کا حامل ہے اور وہ اپنے اساتذہ کو دیکھ کر ہی اپنی پیشہ ورانہ زندگی کا راستہ معین کرتے ہیں۔

کلیدی الفاظ: تعلیم، میڈیکل، جائزہ اور مضامین کا تجزیہ۔

INTRODUCTION

Student evaluation of professors' teaching is one of the most common methods of evaluation in universities and centers for higher education. This method is used as a deciding factor in determining the effectiveness and utility of educational plans in nearly all universities and center for higher education in the world (1). Some experts believe that student' evaluations are the only tangible source of information and the best type of evaluation since students are the only people who are directly trained by professors. Consequently, to evaluate educational activities, students are in the best position. Seldin states that it is hard to forego regularly referring to students if we intend to evaluate teaching; just as we have to ask the people who have had a particular meal when we want to study its taste (2). Utilizing students' views to evaluate lessons and educational activities of instructors is a very common and well-known method. However, research evidence indicates that students' views about their teachers is influenced by factors that should be kept in mind as pitfalls in the evaluation. Dee fink (2006) has deemed it a general phenomenon and stated that studies performed in recent decades by experts in the field clearly show that general environmental attributes affect individuals' perceptions and judgments and jeopardize valid evaluations (3). Commonly, teaching is evaluated by learners through developing and distributing questionnaires. The questionnaires include scale items and close-ended questions that are usually uploaded on electronic systems which are to be completed by learners in a particular time interval. Mashhad University of Medical Sciences implemented student' evaluations through questionnaires a few years ago. Although this method can produce large amounts of data with little cost both in terms of time and money, investigations show that influential and noteworthy factors in the evaluation of professors is overlooked by students. Some researchers list the difficulty of the course, number of students in the class, the nature of order and rules in the class, the professor's rank, gender and personality traits of students, number of semesters that the students have been studying for, expected score and actual score, the professor's pedagogical philosophy and the professor's physical and social appeal as factors affecting the evaluation process (1). Other researchers point to variables such as the unsuitable content of evaluation questionnaires, the content of the questionnaires not being calibrated to the needs of the target group, non-relativistic questions and in general disregard for validity and reliability of the measurement tools as factors affecting the process of student' evaluation (4). As a result, performing valid evaluations is one of the principal duties of evaluation offices at universities and institutions of higher education. Given that universities use the results of evaluation to enable decision making regarding awarding tenure, annual promotions, academic promotions, assigning executive and educational responsibilities, and granting prerequisites (5). Providing a comprehensive model for evaluation and utilizing other methods such as peer evaluation, consulting managers and authorities, clinical oversight and observation, and interviews with learners can

play a significant role in collecting data with high validity and reliability. These data can be used in planning and decision making in the aforementioned aspects, in addition to improving the scientific level and research capabilities of students, improving teaching methods and raising scientific level and research capabilities of the professors, which will lead to an increase in the quality of learners' education. In this study we intended to take steps in redesigning the evaluation system for instructors and implementing novel evaluation methods by analyzing assistants' views.

METHODS

Since the aim of the study was to analyze the views of teaching assistants about faculty members, the summative content analysis method was used. Studies which employ the summative content analysis approach identify and quantify the words or special themes in the text in order to discover their meaning or usage. Summative content analysis can go beyond enumeration by analyzing the hidden connotations of words. In this method, the focus is on uncovering a word's denotation or its connotation (6). The participants in the study included all the assistants who had responded to the surveys in 2015. 639 assistants expressed their views regarding professors, in written form. To collect data, at the end of the survey forms, which used scale items according to the Likert scale, an open ended question which could be answered in essay form asked the assistants' views regarding the faculty members in the corresponding departments. The response ranged from remarks of few words to answers as long as a paragraph. After collecting data, analysis began by reviewing and analyzing of code words. The extracted code words which were the meanings of the words and expressions used by the assistants to describe the faculty members, resulting from their views, perceptions and experiences, were categorized as positive or negative code words according to the subjects' similarity. To verify the validity of data and the extracted code words, the results of the first round of code extraction were sent to a number of experts in the field. The measurements, evaluations and the comments were used in the second round for assigning codes, determining units of meaning and selecting categories and themes. This step helped enhance the credibility of the final results. Ethical considerations were observed by keeping the names and the data of the assistants' confidential.

RESULTS

The participants in this study included male and female assistants totaling 639 individuals with an average age of 34 ± 4 who had taken the assistants promotion examination in 2015. 75 initial code words were obtained through analysis of their views, which resulted in 5 categories (secondary motifs) and two themes (primary motifs). Based on the data presented in table 1, the results show that 639 people have expressed their views regarding the professors in the written form. An analysis of the content of their comments shows that 220 individuals (34%) have mentioned the primary motif of personal qualification and 419 (66%) individuals have cited personal features. Among

Table 1. The code words and units of meaning which were produced by the analysis

Themes=2 (n=639)	Categories	Units of meaning	
		Positive code words	Negative code words
Professional qualification (217) (34%)	Interest (102) (16%)	Tending to assistants' education – with a plan – strict but caring – spends the most time for assistants – conducting classes regularly	Not teaching assistants – disorganized – marginal presence at the clinic and hospital unit – materialistic – not allocating time for assistants
	Scientific command (96) (15%)	Being up to date – knowledgeable and learned – high level of scientific knowledge – excellent in teaching – the talking reference book – the talking “Youmans”	Uneducated – does not study – the least educated – low level of scientific knowledge – should be among the clinical staff, not educational staff
	Practical skill (20) (3%)	My role model in the operating room – my model in the operating room – skillful at surgery – accurate diagnoses – skill and precision in examining patients – with able hands	
Personal features (422) (66%)	Personality traits (326) (51%)	Kind and humble – a gentleman – patient- calm – open-minded – well-dressed – empathetic – honest – kind-hearted	Impatient – restive – overly careful – extremely conservative – arrogant – obsession – fault-finding – traditional – irritable - demanding
	Ethical behavior (90) (14%)	Well-mannered – treating assistants warmly – courteous – polite – sympathetic to assistants – appropriate treatment of assistants and patients – committed to patients – an example in leading assistants toward the right manner of treating patients	Humiliating assistants – belittles assistants – insulting the behaviors of assistants and patients – giving priority to personal and family connections over professional considerations – discrimination in treating assistants – partial treatment of assistants – creating psychological warfare between residents - indifference to residents – tarnishing the status of a professor – constant mental harassment of assistants

the 220 individuals who had evaluated the scientific qualification of professors, 104 (16%) pointed out the professor's interest in teaching, 21 individuals (3%) remarked about practical skill and 95 (15%) noted scientific command. The theme of personal features included the 66% of the remarks. 328 assistants (51%) evaluated and focused on a professor's personality traits and 91 assistants (14%) evaluated the ethical behavior of the professor.

Professional qualification or occupational competency is one of the themes extracted from the views of assistants. The three categories of interest in teaching, scientific command and practical skill subsumed this primary motif. In the interest category, “tending to assistant's education” and “the holding classes regularly” were given more emphasis. On the other hand, a lack of interest on the part of the professor was described using words and phrases such as indifferent, uncommitted, and “not allocating time for teaching assistants”. “Being in touch with the current state of the science”, “educated and high level of scientific knowledge” were the most frequent phrases expressed by assistants regarding

professors' scientific command. Words and phrases such as uneducated, “does not study” and “has a low level of scientific knowledge” denoted a professor's poor command of subjects. The most frequent units of meaning from which the practical skill category was obtained included “a role model in the operating room”, “skillful at surgery”, “accurate diagnoses of trauma” and “expertise in examining patients”.

Personal features: the subcategories of this motif point to the qualities of a member of faculty with respect to human dignity. This primary motif consists of the two categories: personality traits and ethical behavior. The personality traits of a professor were a prominent index and contained the most phrases and units of meaning such as kindness, humility, patience and empathy. Through their interactions with teaching professors and based on their perceptions and experiences of a professor's teaching, units of meaning such as courteous, friendly and “committed to assistants and patients” or their opposites such as “all he does is undermine your personality”, “insults assistants”, “discriminates between assistants” and “tries to humiliate assistants” were

Table 2. Frequency of units of meaning

Unit of meaning	Frequency no. (%)
Kindness	179 (22.1)
Humility – Arrogance	97 (12.0)
well mannered – ill mannered	105 (13.0)
Methodical – Unmethodical	58 (7.2)
Educated – Uneducated	63 (7.8)
Patience – Impatience	68 (8.4)
High level of knowledge	31 (3.8)
Caring for assistants' education	36 (4.4)
Empathy	52 (6.4)
Strictness	40 (4.9)
Open-minded – Traditional	30 (3.7)
Being up-to-date	27 (3.3)
Being organized	23 (2.8)

expressed. This led to the designation of ethical behavior as one of the categories under the main motif of personal features. In order to better describe and analyze the content of assistants' views, the most frequent words and units of meaning used by the participants is presented in table 2.

DISCUSSION

This study's findings led to the two main motifs of "professional qualification" and "personal features" as the main themes for evaluating professors. The categories related to the theme of personal features include personality traits and ethical behavior. In a qualitative study by Sharifnia et al. the features of a good professor from the perspective of nursing students and professors were studied. An inquisitive spirit and personal character were the main motifs extracted with inquisitive spirit, having a good command of science and ability to convey information, interest, encouragement and generating interest and evaluation as subcategories. Categories under personal character were teaching method, personal traits, confidence and attire (7). A qualitative study with a content analysis approach by Cheraghi et al. about the features of a prominent professor identified the three parallel themes of knowledge and eloquence, observing ethical obligations in education, and communication with students. For the first theme, the participants mentioned a professor's high level of scientific knowledge, command of the subject material and placing importance on student's questions. For the second and third themes, students referred to the behavioral characteristics of a prominent professor such as polite communication and not wasting students' time. Scientific command was one of the main categories under the theme of personal qualification (8). Jang et al. discovered profound knowledge as one of the important factors in the student evaluation of the professors (9). A professor's mastery of teaching, a result of being knowledgeable, has been studied frequently. Numerous studies consider a professor's command of the topic as one

of the most important features of a professor. Salmeh et al. in a paper titled "The characteristics of effective professors", have emphasized a professor's knowledge of a topic, under the category of personal qualification, as one the features of an ideal teacher (10). According to findings by Cheraghi et al. an instructor's knowledge, introducing novel topics and ability to convey information to students are among factors influencing the quality of education (8). Another category obtained from assistants' views is a professor's practical skill. Based on the results of a study by Elahi et al. about the challenges faced by effective education from the perspective of nursing teachers, participants considered scientific and practical incompetence of professors very challenging in terms of providing students with the required qualifications and professional skills, in addition to theoretical lessons not being applicable in clinical settings (11). Studies by Barton et al, Bradshaw et al. and Melrose et al. illustrate that instructors' command of clinical skills is required for gaining the professional qualifications (12-14). Interest in teaching is another category under the motif of professional qualification. Based on the findings of a study performed in 2010 in Hong Kong, interest in teaching was identified as the first factor affecting students' motivation for learning (15). In a study by Larson, school students considered teachers with features such as enthusiasm for teaching and helpfulness with learning as effective teachers (16). Lockaby and Vaughn, and Luft and Thompson have included enthusiasm for teaching and interest in teaching among the outstanding features of a good teacher (17,18). One of the categories with the most remarks by assistants was the personal features of a professor. This fact indicated that a teacher's influence is not limited to his/her experiences and viewpoints; rather, it is his/her whole personality that creates the conditions for learning and change in students. Professors' personal features and opinions towards students have a significant influence on the quality of their performance inasmuch as in the minds of students, it transforms the professor from a person merely skilled at teaching to an intellectual who is tasked with educating and nurturing humans. Among the studies whose results are in line with our findings, a study by Sharifnia et al. can be cited which presents honesty, righteousness, flexibility, humility and politeness among the features of a good professor according to teachers and students of nursing (9). As reported by Dargahi et al., one of the most important features of a good professor is being a role model for students which originates from a professor's personality traits (19). Commenting on the topic of professional ethics, assistants touched on polite/impolite behavior with assistants and preventing discrimination. In a study titled "Characteristics of the headmasters, teachers and students in an effective school" Sahenk showed that communication according to ethical obligations is among the features of an effective professor. A professor with kind manners who employs positive communication approaches and respects all students, boosts students' motivation and participation (20). Friendly interactions in a polite and supportive manner lead to strengthening students' motivation, more participation, and more welcoming attitude toward criticism, improved adaptation to stress and

more attention to lessons (21). Furthermore, such behaviors protect students against exhibiting inappropriate professional and academic behavior (22,23). Any lasting and fundamental change in a society depends on changes in its education system. The main component of change and development in an education system in order to train teachers and improve their performance is gaining an understanding of their characteristics (8). Based on the finding of this study it is evident that during teaching, all aspects of a professor's behavior are observed by assistants which can play an integral role in the process of training. Hence, along with professors' knowledge and practical skill, their perspectives and behavioral and personal

features play a major role in shaping the lifestyle and worldview of assistants due to professors acting as role models for the future generation of the country's medical experts.

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