



# Motivational Factors Affecting the Educational Performance of Faculty Members

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## Abstract

**Background:** Motivation of university faculty members can be defined as general processes that initiate, sustain, and regulate goal-directed behaviors by faculty members.

**Objectives:** This study aimed to determine the motivational factors affecting the educational performance of faculty members of Kermanshah University of Medical Sciences (KUMS).

**Methods:** This cross-sectional study was conducted on 177 faculty members of KUMS in western Iran who were randomly selected samples. The data were collected through self-reporting using a standard questionnaire. The *t*-test and Pearson correlation were performed using SPSS software version 16 to analyze the data.

**Results:** The average age of academic members was 40.43 years (SD = 7.99), and the average job history was 11.96 years (SD = 9.40). The average score for motivational factors was 63.75 (95% CI: 61.53 - 65.98), with scores ranging from 18 to 90. "Working with competent colleagues" and "inherent interest in teaching" received the highest average score among external and internal motivational factors, respectively.

**Conclusions:** This study identified two key factors that significantly affect the teaching performance of professors: Working with competent colleagues and inherent interest in teaching. These findings are valuable for university administrators to develop effective motivation programs for faculty members.

Keywords: Respect, Teaching, Academic Performance

## 1. Background

Motivation plays a crucial role in driving people's efforts and activities and is a vital tool for inspiring employees to achieve effective and efficient results, fostering a positive work environment and implementing successful forecasting programs (1, 2). When employees are motivated, they become satisfied with their work and approach it with greater enthusiasm, ultimately enhancing their performance (3). Furthermore, employers expect high performance and a positive attitude from their employees (4). Job motivation can lead to increased productivity, even when other factors remain constant (5), thereby ensuring the success of an organization (6). Several studies have shown that employees who feel tired and uncomfortable while working tend to be unmotivated and less productive (7). Various factors contribute to

employee motivation, including material, cultural, and social aspects (6-9).

The university is the most crucial hub for education and research in any country. As the human capital of this system, the academic board members have a vital role in the country's development and progress, and the country will advance more rapidly by providing higher-quality services (10). In addition, universities play a significant role in guiding the research and innovation of countries to ensure future prosperity and help prepare a knowledgeable and creative workforce (11). Higher education has always been seen as a means to enhance the skills and abilities of individuals in a nation, and faculty members hold a crucial position in improving the overall quality of higher education (12, 13). The lecturer plays a pivotal role in education by actively participating and contributing to achieving quality education (12). Motivation describes why a

person decides to do something, how long they are willing to continue an activity, and how hard they pursue it (14). Accordingly, the motivation of university faculty members can be defined as general processes that initiate, sustain, and regulate goal-directed behaviors by faculty members (15).

Motivation plays a significant role in the performance of faculty members (16). The quality of teaching in higher education is crucial for society, as it impacts student participation, learning outcomes, and persistence (15). A targeted intervention can be developed to enhance faculty motivation by understanding the factors that influence faculty motivation, but professor motivation has received less research than other professions (15).

## 2. Objectives

This study aims to investigate the motivational factors that affect the educational performance of faculty members at Kermanshah University of Medical Sciences (KUMS). The subject is essential, but evidence-based studies are lacking.

## 3. Methods

### 3.1. Participants and Procedure

This cross-sectional study was conducted on 177 faculty members at KUMS in the west of Iran. The subjects were enrolled, and data were collected during the following stages. First, different faculties at KUMS were chosen as clusters. Then, faculty members within each faculty were invited to participate in the study voluntarily. Ultimately, 177 faculty members agreed to take part in the study voluntarily. Participants needed at least one year of experience as faculty at KUMS to participate in the study. Unwillingness to cooperate or incomplete answers to questionnaire items were considered exclusion criteria.

### 3.2. Measure

The data were collected by having participants fill out a written questionnaire. The questionnaire had two parts. The first part asked for information about the participants' age, job history, and gender. The second part used a standard questionnaire to measure the motivational factors that affect educational performance.

The second part of the standard questionnaire consists of 18 items that focus on the motivational factors affecting the educational performance of faculty members. This questionnaire was developed by

Azizzadeh Forozi et al. and was divided into two sections: (1) internal motivational factors and (2) external motivational factors. The internal factors section contains eight items, with a score range of 8 to 40. These items assess factors such as "inherent interest in teaching." The external factors section consists of ten items, with a score range of 10 to 50. These items evaluate factors such as "providing the necessary conditions to enhance knowledge and information". Participants rate their agreement on a five-point Likert Scale, ranging from "very little" to "very much". The validity coefficient for each item in the questionnaire was between 0.71 and 0.96. The tool's reliability was reported as 0.96 for internal and 0.88 for external factors (17). Before starting the main project, a small preliminary study was done to test the tools' usefulness. The pilot study involved 20 academic members, similar to the primary research, to get feedback on how clear, long, detailed, and time-consuming the tools were and to gather data on how reliable the measures were. In the current study, Cronbach's alpha coefficient for the questionnaire was 0.94 for internal and 0.87 for external factors, suggesting that the internal consistency was adequate.

### 3.3. Data Analysis

The data were analyzed using SPSS version 16. Appropriate statistical tests, including bivariate correlation and independent samples *t*-test, were used considering the significance level at 95%.

## 4. Results

The average age of academic members was 40.43 years, with a standard deviation 7.99. Furthermore, the average job history was 11.96 years, with a standard deviation 9.40. Among the participants, 38.4% were females and 61.6% were males. The average score for the questionnaire on motivational factors affecting educational performance was 63.75, with a 95% confidence interval of 61.53 - 65.98. The scores on the questionnaire ranged from 18 to 90. The participants achieved 70.8% of the highest possible score for motivational factors. The gender difference in motivational factors affecting the educational performance of faculty members is shown in Table 1.

The results revealed that the highest average score for external motivational factors was obtained by "working with competent colleagues" and "being respected in the workplace". Additionally, an "inherent interest in teaching" and a "desire to address and improve shortcomings" received the highest average score among the internal motivational factors. The

**Table 1.** Gender Difference in Motivational Factors Among Participants

Variables and Items	Mean $\pm$ SD	Total Mean (SD)	P-Value
<b>External factors</b>			
Working with competent colleagues		3.59 (1.20)	0.003
Female	3.25 $\pm$ 1.27		
Male	3.80 $\pm$ 1.11		
Being respected in the workplace		3.53 (1.19)	0.652
Female	3.48 $\pm$ 1.15		
Male	3.58 $\pm$ 1.21		
Providing the necessary conditions to enhance knowledge and information		3.38 (1.12)	0.303
Female	3.27 $\pm$ 1.20		
Male	3.45 $\pm$ 1.06		
The presence of order in the workplace		3.28 (1.22)	0.097
Female	3.08 $\pm$ 1.26		
Male	3.40 $\pm$ 1.19		
Job security		3.23 (1.25)	0.644
Female	3.17 $\pm$ 1.32		
Male	3.26 $\pm$ 1.21		
Optimal conditions for work advancement		3.16 (1.21)	0.181
Female	3.01 $\pm$ 1.20		
Male	3.40 $\pm$ 1.21		
Adequacy of salary and benefits		3.14 (1.28)	0.008
Female	2.82 $\pm$ 1.32		
Male	3.34 $\pm$ 1.22		
Proportion of salary and benefits		3.07 (1.36)	0.019
Female	2.76 $\pm$ 1.46		
Male	3.25 $\pm$ 1.27		
The presence of motivated students		3.06 (1.26)	0.317
Female	2.94 $\pm$ 1.27		
Male	3.13 $\pm$ 1.25		
Implementing the rules uniformly		2.97 (1.34)	0.034
Female	2.70 $\pm$ 1.38		
Male	3.14 $\pm$ 1.30		
<b>Internal factors</b>			
Inherent interest in teaching		4.03 (1.15)	0.481
Female	4.11 $\pm$ 1.11		
Male	3.99 $\pm$ 1.19		
Interest in changing and rectifying defects		4.02 (1.09)	0.681
Female	3.98 $\pm$ 1.04		
Male	4.05 $\pm$ 1.12		
Personal traits (such as discipline)		3.96 (1.08)	0.853
Female	3.94 $\pm$ 1.13		
Male	3.97 $\pm$ 1.06		
Readiness to engage in activities		3.90 (0.97)	0.194
Female	3.77 $\pm$ 1.04		
Male	3.98 $\pm$ 0.92		
Sense of curiosity		3.86 (1.04)	0.318
Female	3.76 $\pm$ 1.02		
Male	3.92 $\pm$ 1.06		
Willingness to participate in seminars and conferences		3.85 (1.03)	0.883
Female	3.86 $\pm$ 1.07		
Male	3.84 $\pm$ 1.01		
Decision-making power		3.82 (1.05)	0.760
Female	3.79 $\pm$ 1.00		
Male	3.84 $\pm$ 1.09		
Creativity and innovation		3.82 (1.02)	0.445
Female	3.75 $\pm$ 0.98		
Male	3.87 $\pm$ 1.05		
<b>External factors</b>			
Female	30.52 $\pm$ 10.54	32.45 (10.21)	0.047
Male	33.66 $\pm$ 9.85		
<b>Internal factors</b>			
Female	31.00 $\pm$ 6.85	31.39 (7.00)	0.655
Male	31.48 $\pm$ 7.12		
<b>Motivational factors</b>			
Female	61.52 $\pm$ 14.74	63.75 (14.98)	0.119
Male	65.14 $\pm$ 15.03		

research findings indicated that, on average, men have a significantly higher score for external motivation factors than women. **Table 2** displays the correlation between the different components of motivational factors and age and job history.

## 5. Discussion

This research revealed that faculty members scored approximately 70% of the maximum on the

motivational factors questionnaire, which is encouraging. However, senior managers at KUMS should strive to maximize the score on motivational factors that impact faculty members' educational performance. Identifying the most significant motivational factors for faculty members can be advantageous for implementing targeted interventions to enhance their performance. This research revealed that the highest average score for external motivational factors was

**Table 2.** Correlation Between the Components of Motivational Factors with Age and Job History

Factors	External Factors	Internal Factors	Motivational Factors	Age
External factors	1			
Internal factors	0.496 <sup>a</sup>	1		
Motivational factors	0.914 <sup>a</sup>	0.806 <sup>a</sup>		
Age	0.118	-0.051	0.056	1
Job history	0.040	-0.094	-0.017	0.883 <sup>a</sup>

<sup>a</sup> P < 0.01.

obtained by "working with competent colleagues" and "being respected in the workplace". In addition, the highest average score for internal motivational factors was obtained by "inherent interest in teaching" and "interest in changing and rectifying defects". These findings highlighted the significance of these factors among the KUMS faculty members. These results were consistent with those of previous studies conducted in Iran. For instance, Mirmohamadkhani et al., among faculty members of Semnan University of Medical Sciences, found that "being respected in the workplace" was the essential external motivational factor, while "intrinsic interest in teaching" was the most critical internal motivational factor among the faculty members (10). In addition, Azizzadeh Forozi et al. reported similar findings regarding internal motivational factors among Kerman University of Medical Sciences faculty members. As they reported, among the external factors "providing the necessary conditions to enhance knowledge and information," and among the internal factors, "inherent interest in teaching," they obtained the highest average score (17). In van den Berg et al. at the Dutch University Medical Center in the Netherlands, several factors were identified as critical motivational factors among teachers. These factors include teaching in line with their expertise, appreciation for teaching, teaching in small groups, receiving feedback on teaching performance, and having freedom in teaching (18). Similarly, Franco et al. identified several factors significantly impacting employee motivation. These factors included pride in their work, effectiveness in management, honesty, and job security (19). Jameson also highlighted several critical motivational factors. These factors included the opportunity for continuing education, respect, being responsible, appreciation, and receiving equal rewards (20). In the current study, one notable finding was that salary and benefits were ranked seventh out of ten external motivation factors. This was in contrast to a survey conducted by Javorčíková et al. among 1189 Slovak teachers, which

found that Slovak teachers are primarily motivated by factors related to relationships and finances (6). In addition, another study conducted among 189 lecturers from various universities in Vietnam demonstrated the positive impact of salary and well-being on the motivation of faculty members (12). The university's senior administrators must understand that financial issues do not solely determine the educational performance of faculty members. On the contrary, external factors such as working with competent colleagues and being respected in the workplace, as well as internal factors like intrinsic interest in teaching and an interest in changing and rectifying defects, were found to have the most significant impact on faculty members' performance, according to the views of KUMS faculty members. These findings suggest that simple measures, such as selecting competent managers and fostering a respectful work environment, can improve faculty members' educational performance without incurring additional costs. The results of this study can assist the university administration in developing effective motivation programs for faculty members.

The current study found that the item related to implementing rules consistently had the lowest average score among motivational factors. This surprising finding suggests the need for further investigation in this area. The least motivating factor for faculty members regarding student performance is implementing rules consistently. Future studies should focus on exploring this point and conducting qualitative research may be more beneficial in this field.

This research indicated no overall difference in the motivational factors between male and female faculty members. However, men had a significantly higher mean score for external motivational factors than women. Specifically, men scored higher in areas such as 'implementing rules uniformly', 'proportion of salary and benefits,' 'adequacy of salary and benefits,' and 'working with competent colleagues'. Previous studies have reported contradictory findings on this topic. For

instance, Al-Zo'ibi and Mahasneh's research among 232 faculty members in Jordan found no statistically significant difference in teaching motivation between male and female faculty members (21). Bukhari et al. found that female teachers are more motivated (22). However, Chen and Zhao conducted a study on research motivation among faculty members and found that women generally have higher overall motivation (23). These contrasting findings suggested the need for further research in this area.

Finally, the results of this study did not find a significant correlation between motivational factors and age or job history. However, a survey conducted in Jordan found that faculty members with over 11 years of job history were more motivated to teach (21). Furthermore, Chen and Zhao demonstrated that individuals with a higher job history are more motivated by internal rewards (23). There are conflicting findings on this topic. For instance, Bukhari et al. found that teachers with less job history had higher levels of job motivation (22). The present research revealed a negative relationship between age and job history regarding internal motivational factors. On the other hand, there was a positive relationship between age and job history with external motivational factors. However, these relationships were not found to be statistically significant. This finding should serve as a wake-up call for university administrators. Managers of higher education institutions should investigate why the influence of internal motivational factors diminishes as individuals grow older and their job history. Further research on this topic is necessary to better understand these relationships.

### 5.1. Limitations

The current study had some limitations. Firstly, it was a cross-sectional study, so it cannot establish causal relationships. Secondly, the study was conducted only among faculty members at KUMS, so the findings may not be generalizable to faculty members in other parts of Iran. Lastly, the study did not investigate the educational performance of faculty members. Future studies should examine the motivational factors influencing educational performance and how these factors impact the performance of faculty members.

### 5.2. Conclusions

This study has identified two key factors that significantly impact the teaching performance of professors: Working with competent colleagues and inherent interest in teaching. These findings are

valuable for university administrators as they can use them to develop effective motivation programs for faculty members.

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### Footnotes

**Authors' Contribution:** F. J. and M. M. A.: Designed the initial proposal and method to accomplish the project; F. J. and M. M. A.: Performed specialized statistical data analysis and edited the final version. All authors have read and approved the manuscript.

**Conflict of Interests Statement:** The authors declared that they have no conflict of interest.

**Data Availability:** The datasets used and/or analyzed during the current study are available from the corresponding author upon reasonable request.

**Ethical Approval:** The Research Ethics Committee of Kermanshah University of Medical Sciences has approved this study. The project has been deemed to comply with ethical principles and national standards for conducting medical research in Iran. The ethical approval code for this study is [IR.KUMS.REC.1400.550](#).

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**Informed Consent:** The initial part of the questionnaire stated the purpose of the study and informed consent to participate in the study, and all participants participated in the study voluntarily and with consent.

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