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Mindfulness as a buffer against job burnout and teaching motivation decline in academia

Behzad Rigi Kooteh,[1,2] Zohreh Khoshgoftar[1]

[1]Department of Medical Education, Faculty of Medical Education and Learning Technologies, Shahid Beheshti University of Medical Sciences, Tehran; [2]Department of Clinical Psychology, School of Medicine, Zahedan University of Medical Sciences, Iran

Abstract

Faculty members are central to higher education quality, yet increasing job demands have heightened stress and burnout, particularly in resource-limited settings. Mindfulness has emerged as a promising strategy to enhance well-being and teaching motivation while reducing burnout. This cross-sectional, descriptive-correlational study investigated the level of mindfulness and its association with teaching motivation and job burnout among 156 faculty members at Zahedan University of Medical Sciences in 2025. Participants (51.9% female, mean age 48.85) completed validated self-report questionnaires assessing mindfulness, teaching motivation, and job burnout. Results indicated moderate to low levels of mindfulness and average scores for both teaching motivation and job burnout. "Acting with awareness" was the strongest mindfulness facet, while "non-reactivity to internal experience" was the weakest. Emotional exhaustion was the most prominent burnout dimension. Statistical analysis revealed a significant positive correlation between mindfulness and teaching motivation and a negative correlation between mindfulness and burnout. These findings underscore the potential benefits of mindfulness in fostering motivation and mitigating job burnout among medical faculty, highlighting the need for targeted interventions in similar institutional contexts.

Key words: mindfulness, teaching motivation, job burnout, faculty members.

Correspondence to: Zohreh Khoshgoftar, Department of Medical Education, Faculty of Medical Education and Learning Technologies, Shahid Beheshti University of Medical Sciences, Tehran, Iran.
E-mail: bkhoshgoftar@gmail.com

Introduction

Faculty members serve as the cornerstone of higher education, with their competencies directly shaping institutional performance. The quality of academic activities, including research and teaching, largely hinges on the vitality of faculty members. Despite common misconceptions that faculty positions are low-stress, increasing job demands, such as stringent promotion criteria, insufficient salaries, and challenges in publishing in reputable journals, have heightened burnout among university professors globally.[1] This is particularly concerning given that faculty members often juggle educational, research, and administrative responsibilities, making them susceptible to elevated stress and burnout. Therefore, it is imperative for faculty to adopt strategies that enhance teaching motivation, mitigate stress and burnout, and promote psychological well-being, benefiting both educators and students.[2]

In this context, mindfulness has recently gained prominence as a valuable approach in addressing professors' mental health and teaching effectiveness. Emerging evidence indicates that mindfulness can reduce stress, boost motivation, and prevent burnout among faculty.[3] Mindfulness training equips educators with skills and mindsets that foster resilience and alleviate work-related stress, leading to improved educational outcomes.[4,5] Furthermore, mindfulness is associated with enhanced self-perception, characterized by reduced negative self-referential thoughts and greater self-compassion, which positively influence self-efficacy and serve as effective emotion regulation strategies.[6,7] These effects may manifest as reduced negative moods and a transition from self-criticism to self-kindness.[6] Moreover, faculty mindfulness is linked to better teacher-student interactions, improved quality of life, and decreased burnout.[8] It is also correlated with increased emotional support, superior classroom management, and heightened teaching competence.[8-10]

While the beneficial effects of mindfulness and self-compassion in educational contexts are well-documented, most existing studies reiterate similar findings and seldom address the unique circumstances of faculty at Zahedan University of Medical Sciences. This institution faces specific challenges, including limited resources, high student-to-faculty ratios, and distinctive institutional pressures, all of which may impact faculty stress and burnout levels. Consequently, understanding the interplay between mindfulness, motivation, and burnout in this local context is essential for designing targeted interventions. Notably, there remains a lack of research exploring the role of mindfulness among faculty in Iranian medical universities. The present study aims to fill this gap by investigating the status of mindfulness in teaching and its relationship with teaching motivation and job burnout among faculty at Zahedan

University of Medical Sciences in 2025. By focusing on this population, the study offers novel insights into how mindfulness may support faculty well-being and effectiveness within a unique educational and cultural setting.

Materials and Methods

The present research sought to examine the level of mindfulness among faculty members at Zahedan University of Medical Sciences and to explore its associations with both teaching motivation and job burnout in the year 2025. Employing a descriptive-correlational design, this cross-sectional study targeted all faculty members at the university, including both basic sciences and clinical professors. Eligibility criteria for participation were being a current faculty member and providing informed consent at the time of the study. The sampling method was purposive, aiming to ensure representation across different departments and academic ranks, albeit at the expense of random selection, which introduces the possibility of selection bias due to the overrepresentation of more motivated or accessible individuals.

Sample size estimation was based on the following statistical formula with the parameters r=0.5, α=0.05, and β=0.2, resulting in a final sample of 156 faculty members [Eq. 1].

$$n = \left[\frac{\left(Z1-\frac{\alpha}{2}+Z1+\beta\right)^2}{\frac{0}{5}\times Ln\left(\frac{1}{1-r}\right)}\right]^2 + 4 \qquad \text{[Eq. 1]}$$

The study received ethical approval from Shahid Beheshti University of Medical Sciences (IR.SBMU.SME.REC.1404.038). Data collection was conducted *via* online questionnaires, distributed to faculty members through both Iranian and international messaging platforms (*e.g.*, ITA, Soroush, WhatsApp). An invitation was sent to approximately 350 faculty members, and 156 completed responses were obtained, yielding a response rate of 44.5%. The possibility of non-response bias must be acknowledged, as those with a particular interest in the study topic or greater availability may have been more likely to respond.

Three validated instruments were used for data collection. Mindfulness was assessed using the Five-Factor Mindfulness Questionnaire, a 39-item self-report tool measuring five dimensions of mindfulness: "observing", "describing", "acting with awareness", "non-judging of internal experience", and "non-reactivity to internal experience". This instrument has demonstrated satisfactory psychometric properties in both original and Iranian samples.[11] Teaching motivation was measured with the Teacher's Motivation for Teaching, which comprises 40 items rated on a Likert scale and has shown strong reliability and validity in prior research.[12] Job burnout was measured using the Maslach Burnout Inventory, a 22-item tool that assesses emotional exhaustion, depersonalization, and reduced personal accomplishment. The Persian version, validated by Rostami *et al*., exhibited high internal consistency coefficients for its subscales.[13] Established cut-off points from the instrument manual were used for categorization.

Data analysis involved both descriptive [frequency, percentage, mean, standard deviation (SD)] and inferential statistics (Pearson correlation coefficient, linear regression), using SPSS-29 (IBM, Armonk, NY, USA). Effect sizes (*e.g.*, Cohen's d, correlation coefficients) and confidence intervals were reported to contextualize findings. Multivariate regression analyses were conducted to account for potential confounders, including age, gender, academic rank, and years of experience, with both adjusted and unadjusted results provided as appropriate.

Results

In this study, a total of 156 faculty members from Zahedan University of Medical Sciences participated, comprising 81 females (51.9%) and 75 males (48.1%). Regarding academic group affiliation, the majority of participants [93 individuals (59.6%)] were members of basic science groups, while the remaining 63 participants (40.4%) belonged to clinical groups. The participants' ages ranged from 32 to 63 years, with a mean age of 48.85 years and an SD of 8.30.

The assessment of mindfulness was conducted using a standardized questionnaire, which yielded an overall mean mindfulness score of 84.03 (SD=10.7) on a scale ranging from 39 to 195, indicating a moderate to low level of mindfulness among the faculty members. Among the mindfulness subscales, "acting with awareness" recorded the highest mean score (M=18.28, SD=3.37), suggesting that participants were most proficient in this aspect. Conversely, the "non-reactivity to internal experience" subscale yielded the lowest mean score (M=13.25, SD=2.12), indicating relative weakness in this domain.

Teaching motivation was also measured, with participants achieving an average score of 73.42 (SD=7.65) on a scale from 29 to 145. This places the faculty members' motivation for teaching within the average range, as per the questionnaire's standardization.

Job burnout was assessed, and the overall mean score among participants was 72.82 (SD=7.46), which is considered average given the scale's range (22-130; average=66). Emotional exhaustion emerged as the most pronounced burnout dimension, with the highest subscale mean (M=21.30, SD=4.16), whereas the personality trait subscale showed the lowest mean (M=16.23, SD=3.06).

To validate the use of parametric statistical analyses, the Kolmogorov-Smirnov test was applied to assess the normality of the data distribution for the main research variables (Table 1). The results indicated that the data met the assumptions of normality and linearity, as evidenced by non-significant p-values (p>0.05).

Based on the results in Table 2, there is a significant and positive relationship between mindfulness and motivation for teaching

Table 1. The results of the Kolmogorov-Smirnov test.

Sources of variation	Kolmogorov-Smirnov test	Probability value
Mindfulness	0.998	0.272
Teaching motivation	1.143	0.147
Job burnout	1.221	0.101

($p<0.001$, $r=0.267$) at the 0.01 level. This means that mindfulness has led to an increase in the motivation for teaching among faculty members. Among the mindfulness subscales, observation has a more significant and positive relationship with motivation for teaching ($p<0.001$, $r=0.388$) at the 0.01 level. This means that observing mindfulness has led to an increase in the motivation for teaching of faculty members.

Based on the results in Table 3, mindfulness was able to predict 0.071 of the changes related to teaching motivation. In summary, in the regression model of job motivation, the correlation coefficient ($R=0.267$) and the coefficient of determination ($R^2=0.071$) were obtained. Also, based on the results of variance ($F=11.77$), the regression coefficients showed that mindfulness is able to predict the dispersion of the teaching motivation variable at a significance level of 0.01.

The results of Table 4 show that there is a significant and negative relationship between mindfulness and burnout in general ($p<0.018$, $r=0.190$) at the 0.05 level. This means that a decrease in mindfulness scores has led to an increase in burnout among faculty members. No significant relationship was observed with burnout among the mindfulness subscales.

Based on the results in Table 5, mindfulness was able to enter the equation. Mindfulness was able to predict 0.036 of the changes related to job burnout. In summary, in the regression model of job motivation, the correlation coefficient ($R=0.190$) and the coefficient of determination ($R^2=0.036$) were obtained. Also, based on the results of variance ($F=5.76$), the regression coefficients showed that mindfulness is able to predict the dispersion of the job burnout variable at a significance level of 0.05.

Discussion

The present study was conducted with the aim of investigating the status of faculty mindfulness and its relationship with motivation for teaching and job burnout among faculty members at Zahedan University of Medical Sciences. The results showed that there is a significant and positive relationship between mindfulness and teaching motivation. This means that mindfulness has led to an increase in the motivation for teaching among faculty members. Among the mindfulness subscales, observing and teaching motivation have a more significant and positive relationship at the 0.01

Table 2. Pearson correlation matrix between mindfulness and teaching motivation among faculty members.

Variable	Mindfulness	Describing	Observing	Acting with awareness	Non-judging of internal experience	Non-reactivity to internal experience
Teaching motivation						
R	0.267**	0.128	0.388**	-0.016	-0.037	0.211**
Sig	0.001	0.112	0.001	0.838	0.651	0.008
N	156	156	156	156	156	156

**p<0.001.

Table 3. Regression analysis of mindfulness in relation to teaching motivation among faculty members.

Criterion variable	Step	Predictor variable	R	R^2	Adjusted R^2	F	P	B	β	T
Teaching motivation	1	Mindfulness	0.267	0.071	0.065	11.77	0.001	0.283	0.267	3.43

R, correlation coefficient; R^2, coefficient of determination; F, F-statistic; P, p-value; B, unstandardized coefficients; β, standardized coefficients; T, T-value.

Table 4. Pearson correlation matrix between mindfulness and job burnout among faculty members.

Variable	Mindfulness	Describing	Observing	Acting with awareness	Non-judging of internal experience	Non-reactivity to internal experience
Job burnout						
R	-0.190*	-0.114	-0.061	-0.105	-0.070	-0.139
Sig	0.018	0.156	0.453	0.194	0.382	0.084
N	156	156	156	156	156	156

*Significant correlation at the 0.05 level.

Table 5. Regression analysis of mindfulness in relation to job burnout among faculty members.

Criterion variable	Step	Predictor variable	R	R^2	Adjusted R^2	F	P	B	β	T
Job burnout	1	Mindfulness	-0.190	0.036	0.030	5.76	0.018	-0.199	-0.190	-2.41

R, correlation coefficient; R^2, coefficient of determination; F, F-statistic; P, p-value; B, unstandardized coefficients; β, standardized coefficients; T, T-value.

level. This means that observing mindfulness has led to an increase in the teaching motivation of faculty members. Based on the results of the regression analysis of teaching motivation prediction based on mindfulness, mindfulness was able to predict 0.071 of the changes related to teaching motivation. The results of the present study are consistent with the studies of Nurshadrina *et al*.,[14] Fedewa *et al*.,[15] Gönen,[16] Khoshgoftar *et al.*,[17] and Wang *et al*.[18] One of the important issues that can play an important role in increasing people's motivation is mindfulness. Mindfulness is a relatively new approach that, given the nature of this concept, can be seen to function in various aspects of life, from medicine to education, learning, and mental health.[19] In fact, mindfulness in individuals often leads to increased self-awareness, improved emotional regulation, and increased resilience, which leads to improved coping strategies, lower levels of emotional exhaustion, and increased motivation.[20] In other words, having mindfulness in individuals focuses one's attention on the present moment from involuntary thoughts that cause mind wandering, and this increased focus leads to increased self-awareness in teachers, and then an increased willingness to teach, work hard, and create motivation.[21] Mindfulness in teaching is positively and significantly associated with greater teacher participation. Mindfulness in teaching increased teacher resiliency, which in turn enhanced participation.[14] The direct effect of mindfulness on teaching is that mindfulness helps teachers be present in the moment and make the best decisions about how to teach, considering the needs of students and classroom conditions. In fact, teachers who are mindful are less affected by negative thoughts and emotions and can teach with more focus. This leads to a calm and positive atmosphere in the classroom and helps to better communicate with students and achieve effective learning. The indirect effect of mindfulness on the teaching process of teachers is manifested in the self-efficacy space, as mindfulness increases teachers' self-efficacy in teaching, which increases the quality of teaching and learning-teaching in the classroom.[18] Mindfulness helps teachers improve their competence. Mindful teachers actively participate in the development of their teaching skills, consider guidelines for how to further develop their teaching, use additional educational information about the practical aspects of teaching and the development of students' reflective skills, and are sufficiently satisfied with each moment of their teaching.[22] In fact, based on the discussion, mindfulness has had positive effects in the fields of education, training, neuroscience, and learning, and having mindfulness paves the way for regulating emotions, empathy, and compassion among professors, which helps to nourish the healthy teacher-student relationship and subsequently increases well-being and desirable academic, motivational, and social achievements.[23] The results of this study also showed that there is a significant and negative relationship between mindfulness and job burnout in general. This means that a decrease in mindfulness score has led to an increase in job burnout among faculty members. Also, mindfulness was able to predict 0.036 of the changes related to burnout. The results of the present study are consistent with the research of Baker and Karadjova-Kozhuharova,[24] and Roeser *et al*.[25] The most valuable resource that an organization has to achieve its goals and progress is human resources; therefore, the mental health of the organization's employees is of particular importance. One of the factors affecting the health of individuals in the organization is job burnout. Job burnout is a syndrome caused by overwork and stress at work.[26] Professors who suffer from job burnout are less motivated and less active in their work, and become psychologically indifferent, fatigued, and stressed. They criticize all aspects of their work environment, including colleagues, and react negatively to suggestions from others; the quality of their work, not necessarily the quantity, decreases.[27] Research has shown that more than one-third of professors experience very high levels of job stress. Teacher burnout can be a significant issue, as it can affect the quality of teaching and can also lead to job dissatisfaction and work alienation.[28] Due to the high rate of job burnout among teachers, approaches to reducing it have been proposed in the field of education. In recent years, mindfulness has been recognized as a skill in managing job stress and the challenges of working life in the West. Mindfulness is a quality of awareness that is defined as paying attention in a specific way to a goal, in the present moment, and without any judgment.[29] Accordingly, mindfulness for teachers has both direct effects on their capacity to teach more effectively and indirect effects on the capacity of learners to learn more effectively.[30] Mindfulness can be particularly beneficial in classroom settings because it facilitates proactive *vs.* reactive classroom management strategies and healthy teacher-student relationships. For example, mindful teachers may be more attentive and responsive to students' academic, social, and emotional needs, as well as broader classroom dynamics. They may be more readily able to observe fluctuations in students' levels of engagement and learning and thus more readily and flexibly adapt their instructional approach to address their students. Furthermore, by being more aware of their thoughts and feelings, mindful teachers may demonstrate greater self-regulation of their automatic responses to student misbehavior, enabling them to limit their use of reactive and punitive approaches in favor of more intentional and constructive ones. Greater self-awareness and self-compassion can also help teachers recognize when to implement stress management techniques or self-care practices to restore their depleted cognitive and emotional resources.[31] In fact, mindfulness affects job burnout by employing emotional flexibility in professors, *i.e*., their ability to regulate their emotions, and increases attentional and metacognitive capacities and workplace stress regulation.[32]

However, this study has several limitations that should be taken into account. First, the cross-sectional design of the research precludes any definitive conclusions about causality between mindfulness, motivation for teaching, and burnout. Second, the sample was drawn from a single university, which may limit the generalizability of the findings and introduce a potential sampling bias. Third, the reliance on self-report measures for assessing mindfulness, motivation, and burnout could be subject to social desirability or response biases. Future studies should consider using multiple data sources and objective measures where possible. In light of these limitations, further research is warranted. Specifically, longitudinal and intervention studies are needed to examine the effects of mindfulness training on motivation and burnout among faculty over time. Such research would help clarify the directionality of the observed relationships and evaluate the effectiveness of mindfulness-based interventions in academic settings.

From a practical standpoint, the results have important implications for faculty development programs. Implementing mindfulness training as part of these programs may help enhance faculty motivation and reduce burnout. To realistically implement mindfulness training, universities could offer workshops, integrate mindfulness practices into existing professional development curricula, or provide online resources to support faculty well-being. These initiatives could contribute to a more supportive and productive academic environment.

Conclusions

This study highlights the crucial role of mindfulness in supporting faculty well-being and effectiveness at Zahedan University of Medical Sciences. The findings demonstrate that faculty members generally exhibit moderate-to-low levels of mindfulness, with particular strengths in acting with awareness but weaknesses in non-reactivity. Importantly, higher mindfulness is significantly associated with increased teaching motivation and reduced job burnout, especially emotional exhaustion. These results suggest that mindfulness can serve as a protective factor against burnout and motivational decline in academic settings. Given the unique challenges faced by faculty at this institution, implementing mindfulness-based interventions may be a valuable strategy to enhance educators' psychological resilience, teaching motivation, and overall job satisfaction. Future research should further explore the long-term impact of such interventions and consider broader contextual factors to optimize faculty development and educational outcomes.

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Informed consent: informed consent was obtained from participants for their involvement in the study, and their information was used with complete confidentiality.

Patient consent for publication: all participants provided informed consent, were fully informed about the study, and their anonymized data was used ethically, following all research guidelines.

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