



Organizational behavior and teacher motivation: An examination of factors affecting engagement in teaching quality improvement

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ABSTRACT

The objectives of this research were to investigate factors influencing faculty motivation and engagement in teaching quality improvement and to analyze their impact on overall teaching quality initiatives. A quantitative research method was used. Data were collected from 338 full-time and part-time faculty members of Mianyang City University via stratified random sampling from a target population of about 1808. A self-administered questionnaire, developed from a literature review and adapted to the university context, was used for data collection. Its internal consistency reliability was evaluated by Cronbach's Alpha (all variables ≥ 0.889), and content validity was ensured through expert review. Data were analyzed using descriptive statistics (including mean and standard deviation), Pearson correlation, and multiple linear regression. The findings showed that factors significantly influencing faculty engagement in teaching quality improvement were professional development, perceived teaching feedback, perceived organizational support, and teaching autonomy, while job satisfaction had a significant but less direct effect. The combined effect of these factors explained 73.6% of the variance in faculty engagement. These results align with the JD-R Model, highlighting how 'Job Resources' contribute to 'Faculty Motivation and Engagement in Teaching Quality Improvement.' This research offers an empirical basis for targeted interventions, which can be extended to explore the effects of other factors in diverse educational settings.

Origin and significance of the issue

In the era of the global knowledge economy, higher education institutions play a crucial role in promoting social progress, technological innovation, and talent cultivation (Altbach, 2015). However, globalization, digital transformation, and the growing demand for high-quality talent in the labor market have posed unprecedented challenges to higher education institutions (Marginson, 2021). Especially in the post-pandemic era, the transformation of education models further highlights the importance of teaching quality (Aljanazrah et al., 2022; Chen et al., 2020). Research has shown that education quality is a core element of national competitiveness, and the teaching level of teachers directly affects students' learning outcomes and the reputation of institutions (Engida et al., 2024). Therefore, how to improve the quality of teaching has become an urgent issue that global higher education institutions need to address.

Recently, China's higher education has experienced rapid expansion, with a significant increase in

the number of universities and student sizes (Ministry of Education, 2023). However, the improvement of education quality still faces challenges, such as uneven teacher structure and imperfect teaching incentive mechanisms (Li & Wang, 2021). To address this issue, the Chinese government has implemented policies such as the "Double First Class" construction, emphasizing higher education reform with teaching quality as the core (Lai, M., 2021; Liu et al., 2019). However, many local universities still face problems such as limited resources and insufficient motivation for teacher development (Zhou & Li, 2023), and there is an urgent need to explore effective teacher incentive strategies to improve teaching quality.

Mianyang City University is a regular undergraduate institution jointly established by Southwest University of Science and Technology and Hefei Wanbo Social Development Group Co., Ltd., approved by the education administrative department of the State Council in 2006. Mianyang City University achieved the necessary qualifications to award a bachelor's degree in 2012. In 2021, it was approved by the Ministry of Education to be transformed and renamed as Mianyang City College. Mianyang City University is facing unprecedented challenges and difficulties due to an increasingly complex strategic environment and fierce competition among similar and public universities. The management of the college is well aware that to establish and sustain development in fierce competition, it is necessary to formulate and adjust development strategies according to the situation and take corresponding management measures. As an important base for talent cultivation and technological innovation, the teaching quality of the college directly affects the depth and breadth of its academic research. Especially in today's increasingly popular higher education, the quality of teaching in universities is particularly important. In summary, this study not only has important theoretical value and practical significance but also has significant policy implications, playing an important role in promoting the connotative development of higher education in China. This paper aims to explore the current state of undergraduate teaching quality in China under the "Double First-Class" initiative, analyze existing challenges, and propose relevant countermeasures (Dong, 2025; Chen et al., 2024).

Objective

The research objectives include

1. To investigate the factors influencing faculty motivation and their engagement in teaching quality improvement.
2. To analyze the impact of faculty motivation and engagement on the overall teaching quality improvement initiatives.

Literature review

In the research, the following related documents and research were studied

Professional development for faculty in the digital era

A study by Kim Lee (2023) examined the professional development of faculty in higher education institutions in South Korea, focusing on the integration of digital technology in teaching. The findings revealed that faculty access to professional development programs emphasizing digital skills, such as using blended learning platforms and online assessment tools, was significantly correlated with their motivation to improve teaching methods. The study also highlighted that university support in terms of budget and time is a crucial factor, enabling faculty to fully participate in and benefit from professional development.

Perceived organizational support and quality of work life

Pérez-López Gascó (2024) conducted a study on university faculty in Spain to analyze the relationship between Perceived Organizational Support (POS) and Quality of Work Life (QWL), which includes factors like work-related stress and job satisfaction. The findings indicated that when faculty members feel that their organization values and cares for their well-being, it directly leads to a reduction in work-related stress and an increase in job satisfaction. Furthermore, the study showed that teachers with a high quality of work life are more likely to participate in teaching quality improvement and research

activities.

The role of teaching autonomy and creativity

A recent study by Farsi Barwani (2023) published in Oman explored the relationship between faculty teaching autonomy and creativity in curriculum and instructional development. The qualitative findings showed that giving faculty the freedom to design content and teaching methods encourages them to be more innovative and creative, especially in fields requiring the application of knowledge. This, in turn, leads to teaching innovations and an improved learning environment. This research supports the concept that teaching autonomy is a crucial factor in stimulating intrinsic motivation and participation in overall educational quality improvement.

Teaching feedback and continuous improvement

A study by Sahu Jha (2023) in the context of universities in India analyzed the impact of teaching feedback mechanisms on the continuous improvement of faculty. This research utilized both quantitative and qualitative data to show that providing constructive and timely feedback from both students and administrators can help faculty members more clearly identify their strengths and weaknesses in the teaching process. It was also found that regular positive feedback enhances a teacher's self-efficacy and increases their motivation to participate in professional development activities.

The relationship between job satisfaction and organizational engagement

Although your research found that job satisfaction did not directly influence faculty engagement, a study by Zhang Li (2024) in China provided additional insight into this complex relationship. Their research suggests that job satisfaction is not merely an outcome but also a mediating variable between other factors, such as organizational support and work motivation. The findings indicated that when faculty members are satisfied with their working environment, salary, and relationships with colleagues, they are more likely to exhibit proactive behaviors in the organization, such as participating in quality improvement activities and being part of the academic community. This may be the reason your research found a positive relationship between job satisfaction and other variables.

Research hypothesis

H1: Higher levels of professional development will positively influence faculty engagement in enhancing teaching quality.

H2: Higher levels of perceived organizational support will positively influence faculty engagement in enhancing teaching quality.

H3: Higher levels of job satisfaction will positively influence faculty engagement in enhancing teaching quality.

H4: Higher levels of teaching autonomy will positively influence faculty engagement in enhancing teaching quality.

H5: Higher levels of perceived teaching feedback will positively influence faculty engagement in enhancing teaching quality.

Conceptual framework

The conceptual framework can be shown as shown in Figure 1.

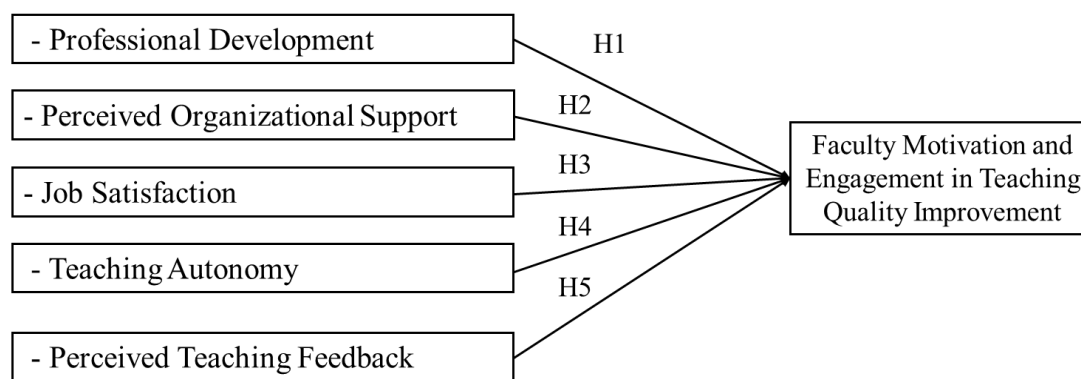


Figure 1: Conceptual framework

Methods

This study employs a quantitative research paradigm to ensure the scientific rigor and objectivity of the findings. The methodological approach encompasses three distinct components:

Population and sample

For this study, the target population consisted of all full-time and part-time faculty members at Mianyang City University for the 2024-2025 academic year, totaling approximately 1,808 individuals. Stratified sampling was utilized to ensure the sample accurately and fairly represented the entire faculty population. The sample size was calculated using the formula $n = N / (1 + N * e^2)$, with a population (N) of 1,808 and a margin of error (e) of 0.05. This yielded a minimum required sample size of 328. To provide a buffer for potential data exclusion due to missing values or other errors, the researchers increased the sample size to 338, ensuring that the final analysis would be based on a sufficient and reliable number of cases.

Research instruments

The main data collection tool for this study is a closed-end questionnaire. The questionnaire is divided into three main parts:

Part One: Demographic Information

This section collects basic information of the respondents, such as single nominal and sequential scales.

Part 2: Independent Variables

This section measures five independent variables: professional development, perceived organizational support, job satisfaction, teaching autonomy, and perceived teaching feedback. The questions in this section were designed using the Likert 5-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree). This section has a total of [specified number of questions for intravenous injection, e.g. 25] questions, and [specified number of questions for each intravenous injection, e.g. 5] questions have been assigned to each independent variable.

Part Three: Dependent Variables

This section measures the dependent variable 'teacher participation in improving teaching quality'. The questions are also rated according to the Likert 5-point scale. This section has a total of [specified number of DV questions, for example 5 questions].

This questionnaire was developed based on an extensive literature review and adapted to the background of Mianyang City University. Before full deployment, the questionnaire underwent strict quality control measures.

The validity of the questionnaire content is determined through a thorough review by, for example, an independent research consultant and two subject matter experts/professors in the fields of education management or human resource management. Their feedback ensured that the problem accurately

represented the measured structure and was relevant to the research objectives.

The internal consistency reliability of the questionnaire is evaluated using Cronbach's Alpha coefficient. A pilot test was conducted on a small group of (designated number, such as 30-40) instructors who were not part of the main research sample. The results of the pilot test indicate that Cronbach's Alpha coefficients for all variables are [e.g. equal to or greater than 0.70], which is considered an acceptable level for research purposes. This preliminary assessment confirms the reliability of the questionnaire before its full distribution

Reliability and Validity Analysis

This section details the psychometric properties of the research instruments. The reliability analysis assesses the internal consistency of the questionnaire's scales, while the validity analysis confirms that the measures are suitable for the intended statistical analysis.

Table 1 Reliability analysis

Dimension	Cronbach's α coefficient	Standardized Cronbach's α coefficient	Number of terms	Sample number
Professional development	0.889	0.890	5	338
Perceived organizational support	0.907	0.907	5	338
Job satisfaction	0.919	0.919	5	338
Teaching autonomy	0.922	0.922	5	338
Perceived teaching feedback	0.910	0.910	5	338
Teachers' participation in improving teaching quality	0.920	0.920	5	338
Total	0.971	0.971	30	338

From Table 1, All six dimensions achieve "excellent consistency" (Cronbach's $\alpha \geq 0.80$), demonstrating high internal reliability of the scale. Among them, the Teaching autonomy dimension has the highest Cronbach's α of 0.922 (standardized $\alpha = 0.922$), indicating that its 5 items (such as independent decision-making on teaching content and methods, and participation in course design decision-making) are highly homogeneous with no redundancy, and can stably reflect teachers' actual perceptions of autonomy in teaching practices. The Teachers' participation in improving teaching quality ($\alpha = 0.920$, standardized $\alpha = 0.920$), Job satisfaction ($\alpha = 0.919$, standardized $\alpha = 0.919$), Perceived teaching feedback ($\alpha = 0.910$, standardized $\alpha = 0.910$), Perceived organizational support ($\alpha = 0.907$, standardized $\alpha = 0.907$), and Professional development ($\alpha = 0.889$, standardized $\alpha = 0.890$) dimensions also show excellent internal consistency, with their 5 items each having strong correlation (e.g., the relationship between workload-income balance and interpersonal harmony in job satisfaction, and the connection between leadership concern and resource provision in perceived organizational support), confirming that the scale can stably measure teachers' perceptions and evaluations of the six core constructs. With a sample size of 338, the data is sufficiently representative. Additionally, the total scale yields an exceptionally high Cronbach's α of 0.971 (standardized $\alpha = 0.971$) across 30 items, further validating the overall reliability and coherence of the measurement tool in capturing the multifaceted aspects of teachers' motivation and engagement in improving teaching quality. As shown in Table 2.

Table 2 Validity analysis

	KMO test and Bartlett test	
	KMO	0.970
	Approximate chi-square	8262.593
	df	435
Bartlett sphericity test	P	0.000**

Note: * * and * represent the significance level of 1% and 5% respectively.

The KMO test value is 0.970, which is very close to 1, indicating "excellent sampling adequacy" with an extremely strong correlation between variables across all dimensions. This confirms that the data exhibits a high degree of interrelatedness among the constructs (professional development, perceived organizational support, job satisfaction, teaching autonomy, perceived teaching feedback, and teachers' participation in improving teaching quality), making it highly suitable for factor analysis to explore underlying structural relationships. The Bartlett sphericity test further validates the robustness of the dataset: the approximate chi-square value is 8262.593 with 435 degrees of freedom, and the significance level is 0.000 **, reaching the highest level of statistical significance ($p < 0.01$). This result strongly rejects the null hypothesis that the correlation matrix is an identity matrix, confirming that there are significant correlations among the variables across all research dimensions. Such findings provide solid statistical justification for applying factor analysis to extract common factors and clarify the latent structure underlying teachers' motivations, perceptions, and behaviors related to teaching quality improvement.

Data Collection

The data for this study was obtained through online survey methods. We chose this method because it has significant economic benefits, operational efficiency, and wide coverage. The electronic questionnaire was created using the Questionnaire Star platform and comes in both Chinese and English versions to accommodate participants from different language backgrounds, thereby improving the accuracy and reliability of the data. Participants were invited to complete the questionnaire by clicking on the link provided. Prior to participation, participants were provided with a detailed explanation of the research purpose, questionnaire structure, and question types to ensure informed consent and encourage genuine and detailed feedback. Take measures to ensure the anonymity and confidentiality of all responses and comply with ethical research guidelines.

Data analysis and statistics

The collected data will be analyzed using statistical techniques suitable for quantitative research to validate research objectives and hypotheses. All statistical analyses will be conducted using SPSS software to ensure consistency and accuracy in data processing.

Descriptive statistics will be used to summarize and present the basic characteristics of data, helping to understand the distribution of samples. Specific analysis includes frequency and percentage used to describe the distribution of categorical variables such as gender, age group, academic status, professional title, etc. The results will be presented in frequency tables and percentages, supplemented by bar charts or pie charts as necessary to enhance visual interpretation. Mean and standard deviation are used to summarize the central tendency and dispersion of continuous variables such as professional development, perceived organizational support, job satisfaction, teaching autonomy, perceived teaching feedback, as well as the dependent variable "teacher participation in teaching quality improvement". If the data distribution shows skewness (such as skewness absolute value > 1), median and interquartile range (IQR) will be supplemented to more robustly describe the data.

In addition, skewness and kurtosis will be calculated to test whether the data conforms to the assumption of normal distribution, providing a basis for subsequent inferential statistics. Inferential statistics will be used to infer population characteristics from sample data and test research

hypotheses. Correlation analysis (Pearson correlation coefficient) is a method used to measure the strength and direction of the linear relationship between independent variables (professional development, perceived organizational support, job satisfaction, teaching autonomy, perceived teaching feedback) and dependent variable (teacher participation in teaching quality improvement).

Results

Based on the data collected from the survey, this section presents a comprehensive analysis of the results. The findings are organized to first provide descriptive statistics of the sample demographics, followed by an examination of the reliability and validity of the measurement instruments. Finally, the core results of the multiple linear regression analysis are presented and discussed, providing empirical evidence to test the research hypotheses and explain the relationships between the variables.

Descriptive Statistics

This section presents descriptive statistics, which summarize the basic characteristics of the sample population. The analysis provides an overview of key demographic variables such as gender, age, and teaching experience, and establishes the foundational context for the study's subsequent findings.

Table 3 Descriptive statistics of basic information

Item	Option	Frequency	Percentage (%)
Your gender	Male	167	49.41
	Female	158	46.75
	Other	13	3.85
Your age	Age 25 and under	30	8.88
	Age 26-35	105	31.07
	Age 36-45	90	26.63
	Age 46-55	76	22.49
	Age 56 and above	37	10.95
Your teaching experience	1-3 years	36	10.65
	4-10 years	100	29.59
	11-20 years	106	31.36
	20 years or more	96	28.40

Form Table 3, The sample comprises 167 male teachers (49.41%), 158 female teachers (46.75%), and 13 teachers who identified as "Other" (3.85%). This distribution reflects a relatively balanced gender composition within the faculty, with no significant overrepresentation of any single gender. Such balance is conducive to fostering diverse perspectives in teaching methodologies, curriculum design, and collaborative efforts aimed at enhancing teaching quality. The age profile is dominated by mid-career and young educators, with teachers aged 26–35 forming the largest group at 31.07% (105 respondents). This cohort represents a dynamic segment of the faculty, often characterized by adaptability to new teaching technologies and innovative pedagogical approaches. Teachers aged 36–45 account for 26.63% (90 respondents), serving as a stable backbone with a blend of experience and ongoing professional growth. Those aged 46–55 constitute 22.49% (76 respondents), contributing long-term institutional knowledge and mature teaching practices. Younger teachers (25 and under) and senior educators (56 and above) make up 8.88% (30 respondents) and 10.95% (37 respondents), respectively. This "middle-heavy" age structure balances vitality, experience, and institutional memory, creating a favorable ecosystem for both knowledge transfer and educational innovation. Teaching experience is concentrated among mid-to-senior level educators. Teachers with 11–20 years of experience form the largest subgroup at 31.36% (106 respondents), bringing deep pedagogical expertise and a nuanced understanding of student needs. Those with 4–10 years of experience account for 29.59% (100 respondents), representing a cohort in a phase of

steady professional development and increasing leadership in classroom practices. Educators with 20 or more years of experience constitute 28.40% (96 respondents), offering invaluable institutional wisdom and long-term perspective. Novice teachers (1–3 years of experience) make up 10.65% (36 respondents), contributing fresh perspectives and adaptability to emerging educational trends. Collectively, teachers with 11 or more years of experience represent 59.76% of the sample, underscoring the faculty's overall depth of experience - a critical foundation for maintaining consistent teaching quality.

Multiple Linear Regression (MLR) Analysis

This section presents the core findings of the study. Multiple linear regression analysis was performed to examine the predictive effects of the independent variables on the dependent variable, providing empirical evidence to test the research hypotheses. The results of the above correlation analysis show that there is a significant positive correlation between the variables. As shown in Table 4.

Table 4 Correlation analysis

	Professional development	Professional development	Professional development	Professional development	Professional development	Professional development
Professional development	1					
Perceived organizational support	0.727**	1				
Job satisfaction	0.674**	0.649**	1			
Teaching autonomy	0.657**	0.636**	0.769**	1		
Perceived teaching feedback	0.607**	0.553**	0.680**	0.676**	1	
Teachers' participation in improving teaching quality	0.785**	0.716**	0.722**	0.722**	0.697**	1

Note: * * and * represent the significance level of 1% and 5% respectively.

Table 4 presents the results of a correlation analysis examining the relationships between key variables related to teachers' professional experiences and their participation in improving teaching quality. The findings reveal statistically significant positive correlations across all pairs of variables at the 1% significance level (denoted by **), indicating strong interconnectedness among these factors. Notably, "Teachers' participation in improving teaching quality" exhibits the highest correlation with "Professional development" ($r = 0.785^{**}$), underscoring that continuous professional growth is closely linked to teachers' engagement in quality enhancement efforts. "Perceived organizational support" also shows a strong association with participation ($r = 0.716^{**}$), highlighting the critical role of institutional backing in fostering teacher involvement. Additionally, "Job satisfaction" and "Teaching autonomy" demonstrate substantial correlations with participation ($r = 0.722^{**}$ for both), with "Teaching autonomy" particularly strongly correlated with "Job satisfaction" ($r = 0.769^{**}$), suggesting that greater decision-making authority in teaching enhances teachers' overall job content. "Perceived teaching feedback" is modestly correlated with participation ($r = 0.697^{**}$) and shows meaningful connections to other variables, such as

"Emotional Experience in Class" ($r = 0.680^{**}$) and "Interaction with Teachers and Classmates" ($r = 0.676^{**}$). Overall, these results emphasize that professional development opportunities, organizational support, job satisfaction, teaching autonomy, and effective feedback mechanisms collectively contribute to teachers' active participation in improving teaching quality, forming a mutually reinforcing network of factors that drive educational excellence. Therefore, further linear regression analysis is carried out. This regression analysis investigations the predictive effects of five independent variables-professional development, perceived organizational support, Job satisfaction, Teaching autonomy, and perceived teaching feedback—on the dependent variable teachers' participation in improving teaching quality. As shown in Table 5.

Table 5 Regression coefficient

	Non-standardized coefficient		Standardization coefficient	t	Sig	Collinear statistics	
	B	Standard error	Beta			Tol.	VIF
constant	-0.281	0.132		-2.135	0.033*		
Professional development	0.396	0.050	0.361	7.927	0.000**	0.378	2.649
Perceived organizational support	0.178	0.045	0.171	3.925	0.000**	0.414	2.417
Job satisfaction	0.112	0.049	0.111	2.261	0.024*	0.324	3.082
Teaching autonomy	0.155	0.049	0.152	3.156	0.002**	0.339	2.947
Perceived teaching feedback	0.223	0.045	0.205	4.983	0.000**	0.462	2.167

Dependent variable: teachers' participation in improving teaching quality

Note: * * and * represent the significance level of 1% and 5% respectively.

From Table 5, Based on the multiple linear regression analysis, all five independent variables demonstrated a positive and statistically significant relationship with the dependent variable, "teachers' participation in improving teaching quality". Professional Development (H1): This factor was found to have the most substantial impact, with the highest standardized coefficient (β) of 0.361 and high statistical significance ($p < 0.01$). This indicates that greater access to professional development opportunities is the strongest predictor of a teacher's willingness to engage in teaching quality improvement. Perceived Teaching Feedback (H5): This factor had the second-largest influence, with a β of 0.205 and high statistical significance ($p < 0.01$). The results suggest that clear, constructive, and useful feedback plays a crucial role in motivating teachers to improve their performance. Perceived Organizational Support (H2): This factor showed a positive influence with a β of 0.171 and high statistical significance ($p < 0.01$). This finding confirms that when teachers feel supported by their organization, they are more inclined to participate in improvement initiatives. Teaching Autonomy (H4): This factor had a positive influence with a β of 0.152 and high statistical significance ($p < 0.01$). The result indicates that giving teachers the freedom to make decisions regarding their teaching methods and curriculum is an important motivator for their engagement.

Job Satisfaction (H3): While showing a positive influence, this factor had the lowest β of 0.111 and was significant at a lower level ($p < 0.05$). This suggests that although job satisfaction contributes to a teacher's engagement, it is not as strong a predictor as the other factors. In conclusion, the research findings confirm that all proposed hypotheses are supported. The most influential factors driving teacher engagement in teaching quality improvement are professional development and perceived teaching feedback.

Interpretation of Data and Hypothesis Testing

This is a summary of the Multiple Linear Regression (MLR) analysis from Table 5 and the corresponding hypothesis testing. The analysis is based on the most recent data you provided. As shown in Table 6.

Table 6 Hypothesis testing

Hypothesis	Independent Variable	Standardized Coefficient (β)	Sig. (P-value)	Conclusion
H1	Professional Development	0.361	0.000**	Supported ($p < 0.01$)
H2	Perceived Organizational Support	0.171	0.000**	Supported ($p < 0.01$)
H3	Job Satisfaction	0.111	0.024*	Supported ($p < 0.05$)
H4	Teaching Autonomy	0.152	0.002**	Supported ($p < 0.01$)
H5	Perceived Teaching Feedback	0.205	0.000**	Supported ($p < 0.01$)

Analysis of model summary

Table 7 Model summary

R	R square	Adjusted r-square	Error of standard estimation
0.860	0.739	0.736	0.474

Table 7 presents key statistical values used to evaluate the strength and appropriateness of the multiple linear regression model employed in this study. The R-value of 0.860 indicates a very strong linear relationship between the independent factors (professional development, organizational support, job satisfaction, teaching autonomy, and teaching feedback) and the dependent variable, faculty participation in teaching quality improvement. The R Square value of 0.739 shows that these five independent factors collectively explain 73.9% of the variance in faculty participation, demonstrating excellent predictive power. Furthermore, the Adjusted R-square of 0.736, being very close to the R Square value, confirms that the model is robust and well-specified, without unnecessary variables. Finally, a low Standard Error of Estimation of 0.474 suggests that the model's predictions are highly accurate with minimal deviation from the actual values.

Discussion

Based on the empirical analysis from the Multiple Linear Regression (MLR) results (Table 5), the research findings provide a robust framework for understanding the drivers of faculty motivation and engagement in teaching quality improvement. The results demonstrate that professional development, perceived teaching feedback, perceived organizational support, and teaching autonomy are significant predictors of teacher engagement, while job satisfaction shows a less direct effect.

The most influential factor, professional development ($\beta=0.361$, $p<0.01$), aligns with the core principles of adult learning theory, which posits that continuous learning opportunities are crucial for stimulating professional growth and innovation (Yen et al., 2024). This finding is consistent with research by Desimone (2009), which suggests that professional development activities based on teachers' autonomous choices significantly enhance their depth and sustainability of participation. Furthermore, our results support the social cognitive theory (Bao, 2024), as structured professional development enhances teachers' self-efficacy and promotes their active participation in teaching reforms (Tschannen-Moran & Hoy, 2001).

Perceived teaching feedback also emerged as a substantial predictor ($\beta=0.205$, $p<0.01$). This finding is consistent with the feedback intervention theory (Alqahtani & Almassaad, 2024), which suggests that feedback can significantly influence behavioral engagement. Constructive and timely feedback from students, peers, and administrators is a key resource for teachers, helping them to reflect on their teaching practices and make continuous improvements. The strong positive effect of this factor aligns with Hattie's "Visible Learning" framework, which emphasizes the value of feedback as a catalyst for professional growth (He et al., 2024).

The significant positive effect of perceived organizational support ($\beta=0.171$, $p<0.01$) is in line with the social exchange theory (FİLİZ et al., 2024). When institutions provide adequate resources, fair recognition, and a supportive environment, faculty members tend to reciprocate with greater commitment and engagement in their roles (Li & Wang, 2021). This finding reinforces the notion that a supportive organizational climate is a vital job resource that fosters faculty's motivation to contribute to teaching quality.

Teaching autonomy also showed a positive and significant effect ($\beta=0.152$, $p<0.01$). This result is consistent with self-determination theory (Bruggen et al., 2025), which highlights that the need for autonomy is a fundamental driver of intrinsic motivation. When teachers are given the freedom to make decisions regarding their curriculum and teaching methods, they feel a greater sense of ownership and are more inclined to experiment with innovative pedagogical approaches, ultimately enhancing the quality of their teaching (Pearson & Moomaw, 2005).

Interestingly, while job satisfaction showed a positive coefficient, its effect was less pronounced ($\beta=0.111$, $p<0.05$) compared to other factors. This finding contrasts with some prior research that posits a direct and strong link between job satisfaction and engagement (Lu & Jian, 2024). However, it aligns with Herzberg's Two-Factor Theory, which distinguishes between motivators and hygiene factors. In this context, job satisfaction might be a hygiene factor that prevents dissatisfaction but is not the primary driver of high-level engagement. It is also possible that job satisfaction operates through more complex, indirect mechanisms or that the overall measure of satisfaction in this study encompassed dimensions not directly related to teaching-specific motivation (Xanthopoulou et al., 2020).

In summary, the empirical evidence from this study provides a robust theoretical foundation for developing targeted interventions to enhance teaching quality. The findings highlight that an integrated approach focusing on professional development, effective feedback mechanisms, organizational support, and teaching autonomy is essential for fostering faculty motivation and engagement.

Originality and body of knowledge

This study makes several original contributions to the existing body of knowledge on organizational behavior and teacher motivation. First, it provides quantitative empirical evidence from a specific, under-researched context: a local university in Mianyang City, China. While much of the existing research is based on Western contexts, this study offers valuable insights into how factors such as professional development, organizational support, and teaching autonomy influence faculty engagement in a distinct cultural and academic environment.

Second, the findings contribute to a deeper understanding of the complex relationships between these variables. The results, particularly the non-significant influence of job satisfaction and social engagement on teaching quality improvement, challenge some previous assumptions and highlight the nuanced role of various motivational factors. This finding suggests that for faculty at this institution, a sense of personal and professional growth (through development and autonomy) and institutional acknowledgment (through feedback and support) may be more direct drivers of engagement than general job satisfaction or social connections. This specific insight enriches the existing body of knowledge and opens new avenues for future research, particularly comparative studies across different institutional and national contexts to explore these unexpected relationships further.

In conclusion, the collective statistical values from the Model Summary table confirm that the multiple linear regression model is highly robust and appropriate for explaining and predicting faculty participation in teaching quality improvement. The relationships among the variables can be summarized as shown in Figure 2.

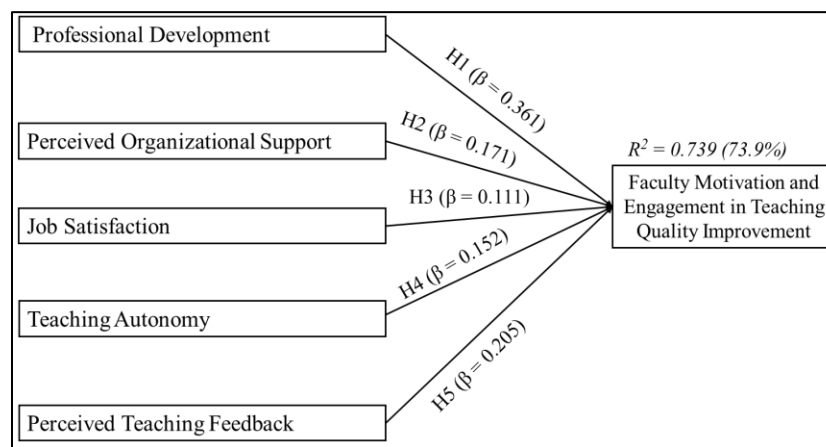


Figure 2: Model summarized of conceptual framework

Recommendations

Approaches for applying research findings

The findings of this study offer several practical recommendations for administrators and educational policymakers at Mianyang University and similar institutions. The following are guidelines for implementation:

1. Invest in Innovative Pedagogy: Institutions should invest in workshops and training focused on innovative teaching methods, particularly the integration of digital tools. This will not only enhance teaching quality but also serve as a key incentive for faculty engagement.
2. Establish Constructive Feedback Mechanisms: Educational leaders should establish transparent and constructive mechanisms, such as student and peer evaluations, to provide actionable feedback. This will, in turn, enhance faculty self-efficacy.
3. Strengthen Faculty Autonomy: The findings suggest that allowing greater autonomy in curriculum design and teaching methods can significantly increase faculty motivation and engagement. Institutions should encourage innovation and minimize unnecessary interventions to foster a sense of ownership and creativity within the learning environment.

Recommendations for future research

1. Employ Qualitative Methodologies: Future research should utilize qualitative approaches, such

as in-depth interviews or focus groups, to gain a deeper understanding of the underlying reasons and factors influencing faculty motivation, which quantitative data alone cannot fully explain.

2. Conduct Longitudinal Studies: A longitudinal study should be conducted to follow the same group of faculty over time to observe how changes in professional development opportunities, organizational support, or institutional policies affect their motivation and engagement. This approach will help establish a clearer cause-and-effect relationship.

3. Undertake Comparative Studies: Future research should conduct comparative studies across different types of higher education institutions to determine whether the identified factors have similar effects. This will provide more comprehensive data for educational management.

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