

Research on the Influence of Young Teachers' Sense of Vocation on Job Engagement in Chinese Context

Xiaolei Wang^{1,2}, Seyoung Yang², Yiming Wang^{3,*}

¹Yancheng Polytechnic College, Yancheng, Jiangsu, China

²Sehan University, Mokpo, Jeollanam-do, South Korea

³Jilin Engineering Normal University, Changchun, Jilin 130000 China

*Corresponding Author

Abstract: This study aims to investigate the mediating effects of collective efficacy and resilience on the relationship between sense of vocation and job engagement among young teachers. A questionnaire survey was conducted on the sense of vocation, job engagement, collective efficacy, and resilience of young teachers. The study focused on 585 young teachers from 10 universities in Jiangsu Province, including key universities, general universities, and vocational colleges. Using "Sense of Vocation" as the independent variable, "job engagement" as the dependent variable, and "collective efficacy" and "resilience" as the mediating variables, an empirical model was constructed. The data was analyzed using SPSS 26.0 statistical software to obtain empirical analysis results on the coordination issues between sense of vocation and job engagement among young teachers, as well as the mediating effects of collective efficacy and resilience. Reflections and suggestions are also provided. First, there are significant correlations among sense of vocation, job engagement, collective efficacy, and resilience of young teachers. Second, sense of vocation has a significant positive impact on job engagement among young teachers. Third, collective efficacy and resilience play a mediating role in the influence of sense of vocation on the job engagement of young teachers. Universities should focus on guiding young teachers to develop a strong sense of sense of vocation, cultivating their collective efficacy, and enhancing their resilience, thereby increasing their job engagement.

Keywords: Young teachers; Sense of Vocation; Job Engagement; Collective Efficacy;

Resilience

1. Introduction

1.1 Research Necessary

The status and role of higher education necessitate that universities face the challenges of international competition and undertake the mission of promoting the development of the nation and human civilization. UNESCO's 2015 report "Rethinking Education: Towards a Global Common Good" specifically states: "We must pay more attention to teachers and educational workers than ever before, regarding them as a comprehensive force for change." It is evident that "building a high-quality teaching staff" is an issue of great concern in the international community. The "National Medium and Long-term Education Reform and Development Plan Outline" proposes: "Strengthen the construction of the teaching staff and improve the overall quality of teachers." Currently, young faculty members (aged 25-40) have become the main body of China's university teaching staff, accounting for approximately 63.3% of the total number of full-time university teachers, with their proportion increasing. The core of higher education development is teachers, and the key to teacher development is young faculty members. The eras of "post-80s" and "post-90s" are precisely the peak periods of age concentration among Chinese office workers, with young faculty members playing the "backbone force" within the university teaching group. They are the main practitioners and promoters of higher education development, which relates to the progress of higher education and the country's core competitiveness. However, the following situations have emerged in reality: young faculty members have a weak Sense of

Vocation, lack collective efficacy, do not exhibit high resilience, and their job engagement is not apparent. The reason for this is not the interference of material life but the pressure on young faculty members, who bear the heaviest burden among university teaching staff due to the implementation of performance reform systems in Chinese universities. Although these human resource measures help standardize talent assessment, negative emotions, psychological barriers, and behavioral issues such as burnout, anxiety, depression, and turnover among young faculty members have also become prominent. Yao Junmei believed that under the premise of basic material living conditions being secured, for most young faculty members, a career is no longer just a means of making a living but also a way to highlight individuality, satisfy expectations, enhance happiness, and achieve self-worth [1].

In this context, cultivating a sense of vocation among young faculty members has become an urgent practical issue to be addressed. Although previous studies have not pointed out a direct relationship between sense of vocation and job engagement, job engagement as one of the important manifestations of professional success still reveals an indirect relationship between sense of vocation and job engagement from some studies on the relationship between sense of vocation and professional success, such as Hall found that a sense of vocation has a significant positive impact on professional success [2]. Moreover, it can be seen from previous research that, besides the study of the influence relationship between sense of vocation and job engagement, there is still a need to enrich research on how collective efficacy and resilience play roles between sense of vocation and job engagement. In this paper's view, an important way to ensure young faculty members maintain high job engagement in a professional environment that combines motivation for survival and pressure to survive is to cultivate their sense of vocation. Based on this, this study builds upon the foundation of previous research by repeatedly reading and organizing a large amount of literature, along with analyzing and comparing theoretical contexts, combined with China's cultural and educational background and the actual situation of university education, to clarify the

corresponding relationships between sense of vocation, job engagement, collective efficacy and resilience.

1.2. Research Purpose

This study aims to explore the impact of sense of vocation on job engagement among young university teachers in China. Based on descriptive statistical analysis of relevant variables, it aims to clarify the mechanisms between sense of vocation, collective efficacy, resilience, and job engagement. A model diagram will be constructed, and based on this, human resource management strategies for young university teachers from a positive psychology perspective will be proposed, further expanding the research field of sense of vocation and job engagement among young teachers.

2. Theoretical Background

2.1 Sense of Vocation

As the educational sector deepens its understanding of individual teacher development and professional positioning, the originally task-oriented and organizationally focused "mission awareness" has gradually evolved into a more intrinsic value and career passion-oriented "sense of vocation." For the research subject of young teachers, the "sense of vocation" not only resonates more closely with their inner motivation and career pursuits as educators but also better reflects their enthusiasm for educational work and the social responsibility they bear. This shift marks a re-recognition of teachers' professional identity, emphasizing the autonomy and value realization of teaching work, in line with the dual needs of young teachers for career satisfaction and personal growth. Liang Yongping believes that "sense of vocation" reflects what teachers truly care about internally. The sense of vocation is the most fundamental understanding of the ultimate purpose of the teaching profession and the significance of work and life. It is deeply rooted in the heart of teachers and drives their work, affecting self-evaluation. Yang Yunping states that "sense of vocation" represents the moral standards for teachers in the new era, imposing the fundamental task of fostering virtue through education at the level of responsibility, strengthening the

responsibility and mission awareness in professional behavior, and clarifying the baseline of teacher ethics [3].

Incorporating the aforementioned research outcomes, this paper characterizes the "sense of vocation" among young teachers as a duty and mission mindset that is grounded in the

ethical standards of the new era for teachers, with an inherent task being the cultivation of virtue and educational responsibility.

Many scholars put forward their own dimensions in the study of the elements of sense of vocation. Table 1 lists the views of some scholars in the previous research.

Table 1. Dimension of Sense of Vocation

Scholar (Year)	Dimensions
Dobrow and Tosti-Kharas (2011)	Unidimensional Structure: Sense of Vocation
Hagmaier and Abele (2012)	Individual-environment fit, Value-driven, and Steering Force
Zhang (2015)	Directional Force, Altruistic Contribution, Meaning and Value
Zhou and Zou (2015)	Quality of Life and Life Responsibility, Family Happiness and Family Responsibility, Career Development and Social Responsibility
Shang (2022)	Guiding call, Meaning of Life, and Prosocial Motivation
Xie et al. (2023)	Integration of Group and Individual Interests, Inner Call

This paper primarily references the study by Hagmaier and Abele for the categorization of sense of vocation, dividing it into three dimensions: individual-environment fit, value-driven, and steering force [4]. This is because these dimensions effectively capture the interplay between personal values and environmental factors, as well as the motivational and directional aspects of one's career mission.

2.2 Job Engagement

In defining the concept of job engagement, Mao Kaixian and Li Chaoping believe that job engagement refers to the extent of an employee's involvement, satisfaction, and enthusiasm towards their work, characterized by vigor, dedication, and absorption as a form of positive psychological fulfillment [5]. Li Chuncheng considers job engagement as the degree to which employees are vigorous, dedicated, and focused on their work, with highly engaged employees often being energetic, committed, and efficient. In contrast,

employees with a mediocre attitude show significantly lower job engagement, exhibiting unserious work attitudes and a lack of passion. Xu Hui states that job engagement is when individual members, in their role, immerse themselves in the process of work roles, displaying a positive state of pursuing optimal role performance cognitively, emotionally, and behaviorally in their professional actions [6]. This inherently includes various behaviors and states physiologically, emotionally, cognitively, and behaviorally.

In this study, the concept of young teachers' dedication is more in agreement with Xu Hui research perspective, which defines it as young teachers engaging in their work roles with their self-role, demonstrating a positive state of pursuing optimal role performance cognitively, emotionally, and professionally. Many scholars put forward their own dimensions in the study of the elements of job engagement. Table 2 lists the views of some scholars in the previous research.

Table 2. Dimension of Job Engagement

Scholar (Year)	Dimensions
Schaufeli and Bakker (2004), Chen et al. (2023)	Vigor, Dedication, Absorption
Wen et al. (2022)	Energy, Focus, and Enthusiasm for Work
Liu and Guo (2023)	Personality, Workplace Spirit, Organizational Culture

In this study, the categorization of job engagement primarily references the research viewpoints of Schaufeli and Bakker, consisting of three dimensions: vigor, dedication, and absorption [7]. These components provide a comprehensive

understanding of employee engagement and are widely accepted in academic research and practical applications.

2.3 Collective Efficacy

Chen Ying et al. believe that collective

efficacy refers to the shared belief in a group's capability to organize and execute the courses of action required to produce given levels of attainments [8]. Wang Zhen considers team collective efficacy as the shared belief among team members in the team's capability to successfully complete a specific task or achieve a certain level of performance, representing the team's "can do" motivational state. Wang Heng, Song Huan and Wang Chenxia propose that teacher collective efficacy is the cognition of teachers in a school about the positive impact they can have on students through their collective efforts as a

whole [9].

This study primarily references the research findings of Wang et al. in defining the collective efficacy of young teachers, considering it as the shared belief among young teacher team members about their overall collaborative ability to complete specific tasks or achieve a certain level of success.

Many scholars put forward their own dimensions in the study of the elements of collective efficacy. Table 3 lists the views of some scholars in the previous research.

Table 3. Dimension of Collective Efficacy

Scholar (Year)	Dimensions
Riggs and Knight (1994)	Unidimensional Structure: Collective Efficacy
Schechter and Tschannen (2006)	Collective Efficacy for Instructional Strategies, Collective Efficacy for Student Discipline
Ramzan Nezhad et al. (2009)	Ability, Effort, Persistence, Preparedness, Coherence
Chen et al.(2016) Zhou (2021)	Internal Joint Belief, Leadership Belief, External Resource Belief
Zhu (2020)	Squad Leader Efficacy, Individual Competence, Class Competence, Team Spirit

In this paper, primarily references the research findings of Chen Ying et al., dividing it into three elements: internal unified belief, leadership capability belief, and external resource belief. This is because these elements effectively capture the key factors that influence the collective efficacy of young teacher teams.

2.4 Resilience

Lei Hui, Huang Wenjing and Zhang Xiaocui state that resilience refers to an individual's positive adaptation when facing life adversities, tragedies, traumas, or other significant life stresses, characterized by the "bounce-back ability" to recover from adversity. Pei Tianhua believes that resilience

is the ability of an individual to successfully adapt to or overcome environmental or challenging factors that threaten their functioning, survival, and development, featuring the role of regulating stress and promoting adaptation [10].

This paper refers to the research findings of Pei Tianhua, defining it as the psychological adaptability of young teachers to successfully adapt to or overcome threats to their functioning, survival, and development in teaching environments or challenging factors.

Many scholars put forward their own dimensions in the study of the elements of resilience. Table 4 lists the views of some scholars in the previous research.

Table 4. Dimension of Resilience

Scholar (Year)	Dimensions
Oshio, Kaneko, and Nagamine (2003)	Novelty Exploration Mindset, Recovery Adjustment, and Positive Future Will
Yu and Zhang (2007)	Toughness, Optimism, Strength
Liang (2022)	Resilience
Zhang (2023)	Commitment, Responsibility

In the categorization of the elements of young teachers' resilience, this paper primarily references the research findings of Yu

Xiaonan and Zhang Jianxin, dividing it into three elements: tenacity, self-improvement, and optimism [11]. Tenacity reflects the

ability to persist in the face of difficulties; self-improvement represents the pursuit of personal growth and advancement; and optimism involves maintaining a positive attitude towards challenges, these factors provide a comprehensive understanding of the psychological resilience of young teachers.

2.5 Relationship between Variables

2.5.1 Sense of vocation and job engagement

Scholars have presented various perspectives on the link between the sense of vocation and job engagement. Firstly, Hu Enhua et al. believe that the sense of vocation, as an individual's identification with the value and meaning of their work, can significantly enhance work enthusiasm and motivation, thereby increasing job engagement [12]. Zeng Lianping et al. emphasize the positive correlation between the sense of vocation and job engagement, pointing out that when employees have a profound sense of vocation towards their work, they are more likely to be fully committed and display a high level of dedication [13]. Finally, Yuan Li and Li Li propose that the sense of vocation promotes job engagement by increasing job satisfaction and work involvement, as employees' job satisfaction and involvement directly affect their level of job engagement.

2.5.2 Sense of vocation and collective efficacy

Expert perspectives on the relationship between the sense of vocation and collective efficacy are also diverse. Bandura noted that the sense of vocation helps to enhance individuals' trust and belonging to the team, thereby improving collective efficacy, as this trust and belonging can make employees more confident in the team's capabilities [14]. Goddard argued that the sense of vocation further promotes the improvement of collective efficacy by strengthening team cooperation awareness and cohesion, as teamwork and cohesion are key factors in achieving team goals [15]. Klassen found a positive relationship between the sense of vocation and collective efficacy, meaning that the stronger the employees' sense of vocation, the more confident they are in the team's abilities and the more willing they are to work together towards team goals.

2.5.3 Sense of vocation and resilience

Liu Zhi et al. investigated the chain-mediated effects of nurses' sense of professional gain

and sense of vocation between resilience and job engagement, suggesting that the sense of vocation is a key factor linking resilience and job engagement [16]. That is, nurses with higher resilience may experience a stronger sense of vocation, thereby increasing their level of job engagement. Hirschi focused on the development of career adaptability during adolescence and its impact on the sense of power and life satisfaction. The study indicated that career adaptability, related to the sense of vocation, positively influences an individual's sense of power and life satisfaction, which may be associated with resilience, as people with strong adaptability are likely more resistant to stress, exhibiting greater resilience. Gu Qiang and Dai Chang pointed out that a teacher's resilience is a necessary condition for teaching effectiveness, arguing that resilience is crucial for maintaining teaching outcomes [17]. This implies that teachers with high resilience are better equipped to handle challenges at work, sustain motivation and enthusiasm for teaching, phenomena closely related to the sense of vocation.

2.5.4 Collective efficacy and job engagement

Scholars have put forward their views on how collective efficacy affects job engagement. Vera believed that collective efficacy can increase employees' investment and sense of responsibility towards their work, naturally leading to higher job engagement [18]. Collins et al. noticed a positive correlation between collective efficacy and job engagement, meaning that employees who believe in their team's capabilities are more likely to exhibit engaged behavior. Chung et al. emphasized that collective efficacy enhances job engagement by strengthening team cooperation awareness and cohesion, as this spirit of teamwork motivates employees to strive for common goals.

2.5.5 Resilience and job engagement

Liu Zhi et al. consider resilience crucial for maintaining a positive attitude among employees facing work stress and challenges, which helps to enhance job engagement. Amir et al. found that employees with high resilience often demonstrate higher job engagement because they can persist and overcome difficulties at work [19]. Villavicencio-Ayub et al. proposed that resilience can promote job engagement by

cultivating self-efficacy and self-regulation abilities, helping employees better cope with challenges at work. Gu Qiang and Dai Chang believed that teachers' resilience is a necessary condition for teaching effectiveness, and resilience is a necessary condition for maintaining job engagement.

2.5.6 the Mediating role of collective efficacy

There is limited research on the mediating role of collective efficacy between the sense of vocation and job engagement, and only some studies provide insights into their relationship. Based on the study by Yuan Li and Li Li, psychological capital is considered to play a mediating role between the sense of vocation and learning investment. Extending this view to the workplace environment, collective self-efficacy, as an important component of team psychological capital, may be a key mediating variable between the sense of vocation and job engagement. The sense of vocation enhances collective efficacy, namely the confidence and belief of team members in the collective's ability to successfully execute tasks, thereby inspiring higher job engagement. In other words, a strong sense of vocation makes team members feel their work is meaningful and important, enhancing the team's collective self-efficacy, which in turn encourages members to invest more enthusiasm and effort into their work.

2.5.7 the Mediating role of resilience

Similarly, there is scarce research on the mediating role of resilience between the sense of vocation and job engagement. In prior research, Cui Guodong et al. mentioned work psychological ownership, which can be seen as a form of employees' psychological possession of their work, reflecting a type of resilience. The sense of vocation employees feel may enhance their work psychological ownership, i.e., their awareness of the value and importance of their work. This sense of ownership strengthens individuals' commitment and responsibility towards their work, thereby improving job engagement. Therefore, we can speculate that resilience (in the form of work psychological ownership) plays a mediating role between the sense of vocation and job engagement. Ge Leilei and Chen Yurui's study points out that sense of vocation affects the job satisfaction of grassroots civil servants, with emotional exhaustion playing a mediating role, and

public service motivation having a moderating effect [20]. Although this study focuses on grassroots civil servants, its findings can be generalized to a broader workplace environment. The sense of vocation may enhance employees' job engagement by reducing emotional exhaustion. When employees perceive their work as having a higher sense of vocation, they may experience less emotional exhaustion because they may view challenges at work as opportunities for growth and contribution rather than sources of stress. Furthermore, public service motivation or similar values-oriented motivations may strengthen this effect because when employees' personal motivations align with their sense of vocation, they are likely to be more engaged and dedicated.

3. Research Methodology

3.1 Research Models and Hypothesis

3.1.1 Research models

Building on existing theories and previous research on various variables, a model was constructed with sense of vocation as the independent variable, collective efficacy and resilience as the mediating variables, and job engagement as the dependent variable, as shown in Figure 1.

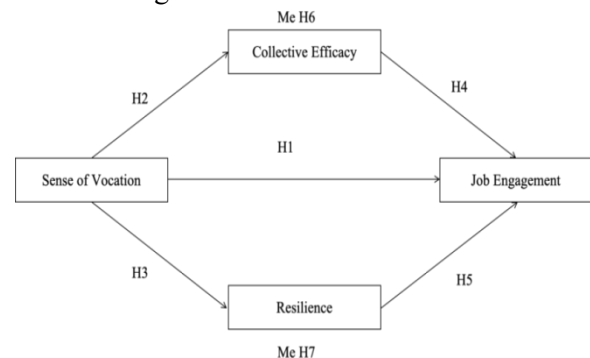


Figure 1. Diagram of the Research Model

3.1.2 Research hypothesis

Based on the theoretical background and previous research, this study sets the following research hypotheses according to the research objectives:

H1: Sense of vocation has a significant positive impact on the job engagement of young teachers.

H2: Sense of vocation has a significant positive impact on the collective efficacy of young teachers.

H3: Sense of vocation has a significant

positive impact on the resilience of young teachers.

H4: Collective efficacy has a significant positive impact on the job engagement of young teachers.

H5: Resilience has a significant positive impact on the job engagement of young teachers.

Me H6: Collective efficacy mediates the relationship between sense of vocation and the job engagement of young teachers.

Me H7: Resilience mediates the relationship between sense of vocation and the job engagement of young teachers.

3.2 Research Objects

Based on the different levels of school operation, this study plans to select young teachers from 10 institutions within Jiangsu Province, including key universities, general universities, and vocational colleges, as research subjects. This is because Jiangsu, as a strong economic and educational province in China, has abundant educational resources, sufficient educational investment, and its trends in educational reform and development usually lead the nation. For example, the Jiangsu area may pay more attention to the

professional development and career growth of teachers, which could affect the sense of vocation and job engagement among young teachers. However, whether in Jiangsu or other regions, young teachers face similar challenges and pressures, such as work stress and uncertainty in career development, all of which can impact their sense of vocation and job engagement.

In the specific research process, this paper adopts stratified sampling and collects data through empirical questionnaire surveys. A total of 600 questionnaires were distributed, with 590 returned. After excluding 5 invalid questionnaires due to blank or missing responses, 585 valid questionnaires remained, resulting in an effective response rate of 99.15%.

The distribution of the questionnaire has taken place during the provincial-level training program for university teachers in Jiangsu Province, from March 2024 to May 2024. The questionnaire for this study will consist of five sections: Sense of Vocation, Collective efficacy, Resilience, Job Engagement, and demographic characteristics. The basic information of the survey participants is shown in Table 5 below

Table 5. Statistical Summary of General Information about the Research Subjects

	Variant	N	Percent
Age	25-30 Years Old	142	24.27%
	30-35 Years Old	180	30.77%
	35 to 40 Years Old	213	36.41%
	Over 40 Years Old	50	8.55%
Professional Title	Teaching Assistant/Research Intern	142	24.27%
	Lecturer/Assistant Researcher	157	26.84%
	Associate Professor/Associate Researcher	139	23.76%
	Professor/Researcher	147	25.13%
Work Category	Full Time Teacher Sequence, Only Responsible for Teaching Affairs	264	45.13%
	Non-Full-time Teacher Sequence, Not Responsible for Teaching Affairs	180	30.77%
	In Addition to Undertaking Teaching Affairs, It Also Undertakes Administrative and Teaching Assistance Affairs	141	24.10%
Work Experience	Less Than 3 Years	200	34.19%
	3-5 Years	130	22.22%
	5-10 Years	155	26.50%
	More Than 10 Years	100	17.09%

3.3 Research Tools

Sense of vocation Scale: This paper primarily references the study by Hagmaier and Abele

for measuring the sense of vocation, which consists of three dimensions: individual-environment fit, value-driven, and guidance force, totaling 9 items.

Job Engagement Scale: The measurement of job engagement in this paper mainly refers to the scale developed and revised by Schaufeli and Bakker composed of three dimensions: vigor, dedication, and absorption, totaling 9 items.

Collective Efficacy Scale: The measurement of collective efficacy in this paper primarily references the scale developed and revised by Chen Ying et al., which comprises three dimensions: internal united belief, leadership capability belief, and external resource belief, totaling 17 items.

Resilience Scale:

The measurement of resilience in this paper also refers to the resilience scale revised by Yu Xiaonan and Zhang Jianxin's CD-RISC-10, consisting of three dimensions: tenacity, self-improvement, and optimism, totaling 10 items.

Reliability and Validity: In this paper, further reliability analysis (Cronbach alpha) of the above research instruments was carried out using SPSS 26.0 and the results are presented in Table 6. All of the Cronbach's α exceeded .80, indicating that the questionnaires used in this study all had good reliability.

Table 6. Reliability of Research Tools

Variant	Number of Issues	Cronbach's α
Sense of Vocation	9	.89
Job Engagement	9	.82
Collective Efficacy	17	.83
Resilience	10	.88

As shown in Table 7, the KMO value of the sense of vocation Test Questionnaire is .94 which is greater than .70, and the experimental value of Bartlett's Sphericity Test is 2033.71 with a degree of freedom of 309, and the P is .00, which indicates that the data are good and the validity is high, and it can be used for promotion. Similarly, the job engagement Scale, collective efficacy scale and resilience scale have good validity.

Table 7. KMO and Bartlett's Test Values for the Scale

Variant	KMO	Bartlett's disease		
		Chi-square (x^2) distribution	Df	sig
Sense of Vocation	.94	2033.71	309	.00

Job Engagement	.93	1812.26	308	.00
Collective Efficacy	.93	1713.43	303	.00
Resilience	.95	2019.42	306	.00

3.4 Research Process

In the initial stage of the study, this paper discussed with an expert team to determine the research subjects and the research tools for Sense of Vocation, Collective efficacy, Resilience, and Job Engagement of young teachers. The research-related factors of Sense of vocation for young teachers, including gender, age, educational background, professional title, work category, work experience, and school category, were also discussed and analyzed. In the formal research stage, this paper, together with the research team, selected the institutions based on the characteristics of the young teacher group to be studied. Additionally, during the survey process, emphasis was placed on maintaining a balance in the characteristics of the participants. During the survey, the investigators must adhere to the principle of confidentiality. They first introduced the survey process and purpose, ensuring that the survey results would only be used for research purposes and would not have any negative impact on the respondents.

4. Research Results

4.1 Descriptive Statistics

As shown in Table 8, descriptive statistical results show that the average value of the Sense of vocation variable is (M=3.31); the average value of the Job Engagement variable is (M=3.36); the average value of the collective effectiveness variable is (M=3.25); the average value of the resilience variable is (M=3.31).

4.2 Correlation Analysis

As shown in Table 9, in the multiple factor correlation analysis test of Sense of vocation with Job Engagement, collective efficacy, and resilience, Sense of vocation was positively correlated with Job Engagement ($r=.41$, $p<.01$), positively correlated with collective efficacy ($r=.55$, $p<.01$), and positively correlated with resilience ($r=.51$, $p<.01$).

Table 8. Descriptive Statistics

Variant	N	Max	Min	M	S D	skewness	kurtosis
Sense of Vocation	585	5.00	1.00	3.31	.87	1.03	1.00
Job Engagement	585	5.00	1.00	3.36	.93	.71	.68
Collective Efficacy	585	5.00	1.00	3.25	.91	.89	.89
Resilience	585	5.00	1.00	3.31	.80	.81	.81

Table 9. Correlations of Sense of Vocation on the Scales of Collective Efficacy, Resilience and Job Engagement Factors

	Sense of vocation	Job Engagement	Collective Efficacy	Resilience
Sense of vocation	1			
Job Engagement	.41**	1		
Collective Efficacy	.55**	.53**	1	
Resilience	.51**	.47**	.39**	1

** $p < .01$

4.3 Hypothesis Testing

4.3.1 Regression analysis

(1) The impact of sense of vocation on young teachers' job engagement

In order to examine the results of the impact of the sense of vocation on the degree of job engagement of young teachers, this paper builds a least squares regression model and uses it to obtain the final estimation of the impact of the sense of vocation on the degree of job engagement of young teachers. In Table 10, it can be found that the Adj.R2 of the model is .97 and passes the F test. Therefore, it can be judged that the regression model constructed in this paper on the influence of

sense of vocation on the degree of job engagement of young teachers is statistically significant and has an explanation rate of 96.6%, which has a high explanation rate. In addition, it can be found in Table 10 that the sense of vocation positively predicts the degree of job engagement of young teachers with an impact coefficient of .462 and rejects the original hypothesis at least at the level of 1%. And the result of this test passes the covariance test and Durbin-Watson test. Therefore, it can be assumed that the increase in the sense of vocation of young teachers will strengthen their job engagement. The research hypothesis H1 is valid.

Table 10. Regression Results of Sense of Vocation on Young Teachers' Job Engagement

Modelling	Unstandardized Coefficient		Standardized Coefficient	p	Covariance Statistics	
	B	Standard Error	Beta		Tolerances	VIF
Constants	-.04	.12		.74		
Sense of Vocation	.47**	.02	.46**	.00	.44	2.30
R^2	.97			Adj R^2	.97	
F	1164.28**			D-W	2.156	

Dependent variable: young teachers' job engagement; ** $P < .01$

(2) The impact of sense of vocation on young teachers' collective efficacy

In Table 11, it can be found that the Adj.R2 of the model is .86 and passes the F test. Therefore, it can be judged that the regression model constructed in this paper on the influence of professional mission consciousness on the collective efficacy of young teachers is statistically significant and has an explanation rate of 85.80%, which has a high explanation rate. In addition, it can be

found in Table 11 that the sense of vocation positively predicts the collective efficacy of young teachers with an impact coefficient of .42 and rejects the original hypothesis at least at the level of 1%. And the result of this test passes the covariance test with Durbin-Watson test. Therefore, it can be assumed that the increased sense of vocation of young teachers will strengthen their sense of collective efficacy. The research hypothesis H2 is valid.

Table 11. Regression Results of Sense of Vocation on Young Teachers' Collective Efficacy

Modelling	Unstandardised Coefficient		Standardised Coefficient	p	Covariance Statistics	
	B	Standard Error	Beta		Tolerances	VIF
Constants	-.21	.12		.64		

Sense of Vocation	.46**	.14	.42**	.00	.58	2.04
R^2	.89			$Adj R^2$.86	
F	1649.01**			$D-W$	2.07	

Dependent variable: young teachers' collective efficacy; ** $p < .01$

(3) The impact of a sense of vocation on young teachers' resilience

In Table 12, it can be found that the $Adj.R^2$ of the model is .75 and passes the F test. Therefore, it can be judged that the regression model constructed in this paper for the effect of professional mission consciousness on young teachers' psychological toughness is statistically significant and has a high explanation rate of 75.00%. In addition, it can

be found in Table 12 that the sense of vocation has a positive predictive effect on the psychological toughness of young teachers, with a coefficient of .46, and the original hypothesis is rejected at least at the level of 1%. And the results of this test passed the covariance test and Durbin-Watson test. Therefore, it can be assumed that the increase in the sense of vocation of young teachers will strengthen their resilience. H3 is valid.

Table 12. Regression Results of Sense of Vocation on Young Teachers' Resilience

Modelling	Unstandardised Coefficient		Standardised Coefficient	p	Covariance Statistics	
	B	Standard Error	$Beta$		Tolerances	VIF
Constants	-.16	.12		.77		
Sense of Vocation	.59**	.11	.46**	.00	.48	2.07
R^2	.83			$Adj R^2$.75	
F	1792.18**			$D-W$	2.19	

Dependent variable: young teachers' resilience; ** $p < .01$

(4) The effect of collective efficacy on young teachers' job engagement

In Table 13, it can be found that the $Adj.R^2$ of the model is .94 and passes the F test. Therefore, it can be judged that the regression model constructed in this paper on the influence of collective efficacy on the degree of job engagement of young teachers has statistical significance and the explanation rate is 94.30%, which has a high explanation rate. In addition, it can be found in Table 13 that collective efficacy positively predicts the degree of engagement of young teachers with an impact coefficient of .48 and rejects the original hypothesis at least at the level of 1%. And the result of this test passes the covariance test and Durbin-Watson test. Therefore, it can be concluded that the increase in collective efficacy of young teachers will strengthen their job engagement. The research hypothesis H4 is valid.

(5) The effect of resilience on the job engagement of young teachers

In Table 14, it can be found that the $Adj.R^2$ of the model is .93 and passes the F test. Therefore, it can be judged that the regression model constructed in this paper on the effect of resilience on the degree of job engagement of young teachers is statistically significant and has an explanation rate of 92.60%, which has a high explanation rate. In addition, it can be found in Table 14 that resilience positively predicts the degree of job engagement of young teachers with an impact coefficient of .53 and rejects the original hypothesis at least at the level of 1%. And the result of this test passes the covariance test and Durbin-Watson test. Therefore, it can be concluded that the increase in resilience of young teachers will strengthen their job engagement. The research hypothesis H5 is established.

Table 13. Regression Results of Collective Efficacy on Young Teachers' Job Engagement

Modelling	Unstandardised Coefficient		Standardised Coefficient	p	Covariance Statistics	
	B	Standard Error	$Beta$		Tolerances	VIF
Constants	-.20	.10		.70		
Collective Efficacy	.47**	.12	.48**	.00	.40	2.13
R^2	.95			$Adj R^2$.94	
F	2017.64**			$D-W$	2.03	

Dependent variable: young teachers' job engagement; ** $p < .01$

Table 14. Regression Results of Resilience on Young Teachers' Job Engagement

Modelling	Unstandardised Coefficient		Standardised Coefficient	<i>p</i>	Covariance Statistics	
	<i>B</i>	Standard Error	<i>Beta</i>		Tolerances	<i>VIF</i>
Constants	-.23	.12		.65		
Resilience	.55**	.13	.53**	.00	.59	2.16
<i>R</i> ²	.94			<i>Adj R</i> ²	.93	
<i>F</i>	1151.22**			<i>D-W</i>	2.10	

Dependent variable: young teachers' job engagement; ***p*<.01

4.3.2 Mediating effect test

As can be seen in Table 15, in model 1, the regression coefficient of the independent variable sense of vocation and job engagement is ($\beta=.55$, $Adj.R^2=.36$) and is significant at the .01 level, which indicates that the sense of vocation has a significant positive effect on job engagement; in model 2, the mediator variable collective efficacy, and the mediator variable resilience are introduced, and at this time, the sense of vocation and the 2 mediator variables' The regression coefficients are ($\beta=.59$, $Adj.R^2=.32$), ($\beta=.46$, $Adj.R^2=.35$), indicating that the sense of vocation has a significant positive effect on Collective Efficacy and resilience of young teachers

(*p*<.01); on the basis of the effect of the sense of vocation on the degree of job engagement, the mediator variable of sense of collective efficacy and the mediator variable of resilience were introduced, at this time The regression coefficients of the sense of vocation and the 2 mediating variables are ($\beta=.51$, $Adj.R^2=.34$), ($\beta=.46$, $Adj.R^2=.32$), indicating that there is a significant positive mediating effect of collective efficacy, psychological toughness, etc. between the influence of the sense of vocation on the degree of job engagement of the young teachers, proving the establishment of hypotheses Me H6 and Me H7.

Table 15. Results of the Mediating Role Test between Sense of Vocation and Young Teachers' Job Engagement through Collective Efficacy and Resilience

Model	Independent Variables	Dependent Variables	<i>B</i>	<i>SE</i>	β	<i>T</i>	<i>Adj.R</i> ²	<i>F</i>
1	Sense of Vocation	Job Engagement	.62	.05	.55	13.30	.36	116.85**
2	Sense of Vocation	Collective Efficacy	.50	.05	.59	7.94	.32	141.89**
		Resilience	.53	.06	.46	13.63	.35	
3	Sense of Vocation	Job Engagement	.59	.06	.57	13.74	.35	164.81**
		Collective Efficacy	.36	.06	.51	10.06	.34	
		Resilience	.48	.05	.46	7.96	.32	

***p*<.01

5. Conclusion

5.1 Summary

This study focused on young teachers from 10 selected institutions in Jiangsu Province, including key universities, regular universities, and vocational colleges. Based on previous research and literature, and considering the relative independence of sense of vocation, regression models were constructed with Sense of vocation as the independent variable, job engagement as the dependent variable, and collective efficacy and resilience as mediating variables. Hypotheses were tested accordingly based on relevant analysis results.

5.2 Discussion

The results of this study on the direct relationships among variables such as sense of vocation, job engagement, collective efficacy, and resilience indicate that the sense of vocation has a significant positive impact on the job engagement of young teachers. This finding is consistent with the views of many scholars, such as Hu Enhua et al., who proposed that a sense of vocation can enhance employee work commitment and satisfaction. For young teachers, the sense of vocation, as an intrinsic motivation, can stimulate their enthusiasm and sense of responsibility for work, thereby improving their job engagement. The sense of vocation also has a significant positive impact on the collective efficacy of young teachers. This outcome aligns with Bandura's theory that an individual's career

beliefs positively influence the team's confidence level. This is because young teachers with a high sense of vocation are more likely to boost team morale and confidence, thereby enhancing collective efficacy.

Furthermore, the sense of vocation significantly positively affects the resilience of young teachers, similar to the findings of Liu Zhi et al., who considered a sense of vocation as a psychological resource to withstand work-related stress. For the young teachers studied in this article, this positive impact may be because a strong sense of vocation helps teachers better cope with challenges and pressures at work, thus strengthening their resilience.

Collective efficacy has a significant positive impact on the job engagement of young teachers, consistent with Vera et al. view that team confidence can significantly enhance members' work commitment. In this study, collective efficacy promotes job engagement by enhancing trust and collaboration among team members.

Resilience has a significant positive impact on the job engagement of young teachers, which is in line with Black et al. discovery that resilience is an important factor in enhancing work commitment. In this regard, teachers with high resilience are more capable of adapting to and overcoming difficulties at work, thereby maintaining high job engagement.

Moreover, the test results for the mediating effects of collective efficacy and resilience show that collective efficacy mediates between the sense of vocation and the job engagement of young teachers. This result supports the theory of Yuan Li and Li Li, who consider collective efficacy as an important bridge connecting personal beliefs and work performance. Thus, the sense of vocation among young teachers can indirectly improve job engagement by enhancing collective efficacy.

Resilience also plays a mediating role between the sense of vocation and the job engagement of young teachers, echoing the research by Cui Guodong et al. who regarded resilience as a key factor in achieving personal career goals. In this study, the sense of vocation enhances job engagement by strengthening resilience, helping teachers better face challenges.

5.3 Conclusion

Upon research, this study draws the following conclusions: Firstly, there is a significant positive correlation between each pair of variables such as sense of vocation, job engagement, collective efficacy, and resilience. Secondly, the sense of vocation among young teachers can significantly positively influence their job engagement. Next, collective efficacy and resilience play mediating roles in the impact of sense of vocation on the job engagement of young teachers. Finally, to enhance the job engagement of young teachers, this paper proposes the following suggestions: On one hand, universities should focus on guiding young teachers to form a strong sense of vocation; on the other hand, universities should concentrate on cultivating the collective efficacy of young teachers and strengthening their resilience, thereby increasing their job engagement.

5.4 Limitation and Prospects

While this study emphasizes the importance of the sense of vocation, collective efficacy, and resilience in enhancing the job engagement of young teachers and reveals their complex relationships, it also demonstrates through comparison with previous research that the interactions between these variables are multifaceted and universal across different environments and cultural backgrounds. However, there are still some limitations to this study. Firstly, as the research only utilized samples from the Jiangsu region, its results may not be directly generalizable to other areas of China. Considering the cultural and educational system differences across China, this limitation may affect the widespread applicability of the findings. Additionally, this study did not cover all possible factors that could influence the job engagement of young teachers, such as job satisfaction and career development opportunities, which might limit the explanatory power of the model. Meanwhile, the study primarily focused on the mediating roles of collective efficacy and resilience, without considering that these variables might also serve as moderating variables, thereby possibly overlooking their varying impacts on job engagement at different levels. Therefore, future research needs to further explore the aforementioned

limitations.

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