

Mediation Effects of Psychological Empowerment and Teachers' Professional Identity on Relationship Between Perceived Organizational Support and Teachers' Work Engagement of Higher Vocational Colleges in Anyang City, Henan Province

Yang Yantao¹, Sataporn Pruettikul² and Sukhoom Moonmuang^{3*}

¹Bachelor Student, Faculty of Education, Bangkokthonburi University, Bangkok 10170

²Lecturer, Faculty of Education, Bangkokthonburi University, Bangkok 10170

³Lecturer, Faculty of Education, Bangkokthonburi University, Bangkok 10170

Received: 21 November 2024

Revised: 20 December 2024

Accepted: 20 December 2024

Abstract

The research objectives were: 1) to develop a model of mediation effects of psychological empowerment (PE) and teachers' professional identity (TPI) on the relationship between perceived organizational support (POS) and teachers' work engagement (TWE) of Higher Vocational Colleges in Anyang City, and (2) to decompose the effects of POS, PE and TPI on TWE of Higher Vocational Colleges in Anyang City. The sample was 368 teachers from higher vocational institutions in the Anyang city, by proportional stratified random sampling method. The data were collected by a five-scale rating questionnaire. Data were analyzed by mean, standard deviation, confirmation factor analysis and structural equation model.

The result found that; 1) the model of mediation effects of psychological empowerment and teachers' professional identity on relationship between perceived organizational support and teachers' work engagement of Higher Vocational Colleges in Anyang city was fit well with empirical data ($X^2/df=2.892$, $GFI=0.947$, $NFI=0.969$, $IFI=0.979$, $CFI=0.979$, $TLI=0.970$, $RMSEA=0.072$) and 2) the perceived organizational support had a positive direct effect on teachers' work engagement and psychological empowerment. The psychological empowerment had a positive direct effect on teachers' professional identity, and teachers' professional identity had direct effect on teachers' work engagement. Moreover, perceived organizational support had indirect effect on teachers' work engagement through psychological empowerment and teachers' professional identity, there were mediation effect.

Keyword: Psychological Empowerment; Teachers' Professional Identity; Perceived Organizational Support; Teachers' Work Engagement

*Corresponding Author: yht2008good@126.com



Introduction

In the evolving landscape of higher vocational education, particularly within institutions in Anyang City, Henan Province, enhancing teachers' work engagement has become a pressing concern. As the demand for innovative and versatile talents escalates in response to rapid technological advancements, the role of educators in shaping this talent pool is more critical than ever (Lin Jiahao, 2019). However, despite the importance of teachers in driving educational outcomes, several challenges undermine their effectiveness and engagement.

Higher vocational colleges are tasked with preparing students for the dynamic demands of the modern workforce, yet many institutions face significant issues related to the engagement and motivation of their teaching staff. Teachers often report a lack of organizational support, which manifests in low job satisfaction, diminished enthusiasm for teaching, and a general decline in work performance. This is compounded by high teacher turnover rates and a weakening sense of belonging within these institutions. Such issues not only impact the quality of education but also hinder the development of students who are expected to thrive in an increasingly complex job market. (Zhao Jinwei, 2020).

On perceived organizational support plays a crucial role in shaping of teachers' work engagement which the mechanisms through psychological empowerment and teacher professional identity are two critical factors that mediate this relationship. Understanding how these factors mediate the relationship between perceived organizational support and teachers' work engagement is essential for developing effective strategies to enhance engagement (Tang Bianqin, 2022). Despite the theoretical significance of these mediators, there is a gap in empirical research specifically addressing their impact within the context of higher vocational colleges in Anyang City, Henan Province. This research aims to fill this gap by investigating how psychological empowerment and teacher professional identity mediate the relationship between perceived organizational support and teachers' work engagement.

Research Objectives

1. To develop model of the mediation effects of psychological empowerment and Teacher professional identity on the relationship between Perceived organizational support and Teachers' work engagement of Higher Vocational Colleges in Anyang City, Henan Province.
2. To decompose the direct effects and indirect effect of Perceived organizational support, psychological empowerment and Teacher professional identity on Teachers' work engagement of Higher Vocational Colleges in Anyang City, Henan Province.

Research Hypothesis

H1: Perceived organizational support has a significant positive effect on Teachers' work engagement.

H2: Perceived organizational support has a significant positive effect on psychological empowerment.

H3: Perceived organizational support has a significant positive effect on Teacher professional identity.

H4: Psychological empowerment has a significant positive effect on Teachers' work engagement.

H5: Teacher professional identity has a significant positive effect on Teachers' work engagement.

H6: Psychological empowerment has a significant positive effect on Teacher professional identity.

H7: Perceived organizational support has significant indirect effect on Teachers' work engagement via psychological empowerment.

H8: Perceived organizational support has significant indirect effect Teachers' work engagement via Teacher professional identity.

H9: Perceived organizational support has significant indirect effect on Teachers' work engagement via psychological empowerment and Teacher professional identity.

Conceptual Framework

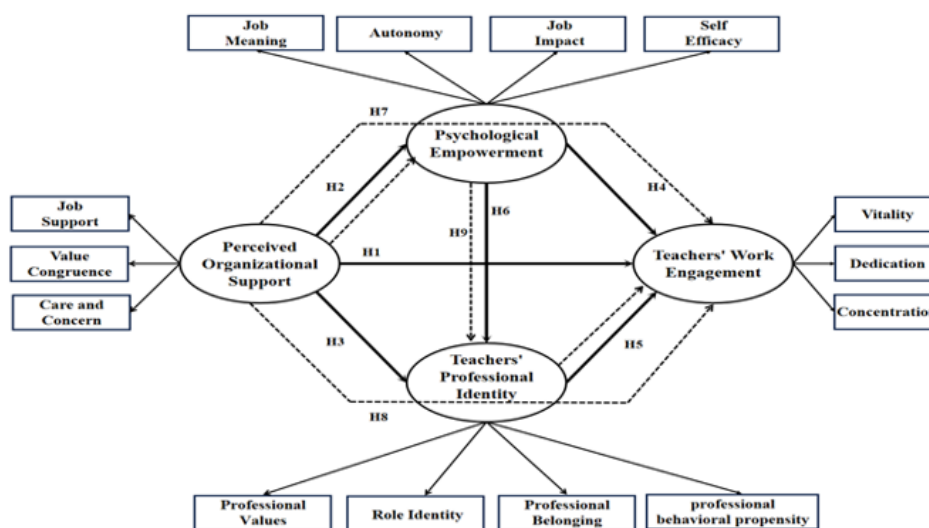


Figure 1 Conceptual framework

Research Design

In this research, there were three research objectives, so the researcher design was divided into three parts according to the research objectives.

Part 1: To develop model of the mediation effects of psychological empowerment (PE) and Teacher professional identity (TPI) on the relationship between perceived organizational support (POS) and teachers' work engagement (TWE) of Higher Vocational Colleges in Anyang City, Henan Province. In this part, the researcher conducted literature review and relevant theoretical research on the POS, PE and TPI affecting on the TWE in Higher Vocational Colleges in Anyang City, Henan Province, determined the model of mediation effects of PE and TPI on the relationship between POS and TWE and developed the model by confirmatory factor analysis.

Part 2: To decompose the direct effects and indirect effect of POS, PE and TPI on TWE of Higher Vocational Colleges in Anyang City, Henan Province. In this part, based on the first part and this part of this research, through the analysis of the questionnaire survey results, the researcher studied the direct effects and indirect effect of POS, PE and TPI on TWE and analyzed structural equation models by AMOS.

The population of this research were the teachers who were working in higher vocational colleges in the Anyang City. Include three colleges, Anyang Vocational and Technical College, Henan Vocational College of Nursing, Anyang Preschool Education College, total 2,217 teachers. The sample was 368, determined by G*power (Faul, et al. 2007)., and using stratified random sampling method.

The data was collected by a five-point scale rating questionnaire, which there were reliability of each factor between 0.854 to 0.908, validity of each item was between 0.06 to 1.00. and data were analyzed by descriptive statistic, confirmatory factor analysis and structural equation models.

Research Result

1. Demographic Information Analysis

The researchers conducted a questionnaire survey on teachers in college in Anyang city under Henan Province. Among them 368 questionnaires were sent out, and response rate 100%. Demographic Information were presented in Table1.

Table 1 Demographic Information

Variable	Option	Frequency	Percent
Gender	Male	76	20.7
	Female	292	79.3
Age	<30	79	21.5
	31-40	178	48.4
	41-50	73	19.8
	>=51	38	10.3
Experience	<5	110	29.9
	6-10	99	26.9
	11-15	53	14.4
	16-20	21	5.7
	21-25	25	6.8
	>26	60	16.3
Educational level	Bachelor	225	61.1
	Master	133	36.1
	PhD	10	2.7

The basic information of 368 valid respondents from this survey, the samples majority of respondents was females (79.30%), In terms of age, respondents aged 31-40 were the majority at 48.4%. For years of teaching experience, those with less than 5 years (29.9%), Concerning on educational level, 61.10 % were bachelor level.

2. Descriptive Statistic

The data from questionnaire could be descriptive analyzed as Table 2;

Table 2 Descriptive statistic

Variable	Item	Mean	SD	CV%	Skewness	Kurtosis
POS	POS1	3.75	0.75	19.55	-0.42	0.21
	POS2	3.52	0.71	20.28	-0.09	0.75
	POS3	3.38	0.80	23.70	-0.12	0.41
TWE	TWE1	3.73	0.76	20.40	-0.43	0.39
	TWE2	3.90	0.76	19.63	-0.48	0.01
	TWE3	3.82	0.78	20.44	-0.38	-0.02
PE	PE1	3.82	0.86	22.55	-0.41	-0.12
	PE2	3.81	0.78	20.62	-0.31	0.11
	PE3	3.69	0.84	22.82	-0.21	-0.35
	PE4	3.07	0.96	31.42	0.26	-0.48
TPI	TPI1	4.32	0.72	16.57	-1.19	1.98
	TPI2	4.10	0.75	18.33	-1.06	1.81
	TPI3	3.98	0.76	19.05	-0.85	1.28
	TPI4	4.34	0.66	15.16	-1.46	3.97

From Table 2, the all level of variables was mean between 3.07 to 4.34, which was at a high level. The standard deviation of them was between 0.66 to 0.96 and the coefficient of variation was between 15.16% to 31.42%, indicating that it was a moderate dispersion. The skewness for the variables was between -1.46 to 0.26, the kurtosis was between -0.48 to 3.97, so the result shows all variable had normality distributed.

3. Confirmation Factor analysis model

Confirmatory factor analysis (CFA) was used to test whether the relationship between factors and test items conforms to the designed research model.

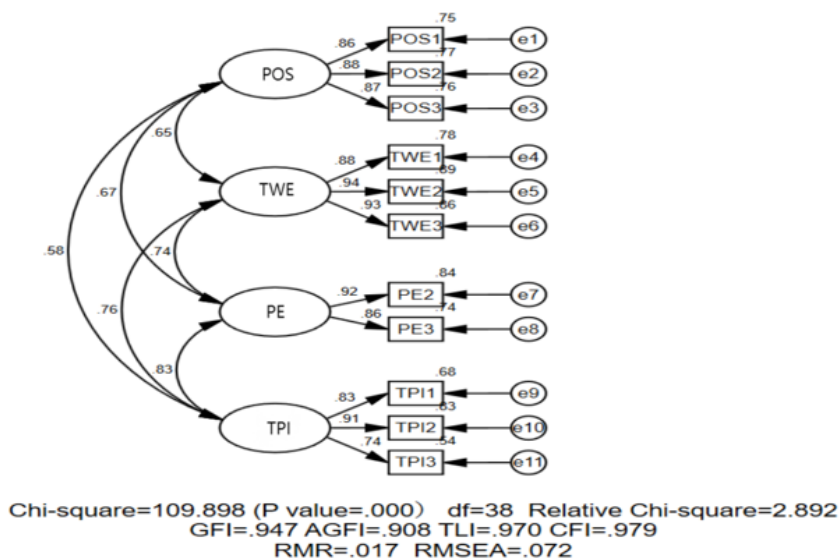


Figure 2 Measurement Model

From the figure 2; that the $X^2/df = 2.892$, GFI = 0.947, TLI = 0.970, CFI = 0.979, NFI = 0.969, RMSEA = 0.072, SRMR = 0.030, that shown the model fit well with empirical data, the factors loading as the table 3.

Table 3 Factor loading all factors and all were statistically analysis.

Relationship	Unstandardized	Standardized	S.E.	C.R.	p	CR	AVE
POS1<---POS	1	0.864				0.905	0.760
POS2<---POS	0.989	0.879	0.046	21.548	<0.001		
POS3<---POS	1.102	0.872	0.052	21.30	<0.001		
TWE1<---TWE	1	0.881				0.941	0.841
TWE2<---TWE	1.074	0.941	0.038	27.963	<0.001		
TWE3<---TWE	1.084	0.929	0.040	27.25	<0.001		
PE2<---PE	1	0.918				0.790	0.883
PE3<---PE	1.004	0.859	0.046	21.894	<0.001		
TPI1<---TPI	1	0.826				0.866	0.685
TPI2<---TPI	1.158	0.911	0.056	20.703	<0.001		
TPI3<---TPI	0.944	0.737	0.060	15.716	<0.001		

Based on the data in the table, the standardized factor loadings for each measurement item were all above 0.5, and the Composite Reliability (CR) values were above 0.7. The statistical measures of Standard Error (S.E.) and Critical Ratio (C.R.) p-values less than 0.001, the quality of measurement model as table 4

Table 4 Shown the quality of measurement model

Factors	CR	AVE	POS	TWE	PE	TPI
POS	0.905	0.760	0.872			
TWE	0.941	0.841	0.655	0.917		
PE	0.790	0.883	0.674	0.736	0.940	
TPI	0.866	0.685	0.579	0.760	0.831	0.828

From table 4 Shown 1) Reliability, it was summarized that the composite (CR) of four factors between from 0.790 to 0.941 with over 0.7, that pointed all factors has acceptable reliability. 2) The Average Variance Extracted (AVE) range from 0.685 to 0.883 which over than 0.5, indicating sufficient convergent validity or the measure model had quality in term of content validity., and 3) it was summarized that the number on diagonal represents the square root of AVE, in this studied the Fornell and Larcker (1981) criterion was used to measure of discriminant validity and the square root of all AVE, was greater than the correlation coefficient between all the other latent variables.

From the table 4; slightly higher correlation TPI (0.831) vs. PE (0.828) might be statistically acceptable. (Hair, et al. 2017).

5. Specific model standardized estimates

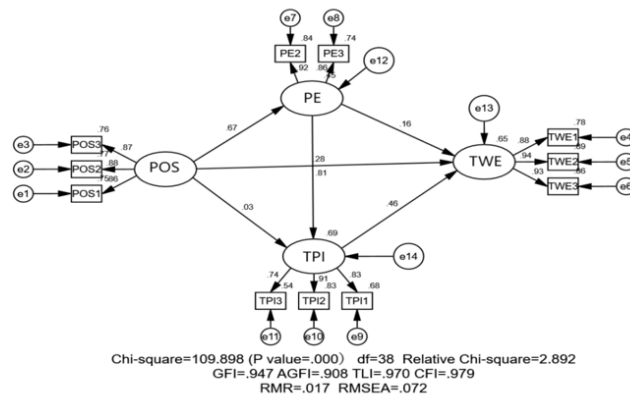


Figure 3 Structural equation model

According to the above figure 3, the $X^2/df = 2.892$, $GFI=0.947$, $AGFI=0.908$, $NFI=0.969$, $IFI=0.979$, $CFI=0.979$, $TLI=0.970$, $RMSEA = 0.072$. All the indicators were goodness of fit with the empirical data, so it can be fully explained the structural equation model.

From the structural equation model above, the effects of perceived organizational support (POS) on teachers' work engagement (TWE) of Higher Vocational Colleges in Anyang City under Henan Province. Result as the Table 5.

Table 5 Shown regression weights in standardized and unstandardized direct effects

Relationship	Unstandardized	S.E.	C.R.	P	Standardized	Hypothesis
TWE<---POS	0.264	0.052	5.078	***	0.275	H1
PE<---POS	0.695	0.053	13.158	***	0.674	H2
TPI<---POS	0.027	0.047	0.577	0.564	0.034	H3
TWE<---PE	0.153	0.086	1.789	0.074	0.165	H4
TWE<---TPI	0.557	0.102	5.441	***	0.464	H5
TPI<---PE	0.626	0.058	10.828	***	0.808	H6

*** $p < 0.001$

The analysis results indicate that four hypotheses (H1, H2, H5, and H6) had a positive direct effect and were accepted at a statistically significant level of .001. However, two hypotheses (H3 and H4) were not accepted.

5.1 Testing for direct effect hypothesis

Hypothesis (H1); perceived organizational support had a significant positive effect on teachers' work engagement, and had a significant positive effect on PE (H2), TPI had a significant positive effect on teachers' work engagement (H5), PE had a significant positive impact on TPI (H6), but perceived organizational support had no a significant effect on TPI (H3), and PE had no a significant positive effect on teachers' work engagement (H4).

5.2 Testing for indirect effect hypothesis

The result for hypothesis testing indirect effects of POS on TWE as the table 6

Table 6 Hypothesis testing of indirect effects

Relationship	Effects	Bootstrap 95%		p	Hypothesis
		Lower	Upper		
TWE<--PE<-- POS	0.106	-0.048	0.251	0.145	H7
TWE<--TPI<--POS	0.015	-0.055	0.093	0.669	H8
TWE<--TPI<--PE<--POS	0.242	0.140	0.403	<0.001	H9

From Table 6, Hypothesis 7 (H7): POS had not indirect effect on TWE via PE, and Hypothesis 8 (H8): POS had not indirect effect on TWE via TPI, but Hypothesis 9 (H9): POS had significant indirect effect on TWE via both PE and TPI.

5.3 Decomposition of effects factors Perceived Organizational Support on Teachers' Work Engagement

For the decomposed the effect of POS on TWE could be show in the table 7

Table 7 Decomposition of effects factors POS on TWE, and spurious effect.

Parameter	Effects	effect proportional (%)
Correlation	0.610	-
Direct Effect	0.264	43.28
Indirect Effect	0.242	39.67
Total Effect	0.506	82.95
Spurious effect	0.104	17.05

From the table 7, The results on decomposed the effect of POS affecting TWE, which the POS had a significant direct effect on the TWE was 0.264 (43.28%) and had indirect effect through mediation effect was 0.242 (39.67%), Total effect was 0.628 (82.95%), Moreover, it was spurious effect 0.104 (17.05%)

Conclusion

The result found that; (1) the perceived organizational support was contained three components namely; job support, value congruence, care and concern. The teachers' work engagement was contained three components namely; vitality, dedication, and concentrations. The psychological empowerment was four components namely; job meaning, autonomy, job impact, self-efficacy, and the teachers' professional identity were four components namely; professional values, role identity, professional belonging, and professional behavioral propensity., (2) the model of mediation effects of psychological empowerment and teachers'

professional identity on Relationship between perceived organizational support and teachers' work engagement of Higher Vocational Colleges in Anyang city was fit well with empirical data ($\chi^2/df=2.892$, GFI=0.947, NFI=0.969, IFI=0.979, CFI=0.979, TLI=0.970, RMSEA=0.072), and (3) The perceived organizational support had a positive direct effect on teachers' work engagement and PE. PE had a positive direct effect on teachers' professional identity, and teachers' professional identity had direct effect on teachers' work engagement. Moreover, perceived organizational support had indirect effect on teachers' work engagement through psychological empowerment and teachers' professional identity, there were as co-mediation effect.

Discussion

The perception of organizational support (POS) has a significant effect on teacher work engagement (TWE) (H1). When teachers feel that their organization values their contributions and cares about their well-being, it enhances their job satisfaction, which is a critical driver of engagement. High POS often leads to better working conditions, recognition, and opportunities for professional growth, all of which increase teachers' enthusiasm and dedication to their work. Overall, a high level of perceived support from the organization creates a more positive and engaging work experience for teachers (Eisenberger, Cummings, Armeli, & Lynch, 1997). Furthermore, POS has a positive effect on psychological empowerment (PE) (H2). POS enhances PE by increasing employees' sense of competence and meaningfulness in their roles. When employees perceive strong support from their organization, they receive better resources and feedback, which boosts their confidence and skills (Spreitzer, 1995).

Teacher professional identity (TPI) has a direct effect on TWE (H5) by shaping teachers' sense of purpose, commitment, and satisfaction in their roles. When teachers have a strong professional identity, they are more likely to feel invested in their work, leading to higher levels of engagement. A strong professional identity enhances the perception of work as meaningful, thereby increasing engagement (Beauchamp & Thomas, 2009). Additionally, PE has a direct effect on TPI (H6). Empowerment boosts self-efficacy, leading individuals to feel more competent and confident in their roles, thus reinforcing their professional identity (Bandura, 1997). When individuals feel empowered, they are likely to show a stronger commitment to their profession, enhancing their professional identity (Mowday, Steers, & Porter, 1979).

Meanwhile, teacher professional identity (TPI) had no significant direct effect on teacher work engagement (TWE) (H3), and psychological empowerment (PE) also had no significant direct effect on TWE (H4). This may be because PE does not necessarily translate into actual autonomy in practice. Teachers might feel empowered but still face rigid administrative

constraints that limit their engagement (Spreitzer, 1995). Additionally, if PE initiatives are inconsistently implemented or poorly communicated, their impact on engagement may be diminished (Lee & Raschke, 2016).

Moreover, the test results found that POS had an indirect effect on TWE through PE and TPI. There was a significant mediating effect because POS enhances teachers' perceptions of their value within the organization. When teachers feel supported by their organization, they are more likely to experience psychological empowerment, which boosts their sense of autonomy, competence, and impact at work. This empowerment, in turn, strengthens their professional identity by aligning their roles with personal values and enhancing their commitment. As a result, both psychological empowerment and a strong professional identity act as mediators that translate perceived organizational support into higher work engagement. A supportive environment fosters conditions that enhance teachers' motivation and satisfaction, leading to more active and committed engagement in their roles (Rhoades & Eisenberger, 2002).

Recommendations

1. For Teachers: Actively engage with support systems provided by your organization. This proactive approach can help you feel valued and empowered, and reflect on and align your teaching practices with your personal values and beliefs. Engage in self-assessment and professional growth activities to strengthen your sense of identity and purpose.

2. For Administrators: Create and maintain a positive organizational climate that emphasizes recognition and appreciation of teachers' efforts and enhance teachers' perceptions of support, and offer opportunities for teachers to develop their skills and advance their careers. So, this research enhances PE and also reinforces TPI.

3. For Colleges: Integrate principles of POS into the college's culture. Encourage faculty members to support one another and build strong professional relationships, and Implement programs that focus on PE, such as leadership training, self-efficacy workshops, and initiatives that promote teachers' sense of impact and competence.

4. For the future research; Examine other potential moderators (e.g., individual differences, work environment characteristics) and mediators (e.g., job satisfaction, burnout) that might influence the relationships between POS, PE, TPI, and TWE,

References

- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. W. H. Freeman and Company.
- Beauchamp, C., & Thomas, L. (2009). "Understanding Teacher Identity: An Overview of Issues and Debates in the Literature." *Cambridge Journal of Education*, 39(2), 175-189.
- Eisenberger, R., Cummings, J., Armeli, S., & Lynch, P. (1997). Perceived organizational support, discretionary treatment, and job satisfaction. *Journal of Applied Psychology*, 82(5), 812-820.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). *G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences*. Behavior Research Methods, 39(2), 175-191. <https://doi.org/10.3758/BF03193146>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). Sage Publications.
- Lee, J., & Raschke, M. (2016). "Organizational Constraints and Work Engagement: A Meta-Analysis." *Journal of Organizational Behavior*, 37(8), 1155-1177.
- Lin Jiahao (2019). *Research on the Relationship among Organizational Support, Well-being and Job engagement of University Teachers*. (Master's Degree of Mental health Education, Fujian Normal University).
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The Measurement of Organizational Commitment. *Journal of Vocational Behavior*, 14(2), 224-247.
- Rhoades, L., & Eisenberger, R. (2002). "Perceived Organizational Support: A Review of the Literature." *Journal of Applied Psychology*, 87(4), 698-714.
- Spreitzer, G. M. (1995). "Psychological Empowerment in the Workplace: Dimensions, Measurement, and Validation." *Academy of Management Journal*, 38(5), 1442-1465.
- Tang Bianqin. (2022). *A study on the current situation and relationship between the sense of organizational support, psychological empowerment and work engagement of pioneer counselors*. Master's Degree of Children Organization and Ideological Education, Guangxi Normal University.
- Zhao Jinwei. (2020). *Research on the Influence of Perceived Organizational Support on Work Engagement of Young University teachers ——The Mediator Role of Positive Emotion and The Moderator Role of Individual Traditionality*. Master's Degree of Education Management, Shanxi University of Finance and Economics).