MEDIATION EFFECTS OF PSYCHOLOGICAL CAPITAL AND ORGANIZATIONAL COMMITMENT ON RELATIONSHIP BETWEEN INCLUSIVE LEADERSHIP AND PROACTIVE BEHAVIOR IN ANYANG PUBLIC HIGHER VOCATIONAL COLLEGES IN HENAN PROVINCE



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Abstract

The objectives of this research were: (1) to study the components of inclusive leadership, proactive behavior, organizational commitment, and psychological capital in Anyang public higher vocational colleges in Henan province, (2) to develop a model of the mediating effect of organizational commitment and psychological capital on the relationship between inclusive leadership and proactive behavior in Anyang public higher vocational colleges in Henan Province, and (3) to analyze the effects of organizational commitment and psychological capital on the relationship between inclusive leadership and proactive behavior in Anyang public higher vocational colleges in Henan Province. The sample size was determined by G*Power software, totaling 478 teachers from public higher vocational colleges and obtained by a stratified random sampling method. The data collection a five-point rating questionnaire. The data were analyzed by descriptive statistical, Confirmatory Factor Analysis (CFA), and Structural Equation Modeling (SEM).

The results showed that (1) The components of inclusive leadership, proactive behavior, organizational commitment and psychological capital in Anyang vocational colleges in Henan Province had good fit with the empirical data; (2) The developed structural equation model of influence was found to have good validity and consistency with the empirical data, and the components of inclusive leadership, organizational commitment and psychological capital had a direct positive influence on proactive behavior; and (3) Organizational commitment and psychological capital mediated the relationship between inclusive leadership and teachers' proactive behavior in public higher vocational colleges in Anyang City, Henan Province.

Keywords: Inclusive leadership, Proactive behavior, Organizational commitment, Psychological capital, Public higher vocational colleges.

Introduction

Today, the world has entered an era of Volatility, Uncertainty, Complexity and Ambiguity (Li Ping, 2020). At the same time, higher vocational colleges are facing unprecedented challenges and opportunities. Among the elements that make up the school organizational system, people are the core, most critical, and fundamental factor. If schools want to survive and develop in a complex, ever-changing and highly competitive external environment, one of the keys is to stimulate teachers' subjective initiative, encourage teachers

to take the initiative to take on internal and external tasks, and change "passive obedience" to "proactive action" (Yuan Xiaoping et al.,2022). It has been shown that among the many antecedent variables affecting employees' proactive behavior, leadership style is its important variable. As an emerging leadership style, inclusive leadership emphasizes respect for diversity, openness, and cooperation, creating a good and relaxed organizational atmosphere and giving employees a sense of security, while providing them with broader space and opportunities for development (Zhu Yu & Qian Shuting, 2014). Combing through the literature, it is found that in recent years inclusive leadership style and employee proactive behavior have become buzzwords in the management and positive psychology circles at home and abroad, but less attention has been paid to inclusive leadership style and proactive behavior in China's education sector.

At the same time, a large number of studies have pointed out that leadership style can affect organizational commitment (Chen Xiaotun et al. 2021) found that organizational commitment has a mediating effect between employees' sense of job gain and work initiative. In addition, studies have found that psychological capital can influence individuals and play an important role in influencing individual cognition and behavior, such as a significant positive effect on an individual's proactive behavior, organizational commitment, etc.

In summary, this research attempts for the first time to explore the effects of inclusive leadership of high vocational college administrators on teachers' proactive behaviors through an innovative research design based on social exchange theory, positive psychology theory, and resource preservation theory, and to further explore the mediating effects of psychological capital and organizational commitment with the aim of providing empirical evidence for the implementation of inclusive leadership by high vocational college administrators and the enhancement of teachers' psychological capital and organizational commitment, which will in turn improve teachers' proactive behavior. At the same time, it provides new ideas for school administrators to improve teachers' proactive behavior management practices.

Research Objectives

- 1. To study the components of inclusive leadership, proactive behavior, organizational commitment and psychological capital in Anyang public higher vocational colleges in Henan Province.
- 2. To development model of the mediating effect of organizational commitment and psychological capital on the relationship between inclusive leadership and proactive behavior in Anyang public higher vocational colleges in Henan Province.
- 3. To analyze the mediation effect of organizational commitment and psychological capital on the relationship between inclusive leadership and proactive behavior in Anyang public higher vocational colleges in Henan Province.

Research Hypothesis

- H1: Inclusive leadership has a positive effect on teachers' proactive behavior.
- H2: Inclusive leadership has a positive effect on organizational commitment.
- H3: Inclusive leadership has a positive effect on psychological capital.
- H4: Organizational commitment has a positive effect on teachers' proactive behavior.
- H5: Psychological capital has a positive effect on teachers' proactive behavior.
- H6: Psychological capital has a positive effect on organizational commitment.
- H7: Organizational commitment plays a mediating effect between inclusive leadership and teachers' proactive behaviors.
- H8: Psychological capital plays a mediating effect between inclusive leadership and teachers' proactive behaviors.
- H9: Psychological capital mediates the relationship between inclusive leadership and teachers' proactive behaviors through organizational commitment.

Research Conceptual Framework

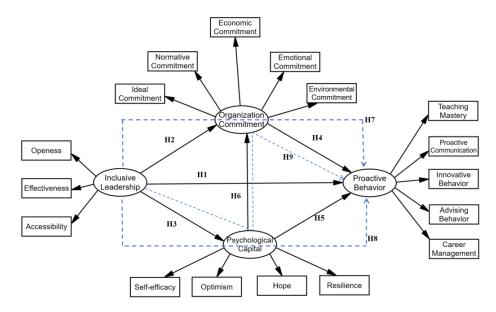


Figure 1 Conceptual framework of this research

"Inclusive leadership" was used as the independent latent variable in this research and consisted of three dimensions, which were openness, effectiveness, and accessibility (Carmeli et al., 2010).

"Proactive behavior" was used as the dependent latent variable, including five dimensions: teaching mastery, proactive communication, innovative behavior, advising behavior, and career management (Xu Weiwei, 2013).

"Organizational commitment" as a mediator latent variable which included five dimensions: ideal commitment, normative commitment, economic commitment, emotional commitment, and environmental commitment (Wang Fenghui, 2010).

"Psychological capital" was used as a mediating latent variable which consisted of four dimensions: self-efficacy(confidence), optimism, hope, and resilience (Luthans et al.,2006).

Research Methodology

This research utilized quantitative research methods.

1. Population and Sample

The population were teachers from who were teaching in three public higher vocational colleges in Anyang City, Henan Province, totaling 2,217. Sample were selected by using the proportional stratified random sampling technique. Sample size were calculated by G*Power software, the minimum requirement was 478 samples.

2. Data collection

Data collection was used the online through the questionnaires which were distributed through the Chinese website "Questionnaire Star", and 478 questionnaires were distributed and subsequently 478 were returned.

3. Data analysis

Descriptive statistics were analyzed to describe the demographic data, and the observed variables. The CFA modeling was used to constructed the measurement model, and the SEM was used to test the hypotheses.

Research Results

1. Demographic Information Analysis

The information of respondents as Table 1.

Table 1 Frequencies, percent and cumulative percent

sai	mple	Counts	% of Total	Cumulative %
Gender	Male	194	40.6 %	40.6 %
	Female	284	59.4 %	100.0 %
	<25	59	12.3 %	12.3 %
Age group	26-35	171	35.8 %	48.1 %
	36-45	213	44.6 %	92.7 %
	>45	35	7.3 %	100.0 %
	Undergraduate	198	41.4 %	41.4 %
Education level	Master's degree	249	52.1 %	93.5 %
	Ph.D.	31	6.5 %	100.0 %
	<6 years	294	61.5 %	61.5 %
Working Experience	6-10 years	104	21.8 %	83.3 %
	>10 years	80	16.7 %	100.0 %

The demographic information presented in Table 1 provided a breakdown of the sample group based on various characteristics. The majority of respondents consisted of 478 participants were female, (59.40 %), age group was between 36-45 years (44.60%), education level was master's degree (52.10), and work experience was less than 6 years.

2. Descriptive statistics

The descriptive statistic for data analysis as Table 2.

	n	Mean	SD	Skewness	SE	Kurtosis	SE
IL1	478	3.43	1.07	-0.658	0.112	-1.14	0.223
IL2	478	3.45	1.08	-0.701	0.112	-1.11	0.223
IL3	478	3.42	1.10	-0.648	0.112	-1.11	0.223
PB1	478	3.44	1.08	-0.644	0.112	-1.18	0.223
PB2	478	3.43	1.14	-0.701	0.112	-1.17	0.223
PB3	478	3.43	1.09	-0.685	0.112	-1.13	0.223
PB4	478	3.43	1.11	-0.692	0.112	-1.14	0.223
PB5	478	3.40	1.12	-0.691	0.112	-1.15	0.223
OC1	478	3.42	1.13	-0.689	0.112	-1.23	0.223
OC2	478	3.44	1.16	-0.63	0.112	-1.10	0.223
OC3	478	3.27	1.19	-0.35	0.112	-1.11	0.223
OC4	478	3.45	1.11	-0.649	0.112	-1.10	0.223
OC5	478	3.40	1.14	-0.699	0.112	-1.20	0.223
PC1	478	3.42	1.07	-0.66	0.112	-1.02	0.223
PC2	478	3.42	1.06	-0.643	0.112	-1.03	0.223
PC3	478	3.46	1.09	-0.668	0.112	-1.02	0.223
PC4	478	3.42	1.08	-0.651	0.112	-1.05	0.223

The descriptive statistics in Table 2 provided a detailed overview of the central tendency, dispersion, and shape of the distribution for various variables. The results suggested that the data were relatively normally distributed with slight deviations, as indicated by the skewness and kurtosis values. The consistent means and moderate standard deviations also pointed to a reasonably homogeneous set of responses across the items.

3. Measurement model analysis (CFA)

(1) Assumption checks for CFA analysis

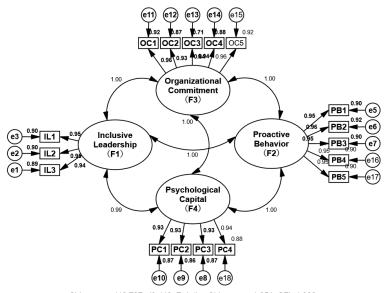
Table 3 Mardia's coefficients

	Coefficient	Z	χ^2	df	p
Skewness	12.70		1013	969	0.16
Kurtosis	322.50	-0.21			0.83

Table 3 presented Mardia's coefficients for skewness and kurtosis, which were used to assess multivariate normality in the data. The results indicated that the data did not significantly deviate from multivariate normality. Both tests had p-values greater than 0.05, suggesting that the assumptions of normality were not violated, and the maximum Likelihood (ML) model estimation could be used for the CFA model (Kline, R. B., 2023).

(2) CFA Model Evaluation

Measurement Model Analysis Standardized Estimate



Chi-square=118.797 df=113 Relative Chi-square=1.051 CFI=1.000 TLI=1.000 RMSEA=.010 RMR=.006

Figure 2 Confirmatory Factor model in standardized

Table 4 Measurement model fit valuation after modifying

Label	Estimate	Threshold	Interpretation
χ^2	119	1	
DF	113	1	
χ^2/DF	1.053	Between 1-3	Excellent
CFI	1.000	>0.9	Excellent
TLI	1.000	>0.9	Excellent
SRMR	0.006	< 0.08	Excellent
RMSEA	0.011	< 0.08	Excellent

Table 4 showed the CFA model evaluation, the fit indices after modified, the chi-square value was reported as 119 with degrees of freedom of 113. The ratio of chi-square to degrees of freedom was 1.053. This suggested an excellent fit of the model to the empirical data. The CFI was 1.000, The TLI was also 1.000, the SRMR value was 0.004, and the RMSEA was 0.011. Indicated that the measurement model fit well to the empirical data.

(3)	Factor	loadings	analysis

Table 5	Table 5 Unstandardized standardized estimated factor loading and statistic testing							
Latent	Observed	Estimate	SE	Lower	Upper	β	Z	р
F1	IL1	1.000	0.000	1.000	1.000	0.950		
	IL2	1.005	0.022	0.963	1.047	0.949	46.4	< .001
	IL3	1.025	0.023	0.981	1.070	0.944	45.3	< .001
F2	PB1	1.000	0.000	1.000	1.000	0.947		
	PB2	1.067	0.022	1.024	1.110	0.960	48.5	< .001
	PB3	1.016	0.022	0.973	1.059	0.950	46.1	< .001
	PB4	1.030	0.022	0.987	1.074	0.951	46.2	< .001
	PB5	1.042	0.023	0.998	1.087	0.951	46.3	< .001
F3	OC1	1.000	0.000	1.000	1.000	0.961		
	OC2	0.996	0.022	0.952	1.039	0.932	44.9	< .001
	OC3	0.924	0.030	0.865	0.982	0.840	30.8	< .001
	OC4	0.955	0.021	0.914	0.996	0.936	45.9	< .001
	OC5	1.010	0.019	0.973	1.047	0.961	53.4	< .001
F4	PC1	1.000	0.000	1.000	1.000	0.932		
	PC2	0.986	0.025	0.936	1.035	0.928	38.9	< .001
	PC3	1.015	0.026	0.965	1.065	0.934	39.8	< .001
	PC4	1.008	0.025	0.959	1.058	0.936	40.1	< .001

Table 5 presents the factor loadings of observed variables on four latent constructs: Inclusive Leadership (F1), Proactive Behavior (F2), Organizational Commitment (F3), and Psychological Capital (F4). All factor loadings were statistically significant, with z-values all statistically significance (P<0.001), reviled that all observed variables are not zero and could be used as indicators of all latent variables.

(4) Quality of measurement model

Table 6 Reliability Indices

Variable	α	ω ₁	W 2	W 3	AVE
F1	0.963	0.963	0.963	0.963	0.898
F2	0.98	0.98	0.98	0.979	0.906
F3	0.967	0.967	0.967	0.967	0.856
F4	0.964	0.964	0.964	0.964	0.869

1) Reliability

The reliability indicators in Table 6 show that all factors have high internal consistency, and each factor's Cronbach's alpha (α) value is greater than 0.96. The McDonald's omega coefficients (ω_1 , ω_2 , ω_3) for each factor were also very high and aligned closely with the α values.

2) Convergent Validity

The Average Variance Extracted (AVE) values for the factors were all more than .80, which was above the recommended threshold of 0.50, indicating all observed variables were good indicators of latent variables.

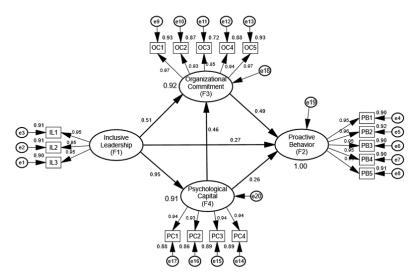
3) Discriminant validity

Table 7 Heterotrait-monotrait (HTMT) ratio of correlations					
	F1	F2	F3	F4	
F1	1.000	0.998	0.999	0.994	
F2	0.996	1.000	0.999	0.997	
F3	0.999	0.999	1.000	0.999	
F4	0.994	0.997	0.999	1.000	

Data analysis in Table 7 showed discriminant validity using the Heterotrait-Monotrait (HTMT) ratio of correlations. The results showed the ratio of correlations were more than the threshold of .90 (Hu& Bentler,1999), indicating that the discriminant.

5. Structural Equation Model (SEM)(1) SEM Model Evaluation

Inclusive Leadership Standardized estimates



Chi-square = 396.311, df= 115, Relative Chi-square= .000, 3.446 CFI=.982 TLI=.978, RMSEA = .072

Figure 3 Structural Equation Models and Model Evaluation in standardized Figure 3 presents a standardized structural equation model, illustrating the relationships between Inclusive Leadership (F1), Organizational Commitment (F3), Psychological Capital (F4), and Proactive Behavior (F2). The model's fit indices indicated an excellent validity between the factors (F1, F2, F3, and F4) might not have been adequately established.

(2) Hypothesis testing

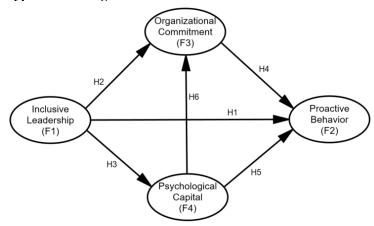


Figure 4 The Hypotheses of The Effects Between the Exogenous on The Endogenous Variables

Conclusion

The research finding, the results of the research objection are as follows: In the direct effect, inclusive leadership has a positive and significant effect on teachers' proactive behavior, organizational commitment, and psychological capital; organizational commitment and psychological capital have a positive and significant effect on teachers' proactive behavior; and psychological capital has a positive and significant effect on organizational commitment, inclusive leadership has a significant and positive effect on teachers' proactive behavior through organizational commitment; inclusive leadership has a significant and positive effect on teachers' proactive behavior through psychological capital; and inclusive leadership has a significant and positive effect on teachers' proactive behavior through psychological capital and organizational commitment.

Discussion

According to the results of the research, the main conclusions as follows:

1. Inclusive leadership had a direct positive impact on proactive behavior (H1) This research found that inclusive leadership could positively predict proactive behavior alone.

The stronger the administrator' inclusive leadership, the more proactive behaviors teachers exhibited. Teachers' proactive behaviors increased with the strengthening of administrators' inclusive leadership. This is consistent with the research conclusions of Xu Yunfei et al. (2021).

- 2. Inclusive leadership had a direct positive impact on organizational commitment (H2), when leaders exhibit behaviors such as openness, approach ability, and effectiveness, teachers develop stronger emotional attachment and loyalty to the institution. This enhanced organizational commitment means that they are more willing to put more effort into their roles. This is consistent with the findings of Cong Xue (2022).
- 3. Inclusive leadership had a direct positive impact on psychological capital (H3), when leaders provided a supportive and inclusive environment, these positive psychological states were enhanced, making teachers more confident to face challenges and maintain positive job performance. This was consistent with the research results of Yao Niuniu (2022), and other studies.
- 4. Organizational commitment has a direct positive impact on teachers' proactive behavior (H4), Through the structural equation model, it was verified that organizational commitment can have a significant positive impact on teachers' proactive behavior. The same is true for the research results of Zhao Yaya (2022). A high level of organizational commitment can enhance teachers' work motivation and enthusiasm, making them more willing to take on additional work tasks and challenges.
- 5. Psychological capital has a direct positive impact on teachers' proactive behavior(H5), The results show that psychological capital has a significant positive impact on teachers' proactive behavior. Teachers with high levels of psychological capital are more likely to take proactive behavior because they have the confidence, hope, resilience, and optimism necessary to take the initiative and cope with challenges. It is consistent with the research results of Gu Juanhui (2021).
- Psychological capital has a direct positive impact on organizational commitment(H6) The results of the research show that there is a significant positive correlation between the psychological capital and organizational commitment of teachers in higher vocational colleges. The higher the level of psychological capital of teachers, the higher the level of organizational commitment, and vice versa. Domestic scholars Zhu Min (2016) and others are similar.

In addition, this research also revealed a mediating relationship. Organizational commitment mediates between inclusive leadership and teacher proactive behavior (H7), which is consistent with the research of Choi et al. (2015). Psychological capital mediates between inclusive leadership and teacher proactive behavior (H8), and organizational commitment and psychological capital play a chain mediating role between inclusive leadership of managers in higher vocational colleges and teacher proactive behavior (H9), which is consistent with the existing literature. These discussions emphasize the complex interactions between inclusive leadership, proactive behavior, organizational commitment, and psychological capital, as well as their combined impact on proactive behavior. It is consistent with the research results of the existing literature.

Recommendations

- 1. Recommendation for Policies Formulation Inclusive leadership gathered people's hearts, improved organizational cohesion, and achieved the unity of school practical benefits and moral consensus. Therefore, we attach importance to the cultivation of inclusive leadership, improve management level through course training; promote diversity recruitment and promotion strategies; establish a feedback and improvement mechanism; and implementing teachers' psychological capital development program; developing systematic mechanisms to increase teachers' organizational commitment.
- 2. Recommendation for Practical Application Through the research, it is found that the openness, effectiveness and accessibility of administrators in higher vocational colleges can positively promote teachers' proactive behaviors, so leaders should change to an inclusive leadership style as soon as possible; At the same time, creating an inclusive and open organizational atmosphere as the hand of school organization and management; administrators need to pay attention to teachers' psychological state; Administrators need to be alert to the potential risks associated with over-inclusive behaviors; it is necessary for school managers to take a series of measures to enhance teachers' organizational commitment and deepen teachers' trust and reliance on the organization.
- 3. Recommendation for Further Research Future research should be based on the organizational context of China, analyze the concepts of inclusive leadership and proactive behavior, continue to enrich the theoretical framework of inclusive leadership and update the connotation of proactive behavior. Deepening the research of the relationship between variables, we can also study the impact of proactive behaviors on teachers' mental health. Adoption of diverse measurement methods, In the follow-up study, questionnaires can be conducted in a comprehensive evaluation manner, and the collection of longitudinal data can also be considered in order to obtain more scientific data results.

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