Factors Influencing Organizational Effectiveness of Public Higher Vocational Colleges in Shandong Province

Yan Zhu[1], Wipada Prasansaph[2]

Nuntiya Noichan[3], and Suttipong Boonphadung[4]

Suan Sunandha Rajabhat University, Thailand

E-mail: S64584951014@ssru.ac.th[1], wipada.pr@ssru.ac.th[2]

nuntiya.no@ssru.ac.th[3], suttipong.bo@ssru.ac.th[4]

Received November 26, 2024; **Revised** December 13, 2024; **Accepted** December 25, 2024

Abstract

Public higher vocational colleges in Shandong Province (PHVCSP) face challenges in enhancing organizational effectiveness (OEF) due to a limited understanding of key factors. This study aimed to: 1) examine the influence of managerial competencies (MCO), job performance (JPE) of administrative staff, and organizational culture (OCU) on OEF in PHVCSP, and 2) propose an organizational effectiveness model for these institutions. A mixed-method approach was employed, combining quantitative and qualitative methods. The quantitative phase involved structural equation modeling (SEM) and path analysis using data from 600 administrative staff, while the qualitative phase included semi-structured interviews with nine experts. The results revealed that MCO, JPE, and OCU significantly and positively affect OEF. Moreover, MCO significantly and positively influences the JPE of administrative staff, while OCU also positively impacts their JPE. Notably, JPE mediates the effects of both MCO and OCU on OEF. The qualitative findings further supported these relationships and contributed to developing an organizational effectiveness model for PHVCSP. This proposed model highlights the critical roles of managerial competencies, job performance, and organizational culture in improving institutional outcomes. The study offers practical insights for policymakers and administrators to enhance OEF by strengthening managerial competencies, improving job performance, and fostering a supportive organizational culture. These findings provide a strategic foundation for boosting the overall effectiveness of public higher vocational colleges in Shandong Province.

Keywords: influencing factors; organizational effectiveness; public higher vocational colleges

Introduction

Organizational effectiveness measures an organization's success in achieving its goals, efficiently utilizing specific resources while avoiding waste and minimizing the impact on members and society (Igboanusi, 2023). An efficient organization can optimize resource allocation, improve operational efficiency, and enhance the ability to adapt to changes in the external environment. Studying factors influencing organizational effectiveness can help identify key issues restricting the development of institutions and provide theoretical support for the development of targeted management strategies. This is not only related to the sustainable development of the organization itself, but also is of important reference significance for the practice of related fields.

Previous studies have shown that managerial competencies are important in improving organizational effectiveness (Mukarromah et al., 2019; Amri et al., 2024; Mutohar & Trisnantari, 2020; Salabi et al., 2023). They confirmed that the principals' managerial competencies significantly affect the school's organizational effectiveness. School administrators give full play to their managerial competencies, optimize resource allocation, simplify the work process, enhance collaborative efficiency within the organization, and ultimately improve overall efficiency.

Besides, many empirical studies have confirmed the impact of employee job performance on organizational effectiveness (Otoo, 2024; Kareem & Hussein, 2019). In the education field, Hayatullah et al. (2021), and Özgenel (2021) also confirmed that employee performance significantly affects the organizational effectiveness of the school.

Organizational success must start at the center of organizational culture for alignment to unfold between the organization's members, business strategy, mission, and vision (Pathiranage et al., 2020). Many studies have found that organizational culture has a positive impact on school effectiveness (Amri et al., 2024; Mutohar & Trisnantari, 2020; Gonzáles–Cardona et al., 2023; Duan et al., 2018; Ismail et al., 2022). However, these studies were focused on primary, middle, and high schools. However, in the field of higher education, there are few related studies.

Public higher vocational colleges are vital to China's higher educational institutions (HEIs). They need to train many high–quality technical and skilled students for society, directly serving the needs of national economic construction and social development. In public higher vocational colleges, organizational effectiveness reflects the utilization effectiveness of their internal resources and is also related to their performance in realizing teaching goals and serving social needs. Improving the

organizational effectiveness of public higher vocational colleges is conducive to improving the quality of education, accomplishing the teaching objectives, and meeting society's demand for high–quality skilled talents. Higher organizational effectiveness can also enhance the ability of schools to adapt to the changes in the external environment, and enhance their competitiveness and social influence. Shandong Province is an important regional representative of higher vocational education in China. Its public higher vocational colleges have a specific demonstration effect throughout the country. The number of public higher vocational colleges in Shandong Province ranks among the top in China, and its rich college types and educational practices provide representative and universal samples for the research.

In conclusion, it is meaningful and important to study the influence of managerial competencies, job performance, and organizational culture on the organizational effectiveness of public higher vocational colleges in Shandong Province. This study will provide new methods and ideas for improving organizational effectiveness, school quality, and management level, as well as obtaining sustainable development power and social competitiveness.

Research Objectives

1. To examine the managerial competencies, job performance of administrative staff, and organizational culture influencing organizational effectiveness of public higher vocational colleges in Shandong Province.

2. To propose the organizational effectiveness model of public higher vocational colleges in Shandong Province.

Scope of Research

Content of the study: The researcher studied factors influencing organizational effectiveness of public higher vocational colleges in Shandong Province.

Population and Sample:

In the quantitative phase, this study's population was 3,300 administrative staff of public higher vocational colleges in Shandong Province, 600 of whom were the sample. In the qualitative phase, nine key informants were selected for semi–structured interviews.

Targeted Location: Public higher vocational colleges in Shandong Province, China.

Period: October between the year of 2023 to 2024

Literature Reviews

Organizational Effectiveness

According to Igboanusi (2023), organizational effectiveness is the measure of an organization's success in achieving its goals, involving the efficient utilization of specific resources while avoiding waste and minimizing the impact on members and society. Sharma & Singh (2019) stated that the central objective of assessing organizational effectiveness is determining how effectively an organization has achieved its predetermined goals and results. In order to achieve effectiveness, it is necessary to ensure that the members are consistent with the organization's operation and that the will of the individual does not deviate from the organization. Efficient organizations strive to make the most of their employees' distinctive skills and create a positive work environment where individuals feel content with their contributions. Organizational effectiveness reflects the organization's efficiency in its internal resource allocation and management, as well as its ability to adapt to changes in the external environment, achieve its mission, and improve its overall performance.

Job performance

Job performance refers to the degree to which employees perform given tasks, perform job responsibilities, and meet job requirements in specific positions, which is the contribution made by employees to realizing organizational goals. It is regarded as the minimum unit of inclusive success, and the final sum is organizational performance (Ramawickrama et al., 2017). According to Masa'd & Aljawarneh (2020), improving the performance of employees is necessary to maintain the organization's growth, success, and good competitiveness. Manzoor et al. (2019) also added that job performance can improve an organization's competitiveness. Moreover, studies showed that employees' job performance benefits the organization's long–term success and profitability (Na–Nan et al., 2018).

Ramawickrama et al. (2017) claimed that organizational performance is based on the full value of individual outcomes. Job performance is regarded as the minimum unit of inclusive success; the final sum is organizational performance. Job performance is beneficial in defining and indicating

the level of coordination between the components of an organization and the organizational design in achieving goals. It represents the ability and willingness of the organization to achieve the expected results, so it is a measure of the organization's success in achieving its goals and the ability to survive and grow.

Managerial competencies

According to Mwenda et al. (2023), managerial competencies, as dynamic capabilities, enable organizations to respond to market changes, identify new opportunities, and effectively manage resources for superior performance. Niazi et al. (2020) explained that managerial competency is vital for ensuring organizational productivity and high performance and achieving competitive advantage. They also mentioned that managerial competencies can help motivate and increase employee productivity and performance. Managerial competencies are important for organizational success (Asghar et al., 2023).

According to Othman et al. (2021), managerial competencies may enhance present job performance, improve the quality of goods or services, adjust to new technologies, produce a more flexible workforce, and increase employee safety. According to Alabri et al. (2022), managerial competencies have become critical for managers to attain greater performance levels, generate better outcomes, get promoted, and secure jobs. Similarly, Okonkwo et al. (2020) considered that lacking managerial competencies prevents employees from attaining positive behavioral outcomes.

Organizational culture

Organizational culture represents a system of beliefs, norms, and values, and is used by organizational members to operate and make decisions to achieve organizational goals (Falcon, 2022). Organizational culture is essential in creating and shaping the organization and solving its problems. Organizational success must start at the center of organizational culture for alignment to unfold between the organization's members, business strategy, mission, and vision (Pathiranage et al., 2020). Odor (2018) concluded that organizations should focus on those positive cultural factors and produce the most significant results regarding staff and organizational outcomes. Moreover, he believed that effectively managing organizational culture can lead to greater organizational performance.

Figure 1 presents the proposed conceptual framework for this research, which was developed based on the research objectives, literature review, and formulation of hypotheses.

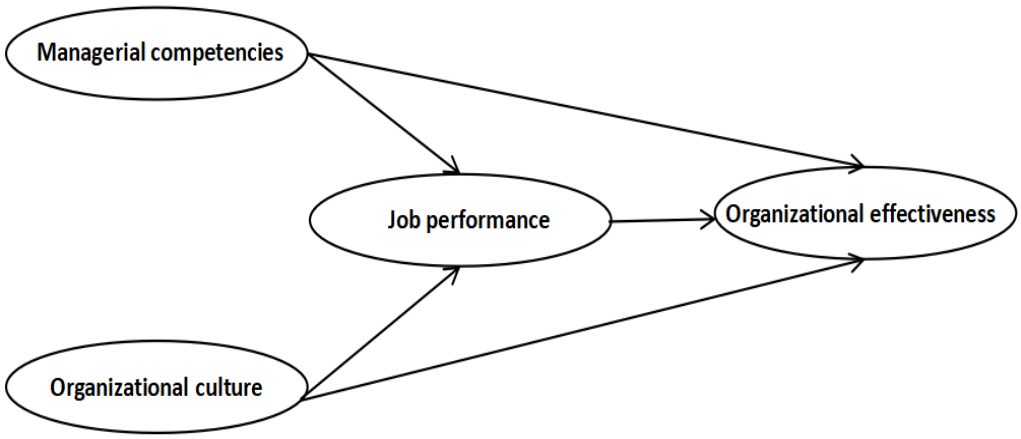


Figure 1 Conceptual Framework

Research Methodology

This study used a mixed-method research approach. In the quantitative stage, the hypotheses were tested using SEM and path analysis. Subsequently, a qualitative approach was adopted to analyze and summarize the results of the key informant interviews.

Research Instruments

There are two research instruments for this research study: a questionnaire and a semi-structured interview. This study is divided into three phases. The first two phases involve a questionnaire, and the third phase involves a semi-structured interview. The first phase aimed to learn about the respondents' demographic information: gender, age, highest education level, and work experience. The second phase involves a questionnaire on factors influencing the organizational effectiveness of public higher vocational colleges in Shandong province. There are 102 questions, all measured on 5-point Likert scales: 1 means strongly disagree, 2 means disagree, 3 means neutral, 4 means agree, and 5 means strongly agree. The population used in this research was the administrative staff of public higher vocational colleges in Shandong Province. 3300 administrative staff employed at public higher vocational colleges in Shandong Province. According to the recommendations of Comrey and Lee (1992), a rough rating scale for adequate sample sizes is provided as follows: 100 = poor; 200 = fair; 300 = good; 500 = very good; and 1,000 or more =

excellent. They urged researchers to obtain 500 or more participants as observational samples. In this case, 600 administrative staff of public higher vocational colleges in Shandong Province were randomly selected as participants for adequate sample sizes. The third phase of the research instruments is a semi–structured interview of nine key informants for the organizational effectiveness model of public higher vocational colleges in Shandong province.

Data Analysis

Basic demographic information of respondents was analyzed using descriptive statistical frequency and percentage.

The hypotheses were tested by using structural equation modeling (SEM) and path analysis. Interview results were analyzed and summarized using content analysis.

Research Results

Objective 1. The results showed that the MCO and JPE of administrative staff and OCU significantly affected OEF. The results also indicated that the MCO of administrative staff had a significant positive effect on their JPE, and OCU had a significant positive effect on the JPE of administrative staff. In addition, the results also showed that JPE positively mediated the effects of MCO and OCU on OEF.

Table 1 shows the structural model fit indices, and Table 2 shows the structural model's results. Figure 2 shows the results of this study's path analysis of the structural model.

Table 1 Model fit indices of Structural Model

Fit Measure	Criteria	Fit level	Scholar	Output	Results
χ^2/df	0≤ χ^2/df ≤2	Good	Schermelleh et al. (2003)	1.152	Good
GFI	.95 ≤ GFI ≤ 1.00	Good	Schermelleh et al. (2003)	.957	Good
AGFI	.90 ≤ AGFI ≤ 1.00	Good	Schermelleh et al. (2003)	.951	Good
CFI	.95≤CFI≤1.00	Good	Byrne (2010)	.980	Good
TLI	.95≤TLI≤1.00	Good	Byrne (2010)	.980	Good
IFI	.95≤IFI≤1.00	Good	Byrne (2010)	.980	Good
RMSEA	0 ≤ RMSEA ≤ .05	Good	Schermelleh et al. (2003)	.016	Good
	.05＜RMSEA ≤ .08	Acceptable			
RMR	0 ≤RMR≤.05	Good	Byrne (2010)	.053	Acceptable
	0.05＜RMR≤0.08	Acceptable	Bhale and Bedi (2023)		
SRMR	0 ≤ SRMR ≤ .05	Good	Schermelleh et al. (2003)	.039	Good
	.05 ＜SRMR ≤ .10	Acceptable			

The results of model fit indices of the structural model are shown in Table 1. As shown in Table 1, $\chi 2/df$ equals 1.152, a good fit value within the threshold range that Schermelleh et al. (2003) suggested. The GFI value of .957 is greater than the good fit value of .95 suggested by Schermelleh et al. (2003). The AGFI value of .951 is greater than the good fit value of .90 suggested by Schermelleh et al. (2003). The CFI value of .980, the TLI value of .980, and the IFI value of .980 are all higher than the good fit value of .95, as suggested by Byrne (2010). In addition, the RMSEA value is .016 within the good fit threshold range of .05 that Schermelleh et al. (2003) suggested. The RMR value is .053 less than .08, as Bhale and Bedi (2023) suggested, which is acceptable. After the calculation, the SRMR value is .039, also within the good fit threshold range of .05 that Schermelleh et al. (2003) suggested. All the fit indices are at the desired level, with these indices corresponding to the standards. It demonstrates that the proposed model has the suitable fit.

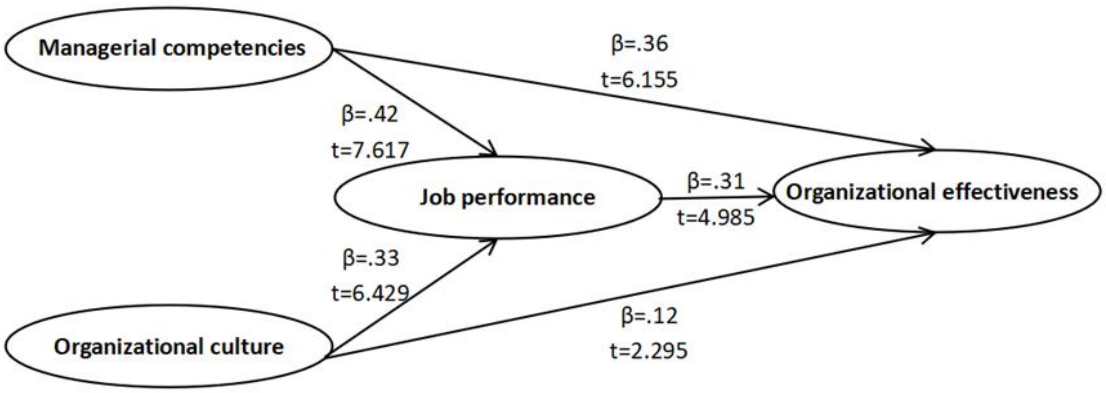


Figure 2 Path analysis of structural model

Table 2 Structural Model Results

Path	Coefficient (β)	S.E.	t-value	p	Results
JPE←MCO	.421	.056	7.617	.000***	Support H1
JPE←OCU	.334	.050	6.429	.000***	Support H2
OEF←JPE	.309	.062	4.985	.000***	Support H3
OEF←MCO	.361	.060	6.155	.000***	Support H4
OEF←OCU	.118	.049	2.295	.022*	Support H5

Note: ***p<.001, *p<.05

Path analysis

Table 2 presents the results of the structural model. As shown in Table 3, all latent variables present significant positive relationships supporting the hypotheses. The results are summarized as follows:

1. The influence of managerial competencies on job performance

The results indicate that managerial competencies significantly positively influence job performance (β=.421, t–value=7.617, p<.001), supporting Hypothesis 1.

2. The influence of organizational culture on job performance

The results showed that organizational culture significantly positively influences job performance (β=.334, t–value=6.429, p<.001), supporting Hypothesis 2.

3. The influence of job performance on organizational effectiveness

The results also showed that job performance significantly influences organizational effectiveness (β=.309, t–value=4.985, p<.001), supporting Hypothesis 3.

4. The influence of managerial competencies on organizational effectiveness

The results showed that managerial competencies significantly positively influence organizational effectiveness (β=.361, t–value=6.155, p<.001), supporting Hypothesis 4.

5. The influence of organizational culture on organizational effectiveness

The results showed that organizational culture also has a significant positive influence on organizational effectiveness (β=.118, t–value=2.295, p<.05), supporting Hypothesis 5.

Mediating effects analysis

In order to test the hypothesis that the mediating effects of job performance between the influence of managerial competencies and organizational culture on organizational effectiveness (H6 and H7), bias–corrected percentile bootstrapping at a 95% confidence interval with 5,000 bootstrap samples was performed. The results are shown in Table 3.

Table 3 The mediating effects of job performance

Path	Coefficient (β)	SE	t–value	p	Results
MCO⟶JPE⟶OEF	.130	.031	4.194	.000***	Partially mediation
OCU⟶JPE⟶OEF	.103	.027	3.815	.000***	Partially mediation

*Note: Standardized estimating of 5,000 bootstrap samples, *** p < .001.*

As shown in Table 3, the coefficient (β) of mediating effect of job performance between managerial competencies and organizational effectiveness is .130 (t–value=4.194, p<.001). The results confirmed that JPE partially mediates the relationship between MCO and OEF; hypothesis 6 is supported. In addition, as shown in Table 3, the coefficient (β) of mediating effect of job performance between organizational culture and organizational effectiveness is .103 (t=3.815, p < .001). The results confirmed that JPE partially mediates the relationship between OCU and OEF; hypothesis 7 is supported. That is, JPE mediates the impact of MCO and OCU on OEF.

Results of the hypothesis test

Based on the above analysis results, all hypotheses are statistically significant at the p<.001 – p<.05. Thus, the hypotheses test results in this study are summarized, as shown in Table 4.

Table 4 Hypothesis testing results

Hypotheses	Paths	Results
H1	Managerial competencies ⟶ Job performance	Supported
H2	Organizational culture ⟶ Job performance	Supported
H3	Job performance ⟶ Organizational Effectiveness	Supported
H4	Managerial Competencies ⟶ Organizational Effectiveness	Supported
H5	Organizational culture ⟶ Organizational Effectiveness	Supported
H6	Managerial competencies ⟶ Job performance ⟶ Organizational Effectiveness	Supported
H7	Organizational culture ⟶ Job performance ⟶ Organizational Effectiveness	Supported

Objective 2: The model of administrative staff's managerial competencies, job performance, and organizational culture influencing the organizational effectiveness of public higher vocational colleges in Shandong Province was proposed.

According to the content analysis results of the semi–structured interviews with key informants, the important managerial competencies of public administrative staff are human resource management, teamwork, professional knowledge and skills, decision–making, communication, planning and organization, crisis management skills, leadership, and technical skills. The important aspects of administrative staff job performance are work/task quality, work/task quantity, work/task efficiency, task performance, and management performance.

Moreover, experts believe that higher vocational colleges should develop and build positive and healthy organizational culture: value–oriented culture, people–oriented culture, collaboration culture, innovation culture, learning culture, goal–oriented culture, diversity and inclusiveness culture. Finally, the important aspects of the organizational effectiveness are resource allocation efficiency, organizational goals achievement, management efficiency, school–running efficiency, teaching quality, teaching objectives achievement, and talent training quality.

As a result, based on the results of quantitative analysis and the quantitative analysis results of the semi–structured interview of key informants, the model of administrative staff's managerial competencies and job performance, and organizational culture influencing organizational effectiveness of public higher vocational colleges in Shandong Province was proposed. The details of the model are shown in Fig.3

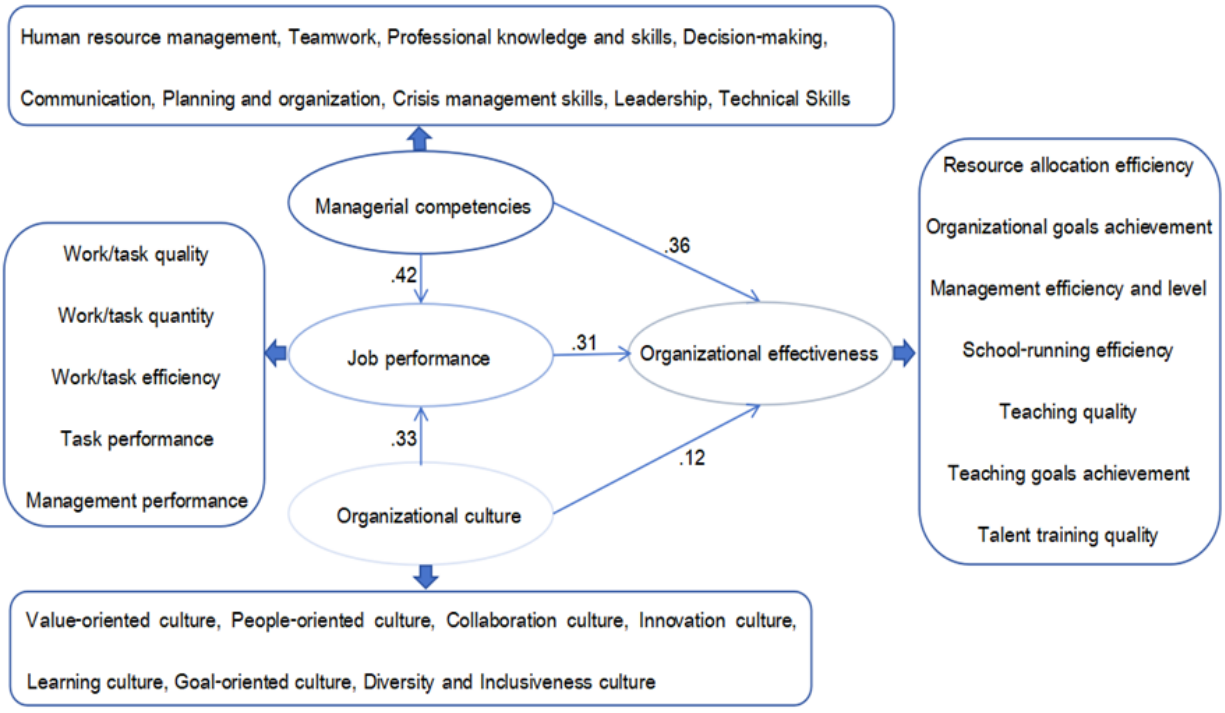


Figure 3 The organizational effectiveness model of public higher vocational colleges in Shandong Province

Discussion

The result of this study shows that the administrative staff's managerial competencies have a significant and positive effect on the organizational effectiveness of public higher vocational colleges in Shandong Province. This means that if the administrative staff's managerial competencies are improving, the organizational effectiveness of public higher vocational colleges in Shandong Province will also be higher. This is obtained based on the hypothesis testing with a path coefficient of β=.361, t-value=6.155, with a significance level is .001 (hypothesis accepted if the significance level of it is <.05). The results of this study support the previous research of Amri et al. (2024), Mutohar and Trisnantari (2020), and Salabi et al. (2023). They confirmed that the principals' managerial competencies significantly affect the organizational effectiveness of the school.

The result of this study shows that the administrative staff's job performance has a significant and positive effect on the organizational effectiveness of public higher vocational colleges in Shandong Province. This means that if the administrative staff's job performance level improves, then the organizational effectiveness of public higher vocational colleges in Shandong Province will also be higher. This is obtained based on the hypothesis testing with a path coefficient of β=.309, t-value=4.985, with a significance level of .001 (hypothesis accepted if the significance level is <.05). The results of this study also support the previous research of Özgenel (2021) and studied the effects of employee performance on school effectiveness.

This study shows that organizational culture significantly and positively affects the effectiveness of public higher vocational colleges in Shandong Province. This means that if the organizational culture level is improving, the organizational effectiveness of public higher vocational colleges in Shandong Province will also be higher. This is obtained based on the hypothesis testing with a path coefficient of β=.118, t-value=2.295, with a significance level of .05 (hypothesis accepted if the significance level is <.05). Many studies have found that organizational culture has a positive impact on school effectiveness, such as Amri et al. (2024), Mutohar and Trisnantari (2020), Gonzáles Cardona et al. (2023), Duan et al. (2018), and Ismail et al. (2022). However, these studies were focused on primary, middle, and high schools. Besides, the findings of Ramdhany et al. (2019), the organizational culture of public universities operating the Educational Institution of Education Personnel (EIEP) has a positive and significant impact on their organizational effectiveness in Indonesia.

In addition, the study also confirmed that the administrative staff's managerial competencies significantly and positively affect their job performance in public higher vocational colleges in Shandong Province. This is obtained based on the hypothesis testing with a path coefficient of β=.421, t-value=7.617, with a significance level of .001 (hypothesis accepted if the significance level is <.05). This result is also consistent with the conclusions of Dehghani Soltani et al. (2021). They confirmed that school leaders' managerial competencies strongly impact their performance.

The results showed that organizational culture significantly and positively influences administrative staff's job performance of public higher vocational colleges in Shandong Province. This is obtained based on the hypothesis testing with a path coefficient of β=.334, t-value=6.429, with a significance level of .001 (hypothesis accepted if the significance level is <.05). This result supports the research of Simorangkir et al. (2018), and Arif et al. (2019). The study of Simorangkir et al. (2018) found that organizational culture positively affects the performance of primary school principals at State Elementary School in North Tapanuli Regency. Arif et al. (2019) found a positive and significant direct influence of organizational culture on the performance of high school heads in Medan City. Organizational culture has a significant direct influence on the performance of school leaders.

The results confirmed that job performance has positively mediates the relationship between managerial competencies and organizational effectiveness, which is obtained based on the hypothesis testing with a path coefficient of .130, and t-value=4.194, with a significance level is .001 (hypothesis accepted if the significance level of it is <.05). This result support the research of Mutohar and Trisnantari (2020), and Hayatullah et al. (2021). Job performance mediates the relationship between employees' competencies and organizational effectiveness.

Moreover, the result of job performance positively mediates the relationship between organizational culture and organizational effectiveness which is obtained based on the hypothesis testing with a path coefficient of .103, t=3.815, with a significance level is .001 (hypothesis accepted if the significance level of it is <.05). This result support the research of Hidayat and Graha (2021). That is, employee job performance positively mediates the effect of organizational culture and organizational effectiveness.

Finally, based on the quantitative, qualitative, and semi-qualitative analysis results of key informants, a model of administrative staff's managerial competencies and job performance, and organizational culture influencing organizational effectiveness of public higher vocational colleges in

Shandong Province was put forward. According to the key informants' opinions, the public higher vocational colleges in Shandong province should focus on important aspects of the administrative staff's managerial competencies and job performance, organizational culture, and organizational effectiveness. They should also improve the administrative staff's managerial competencies, job performance, organizational culture, and effectiveness.

This model provides a reference path for public higher vocational colleges to improve organizational effectiveness. It also gives the school new ideas for improving the administrative staff's managerial competencies, job performance, and organizational culture. In addition, this model is also helpful for managing schools, which can optimize and improve the management process. Moreover, successful implementation of the model can improve the management efficiency and effectiveness of schools and make higher vocational colleges more flexible, adaptable, and competitive in the face of external policies and market changes.

Conclusion

There are two research objectives: 1) to examine the influence of managerial competencies and job performance of administrative staff, and organizational culture on organizational effectiveness of public higher vocational colleges in Shandong Province, and 2) to propose the organizational effectiveness model of public higher vocational colleges in Shandong Province. The mixed quantitative and qualitative methods were used. In the qualitative stage, the results supporting the hypotheses model are obtained: MCO has a significant and positive effect on JPE (H1), OCU has a significant and positive effect on JPE (H2), JPE has a significant and positive effect on OEF (H3), MCO has a significant and positive impact on OEF (H4), OCU has a significant and positive effect on OEF (H5). In addition, the findings also show that JPE positive mediates the influence of MCO and OCU on OEF (H6, H7). In the quantitative stage, the purpose of semi–structured interviews with key informants was to help propose the model in this study. Finally, based on the results of quantitative analysis and the content analysis of the semi–structured interview of key informants, the model of administrative staff's managerial competencies and job performance, and organizational culture influencing organizational effectiveness of public higher vocational colleges in Shandong Province was put forward.

Suggestions

1. A more in-depth investigation of the specific managerial competencies and key aspects of administrative staff job performance is recommended, as these factors play a critical role in enhancing organizational effectiveness. Identifying the specific competencies and performance areas can provide more targeted strategies for improvement.

2. Future studies could differentiate between senior and middle administrative staff to understand how their competencies and performance contribute to organizational effectiveness. This distinction could offer valuable insights into how different administrative levels impact the overall functioning of the institution.

3. To gain a broader understanding of organizational effectiveness, the study suggests expanding the research to include public higher vocational colleges in Shandong Province and those across China. A national-level study would allow for comparative analysis and provide a more comprehensive understanding of the factors influencing organizational effectiveness in diverse institutional contexts.

New Knowledge

This study shows that the managerial competencies and job performance of administrative staff and organizational culture positively and significantly influence the organizational effectiveness of public higher vocational colleges in Shandong Province. Among the influencing factors, the most decisive influence on organizational effectiveness is the managerial competencies of administrative staff, followed by the job performance of administrative staff, and finally the organizational culture. The application of this model provides new ideas to improve organizational effectiveness. It also has a profound inspiration to develop the managerial competencies of administrative staff, improve their job performance, and create a favorable organizational culture in public higher vocational colleges. It is of great significance to improving the organizational effectiveness of public higher vocational colleges, improving the quality and efficiency of running, and enhancing the ability of sustainable development and social competitiveness.

References

Alabri, I., Siron, R.B., & Alam, M.N. (2022). Human Resource Management (HRM) practices and employees' adaptive performance: the moderating role of transformational leadership. *Webology, 19*(2), 6215.

Amri, U., Nellitawati., Syahril., & Rusdinal. (2024). The impact of instructional leadership organizational culture and organizational commitment to teacher performance at junior high school. *Pakistan Journal of Life and Social Sciences, 22*(2), 17231–17240. https://doi.org/10.57239/PJLSS–2024–22.2.001253

Arif, S., Zainudin., & Hamid, K.A. (2019). Influence of leadership, organizational culture, work motivation and job satisfaction as performance principles in senior high school in Medan City. *Budapest International Research and Critics Institute (BIRCI–Journal) Humanities and Social Sciences, 2*(4), 239–254. DOI:10.33258/birci.v2i4.619

Asghar, N., Khattak, A., Danish, M. H., Bokhari, I. H., & Waris, M. (2023). Managerial skills, technology adaptation and firm performance: mediating role of process and product innovation. *Cogent Business & Management*, *10*(3), 2281485.

Bhale, U., & Bedi, H. S. (2023). *SEM model fit indices: meaning and acceptance of model Literature support*. SSRN.

Comrey, A. L., & Lee, H. B. (1992). *A first course in factor analysis* (2nd ed.). Lawrence Erlbaum.

Dehghani–Soltani, M., Mesbahi, M., & Darvish, M. (2021). The impact of transformational leadership and transparent communication on employees' openness to change by explaining the mediating role of organizational trust. *Organizational Behavior Studies Quarterly, 10*(2 38), 77–103. SID. https://sid.ir/paper/1038098/en

Duan, X., Du, X., & Yu, K. (2018). School culture and school effectiveness: The mediating effect of teachers' job satisfaction. *International Journal of Learning. Teaching and Educational Research, 17*(5), 15–25. https://doi.org/10.26803/ijlter.17.5.2

Falcon, S. (2022, February 3). *Organizational culture update.* Prezi. https://prezi.com/p/lpwcit9geekr/organizational–culture–update/

Gonzáles Cardona, J.A., Naranjo–Valencia, J.C. & Calderón Hernández, G. (2023). Relationship between organizational culture and school performance. a study in elementary, middle, and high school institutions. *Desarrollo Gerencial, 15*(2), 1–25. DOI:10.17081/dege.15.2.6414

Hayatullah, E., Triatmanto, B., & Sumarsono, T. G. (2021). The effect of competence and job satisfaction with employee performance and its implications on organizational effectiveness. *Journal of Research in Business and Management, 9*(8), 17–23.

Hidayat, R., & Graha, A. N. (2021). The role of organizational commitment in employee performance. In *Conference: 2nd Annual Conference on Social Science and Humanities (ANCOSH 2020).* DOI:10.2991/assehr.k.210413.060

Igboanusi, J. E. (2023). *Business intelligence and organizational effectiveness: the Nigerian Oil and Gas small and medium enterprises*[Doctoral dissertation, Northcentral University].

Ismail, M., Khatibi, A., & Azam, F. (2022). Impact of school culture on school effectiveness in government schools in the Maldives. *Participatory Educational Research (PER), 9*(2), 261–279. https://doi.org/10.17275/per.22.39.9.2

Kareem, M.A., & Hussein, I.J. (2019). The impact of human resource development on employee performance and organizational effectiveness. *Management Dynamics in the Knowledge Economy, 7*(3), 307–322. DOI:10.25019/MDKE/7.3.02

Manzoor, F., Wei, L., Nurunnabi, M., Subhan, Q. A., Shah, S. I. A., & Fallatah, S. (2019). The impact of transformational leadership on job performance and CSR as mediator in SMEs. *Sustainability, 11,* 436. https://doi.org/10.3390/su11020436

Masa'd, F., & Aljawarneh, N. M. (2020). Administrative creativity and job performance: an empirical study at Jadara University. *International Journal of Psychosocial Rehabilitation, 24*(8), 9574–9584. DOI:10.37200/IJPR/V24I8/PR280950

Mukarromah, I., Mudjito, M., & Purbaningrum, E. (2019). The effect of managerial skills (conceptual, human, and technical) of headmasters to the effectiveness of Islamic senior high schools in Jombang district. *International Journal for Educational and Vocational Studies*, *1*(6), 539–544. DOI:10.29103/ijevs.v1i6.1749

Mutohar, P.M., & Trisnantari, H.E. (2020). Design of character–based learning in Islamic elementary schools with a full day system. *International Journal of Science and Research (IJSR), 9*(3), 916–924. DOI: 10.21275/SR20314204128

Mwenda, B.B., Ngollo, M., & Mwasota, A. (2023). An empirical study on the effects of managerial competence on firm profitability. *Ilomata International Journal of Tax and Accounting, 4*(3), 491–507. DOI:10.52728/ijtc.v4i3.794

Na-Nan, K., Chaiprasit, K., & Pukkeeree, P. (2018). Factor analysis-validated comprehensive employee job performance scale. *International Journal of Quality & Reliability Management, 35*(10), 2436-2449, https://doi.org/10.1108/IJQRM-06-2017-0117

Niazi, A., Faraz, H.A., Arshad, B., & Asghar, W. (2020). Impact of managerial competency and learning orientation on job performance. *Journal of Accounting and Finance in Emerging Economies, 6*(3), 885-896. DOI:10.26710/jafee.v6i3.1423

Odor, H. (2018). Organisational culture and dynamics. *International Journal of Scientific Research and Management (IJSRM), 6*(1). 31-39. DOI:10.18535/ijsrm/v6i1.em05

Othman, N., Yusof, N., & Hamid, S. H. A. (2017). The relationship between social media use and academic performance among students. *Journal of Applied Environmental and Biological Sciences, 7*(5), 140-144.

Otoo, F.N.K. (2024) Assessing the influence of financial management practices on organizational performance of small-and medium-scale enterprises. *Vilakshan—XIMB Journal of Management, 21,* 162-188. https://doi.org/10.1108/xjm-09-2023-0192

Özgenel, M. (2021). The effect of quality of life work on organizational commitment: a comparative analysis on school administrators and teachers. *Elementary Education Online*, *20*(1), 129-144. DOI: 10.17051/ilkonline.2021.01.018

Pathiranage, Y. L., Jayatilake, L. V. K., & Abeysekera, R. (2020). Exploring strategies to establish an effective organizational culture to enhance corporate performance: A proposed business model. *Review of International Comparative Management, 21*(3), 361-372.

Ramawickrama, J., & Opatha, H.H.D.N.P., & PushpaKumari, M. D. (2017). Quality of work life, job satisfaction, and the facets of the relationship between the two constructs. *International Business Research, Canadian Center of Science and Education, 10*(4), 167-182.

Ramdhany, M. A., Triantoro, A., Mulyadi, H., & Hardiana, R. D. (2019, May). Organizational culture and organizational effectiveness at public universities of educational institution of education personnel. In *1st International Conference on Economics, Business, Entrepreneurship, and Finance (ICEBEF 2018)* (pp. 275-279). Atlantis Press.

Salabi, A., Muadin, A., & Prasetyo, M. A. M. (2023). Improving the quality of learning organizations through school effectiveness. *QALAMUNA: Jurnal Pendidikan, Sosial, Dan Agama*, *15*(1), 243-254. https://doi.org/10.37680/qalamuna.v15i1.2321

Schermelleh–Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: tests of significance and descriptive goodness–of–fit measures. *Methods of Psychological Research Online, 8*(2), 23–74.

Sharma, N., & Singh, R.K. (2019). A unified model of organizational effectiveness. *Journal of Organizational Effectiveness People and Performance, 6*(2), 114–128. DOI:10.1108/JOEPP–10–2018–0084

Simorangkir, M., Siburian, P., & Rahman, A. (2018). The effect of organizational culture, knowledge of educational management, work motivation and job satisfaction to performance of the state primary school principals in North Tapanuli district. *International Journal of Development and Sustainability, 7*(3), 1117–1142. https://isdsnet.com/ijds–v7n3–21.pdf