

Received: May 2023 Accepted: June 2023

DOI: <https://doi.org/10.58262/ks.v11i02.179>

Correlation Between Human Resource Management Practices and Teachers' Performance in China Shandong Vocational Colleges to Improve Quality of Education

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Abstract

The number of full-time teachers in China's vocational schools increased from 1.11 million in 2020 to 1.29 million in 2021, an increase of 17 percent, providing strong support for the high-quality development of vocational education. In the context of human resource management, the purpose of this quantitative study is to examine the relationship between human resources practices such as information sharing, performance assessment, reward and teacher' performance for 308 participants in China Shandong Vocational Colleges. Past research seldom researched on the relationship between human resource management practice and teachers' performance especially in vocational colleges, and there is lack of research about the application of the collegial model in this field. Findings reveal a positive correlation effect between information sharing, performance assessment, and rewards on teachers' performance. Information sharing was found to have the strongest impact on performance. It suggests that the Bush Collegial management model can be applied to improve human resource management and enhance teacher performance in vocational colleges in China. This study recommends that schools create a culture of information sharing, conduct regular performance assessments, and provide incentives in the form of rewards to improve teacher performance, education quality and create a sustainable development in education.

Keywords: *Human resource management practices, teacher performance, collegial model, education quality, sustainable development in education*

Introduction

The number of full-time teachers in China's vocational schools increased from 1.11 million in 2020 to 1.29 million in 2021, an increase of 17 percent, providing strong support for the high-quality development of vocational education (Chinese News 2022). Vocational education in China had been a focus of the government, with numerous initiatives and policies aimed at improving the quality of vocational education. However, the effectiveness of these policies heavily depends on the performance of teachers in vocational colleges (Karimi, Yarmohamadzadeh, and Hosseinzadeh et al. 2022). The quality of vocational education is directly linked to the quality of teaching and the competence of teachers. Therefore, it is crucial to promote the performance of teachers in vocational colleges to realize the strategic objectives of the country and management objectives of the school (Jiao, Liu Chun-fang, and Zhao et al. 2021).

Promoting vocational college teacher performance remains a challenge despite government and

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institutional efforts. Effective human resource management (HRM) practices that promote inner work vitality and continuous professional development can improve teacher performance. Current solutions, such as training and improving teaching standards, are necessary but insufficient (Ahmad, Bakhsh, and Rasool et al. 2021). Comprehensive HRM practices are needed to address core challenges of promoting teacher performance (Mahmoud, Ahmad, and Poespowidjojo 2022) and improving the quality of education in the vocational colleges as per SDG 4's objective to "ensure inclusive and equitable quality education for all" (United Nations [UN], 2015, Target 4.1).

Existing research does not consider the role of HRM practices in promoting teacher performance. Gaps in research exist on information sharing, performance assessment, reward, and HRM practices in vocational colleges using the Bush collegial model (Bush 2022). Adoption of HRM practices is needed to improve teacher performance (Cai, Wei, and Liu 2021). The objective of this study is to investigate the relationship between HRM practices and the performance of teachers in China vocational colleges. It provides a theoretical basis for research on the improvement of faculty and staff performance by HRM practices, and so points out a path for improving faculty and staff performance.

Literature Review

Teachers' performance is a critical factor in educational institutions' success, and continuously improving teachers' quality will also enhance students' performance (Tan, Lim, and How et al. 2022). Research suggest that high-performance work practices positively correlate with organizational innovation, enhance job satisfaction, and promote organizational commitment, psychological empowerment, and organizational citizenship behavior (Cooper, Wang, and Bartram et al. 2019; Wati 2020; GuyPare 2022).

HRM practices in colleges include various practices such as strategy-based planning, recruitment, compensation, training, performance management, and employee relationship management (Martocchio 2019). Supervisor support and job autonomy contribute to employee performance, and training and development positively affect employee performance, especially when combined with knowledge-sharing behavior (Cooper et al. 2019). Basic and high-performance HRM practices can impact employee performance through factors such as employee selection, training, compensation, participation mechanisms, empowerment, and information sharing (GuyPare 2022).

Colleges play a crucial role in meeting the ever-evolving needs of society through knowledge integration and information sharing. Success in organizations is driven by knowledge. Since employees model their conduct after their superiors, the leader must actively manage knowledge, set an example, and promote sharing to ensure that resource utilization and competition are not negatively impacted. Effective HRM practices are key to motivating employees to enhance knowledge integration and promote collaboration (Chua, Thinakaran, and Vasudevan 2023). Cooperative teaching and research, where teachers support and exchange information with one another, contribute to improving professional quality and establishing a cooperative culture (Irene, 2020). Establishing platforms like WeChat groups further facilitates teaching and research cooperation. Studies indicate that information and knowledge sharing positively impact organizational outcomes such as profitability, productivity, job satisfaction, employee performance, and innovation. Factors like psychological ownership, psychological safety, organizational learning culture, and task complexity moderate these relationships (Wati 2020). Almonawer, Alainati, and Al-Hammad et al. (2023) advocate for democratic and fair decision-making in education to maintain control in decentralized management, fostering a transformative leadership approach over a transactional one. Furthermore, according to Ooi, Wider, and Lee (2022), the perception of HR artificial intelligence implementation, namely, the talent acquisition process, human capital development process, and performance management process, positively affect organizational performance.

The labor value of teachers in colleges and universities is complex and requires measuring work effects

based on competency (Ahmad et al. 2021). High-performance HR practices can positively impact employee outcomes through the mediating role of psychological capital and perceived supervisor support. Performance-based rewards perceived organizational support, and effective performance appraisal with feedback can improve teacher motivation and performance (Farooqi, Ahmed, and Ashiq 2019; Kim and Lee, 2020; Akhtar and Akram, 2022). As per Chua et al. (2023), rewards serve as effective inducements and motivators, which are crucial for meeting internal psychological needs, particularly those pertaining to self-assurance and self-actualization.

Methodology

The study involved collecting data through an online questionnaire using stratified random sampling, with a sample size of 308 teachers from three specific vocational colleges. The study used an online Likert 5 scaling questionnaire to collect data on the independent variable (HRM practices) and the dependent variable (teachers' performance). The objective of this study was to investigate the correlation between HRM practices and the performance of teachers in vocational colleges in China.

Findings and Data Analysis

Demographic Profile

The data was collected from 308 participants. There were 147 male respondents (47.7%) and 161 female respondents (52.3%). Majority of respondents were aged 35-45 (40.3%), had a degree (56.2%), and had 5-10 years of working experience (31.5%). Most respondents were married (92.5%) (as refer to Table 1 below). The three schools involved were Zibo Vocational Institute (42.2%), Shandong Institute of Commerce and Technology (39.6%), and Heze Jiazheng Vocational College (18.2%).

Table 1: Demographic Profile

		Frequency	Percent
Gender	Male	147	47.7
	Female	161	52.3
	Total	308	100
Age	25-35	32	10.4
	35-45	124	40.3
	45-55	86	27.9
	55-65	47	15.3
	Above 65	19	6.2
	Total	308	100
Education Level	Degree	173	56.2
	Master	132	42.9
	PhD	3	1
	Total	308	100
Working Experience	1-5 years	41	13.3
	5-10 years	97	31.5
	10-15 years	37	12
	15-20 years	87	28.2
	Above 20 years	46	14.9
	Total	308	100
Marital Status	Single	23	7.5
	Married	285	92.5
	Total	308	100
Schools	Shandong Institute of Commerce and Technology	122	39.6
	Zibo Vocational Institute	130	42.2
	Heze Jiazheng Vocational College	56	18.2

Total	308	100
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Preliminary Analysis

The results of KMO and Barrett spherical are used in this study to verify the validity of the questionnaire. Data is considered valid because $KMO > 0.7$ and $p < 0.05$. In addition, because Cronbach α is greater than 0.7, the data was considered reliable (Shrestha 2021).

Pearson Correlation

Table 2 presents the correlation coefficients between the variables: Information sharing, Performance assessment, Reward, and Teacher's performance. The results indicate teacher's performance has strong positive correlation with Information sharing ($r = 0.902$), Performance assessment ($r = 0.877$) and Reward ($r = 0.893$). All correlation coefficients are highly significant ($p < 0.01$) with a two-tailed test.

Table 2: Correlations

		Information sharing	Performance assessment	Reward	Teacher's performance
Information sharing	Pearson Correlation	1	.889**	.915**	.902**
	Sig. (2-tailed)		.000	.000	.000
	N	308	308	308	308
Performance assessment	Pearson Correlation	.889**	1	.896**	.877**
	Sig. (2-tailed)	.000		.000	.000
	N	308	308	308	308
Reward	Pearson Correlation	.915**	.896**	1	.893**
	Sig. (2-tailed)	.000	.000		.000
	N	308	308	308	308
Teacher's performance	Pearson Correlation	.902**	.877**	.893**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	308	308	308	308

** . Correlation is significant at the 0.01 level (2-tailed).

These results indicate strong positive correlations among all variables. Specifically, there is a strong positive relationship between information sharing, performance assessment, reward, and teacher's performance. This finding implies that organizations where information sharing is high tend to have better performance assessment, provide more rewards, and have improved teacher's performance. It also highlights the importance of effective information sharing practices in influencing organizational effectiveness and performance.

Multiple Linear Regression

According to Table 3, the results showed that the predictors all have significant impact on teacher's performance. Information sharing has the highest standardized coefficient (0.420), followed by performance assessment (0.242) and reward (0.292). This indicated that information sharing has the strongest influence on teacher's performance among the predictors.

Table 3: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.113	.087		1.296	.196
	Information Sharing	.424	.060	.420	7.072	.000
	Performance Assessment	.241	.054	.242	4.467	.000
	Reward	.292	.054	.292	5.407	.000

Reward	.305	.064	.292	4.772	.000
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a. Dependent Variable: Teacher's performance

Table 4 presents the ANOVA results, indicating the overall significance of the regression model. The F-test value of 579.815 is highly significant ($p < 0.001$), suggesting that the regression model significantly predicts teacher's performance.

Table 4: ANOVA^a

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	206.128	3	68.709	579.815	.000 ^b
	Residual	36.025	304	.119		
	Total	242.153	307			

a. Dependent Variable: Teacher's performance

b. Predictors: (Constant), Information sharing, Performance assessment, Reward

Discussion

RQ1: *What is the effect of information sharing towards teachers' performance in China Shandong Vocational Colleges?*

There is a significant effect of information sharing on teachers' performance in China Shandong Vocational Colleges (Beta= 0.420, $p=0$). Organizations should prioritize improving information sharing processes among teachers and relevant stakeholders. This can be achieved by implementing effective communication channels, providing platforms for knowledge exchange, and fostering a collaborative culture (Lilit and Narek 2023). Encouraging open dialogue and sharing of best practices can contribute to increased information flow, leading to improved performance assessment and rewards for teachers' predictors (Chua et al. 2023).

RQ2: *What is the effect of performance assessment towards teachers' performance in China Shandong Vocational Colleges?*

There is a significant effect of performance assessment on teachers' performance in China Shandong Vocational Colleges (Beta= 0.242, $p=0$). Organizations should ensure that performance assessments are conducted in a fair and transparent manner. Clear performance criteria and expectations should be communicated to teachers, allowing them to understand how their performance will be evaluated (Ali, Mahmood, and Mehreen 2019). Providing constructive feedback and coaching to teachers can help them identify areas for improvement and further enhance their performance. Regular evaluations and performance discussions can create a supportive environment that motivates teachers to excel (Farooqi 2019; Kim and Lee 2020; Akhtar and Akram 2022).

RQ3: *What is the effect of reward towards teachers' performance in China Shandong Vocational Colleges?*

There is a significant effect of reward on teachers' performance in China Shandong Vocational Colleges (Beta= 0.242, $p=0$). Organizations should design reward systems that align with teachers' performance and recognize their efforts. Rewards can include financial incentives, professional development opportunities, recognition programs, or increased responsibilities. It is crucial to ensure that rewards are perceived as fair and equitable, promoting a sense of motivation and job satisfaction among teachers. Regularly reviewing and adjusting reward systems based on individual and organizational needs can strengthen the link between performance and rewards (Farooqi et al. 2019).

Conclusion

The study collected 308 data on demographics and analyzed the variables of information sharing, performance assessment, reward, and teachers' performance. The findings suggest that respondents perceive moderate levels for these variables and there is a strong positive correlation between them. Furthermore, the regression analysis confirmed the significant impact of information sharing, performance assessment, and reward on teachers' performance. The study also found that information sharing, performance assessment, and reward significantly affect teachers' performance in China Shandong Vocational Colleges. Overall, the study highlights the importance of effective information sharing practices within organizations to positively impact teachers' performance.

Limitation

Study limitations include limited generalizability, small sample size, lack of detail on minimizing researcher interference, potential limitations of the Bush collegial model, and variable effectiveness depending on specific contexts and organizational culture.

Future Study

Future studies should consider broader perspectives beyond the Bush collegial model, including institutional policies, resources, and support systems. Factors such as leadership styles, teacher characteristics, and institutional norms should also be considered. A larger sample size is recommended for more representative results.

References

- Almonawer, N., Alainati, A. S., Al-Hammad, F., Haque, R., and Senathirajah, A. R. S. (2023). *Transformational Leadership Style and School Transformation: The Case of Secondary Schools in Kuwait*. 29(1), pp. 51-67. DOI: 10.46970/2022.29.1.4Akhtar and Akram. (2022). A study of issues in educational management at high school level at Punjab. *Pakistan Journal of Social Research*, 4(1), pp.213-219.
- Ahmad, M. S., Bakhsh, K. and Rasool, S. (2019). Effect of transformational leadership skills on teachers' performance at secondary school level in Punjab. *Journal of Managerial Science*, XIII(2), pp.1-9.
- Ahmad, M.S., Bakhsh, K. and Rasool, S. (2021). Effect of transformational leadership skills on teachers' performance at secondary school level in Punjab. *European Journal of Educational Research*, 6(1), pp.19-38.
- Ali, Z., Mahmood, B. and Mehreen, A. (2019). Linking succession planning to employee performance: The mediating roles of career development and performance appraisal. *Australian Journal of Career Development*, 28(2), pp.112–121.
- Bush, T. (2022). *Theories of Educational Leadership and Management*. SAGE Publications, Version 5.
- Cai, Y., Wei, C., and Liu, Y. (2021). Exploring the relationship between knowledge sharing and employee innovation behaviour: The mediating role of psychological safety and the moderating role of power distance. *Journal of Business Research*, 136, pp.311-321.
- Chinese News. (2022). Ministry of Education: The number of full-time teachers in vocational schools nationwide will reach 1.29 million in 2021.
- Chua K., Thinakaran, R., Vasudevan, A. (2023). Knowledge Sharing Barriers in Organizations - A Review, 12(1), pp.184-191. DOI: 10.18421/TEM121
- Cooper, B., Wang, J., Bartram, T., and Cooke, F. L. (2019). Well-being-oriented human resource management practices and employee performance in the Chinese banking sector: The role of social climate and resilience. *Human Resource Management*, 58(1), pp.85-97.
- Farooqi, M. T. K., Ahmed, S. and Ashiq, I. (2019). Relationship of perceived organizational support with

- secondary school teachers' performance. *Bulletin of Education and Research*, 41(3), pp.141-152.
- GuyParé and Raymond L, P. M.-P. G. G. C. A. O. A. (2022). Medical students' intention to integrate digital health into their medical practice: A pre-peri COVID-19 survey study in Canad. *Digital Health*, Volume 8.
- Irene. (2020). Relationship Between Teachers' Collegiality and Academic Performance of Pupils in KCPE in Central Division, Narok North Sub-County, Kenya. Faculty of Education (FEEd), University of Nairobi.
- Jiao,L,J, Liu Chun-fang, Zhao Yan-ze and Song Rui. (2021). Predicting academic performance of students in Chinese-foreign cooperation in running schools with graph convolutional network. *Neural Computing and Applications*, 33, pp.637–645
- Karimi, F, Yarmohamadzadeh, P, Hosseinzadeh, O. A. and Jamalpour, M. (2022). Deducing the intellectual pattern existing in schools based on the formal model. *Journal of School Administration*, 10(3), pp.1-25.
- Kim, T. and Lee, Y. (2020). Principal instructional leadership for teacher participation in professional development: Evidence from Japan, Singapore, and South Korea. *Asia Pacific Education Review*, Volume 21, pp.261–278.
- Lilit and Narek. (2023). Main components of school management model using information and communications technologies. *Pedagogy and Psychology*, 10(1), pp.87-98.
- Mahmoud, M. A., Ahmad, S. B., and Poespowidjojo, D. A. L. (2022). Validation of psychological safety, psychological empowerment, intrapreneurial behaviour and individual performance measurements. *RAUSP Management Journal*, 57, pp.219-234.
- Martocchio, J.J. (2019) *Human Resource Management* (15th ed.) Pearson Education, Inc.
- Ooi K.X., Wider, W. and Lee K.L. Human resource artificial intelligence implementation and organizational performance in Malaysia. *Asia-Pacific Social Science Review*, 22(3), pp.17-36.
- Shrestha, N. (2021). Factor analysis as a tool for survey analysis. *American Journal of Applied Mathematics and Statistics*, 9(1), pp.4-11.
- Tan, O.K., Lim, K.Y., How, W.Y., Ong, C.H., Goh, C.F., Rasli, A., Choi, S.L. (2022). Relationship between teaching quality factors and employability among technology management students. *International Journal of Evaluation and Research in Education*, 11(3), pp. 1154-1161.
- United Nations (2015). Transforming our world: The 2030 agenda for sustainable development. *New York: United Nations, Department of Economic and Social Affairs*.
- Wati, M. (2020). Training and assistance in preparing class action research proposals for science teachers in Hulu Sungai Tengah regency. *Indonesian Journal of Science and Education*.