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# Predicting Job Performance Based on Knowledge Management and Psychological Empowerment Among Physical Education Teachers

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ARTICLE INFO	ABSTRACT
Article History: Received 4 March 2024 Received in revised form 13 May 2024 Accepted 17 June 2024 Available online 23 June 2024	The purpose of this study was to predict job performance based on knowledge management and psychological empowerment. The research employed a descriptive-correlational design. The statistical population included all physical education teachers in Sarab County (N = 106). The entire population was selected as the sample using a census method. Data were collected using the Job Performance Questionnaire by Ramazani-Nejad (2013), the Psychological Empowerment Scale by Spreitzer and Mishra (1995), and the Knowledge Management Questionnaire by Hemmati (2000). Pearson correlation and multiple regression analyses were used to test the hypotheses. The results indicated a significant relationship between knowledge management and psychological empowerment with job performance. The regression findings showed that knowledge management and psychological empowerment together explained 29.9% of the variance in job performance. It appears that enhancing teachers' awareness and knowledge, along with strengthening their cognitive empowerment, can lead to improved job performance. Therefore, in addition to teachers, educational administrators should also pay particular attention to this matter and make greater efforts toward implementing knowledge management principles.
Keywords: Knowledge Management, Psychological Empowerment, Job Performance	

## 1. INTRODUCTION

One of the most critical issues in today's world is employee work performance. Effective and efficient job performance is one of the key drivers of organizational success. High-quality performance translates into productivity, quality, profitability, and customer orientation. For this reason, leading global organizations strive to identify and manage the factors influencing employee performance and behavior. By doing so, they aim to improve both the quantity and quality of employee outputs. Factors such as talent, knowledge and skills, opportunities, resources and facilities, motivation, goal orientation and planning, positive thinking, persistence, discipline, determination, access to role models, and the need for achievement are among the essential elements that support and ensure high levels of performance. Consequently, one of the key responsibilities of managers in improving employee performance is to discover the talents of their colleagues, assign appropriate roles and positions to enhance

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organizational productivity, and promote training and skill development while ensuring that staff have both the opportunity and authority to perform effectively [1].

Among the various factors affecting job performance, knowledge enhancement and knowledge management are of particular significance. Knowledge management is a fundamental and influential factor in employees' job performance. Knowledge is a valuable asset that empowers organizations to innovate and compete. Within organizations, knowledge can enhance employees' awareness and competence. The process of knowledge management involves establishing a systematic approach to managing intellectual work and transforming knowledge into a strategic asset. Organizations must strive to balance the activities of knowledge creation, dissemination, and utilization. Ultimately, knowledge management aims to raise organizational intelligence and improve overall efficiency. In knowledge-based organizations, knowledge is easily transferred and made accessible to employees. When employees can access organizational knowledge, they better understand and interpret their work environments. They can discover innovative methods in their fields, make sense of them, and apply them in practice thereby increasing organizational productivity. Based on the above, knowledge management can be defined as: "The process of creating, disseminating, and applying knowledge to achieve organizational goals" [1].

In the current era, knowledge is power, and intellectual capital serves as a tool of influence. The role of knowledge management is to oversee and guide the use of an organization's intellectual assets through a systematic process aimed at achieving strategic objectives. Throughout history, humankind has played a key role in generating knowledge and using it to drive societal change. In the 21st century, knowledge-based and knowledge-creating organizations are the main agents of knowledge management [2].

In addition to knowledge management, psychological empowerment has also garnered research attention as a significant factor influencing job performance. Psychological empowerment of human resources as an innovative, intrinsic motivational approach refers to unleashing internal employee potential by creating the conditions and opportunities for individuals to develop their talents, abilities, and competencies. Psychological empowerment entails employees believing in their own competence to perform tasks successfully, feeling autonomous in their actions, believing in their capacity to influence outcomes, pursuing meaningful and valuable job goals, and experiencing fair and honest treatment within the organization [3].

The most vital asset of any organization is its human capital. The quality and capability of this workforce determine the organization's sustainability and growth. A capable workforce builds a capable organization. Economic development depends on empowering knowledgeable employees. An empowered organization is one in which individuals collaborate across teams to accomplish shared tasks. Empowering employees is a central strategy for innovation, decentralization, and the reduction of bureaucracy within organizations. Empowerment helps managers and institutions reach their goals faster and more efficiently, reducing resource waste. It also fosters a sense of ownership and pride in employees, motivating them to perform at their best. Without empowerment, neither managers nor organizations can succeed in the long run [4].

Numerous studies have demonstrated a significant relationship between knowledge management and psychological empowerment with job performance. In this regard, findings by Ghasemi (2016), Asgari and Pourmohammadi (2015), Habibi, Hassanzadeh, and Niroumand (2014), Asadollahi (2011), Masaedeh, Shannak, Maqableh, and Tarhini (2017), and Zarin Nasira and Rozzeli (2016) confirm the positive relationship between knowledge management and job performance [5–10]. Similarly, research by Maleki Sadeghi and Areban (2017), Vajehoddini and Mollahosseini (2016), Shijin (2016), and Noray (2016) supports the link between psychological empowerment and job performance [11–14]. Moreover, Amini (2019) pointed to a significant relationship between knowledge management and psychological empowerment [15].

In general, human factors particularly teachers are the dynamic core of the educational system. Since today's students are tomorrow's leaders and decision-makers, there is a growing need for dedicated teachers, including physical education instructors, who embody behavioral virtues such as altruism, work ethic, integrity, civic virtue, and courtesy. These traits help foster the continuous development of physical education within the school system. Given the limited understanding of the current state of psychological empowerment and knowledge management among physical education teachers and the lack of sufficient data on their connection to job performance this study is of particular importance.

By examining the variables of psychological empowerment, knowledge management, and job performance in physical education teachers, this research seeks to clarify current conditions and offer valuable insights for policymakers and education professionals. Therefore, this study aims to answer the following research question: Can knowledge management and psychological empowerment predict the job performance of physical education teachers in Sarab County?

## 2. METHODOLOGY

This study employed a descriptive-correlational research design and was conducted in the field. The statistical population consisted of all physical education teachers in Sarab County (N = 106), all of whom were selected as the study sample using a census method.

To collect data, the following standardized questionnaires were used:

- The Job Performance Questionnaire developed by Ramazani-Nejad (2013), consisting of 20 items;
- The Psychological Empowerment Scale by Spreitzer and Mishra (1995), which includes five dimensions competence, autonomy, impact, meaningfulness, and trust across a total of 15 items;
- The Knowledge Management Questionnaire developed by Hemmati (2000), comprising four dimensions knowledge creation, knowledge sharing, knowledge application, and knowledge storage with a total of 25 items.

All items were measured using a five-point Likert scale.

To ensure content validity, the initial questionnaires were reviewed and approved by ten faculty experts in sports management. For reliability assessment, Cronbach’s alpha was utilized. The reliability coefficients for the job performance, psychological empowerment, and knowledge management questionnaires were 0.80, 0.86, and 0.98, respectively indicating high internal consistency.

After data collection, descriptive statistics including mean, standard deviation, frequency, and percentage were used to organize, summarize, and describe the data. To analyze the data, inferential statistics such as the Kolmogorov-Smirnov test (to assess normality), Pearson correlation coefficient, and multiple regression analysis were employed using SPSS version 21.

## 3. RESEARCH FINDINGS

Descriptive results revealed that 53.8% of the research sample were male, while 46.2% were female. Regarding educational background, 70.7% held a bachelor’s degree, and 29.2% held a master’s degree. Additionally, 49.1% of participants had between 15 to 25 years of work experience. Other descriptive statistics are presented in Table 1.

**Table 1.** Demographic Characteristics

Percentage	Number	Variables	
53.8%	57	Male	<b>Gender</b>
46.2%	49	Female	
36.8%	39	Primary School	<b>Educational Level</b>
63.2%	67	Middle & High School	

To ensure accurate analysis and estimation, the mean score for each variable was calculated. The results are presented in Table 2.

**Table 2.** Mean Scores of Variables in the Sample Group

Variable	N	Mean	Standard Deviation	Minimum	Maximum
Job Performance	106	76.64	8.335	57	96
Knowledge Management	106	82.62	20.960	29	117
Psychological Empowerment	106	60.58	6.667	41	75

As shown in Table 2, the mean scores of the sample group across all three variables exceed 60, indicating that participants generally possessed favorable levels in terms of job performance, knowledge management, and psychological empowerment.

One of the key assumptions for applying multivariate statistical methods such as regression is the normality of the data. Ignoring this assumption may result in misleading conclusions. To evaluate the distribution of data, the Kolmogorov–Smirnov test was employed. The results confirmed that the data were normally distributed, as shown in Table 3.

**Table 3.** Assessment of Normality in Data Distribution

Variable	Mean	Standard Deviation	Z	Sig.	Normality Status
Job Performance	76.64	8.335	0.753	0.623	Normal
Knowledge Management	82.62	20.960	1.270	0.080	Normal
Psychological Empowerment	60.58	6.667	1.364	0.098	Normal

As shown in Table 3, the significance levels for all variables are greater than 0.05, confirming the normal distribution of the data across all variables.

To proceed with Pearson correlation analysis and regression modeling, the issue of multicollinearity among predictor variables was assessed. High multicollinearity in a regression model indicates strong intercorrelation among predictors, which can compromise the validity of the model.

In this study, multicollinearity was evaluated using two key indicators:

- Variance Inflation Factor (VIF)
- Tolerance coefficient

These metrics assess the degree of linear dependency among the predictor variables.

**Table 4.** Estimation of Multicollinearity

Multicollinearity Indices		Variables
Variance Inflation Factor (VIF)	Tolerance	
1.061	0.942	Knowledge Management
1.061	0.942	Psychological Empowerment

As shown in Table 4, the tolerance coefficients fall within the acceptable range of 0 to 1. Additionally, the Variance Inflation Factor (VIF) values for both predictor variables are slightly above 1. Since a VIF greater than 2 typically indicates concern regarding multicollinearity, the results in this study suggest that the level of multicollinearity is low. Therefore, the model demonstrates adequate statistical validity.

Having confirmed the distributional assumptions and the integrity of the model, the next step involved evaluating the significance of the model components and the relationships between the variables. Table 5 presents the correlations between the predictor variables and job performance.

**Table 5.** The Relationship Between Variables and Subscales With Job Performance

Variables and Subscales	Correlation Coefficient	Significance Level
Knowledge Management	<b>0.536</b>	<b>0.001</b>
Psychological Empowerment	<b>0.235</b>	<b>0.001</b>

According to the results presented in Table 5, the relationships between knowledge management and psychological empowerment with job performance are statistically significant, as the p-values are less than 0.01. Therefore, it can be stated with 99% confidence that there is a positive and significant correlation between knowledge management and psychological empowerment with the job performance of physical education teachers.

To develop a regression equation and determine the predictive contributions of knowledge management and psychological empowerment to job performance, regression analysis was conducted. A summary of the regression analysis results is presented in Tables 6, 7, and 8.

**Table 6.** Correlation Coefficient and Significance Level of Predictor Variables with Job Performance

Variables	Correlation Coefficient	Significance Level	Adjusted R <sup>2</sup>
Knowledge Management and Psychological Empowerment	<b>0.547</b>	<b>0.001</b>	<b>0.299</b>

The adjusted R<sup>2</sup> value shown in Table 6 indicates that the predictor variables collectively explain 29.9% of the variance in job performance.

**Table 7.** Results of the ANOVA for Job Performance

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	Sig.
<b>Regression</b>	2180.777	2	1090.388	21.963	0.001
<b>Residual (Error)</b>	5113.601	103	49.467		
<b>Total</b>	7294.377	105			

Table 7 indicates whether the regression model can adequately predict the variance of the dependent variable. Given that the significance level is less than 0.01, the results demonstrate that the applied model is a suitable predictor of the dependent variable, i.e., job performance.

**Table 8.** Regression Coefficients of Predictor Variables on Job Performance

Predictor Variable	Durbin-Watson	R	Adjusted R <sup>2</sup>	Beta	t	Sig.
<b>Constant (Intercept)</b>	1.913	0.547	0.299	51.403	8.022	0.001
<b>Knowledge Management</b>				0.202	5.984	0.001
<b>Psychological Empowerment</b>				0.141	1.325	0.048

According to Table 8, the value of R indicates the simple correlation between knowledge management and psychological empowerment with the job performance of physical education teachers. The correlation coefficient is 0.547, which reflects a moderate strength of association. The adjusted R<sup>2</sup> value is 0.299, meaning that 29.9% of the variance in job performance can be explained by the variables of knowledge management and psychological empowerment. Therefore, these variables are significant predictors of job performance.

The Durbin-Watson statistic was used to assess the independence of observations. The Durbin-Watson statistic ranges from 0 to 4, and values between 1.5 and 2.5 are generally considered acceptable. According to Table 8, the Durbin-Watson value is 1.913, which indicates an acceptable level, suggesting that there is no autocorrelation among the residuals.

Furthermore, based on Table 8, the intercept (constant) and regression coefficients for knowledge management and psychological empowerment are 51.403, 0.202, and 0.141, respectively. Thus, the regression model can be expressed as follows:

Where:

$$Q = 0.202 x' + 0.141 Y' + 51.403$$

- Q = Job Performance
- x' = Knowledge Management
- Y' = Psychological Empowerment

#### 4. DISCUSSION AND CONCLUSION

The results of this study demonstrated a significant and positive relationship between knowledge management and psychological empowerment with job performance ( $r = 0.219$ ). The adjusted  $R^2$  indicates that 29.9% of the variance in job performance can be explained by knowledge management and psychological empowerment. Therefore, knowledge management and psychological empowerment are capable of predicting the job performance of physical education teachers. The findings of the present study align with previous research such as those by Sadeghi (2017), Vajeddini and Malahosseini (2016), Ghasemi (2016), Asadollahi (2011), Masaideh et al. (2017), Zarin Naseh and Rosli (2016), Shijin (2016), and Noray (2016) [5, 8-14]. No conflicting results were found in the literature search that contradict these findings.

Knowledge management, as a systematic and committed business optimization strategy, involves selecting, refining, storing, organizing, and summarizing essential business information to enhance employee performance and organizational competitiveness [16]. Knowledge serves as a fundamental competitive tool in many organizations. Both commercial and scientific communities agree that leveraging knowledge enables organizations to maintain competitive advantages. To guide knowledge towards organizational goals and achieve sustainable competitive advantage, managers must actively engage in knowledge management. They need to enhance their capabilities in this field, familiarize themselves with knowledge management strategies, and cultivate a knowledge-centered, interactive cultural environment among human resources to facilitate seamless knowledge sharing and management. This way, existing knowledge can be transformed into sustainable competitive advantage.

Environmental changes compel organizations to continuously seek optimal practices and methods to adapt, thereby achieving competitive advantages. The only viable solution is to become a learning organization. One fundamental approach to becoming such an organization is implementing knowledge management. Physical education teachers, by acquiring, expanding, and sharing knowledge with colleagues, can not only ensure improved job performance but also elevate the collective knowledge of staff and guarantee the organization's desired performance. Hence, knowledge management forms the foundation of desirable job performance among teachers.

In addition to knowledge management, psychological empowerment significantly influences employee performance. Psychological empowerment refers to having self-confidence and belief in one's abilities and striving to make organizational activities effective. Empowered individuals believe that external obstacles do not control their actions but can be managed or overcome [17]. The presence of such traits in employees enhances their performance by fostering self-confidence, a sense of influence, and improved organizational outcomes. This was also evident in the present study, where physical education teachers with high psychological empowerment exhibited desirable job performance.

A key factor in empowering employees is their access to information, knowledge, job skills, and experience. Bowen and Lawler (1992) defined empowerment as involving employees in four elements: information, knowledge, rewards, and power [18]. Therefore, collecting, disseminating, and managing knowledge can empower employees and enhance organizational performance.

The integration of knowledge management and psychological empowerment can lead to improved performance among teachers [19]. When employees feel that their colleagues are honest with them, that they impact organizational performance, and that important information, knowledge, and awareness are shared among them, a sense of trust develops. In such an environment, cooperation among employees increases, and the knowledge and awareness necessary for organizational advancement are shared and managed effectively through knowledge management.

Given the relationship between knowledge management, psychological empowerment, and job performance, managers and officials should plan and invest in the implementation of knowledge management principles and psychological empowerment strategies. The role of the education department in the sports industry is undeniable, and expanding this role requires specialized

and dedicated teachers. Understanding the variables of psychological empowerment, knowledge management, and job performance among physical education teachers can foster sports development, particularly student sports.

Based on the findings, the following recommendations are made:

1. Considering the direct relationship between knowledge management, psychological empowerment, and the performance of physical education teachers, officials are advised to adopt and implement methods that enhance psychological empowerment. These include fostering flexible organizational structures, adopting participatory management styles, creating learning environments, increasing organizational knowledge, providing necessary job-related training, and employing a diverse workforce.
2. Given the relationship between knowledge management and teacher performance, it is recommended that teachers be encouraged to pursue further education and participate in refresher courses related to their profession to improve knowledge management skills.

## **Declaration**

We acknowledge that we used ChatGPT to enhance the academic writing of our manuscript while ensuring the originality and integrity of our work.

## **Transparency Statement**

The data supporting this study are available upon reasonable request to the corresponding author, subject to ethical and confidentiality considerations.

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## **Declaration of Interest**

The authors declare that they have no competing interests.

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