

Analyzing the Effect of Talent Management on Job Performance through Employee Retention: A Mediation Study Using the PROCESS Model in the Healthcare Sector of Hafr Al-Batin Governorate

Dr. Abdelmohsin Mohamed Ahmed Abdelrahman Assistant Professor

International University of Africa

DOI: <https://doi.org/doi.org/10.51584/IJRIAS.2026.11060223>

Received: 15 June 2026; Accepted: 20 June 2026; Published: 11 July 2026

ABSTRACT

This study aimed to analyze the effect of talent management on job performance through employee retention in the healthcare sector of Hafr Al-Batin Governorate, Saudi Arabia. The study adopted a descriptive-analytical approach and utilized a structured questionnaire administered to a sample of 384 healthcare employees. Data were analyzed using SPSS and Hayes' PROCESS Macro (Model 4) to test the mediating role of employee retention. The findings revealed a significant positive effect of talent management on employee retention and a significant positive effect of employee retention on job performance. In addition, talent management demonstrated a significant total effect on job performance. However, the indirect effect through employee retention was not statistically significant according to Bootstrap confidence intervals, indicating the absence of a significant mediation effect. The study recommends strengthening talent management practices, improving workplace conditions, and exploring additional mediating variables in future research.

Keywords: Talent Management; Employee Retention; Job Performance; Mediation Analysis; PROCESS Model; Healthcare Sector; Saudi Arabia.

INTRODUCTION

Talent management has become one of the most widely recognized concepts in human resource management, receiving increasing attention in the modern management literature due to rapid changes in the business environment and the growing intensity of competition among organizations. Talent management aims to attract, develop, and develop talented personnel to meet the organization's strategic priorities, thereby enhancing organizational effectiveness and ensuring sustainable excellence. In this context, the healthcare sector holds particular importance because it relies heavily on skilled human resources to deliver high-quality services that directly affect patient health and safety.

On the other hand, employee retention continues to be a critical concern for modern organizations. Organizational success is no longer determined solely by the ability to attract talented employees but also by the capacity to retain them and reduce employee turnover rates. The loss of talented employees results in several adverse consequences, including increased recruitment and training costs, loss of organizational knowledge and expertise, and a decline in overall organizational performance. Furthermore, employee retention contributes to job stability, higher levels of employee satisfaction, and stronger organizational commitment, which positively influence job performance and the continuity of efficient service delivery. This is particularly critical in the healthcare sector, where workforce stability is essential for ensuring the quality of healthcare services.

Despite the growing body of research examining talent management and its impact on job performance, previous studies remain limited in exploring the underlying mechanisms that explain this relationship. Most studies have focused on the direct effect of talent management on job performance without adequately investigating the explanatory role of employee retention as a mediating variable. Furthermore, there is a notable lack of empirical studies employing advanced statistical mediation techniques, such as the PROCESS macro, particularly within

the healthcare sector in Saudi Arabia and specifically in Hafr Al-Batin Governorate. Therefore, this study seeks to address this research gap by examining the mediating role of employee retention in the relationship between talent management and job performance, thereby providing a deeper understanding of causal relationships within healthcare work environments.

The research problem arises from variations in the implementation of talent management practices across healthcare institutions and the subsequent effects on employee retention and job performance quality.

Research Problem

The study seeks to answer the following main research question:

"To what extent does talent management influence job performance directly and indirectly through employee retention among healthcare sector employees in Hafr Al-Batin Governorate"?

This main question can be divided into the following sub-questions:

1. What is the level of talent management implementation in the healthcare sector?
2. What is the relationship between talent management and employee retention?
3. What is the relationship between talent management and job performance?
4. What is the relationship between talent management and job performance when employee retention acts as a mediating variable?

Research Objectives

1. To measure the level of talent management implementation.
2. To analyze the relationship between talent management and employee retention.
3. To examine the direct effect of talent management on job performance.
4. To investigate the indirect effect of talent management on job performance through employee retention using the PROCESS model.

Significance of the Study

Theoretical Significance

The theoretical significance of this study lies in its application of mediation analysis using the Bootstrap technique and the PROCESS model to examine both direct and indirect relationships among talent management, employee retention, and job performance. This contributes to enriching the human resource management literature, particularly within the Saudi healthcare sector.

Practical Significance

The findings of this study may assist hospital administrators in improving talent acquisition and retention policies based on robust quantitative evidence, thereby enhancing workforce stability and organizational performance.

Research Hypotheses

H1: There is a statistically significant positive relationship between talent management and employee retention.

H2: There is a statistically significant positive relationship between employee retention and job performance.

H3: There is a statistically significant positive relationship between talent management and job performance.

H4: Talent management has a statistically significant indirect effect on job performance through employee retention.

Theoretical Framework and Previous Studies

Talent Management

Talent management is a contemporary management concept that emerged with the transition toward a knowledge-based economy, where talented human resources have become a critical source of sustainable competitive advantage for organizations (Collings & Mellahi, 2009). Talent management refers to a set of policies and practices aimed at attracting, developing, motivating, and retaining highly qualified individuals to ensure the effective achievement of organizational objectives (Armstrong, 2020).

Scholars argue that talent management extends beyond recruitment and encompasses an integrated system that includes workforce planning, skills development, performance management, and succession planning (Mitsakis, 2020). Existing literature further suggests that organizations implementing effective talent management practices achieve higher levels of organizational performance, employee satisfaction, and lower turnover rates (Al Ariss et al., 2014).

In the healthcare sector, talent management is particularly important because the quality of healthcare services depends directly on the competence of healthcare professionals. Research indicates that ineffective talent management practices contribute to employee burnout and the loss of talented personnel, ultimately affecting the quality of healthcare delivery (Dawson et al., 2014).

The primary dimensions of talent management include talent attraction, talent development, talent motivation, and talent retention, which collectively form the strategic framework for managing human capital within organizations (Lewis & Heckman, 2006).

Employee Retention

Employee retention is a fundamental component of human resource management and refers to an organization's ability to retain high-performing employees while reducing turnover rates (Hausknecht et al., 2009). It encompasses a range of policies and practices designed to enhance employee satisfaction and organizational loyalty, thereby encouraging employees to remain within the organization for extended periods (Das & Baruah, 2013).

Within the healthcare sector, employee retention represents a strategic challenge due to the increasing global demand for healthcare professionals and the demanding nature of healthcare work. Studies have shown that the loss of skilled healthcare employees negatively affects service quality and increases the workload of remaining staff members (Halter et al., 2017).

Employee retention is influenced by several key factors, including job satisfaction, organizational justice, work environment, professional development opportunities, and leadership style (Chan et al., 2013). Furthermore, talent management practices contribute directly to employee retention by improving workplace conditions and providing clear career development pathways (Kim & Kao, 2014).

Job Performance

Job performance is one of the most important organizational outcomes and is defined as the extent to which employees accomplish assigned tasks and responsibilities according to established standards of quality, quantity, and timeliness (Campbell & Wiernik, 2015). It is also viewed as the outcome of the interaction between individual capabilities, workplace conditions, and organizational motivation (Koopmans et al., 2014).

In the healthcare sector, job performance is a critical factor directly associated with healthcare quality and patient safety. Consequently, improving job performance is considered a strategic objective for healthcare organizations worldwide (World Health Organization [WHO], 2020).

Job performance consists of several dimensions, including quality of work, quantity of output, professional competence, organizational commitment, and teamwork (Koopmans et al., 2014). Research indicates that improvements in human resource management practices, particularly talent management, lead to enhanced job performance through the development of employee competencies and increased motivation (Collings et al., 2018).

The Relationship Between Talent Management and Job Performance

Numerous studies have demonstrated that talent management positively influences job performance. Attracting and developing highly competent employees enhances work quality and productivity, while investment in employee development strengthens their ability to perform job responsibilities more effectively.

However, this relationship may not always be direct, as it can be influenced by mediating variables such as job satisfaction, organizational commitment, and employee stability within the organization. This creates opportunities for examining the mechanisms through which talent management contributes to performance outcomes.

The Mediating Role of Employee Retention

Employee retention serves as an important mediating variable in explaining the relationship between talent management and job performance. Effective talent management not only improves performance directly but also contributes to reducing employee turnover and increasing workforce stability.

Consequently, retaining talented employees facilitates the accumulation of organizational knowledge and experience, improves internal coordination, and enhances task execution efficiency, all of which contribute positively to job performance. This mediating role can be explained through mediation models, which assume that the effect of an independent variable is transmitted through a third variable before influencing the dependent variable (Baron & Kenny, 1986).

Research Methodology

Research Design

This study adopts a descriptive-analytical research design aimed at describing the phenomenon under investigation and analyzing the relationships among its variables. Specifically, the study examines the effect of talent management on job performance and investigates the mediating role of employee retention in this relationship. This design is appropriate for studies seeking to test causal models using advanced statistical techniques.

Population and Sample

The study population consists of all employees working in the healthcare sector in Hafr Al-Batin Governorate, Saudi Arabia. Due to the difficulty of accurately identifying the entire population, a simple random sampling technique was employed. A sample of 384 respondents was selected, which is considered appropriate for quantitative studies according to established sample size determination guidelines.

Research Instrument

Data were collected using a structured questionnaire comprising three main dimensions:

- Talent Management

- Employee Retention
- Job Performance

A five-point Likert scale was used to measure respondents' perceptions.

Validity and Reliability

Content validity was established through evaluation by a panel of experts specializing in human resource management and statistics. Internal consistency reliability was assessed using Cronbach's alpha coefficient, which yielded an overall value of 0.97, indicating excellent reliability.

Data Analysis Techniques

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) and the PROCESS Macro for advanced statistical analysis.

The simple mediation model (PROCESS Model 4) was employed to examine the mediating role of employee retention in the relationship between talent management and job performance. The Bootstrap method with 5,000 resamples was used to estimate indirect effects accurately and reduce estimation bias.

The study follows the methodology proposed by Hayes (2018) for mediation analysis using Bootstrap procedures, which provide more accurate estimates of indirect effects compared with traditional mediation approaches such as those proposed by Baron and Kenny (1986).

Fourth: Field Study and Data Analysis

Demographic Characteristics of the Sample

Table 1. Demographic Characteristics of the Sample (N = 384)

Variable	Category	Frequency	Percentage (%)
Gender	Male	152	39.6
	Female	232	60.4
Job Position	Manager	75	19.5
	Supervisor	17	4.4
	Specialist	88	22.9
	Technician	13	3.4
	Administrative Staff	89	23.2
	Other	102	26.6
Educational Qualification	Secondary School	15	3.9
	Diploma	22	5.7
	Bachelor's Degree	269	70.1
	Higher Diploma	5	1.3

	Master's Degree	65	16.9
	Doctorate	8	2.1
Years of Experience	Less than 5 years	96	25.0
	5 to less than 10 years	97	25.3
	10 to less than 15 years	110	28.6
	15 years and above	81	21.1

Source: Prepared by the researcher based on questionnaire data (2025).

The results indicate that the majority of respondents were female (60.4%), while males represented 39.6% of the sample. The occupational distribution reveals diversity across job categories, with a relatively higher concentration among administrative staff and specialists. Regarding educational qualifications, most participants held a bachelor's degree (70.1%), reflecting a relatively high educational level among employees in the healthcare sector under study. Furthermore, the distribution of years of experience demonstrates a balanced representation across experience categories, with the largest proportion belonging to employees with 10 to less than 15 years of experience.

Descriptive Statistics of the Study Variables

Table 2. Descriptive Statistics of Study Variables

Variable	N	Min	Max	Mean	SD
Talent Management	384	1.00	5.00	3.80	0.96
Employee Retention	384	1.20	5.00	3.82	0.96
Job Performance	384	1.00	5.00	4.48	0.55

Source: Prepared by the researcher based on questionnaire data (2025).

The findings indicate that both talent management and employee retention were perceived at moderate-to-high levels. In contrast, job performance achieved a relatively high mean score with low variability, suggesting a high degree of consensus among respondents regarding this construct.

Reliability Analysis

Table 3. Reliability Analysis (Cronbach's Alpha)

Dimension	Number of Items	Cronbach's Alpha
Talent Management	14	0.97
Employee Retention	10	0.96
Job Performance	10	0.95
Total Scale	34	0.97

Source: Prepared by the researcher based on questionnaire data (2025).

The results demonstrate excellent internal consistency reliability across all study dimensions, as all Cronbach's alpha coefficients exceeded the commonly accepted threshold of 0.70. These findings confirm the suitability of the instrument for subsequent statistical analyses.

Correlation Analysis

Table 4. Correlation Matrix among Study Variables

Variables	Talent Management	Employee Retention	Job Performance
Talent Management	1	0.896**	0.379**
Employee Retention	0.896**	1	0.382**
Job Performance	0.379**	0.382**	1

$p < 0.01$

Source: Prepared by the researcher based on questionnaire data (2025).

The results reveal statistically significant positive correlations among all study variables. The strongest relationship was observed between talent management and employee retention, whereas the relationships involving job performance were moderate in magnitude.

Regression and Mediation Analysis (PROCESS Model 4)

Table 5. Regression and Mediation Results

Path	Relationship	β	t	p	Result
a	Talent Management $\rightarrow$ Employee Retention	0.8997	39.45	0.000	Significant
b	Employee Retention $\rightarrow$ Job Performance	0.1229	2.01	0.045	Significant
c (Total Effect)	Talent Management $\rightarrow$ Job Performance	0.2187	8.01	0.000	Significant
c' (Direct Effect)	Talent Management $\rightarrow$ Job Performance (with mediator)	0.1082	1.77	0.078	Not Significant

Source: Prepared by the researcher based on questionnaire data (2025).

Table 6. Bootstrap Analysis of Indirect Effect

Indirect Effect	Effect	Boot SE	LLCI	ULCI	Result
Talent Management $\rightarrow$ Employee Retention $\rightarrow$ Job Performance	0.1106	0.0618	-0.0067	0.2366	Not Significant

Source: Prepared by the researcher based on questionnaire data (2025).

The PROCESS analysis revealed a positive and statistically significant effect of talent management on employee retention, as well as a significant positive effect of employee retention on job performance. In addition, talent management exhibited a significant total effect on job performance. However, the direct effect became

statistically insignificant after introducing employee retention as a mediator. Furthermore, the indirect effect was not statistically significant based on the Bootstrap confidence intervals, indicating the absence of a significant mediation effect.

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Discussion of Findings

First: The Relationship between Talent Management and Employee Retention

The findings demonstrated a strong and statistically significant positive effect of talent management on employee retention. This suggests that improving talent management practices within healthcare organizations directly enhances their ability to retain highly qualified employees. This result is consistent with the literature emphasizing that work environments providing professional development opportunities, employee recognition, and clear career pathways contribute to reducing turnover intentions and increasing workforce stability.

This finding is also aligned with the strategic human resource management perspective, which considers talent management a critical mechanism for minimizing human capital loss, particularly in essential sectors such as healthcare.

Second: The Relationship between Employee Retention and Job Performance

The results indicated a positive and statistically significant effect of employee retention on job performance, although the magnitude of this effect was moderate. This suggests that employee stability contributes to performance improvement through accumulated experience, enhanced teamwork coordination, and increased organizational knowledge.

However, the relatively moderate strength of the relationship implies that job performance in healthcare organizations may not depend solely on employee retention. Other factors such as leadership effectiveness, job stress, incentive systems, and workplace conditions may also play important roles in shaping performance outcomes.

Third: The Relationship between Talent Management and Job Performance

The findings revealed a significant positive total effect of talent management on job performance, highlighting the importance of talent management practices in enhancing employees' overall performance. However, the direct effect lost its statistical significance after introducing employee retention into the model.

This finding suggests that talent management may influence job performance through multiple organizational mechanisms rather than solely through employee retention.

Fourth: The Mediating Role of Employee Retention

The mediation analysis using Bootstrap procedures and PROCESS Model 4 revealed that the indirect effect of talent management on job performance through employee retention was not statistically significant. Consequently, the mediation hypothesis was not supported.

This finding is particularly important because it indicates that employee retention does not fully explain the relationship between talent management and job performance. Talent management may affect job performance through alternative pathways, including:

- Employee skill development.
- Increased work motivation.
- Improvement of the work environment.

- Enhanced organizational commitment.

Moreover, the very strong correlation between talent management and employee retention may indicate conceptual overlap between the two constructs, thereby reducing the ability of employee retention to function as an independent mediator.

An additional explanation for the absence of a significant mediation effect may be related to the possibility of multicollinearity between talent management and employee retention. The correlation matrix revealed a very strong positive association between the two variables ($r = 0.896$, $p < .01$), suggesting substantial shared variance. Such a high correlation may reduce the unique explanatory contribution of employee retention when entered simultaneously with talent management in the mediation model. Consequently, the mediating variable may not demonstrate a statistically significant indirect effect despite its theoretical relevance. This finding highlights the importance of examining potential multicollinearity issues in future studies through additional diagnostic measures such as Variance Inflation Factor (VIF) and tolerance statistics.

This result is partially consistent with recent organizational research suggesting that organizational processes often operate through multiple pathways rather than a single explanatory mechanism (Hayes, 2018).

Conclusions

Based on the findings of the study, the following conclusions can be drawn:

1. Talent management practices exert a strong positive influence on employee retention within the healthcare sector.
2. Employee retention has a positive effect on job performance, although the effect size is moderate.
3. Talent management directly influences job performance; however, this relationship changes when the mediating variable is introduced.
4. The mediation hypothesis was not supported, as employee retention did not emerge as a significant mediator between talent management and job performance.
5. The findings suggest that the relationships among the study variables are more complex than those assumed by a simple mediation model and may require additional explanatory variables.

Recommendations

1. Strengthen talent management practices within healthcare organizations through well-structured recruitment, development, and career advancement programs.
2. Improve workplace conditions to enhance employee stability and reduce turnover rates.
3. Redesign incentive and reward systems to directly support higher levels of job performance.
4. Invest in continuous training and professional development programs to improve employee competencies.
5. Develop comprehensive human resource management strategies that emphasize not only retention but also employee motivation, development, and empowerment.
6. Investigate other potential mediating variables, such as job satisfaction and organizational commitment.
7. Employ more advanced analytical models, such as serial mediation models, to better understand organizational relationships.
8. Conduct comparative studies across different healthcare sectors within Saudi Arabia.

9. Expand future research by utilizing Structural Equation Modeling (SEM) to provide deeper insights into the relationships among study variables.

REFERENCES

1. Armstrong's Handbook of Human Resource Management Practice
2. Armstrong, M. (2020). *Armstrong's handbook of human resource management practice* (15th ed.). Kogan Page.
3. Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
4. Campbell, J. P., & Wiernik, B. M. (2015). The modeling and assessment of work performance. In J. D. Wright (Ed.), *International encyclopedia of the social & behavioral sciences* (2nd ed., pp. 263–271). Elsevier.
5. Chan, Z. C. Y., Tam, W. S., Lung, M. K. Y., Wong, W. Y., & Chau, C. W. (2013). A systematic literature review of nurse shortage and the intention to leave. *Journal of Nursing Management*, 21(4), 605–613. <https://doi.org/10.1111/j.1365-2834.2012.01437.x>
6. Collings, D. G., & Mellahi, K. (2009). Strategic talent management: A review and research agenda. *Human Resource Management Review*, 19(4), 304–313. <https://doi.org/10.1016/j.hrmr.2009.04.001>
7. Collings, D. G., Mellahi, K., & Cascio, W. F. (2018). Global talent management and performance in multinational enterprises: A multilevel perspective. *Journal of Management*, 45(2), 540–566.
8. Das, B. L., & Baruah, M. (2013). Employee retention: A review of literature. *Journal of Business and Management*, 14(2), 8–16.
9. Dawson, A. J., Stasa, H., Roche, M. A., Homer, C. S. E., & Duffield, C. (2014). Nursing churn and turnover in Australian hospitals. *Journal of Clinical Nursing*, 23(5–6), 888–900.
10. Halter, M., Boiko, O., Pelone, F., Beighton, C., Harris, R., Gale, J., Gourlay, S., & Drennan, V. (2017). The determinants and consequences of adult nursing staff turnover: A systematic review. *BMC Health Services Research*, 17(1), 824. <https://doi.org/10.1186/s12913-017-2707-0>
11. Hausknecht, J. P., Rodda, J. M., & Howard, M. J. (2009). Targeted employee retention: Performance-based and job-related differences in reported reasons for staying. *Human Resource Management*, 48(2), 269–288. <https://doi.org/10.1002/hrm.20279>
12. Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). Guilford Press.
13. Kim, H., & Kao, D. (2014). A meta-analysis of turnover intention predictors among U.S. child welfare workers. *Children and Youth Services Review*, 47, 214–223.
14. Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Van Buuren, S., Van der Beek, A. J., & De Vet, H. C. W. (2014). Improving the individual work performance questionnaire using Rasch analysis. *Journal of Applied Measurement*, 15(2), 160–175.
15. Lewis, R. E., & Heckman, R. J. (2006). Talent management: A critical review. *Human Resource Management Review*, 16(2), 139–154. <https://doi.org/10.1016/j.hrmr.2006.03.001>
16. Mitsakis, F. V. (2020). Human resource management (HRM), talent management and employee retention in organizations. *International Journal of Scientific and Research Publications*, 10(12), 142–152.
17. World Health Organization
18. World Health Organization. (2020). *State of the world's nursing 2020: Investing in education, jobs and leadership*. World Health Organization.

APPENDIX A

Research Questionnaire

Study Title

Analyzing the Effect of Talent Management on Job Performance through Employee Retention: A Mediation Study Using the PROCESS Model in the Healthcare Sector of Hafr Al-Batin Governorate

Dear Participant,

This questionnaire aims to collect data for scientific research purposes to examine the effect of talent management on job performance through employee retention in the healthcare sector of Hafr Al-Batin Governorate. All information provided will be treated confidentially and used solely for research purposes.

Please answer all items accurately and honestly.

Section I: Demographic Information

1. Gender
 - ☐ Male
 - ☐ Female
2. Age
 - ☐ Under 30
 - ☐ 30–39
 - ☐ 40–49
 - ☐ 50 and above
3. Educational Qualification
 - ☐ Diploma
 - ☐ Bachelor's Degree
 - ☐ Master's Degree
 - ☐ Doctorate
4. Job Position
 - ☐ Physician
 - ☐ Nurse
 - ☐ Healthcare Specialist
 - ☐ Administrative Staff
 - ☐ Other
5. Years of Experience
 - ☐ Less than 5 years
 - ☐ 5–10 years
 - ☐ 10–15 years

☐ More than 15 years

Section II: Questionnaire Items

Please indicate your level of agreement using the following scale:

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	4	3	2	1

Dimension 1: Talent Management

1. The organization adopts effective methods for attracting talented employees.
2. Employees are selected based on merit and competence.
3. The organization provides training programs for talent development.
4. The organization supports employees' professional growth.
5. Clear opportunities for career advancement are available.
6. High-potential employees are identified and developed.
7. The organization encourages creativity and innovation.
8. Outstanding employees receive appropriate recognition.
9. The organization provides a supportive environment for talent development.
10. Fair talent management policies are implemented.
11. Management pays attention to succession planning.
12. Talented employees are involved in decision-making.
13. The organization provides continuous learning opportunities.
14. Talent management practices contribute to achieving organizational goals.

Dimension 2: Employee Retention

15. I intend to continue working in this organization.
16. The organization provides reasons that encourage me to stay.
17. I feel secure in my current job.
18. Good opportunities for professional growth are available.
19. I am satisfied with the work environment.
20. I believe the organization values employees' efforts.
21. The organization treats employees fairly.

- 22. I feel loyal to the organization.
- 23. I rarely think about leaving my job.
- 24. I would recommend this organization as a good place to work.

Dimension 3: Job Performance

- 25. I perform my assigned duties efficiently.
- 26. I adhere to quality standards in my work.
- 27. I complete tasks within the required time.
- 28. I effectively deal with work-related problems.
- 29. I continuously strive to improve my performance.
- 30. I cooperate with colleagues to achieve organizational goals.
- 31. I take responsibility for my work outcomes.
- 32. I exert extra effort when necessary.
- 33. I contribute to improving service quality.
- 34. I achieve the required work objectives efficiently.