

RECRUITMENT, CAREER DEVELOPMENT, AND PERFORMANCE APPRAISAL AS DETERMINANTS OF EMPLOYEE RETENTION IN THE OMANI MINISTRY OF HEALTH

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Abstract: Human resource management (HRM) practices are regarded as a strategic approach to managing employees in order to maximise employee effectiveness and contribute to organisational goals. Effective HRM practices can enhance employee loyalty and promote long-term retention within organisations. Oman, like many other countries, faces challenges related to employee retention. This study aims to examine the impact of selected human resource management practices, namely recruitment and selection, career development, and the performance appraisal system on employee retention. A purposive sampling method was employed, and data were collected through a survey research design involving 371 employees from the Ministry of Health in the Sultanate of Oman. A structured questionnaire was used to gather quantitative data, which were subsequently analysed using the Statistical Package for Social Sciences (SPSS) version 25.0 and SmartPLS. The findings indicate that the HRM practices examined recruitment and selection, career development, and the performance appraisal system have a positive and significant impact on employee retention. The results of this study provide valuable insights into how improvements in HRM practices can enhance employee retention within healthcare organisations.

Keywords: Human Resource Management, Recruitment and Selection, Career Development, Performance Appraisal System, Employee Competency, Employee Retention

1. Introduction

Retaining experienced employees over the long term is crucial for any organisation. This can be achieved by designing a workplace environment that prioritises employee retention. Retaining good employees remains a major challenge for organisations, as it helps to reduce turnover costs and increases the likelihood of organisational success (Idris Osman et al., 2018). Employee retention refers to an organisation's ability to retain or motivate employees to remain with the organisation for the longest possible period (Kossivi et al., 2016). Employee retention has emerged as one of the most pressing human resource challenges globally, particularly in the healthcare sector. The healthcare industry relies heavily on skilled, motivated, and stable human resources to ensure high-quality service delivery (World Health Organization, 2020). However, many public healthcare institutions experience high turnover rates, leading to workforce shortages, increased recruitment costs, and reduced service quality. In developing countries and Gulf Cooperation Council (GCC) nations, including Oman, employee retention in the public healthcare sector is an increasing concern due to factors such as limited career development opportunities, heavy workloads, and the attraction of better remuneration in private or international healthcare organisations (Al-Lamki, 2021).

Human resource management (HRM) has become a critical strategic function in modern organisations, particularly in the public sector, where employee retention and motivation are essential for achieving institutional goals and service excellence. HRM practices such as recruitment and selection, training and development, performance appraisal, compensation, and employee relations play a vital role in shaping employees' attitudes, satisfaction, and long-term commitment to their organisations (Al-Emadi et al., 2015; Kundu & Lata, 2017). Effective HRM practices not only enhance employee performance but also contribute significantly to retaining competent and experienced employees, which is essential for organisational sustainability and effectiveness.

Effective recruitment and selection processes can lead to increased employee retention rates, as placing the right person in the right job reduces turnover and enhances morale, thereby fostering a more creative and productive work environment (Alameddine et al., 2017). Providing career development opportunities is another important HRM practice that can encourage employees to remain with their organisation (Al-Sharafi et al., 2018). A lack of professional growth opportunities may result in higher employee turnover. Organisations that implement career development programmes demonstrate strong commitment and dedication to their employees. In addition, performance appraisal systems help to evaluate employees based on their assigned tasks; through these appraisals, organisations can assess whether employees meet the required standards, which in turn influences compensation decisions (Al Habsi et al., 2021).

In 2020, both the global and local economies were severely disrupted by the COVID-19 pandemic (World Bank, 2020). The global decline in oil demand caused significant disruptions in the oil market, resulting in a price drop of nearly 30 per cent within a single week (National Centre for Statistics and Information [NCSI], 2021). In addition to the pandemic, the decline in oil prices led the government to anticipate reduced revenues over the medium term and an increase in annual deficits to an average of at least OMR 5 billion if no corrective action was taken. Consequently, the government introduced measures to address the challenges arising from falling oil prices and the impact of COVID-19, including the launch of the Medium-Term Fiscal Plan (MTFP). The MTFP aims to implement several measures to stabilise the Omani economy, one of which involves reducing capital expenditure across government units (Sultanate of Oman, Ministry of Finance, 2020).

These measures have led to changes in employee behaviour over the past five years, with more workers moving from the public sector to the private sector or to other organisations. The COVID-19 pandemic further intensified changes within the Omani economy, including the merger of more than ten ministries as part of efforts to reduce capital expenditure during a period of fiscal constraint. Additionally, reductions in government spending resulted in cuts to training programmes, bonuses, and promotional opportunities. Furthermore, the introduction of a new retirement law aligned with Oman Vision 2040 has contributed to increased staff resignations. The revised law extends the service period from 20 to 30 years and reduces end-of-service benefits, leading many employees to resign. These factors have contributed to a rise in resignations, particularly within the Ministry of Health, with many departing employees being highly competent staff members (Sultanate of Oman, Ministry of Health, 2022). As a result, employee retention has become one of the most significant challenges currently facing the Ministry of Labour. This situation has also created additional challenges, including the assignment of inexperienced managers to unsuitable departments (Al Habsi et al., 2021). Given the high rate of employee turnover within the Ministry of Health, this study focuses on the ministry as a case study.

In the Sultanate of Oman, the Ministry of Health (MOH) plays a central role in providing comprehensive healthcare services to the population. The ministry has made substantial investments in human resource development, workforce localisation, and employee welfare initiatives to improve the quality of healthcare delivery. Despite these efforts, evidence suggests that the sector continues to face employee retention challenges, particularly among highly qualified and specialised professionals (Sultanate of Oman, Ministry of Health, 2023). These challenges may be associated with HRM practices such as limited career progression pathways, inadequate recognition systems, and inconsistencies in performance evaluation and compensation structures (Al Habsi et al., 2021; Al-Azri, 2019). Understanding the impact of HRM practices on employee retention is therefore critical for the Ministry of Health in Oman. Identifying the HRM dimensions that most strongly influence employees' decisions to remain with or leave the organisation can assist policymakers and HR practitioners in developing effective strategies to strengthen workforce stability and performance. This is especially important in the healthcare sector, where high turnover can directly affect the quality of patient care, staff morale, and overall service efficiency. Retention also helps to maintain a talented and committed workforce, thereby reducing recruitment, training, and development costs (Kamalaveni et al., 2019). Moreover, employee retention preserves institutional knowledge, expertise, and long-established professional relationships.

In Oman's public sector, retaining skilled and competent employees is essential, particularly given the significant role government agencies play in service delivery. The loss of such employees negatively affects the continuity and quality of public services (Al Shamsi & Alsinani, 2018). Al-Mukhaini et al. (2025) further emphasised that retention and motivation strategies are essential for driving productivity, improving efficiency, and sustaining organisational integration processes. The Ministry of Health in Oman is a critical pillar of national well-being, particularly in light of increasing demand for healthcare services arising from population growth, epidemiological transitions, and emerging public health challenges. Employee retention within the Ministry of Health is therefore vital to ensure continuity of service delivery, minimise disruptions in healthcare provision, and maintain patient satisfaction.

Accordingly, this study aims to investigate the influence of selected human resource management practices on employee retention within the Ministry of Health (MOH). Giving greater emphasis to HRM practices can enhance retention levels, which in turn encourages employees to remain with the organisation for a longer period and supports the achievement of organisational goals. This study focuses on three key HRM practices that are considered critical to employee retention: recruitment and selection, career development, and performance appraisal systems. Accordingly, the specific objectives of the study are as follows: 1. To examine the impact of recruitment and selection practices on employee retention; 2. To examine the impact of career development systems on employee retention; 3. To examine the impact of performance appraisal systems on employee retention.

2. Problem Statement

Employee retention in Oman's public sector presents a complex challenge. While employment levels in the public sector have increased steadily over the years, resignation rates, particularly within

the Ministry of Health remain high. Data from the National Centre for Statistics and Information (NCSI, 2022) show a continuous rise in the number of public sector employees, from 194,326 in 2012 to 211,129 in 2013, 225,833 in 2014, and 229,467 in 2015. This upward trend continued in 2019, with 237,366 employees, and further increased to 393,189 employees in 2020 (NCSI, 2022). Despite this growth, the public sector, especially the Ministry of Health, continues to experience a substantial number of employee resignations.

According to the Ministry of Health (Sultanate of Oman, Ministry of Health, 2022), approximately 73.1 per cent of employee separations are due to resignation. Several factors contribute to this phenomenon. One of the most significant is the introduction of the new retirement law, which extended the required length of service from 20 to 30 years. Many employees have expressed concern over the extended service period and changes to end-of-service benefits, prompting a considerable number to resign (Sultanate of Oman, Ministry of Health, 2022; Social Protection Fund, 2023; Al Shamsi & Alsinani, 2018). Additionally, the Omani government's revision of the 2020 budget in response to declining corporate tax revenues led to reduced employee benefits, including limitations on career development programmes. This has further contributed to increased resignations within the Ministry of Health (Sultanate of Oman, Ministry of Finance, 2020).

National-level statistics reinforce the severity of the issue. According to the NCSI (2021), a total of 29,261 employees, comprising 15,843 men and 13,418 women resigned from public sector employment in Oman in 2021. This figure represents approximately 8.33 per cent of total job exits and largely reflects resignations at the operational level. While the reasons for resignation vary, Alkhaifiy (2017) identified several recurring factors, including unfair performance appraisal systems, marginalisation, perceived injustice by direct supervisors, and promotion decisions based on personal interests rather than competencies. These issues negatively affect career progression and hinder the development of employees' skills.

Further evidence from the Ministry of Health's 2023 annual report indicates that the ministry recorded the highest proportion of resignations among public sector institutions, accounting for approximately 55.3 per cent of total resignations (Sultanate of Oman, Ministry of Health, 2023). The primary reasons cited include employees securing positions in other organisations that better match their qualifications and competencies, as well as dissatisfaction with perceived unfairness in performance appraisal systems. According to Figure 1 (Sultanate of Oman, Ministry of Health, 2022), 73.1 per cent of employee separations in the Ministry of Health are attributed to resignation, followed by contract termination (16.8 per cent), retirement upon reaching the age of 60 (5.0 per cent), and transfers to other government sectors (0.8 per cent). These figures highlight resignation as the dominant form of employee turnover within the ministry.

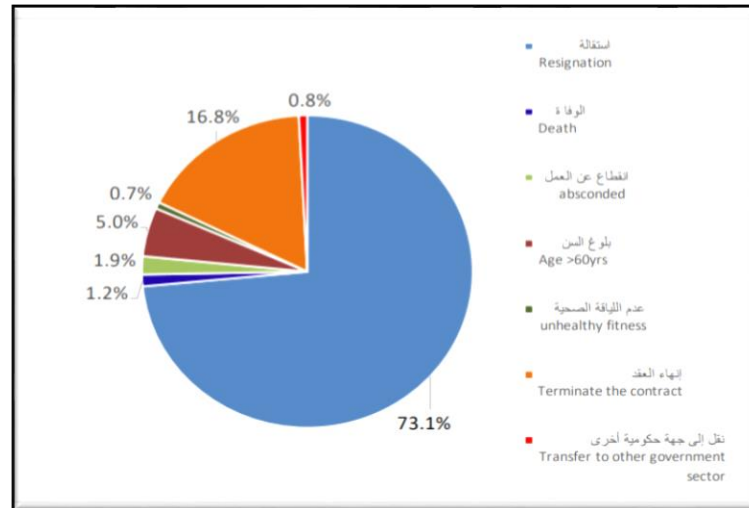


Figure 1. Staff reasons for leaving the services in MOH 2022
Source (MOH,2022)

In comparison with the private sector, several shortcomings in public-sector HR practices have been identified. Al Shamsi and Alsinani (2018) noted a lack of appreciation for workforce value, inadequate training programmes, limited top management support for HR initiatives, and insufficient feedback mechanisms, findings that are consistent with those of Jeffrey and Prasetya (2019). Moreover, the absence of fairness in performance appraisal systems prevents employees from accurately identifying their strengths and weaknesses, thereby limiting opportunities for skill development and professional growth. Empirical studies have consistently demonstrated a relationship between performance appraisal systems and employee retention in public-sector organisations. Research by Thu and Watanabe (2022), Hossain (2023), and Al Zadjali (2017) confirmed that ambiguity, inaccuracy, and perceived unfairness in appraisal systems reduce employee productivity and contribute to higher turnover rates.

Additionally, Al Shamsi and Alsinani (2018) reported that difficult co-worker relationships, negative work environments, poor management practices, lack of communication, and unsupportive supervisors can significantly hinder employees' career development. As a result, employee turnover increases, imposing substantial costs on organisations, including recruitment and advertising expenses, onboarding and training costs in terms of time and resources, and productivity losses (Al Rashdi, 2020).

3. Literature Review

Agwu and Nwoke (2019) emphasised that employee retention begins at the hiring stage, where organisations must select talented individuals whose interests and capabilities align with organisational needs. Recruitment decisions should therefore be made in accordance with organisational requirements and long-term strategic goals, with a view to enhancing workforce stability. The recruitment and selection process involves several stages, all of which are critical in ensuring that the most suitable candidate is appointed to the position (Miheso et al., 2019). Numerous empirical studies (Alameddine et al., 2017; Naing, 2024) have demonstrated that effective recruitment and selection practices are positively associated with higher employee retention rates.

Selecting the right individual for the job reduces turnover, improves employee morale, and fosters a positive and creative work environment. Khandelwal and Kumar (2019) distinguished between the traditional recruitment approach, which aims to attract a large pool of applicants, and the contemporary approach, which focuses on attracting the most qualified candidates. However, Agwu and Nwoke (2019) reported that approximately 60 per cent of undesirable employee turnover can be attributed to poor hiring practices. Inappropriate recruitment decisions often result from rushed selection processes that fail to verify whether candidates possess the required knowledge, skills, and competencies for the role.

Further studies by Khandelwal and Kumar (2019) and Miheso et al. (2019) suggested that organisational culture and workplace values should align with employees' interests and motivations to enhance retention. Organisations are therefore encouraged to assess not only formal qualifications and technical skills, but also candidates' attitudes, values, and behavioural attributes during the recruitment process. Organisations that adhere to structured and appropriate recruitment and selection procedures are more likely to achieve higher levels of job success and employee retention. Based on evidence from prior studies demonstrating a significant relationship between recruitment and selection and employee retention, the following hypothesis is proposed:

Hypothesis H1: There is a significant impact of recruitment and selection on employee retention.

Career development is widely recognised as a key mechanism for enhancing employee retention and productivity (Arifin et al., 2020). It involves assessing employees' abilities and providing opportunities for advancement through training, skill development, and career planning initiatives. Several studies (Al-Sharafi et al., 2018; Ferdiana et al., 2023; Frimayasa, 2021) have examined the relationship between career development and employee retention, consistently highlighting its positive influence. Ferdiana et al. (2023) conducted a study examining the role of career development in employee retention and found that career development significantly enhances retention by offering learning opportunities that improve employees' skills and competencies throughout their career paths. These opportunities enable employees to perform their duties more effectively and efficiently, thereby increasing both productivity and retention levels.

Similarly, Salleh et al. (2020), in a study conducted in Jordan, found that career planning has a significant impact on employees' turnover intentions. Their findings indicate that clearly defined career goals aligned with structured career paths enhance skill acquisition and professional development. A study conducted in Kenya by Mule and Moguche (2020) further supported these findings, demonstrating that career development programmes positively influence employee productivity. Collectively, these studies underscore the importance of career growth in ensuring organisational sustainability and long-term employee retention. Career development provides a structured pathway for employees to progress within the organisation and strengthens their commitment to remaining with the employer. Based on the consistent empirical evidence indicating a significant relationship between career development and employee retention, the following hypothesis is formulated:

Hypothesis H2: There is a significant impact of career development on employee retention.

Performance appraisal is a formal process that involves managerial assessment of employees' performance, typically conducted through annual appraisal meetings (Thu, 2024). The performance appraisal system serves as a critical management tool for evaluating employees' contributions towards organisational objectives and identifying areas for improvement. Through regular appraisal processes, management can assess whether organisational standards, expectations, and responsibilities are being met. Additionally, performance appraisal systems enable organisations to identify individual training needs and support employee development. Moreover, performance appraisal systems allow employees to recognise their strengths and weaknesses, facilitating informed career decisions and professional growth. As a result, employees are more likely to feel valued and motivated, which in turn enhances their intention to remain with the organisation.

Several scholars (Bibi et al., 2018; Al Habsi et al., 2021) have argued that effective performance management requires regular and transparent appraisal processes, including feedback mechanisms between managers and employees. Employees' perceptions of appraisal accuracy and fairness reflect the organisation's commitment to human resource development. Performance appraisal systems also play a crucial role in determining compensation and rewards by evaluating employees against predefined performance standards. Gulzar et al. (2017) found that performance appraisal, career development, feedback, and reward systems collectively have a positive effect on employee retention. These systems enable managers and policymakers to design policies and procedures that enhance employee productivity and encourage long-term organisational commitment. Similarly, Bibi et al. (2018), in a study of the Malaysian tourism sector, demonstrated that fair and transparent appraisal systems support employees in achieving both individual and organisational goals and increase their willingness to remain with the organisation.

Further empirical evidence from Thu and Watanabe (2022) and Al Habsi et al. (2021) confirmed that effective performance appraisal systems significantly enhance employee retention and long-term commitment. Such systems assist organisations in identifying employees' strengths, weaknesses, and future skill requirements, thereby supporting career advancement and performance improvement. Performance appraisal is therefore considered a powerful motivational tool that promotes employee development and aligns individual objectives with organisational goals. Based on the findings of previous studies indicating a significant relationship between performance appraisal systems and employee retention, the following hypothesis is proposed:

Hypothesis H3: There is a significant impact of performance appraisal systems on employee retention.

4. Conceptual Framework

The conceptual framework of this study is grounded in an integrated theoretical approach drawing on Social Exchange Theory, the Ability–Motivation–Opportunity (AMO) model, and the Resource-Based View (RBV) theory. This integrated framework is proposed in response to the limited number of empirical studies that examine the relationships between recruitment and selection, career development, and performance appraisal systems and employee retention through employee competency within the Omani public sector.

Social Exchange Theory provides a foundation for understanding how employees' perceptions of organisational support and fairness influence their willingness to remain with an organisation. The AMO model explains how HRM practices enhance employees' abilities, motivation, and opportunities to perform, thereby influencing their commitment and retention. The Resource-Based View (RBV) further supports the framework by conceptualising human resources and employee competencies as strategic assets that contribute to sustained organisational performance and competitive advantage.

By integrating these three theoretical perspectives, the proposed framework illustrates how key HRM practices, recruitment and selection, career development, and performance appraisal systems affect employee retention through the development and utilisation of employee competencies. This approach addresses a notable research gap in the Omani public sector context, where empirical evidence on the combined effects of these HRM practices on employee retention remains limited.

Figure 2 presents the conceptual framework of the study, illustrating the relationships between HRM practices, employee competency, and employee retention.

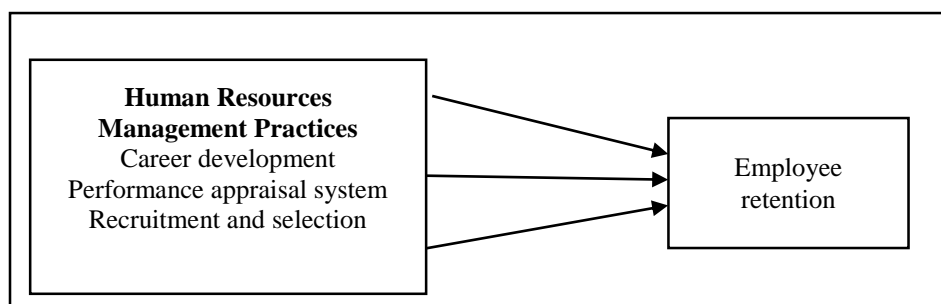


Figure 2. Conceptual Research Model of HRMP and Employee Retention

5. Research Method

A purposive sampling technique was employed in this study. A total of 371 respondents were selected from a population of 10,829 employees across different governorates of Oman using the Raosoft sample size calculator. The target respondents comprised operational-level employees working in the Ministry of Health (MOH) across various governorates in the Sultanate of Oman. Primary data were collected using a structured questionnaire to examine the impact of human resource management practices on employee retention. Prior to data collection, the questionnaire underwent a pre-testing process to ensure clarity and validity. A panel of experts reviewed the instrument, including two academic experts and two industry practitioners, who assessed the content validity of the questionnaire. In addition, two language experts were engaged to translate the questionnaire from English into Arabic and subsequently back-translate it from Arabic into English to ensure linguistic accuracy and equivalence, following the back-translation procedure recommended by Brislin (1970).

For this study, a self-administered structured questionnaire comprising six sections and 55 items was used to collect data from employees of the MOH in Oman. The questionnaire included sections covering demographic information, employee retention, and employee competency. The measurement items for recruitment and selection were adapted from Alemayehu and Deressa (2019), career development items were adopted from Hirschi et al. (2018), and the performance appraisal system was measured using scales developed by Youngcourt et al. (2007), Colquitt (2001), and Giles and Mossholder (1990). Employee retention was measured using items adapted from Kyndt et al. (2009). Data analysis was conducted using SPSS version 25.0 and SmartPLS-SEM. SPSS was utilised for preliminary data screening, including the identification of missing values, outliers, and common method variance (CMV). SmartPLS-SEM was subsequently employed to assess the reflective measurement model, evaluate the structural model, conduct mediation analysis, and test the proposed hypotheses.

6. Results

6.1 Demographic Profiles of Respondents

This section presents the demographic characteristics of the respondents. All respondents were operational-level employees working in the Ministry of Health. The demographic profile includes information on gender, age, governorate, position, and years of work experience.

The results indicate that more than half of the respondents were male (53.3 per cent), while the remaining 46.7 per cent were female. In terms of age, the largest proportion of respondents (30.9 per cent) were aged between 37 and 40 years. With regard to geographical distribution, the highest percentage of participants were from the Muscat Governorate (32.1 per cent). Concerning job position, administrators constituted the largest group of respondents, accounting for 41.2 per cent of the sample. In terms of work experience, the majority of respondents (32.1 per cent) reported having between 10 and 15 years of experience.

6.2 Measurement Model

Two validity evaluation was conducted in that it convergent and discriminant validity test.

6.2.1 Internal Consistency Reliability

The following table shows reliability and validity test of the questionnaire distributed to respondents. Table 1 shows the reliability of independent and dependent variables.

Table 1. Latent Variables Reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
CDEV	0.921	0.953	0.933
ER	0.969	0.971	0.973
HRM	0.922	0.924	0.934
PAS	0.932	0.934	0.943
RS	0.917	0.930	0.931

Source: SmartPLS 4

Based on table 1, all variables have a Cronbach Alpha value of more than 0.700. For career development, reliability is 0.921, for employee retention is 0.969, for performance appraisal system is 0.932, and for recruitment and selection is 0.917 and for HRM is 0.922.

6.2.2 Convergent Validity

In order to measure the convergent validity, the Average Variance Extracted (AVE) value to be sufficient for convergent it should be more than 0.5 (Cheung, 2024) the acceptable range between 0.50 and 0.62, and the thus exceeding 0.5. Table 2 shows the average variance extracted.

Table 2. Average Variance Extracted

Average variance extracted (AVE)	
CDEV	0.610
ER	0.800
HRM	0.541
PAS	0.623
RS	0.601

Source: SmartPLS 4

Further, to measure convergent validity, it needs to check the outer loading. For outer loading it should be more than > 0.7 (Hair et al., 2019). Table 3 shows the Outer loading.

Table 3. Outer loading

	CDEV	ER	PAS	RS
CDEV1	0.762			
CDEV2	0.772			
CDEV3	0.828			
CDEV4	0.820			
CDEV5	0.831			
CDEV6	0.738			
CDEV7	0.753			
CDEV8	0.813			
ER1		0.934		
ER2		0.874		
ER3		0.910		
ER4		0.865		
ER5		0.911		
ER6		0.844		
ER7		0.918		
ER8		0.925		
ER9		0.863		
PAS1			0.740	
PAS10			0.767	
PAS2			0.812	
PAS4			0.796	
PAS5			0.848	

PAS6	0.774
PAS7	0.779
PAS8	0.852
PAS9	0.830
RS1	0.737
RS2	0.781
RS3	0.851
RS4	0.876
RS5	0.863
RS6	0.743
RS7	0.726
RS8	0.736

Source: SmartPLS 4

6.2.3 Discriminant Validity

Discriminant validity is an important aspect of construct validity and refers to the extent to which a construct is truly distinct from other constructs within the model (Hair et al., 2019). It ensures that each variable measures a unique concept and does not overlap with or represent other variables in the model. Discriminant validity can be assessed using three main criteria: cross-loadings, the Fornell–Larcker criterion, and the heterotrait–monotrait (HTMT) ratio. The criterion for cross-loadings requires that each measurement item loads more highly on its intended construct than on any other construct. This indicates that the items are more strongly associated with their respective variables than with unrelated variables.

The second criterion, the Fornell–Larcker criterion, compares the square root of the average variance extracted (AVE) for each construct with its correlations with other constructs. According to this criterion, the square root of the AVE of a construct should be greater than its highest correlation with any other construct, thereby confirming adequate discriminant validity. Table 4 presents the results of the Fornell–Larcker criterion for this study.

Table 4. Fornell-Larker Criterion

	CDEV	ER	HRM	PAS	RS
CDEV	0.781				
ER	0.316	0.894			
HRM	0.580	0.516	0.736		
PAS	0.522	0.422	0.897	0.789	
RS	0.509	0.462	0.843	0.592	0.775

Source: SmartPLS 4

In addition to the Fornell–Larcker criterion, discriminant validity can be assessed using the heterotrait–monotrait (HTMT) ratio (Hair et al., 2019). Several threshold values have been proposed to establish discriminant validity using HTMT. According to Henseler et al. (2015), Ringle et al. (2020), and Sarstedt et al. (2021), discriminant validity is achieved when the HTMT value is equal to or below

0.85 and does not exceed the more conservative threshold of 0.90. The HTMT ratios for the constructs examined in this study are presented in Table 5.

Table 5. HTMT Criterion

	CDEV	CH_IN	IU	PAS	RS
CH_IN	0.620				
IU	0.635	0.637			
PAS	0.511	0.591	0.495		
RS	0.550	0.695	0.601	0.620	
TMR	0.382	0.578	0.575	0.615	0.573

Source: SmartPLS 4

The final method used to assess discriminant validity is the cross-loading criterion. This approach requires that each measurement item exhibits a higher loading on its associated construct than on any other construct (Li & Yoon, 2024). Table 6 presents the cross-loadings of the latent variables, demonstrating that all items load more strongly on their respective constructs than on other constructs in the model. Therefore, the cross-loading criterion for discriminant validity is satisfied.

Table 6. Cross-Loading Criterion

	CDEV	ER	PAS	RS
CDEV1	0.762	0.222	0.298	0.348
CDEV2	0.772	0.162	0.328	0.324
CDEV3	0.828	0.239	0.272	0.380
CDEV4	0.820	0.227	0.358	0.387
CDEV5	0.831	0.187	0.317	0.341
CDEV6	0.738	0.105	0.306	0.397
CDEV7	0.753	0.153	0.354	0.348
CDEV8	0.813	0.234	0.422	0.413
CDEV9	0.698	0.458	0.682	0.493
ER1	0.314	0.934	0.431	0.422
ER2	0.309	0.874	0.397	0.453
ER3	0.288	0.910	0.359	0.420
ER4	0.258	0.865	0.319	0.407
ER5	0.280	0.911	0.385	0.366
ER6	0.277	0.844	0.329	0.385
ER7	0.274	0.918	0.374	0.411
ER8	0.257	0.925	0.392	0.427
ER9	0.287	0.863	0.396	0.435
PAS1	0.477	0.468	0.740	0.458
PAS10	0.419	0.344	0.767	0.514
PAS2	0.394	0.335	0.812	0.504
PAS3	0.434	0.254	0.678	0.384
PAS4	0.363	0.258	0.796	0.407
PAS5	0.466	0.321	0.848	0.508

PAS6	0.392	0.305	0.774	0.435
PAS7	0.350	0.273	0.779	0.419
PAS8	0.433	0.387	0.852	0.513
PAS9	0.383	0.359	0.830	0.506
RS1	0.340	0.410	0.565	0.737
RS2	0.329	0.421	0.551	0.781
RS3	0.407	0.436	0.511	0.851
RS4	0.400	0.398	0.490	0.876
RS5	0.374	0.413	0.517	0.863
RS6	0.472	0.260	0.338	0.743
RS7	0.370	0.315	0.302	0.726
RS8	0.450	0.249	0.363	0.736
RS9	0.521	0.217	0.371	0.630

Source: SmartPLS 4

6.3 Structural Model

Once the measurement model has been confirmed as valid and satisfactory, the next step in PLS-SEM analysis is the assessment of the structural model. Evaluating the structural model involves examining the coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2). Table 7 presents the coefficient of determination for employee retention (ER), which is reported as 0.342. According to Hair et al. (2019), this value indicates a moderate explanatory power. The R^2 value ranges from 0 to 1, with values of 0.75, 0.50, and 0.25 generally considered substantial, moderate, and weak, respectively (Hair et al., 2019). Thus, the R^2 value obtained in this study suggests that the exogenous constructs explain a moderate proportion of the variance in employee retention.

The effect size (f^2) was also assessed to determine the contribution of each exogenous construct to the endogenous construct. According to Hair et al. (2019) and Ringle et al. (2020), f^2 values of 0.02, 0.15, and 0.35 represent small, medium, and large effects, respectively. Table 8 presents the f^2 values for the relationships between the exogenous and endogenous constructs. The results indicate that the effect size of career development on employee retention is 0.128, which reflects a small effect. The performance appraisal system and recruitment and selection demonstrate medium effect sizes. Overall, human resource management practices exhibit a small effect size on employee retention.

Predictive relevance was assessed using the Q^2 statistic. According to Geisser (1974), a Q^2 value greater than zero indicates that the model has predictive relevance for the endogenous construct. The results show that the Q^2 value for employee retention exceeds zero, thereby confirming the predictive relevance of the model. Table 9 presents the predictive relevance results for employee retention.

Table 7. Coefficient of Determination

	R-square	R-square adjusted
ER	0.342	0.338

Source: SmartPLS 4

The values of f^2 that is related effect size in accordance with (Hair et al., 2019; Rnigle et al., 2020) are 0.02, 0.15, and 0.35, which indicate low, medium, and high effects respectively. Table 8 shows the value of f^2 for all relationships of endogenous construct and exogenous constructs. The results showed the effect size of career development and employee retention, which was worth (0.128) and it is a small impact., PAS and RS is medium impact. Overall HRM, has small effect size on ER.

Table 8. F-Square

	f-square
CDEV -> ER	0.128
PAS -> ER	0.232
RS -> ER	0.280
HRM -> ER	0.037

Source: SmartPLS 4

Another measurement is predictive relevance. Based on (Geisser, 1974) Q^2 is more than zero, which reflects that the exogenous constructs have predictive relevance for the endogenous construct. As a result, the predictive relevance of the endogenous constructs is established. Table 9 shows the predictive relevance of ER.

Table 9. Predictive Relevance

	Q²predict	RMSE	MAE
ER	0.258	0.865	0.668

Source: SmartPLS 4

6.5 Effect of Independent Variables on the Dependent Variable

The findings indicate that human resource management practices have a positive impact on employee retention. To support the acceptance of a direct relationship hypothesis, the t-value must exceed 1.96 and the p-value must be less than 0.05 (Ramayah et al., 2019). The results show that career development has a significant and positive effect on employee retention ($t = 7.279$, $p < 0.05$). Similarly, the performance appraisal system demonstrates a significant positive effect on employee retention ($t = 9.571$, $p < 0.05$). In addition, recruitment and selection also have a significant positive impact on employee retention ($t = 9.239$, $p < 0.05$). Table 10 summarises the direct relationships among the variables. Based on these findings, all proposed hypotheses are supported and accepted.

Table 10. shows the direct relationship between variables.

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
CDEV -> ER (H1)	0.306	0.309	0.042	7.279	0.000
PAS -> ER (H2)	0.434	0.439	0.045	9.571	0.000
RS -> ER (H3)	0.468	0.474	0.051	9.239	0.000

Source: SmartPLS 4

7. Discussion

Based on the PLS-SEM analysis, the findings indicate that human resource management (HRM) practices have a significant and positive impact on employee retention. This result is consistent with previous empirical studies that have confirmed a positive relationship between HRM practices and employee retention (Bibi et al., 2018; Malik et al., 2020; Alajlani & Yesufu, 2022).

The first hypothesis examined the impact of recruitment and selection on employee retention. The results demonstrate that recruitment and selection have a significant and positive effect on employee retention. This finding aligns with previous studies by Arifin et al. (2020) and Alameddine et al. (2017), which emphasised that recruitment and selection processes are among the most critical aspects of managing both new and established organisations. Recruiting the right employees for appropriate roles enables organisations to enhance performance and reduce turnover. Effective recruitment and selection practices ensure a better person–job fit, which lowers turnover rates, improves employee morale, and fosters a positive and innovative working environment. Employers who follow structured and competency-based hiring procedures are more likely to attract high-quality employees who possess the necessary skills and commitment, thereby enhancing long-term employee retention.

The second hypothesis examined the relationship between career development and employee retention. The findings confirm that career development has a significant and positive impact on employee retention. This result is consistent with earlier studies (Al-Sharafi et al., 2018; Ferdiana et al., 2023; Wane, 2016), which highlighted the critical role of career development in retaining employees. Employees increasingly prioritise professional growth and assess whether organisations provide opportunities for advancement and skill enhancement. Nagarathanam et al. (2018) further argued that career development programmes significantly influence staff retention. Organisations that invest in structured career development initiatives are more likely to retain employees over the long term, as such programmes foster motivation, engagement, and stronger employer–employee relationships.

The third hypothesis examined the effect of performance appraisal systems on employee retention. The findings indicate that performance appraisal systems have a significant and positive impact on employee retention. This result is consistent with previous studies (Thu & Watanabe, 2022; Jeffrey & Prasetya, 2019), which found that employee morale and commitment are strongly influenced by perceptions of fairness in appraisal processes. When employees perceive performance appraisals as fair, transparent, and objective, they are more motivated to perform well and remain with the organisation. A fair performance appraisal system enables employees to achieve individual

and organisational objectives, thereby strengthening their intention to stay with the organisation over the long term.

In Oman's public sector, retaining skilled and competent employees is essential due to the significant role government institutions play in service delivery. This study extends the existing body of knowledge on employee retention by focusing specifically on the public sector context in Oman, particularly the Ministry of Health. Moreover, previous studies in Oman have primarily focused on other sectors, such as the civil service (Al Shamsi & Alsinani, 2018), the oil and gas industry (Al Habsi et al., 2021), the education sector and Sultan Qaboos University (Al Harrasi et al., 2024), and the private sector (Al-Mukhaini et al., 2025). Hence, research on employee retention in this context is especially relevant given the high resignation rates reported in recent years.

This study contributes to the advancement of Social Exchange Theory (SET) by demonstrating how fair, transparent, and competency-based HRM practices strengthen the reciprocal relationship between employees and the organisation. The findings suggest that when employees perceive HRM practices, particularly performance appraisal systems as fair and supportive, they are more likely to reciprocate with positive attitudes, including loyalty, commitment, and long-term retention. The findings provide important managerial implications for public-sector organisations in Oman. In line with Oman Vision 2040, which emphasises the development of an efficient, innovative, and competency-based workforce, the results highlight the critical role of effective HRM practices in enhancing employee retention. The study underscores the importance of prioritising career development, indicating that top management in public-sector ministries should invest in structured career pathways and continuous professional development opportunities.

Employers should prioritise the development of employees' experience, knowledge, and skills, as these attributes contribute significantly to individual success and organisational performance. Career development initiatives help create a more capable and flexible workforce while enhancing employee loyalty, satisfaction, and retention. Top management should identify and address the most significant factors influencing employee retention. Recruitment and selection processes should be carefully designed to ensure that the most suitable candidates are hired based on competencies, skills, and organisational fit. Furthermore, greater emphasis should be placed on career development initiatives that enhance employees' knowledge, skills, and professional growth. This study focuses on a single public-sector organisation, namely the Ministry of Health. Future studies could expand the scope by examining other ministries or comparing multiple public-sector institutions. Additionally, future research could explore employee retention in other sectors to enhance the generalisability of the findings.

8. Conclusion

This study aimed to identify the most significant factors influencing employee retention within the Ministry of Health in the Sultanate of Oman. The findings confirm that human resource management practices specifically recruitment and selection, career development, and performance appraisal systems have a significant impact on employee retention in the public healthcare sector. The study concludes that the Ministry of Health should provide clear career pathways, implement fair and transparent performance appraisal systems, and adopt robust recruitment and selection processes to attract and retain competent employees. These practices enable employees to identify

their strengths and weaknesses, enhance their performance, and remain committed to the organisation. In alignment with Oman Vision 2040, which places strong emphasis on national human capital development, this study highlights the importance of investing in employee competencies, structured career development, and effective HRM systems to strengthen employee retention within the public sector.

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