

Motivating Factors for Employee Retention among the Private Healthcare Workforce in Selangor, Malaysia

Sarladavi A/P Yogolingam¹, Rose Ruziana Samad^{*2}, Nur Atika
Atan³, Hatikaty Mohd Diah⁴

¹Clinical Skills & Simulation Centre, IMU University, Kuala Lumpur, Malaysia, ^{2,3}School of
Healthcare Management, KPJ Healthcare University, Malaysia, ⁴Centre of Global and
Professional Development (CGPS), KPJ Healthcare University, Malaysia

*Corresponding Author Email: roseruziana@kpju.edu.my

DOI Link: <http://dx.doi.org/10.6007/IJARBSS/v15-i12/27203>

Published Date: 10 December 2025

Abstract

The private healthcare sector in Malaysia, particularly in Selangor, faces significant workforce retention challenges, exacerbating operational inefficiencies and threatening the quality of patient care. High turnover among healthcare professionals necessitates a deeper understanding of the motivational factors that drive long-term commitment. This study investigates the relationship between key motivating factors and employee retention, with job satisfaction posited as a critical mediating variable. A cross-sectional study was conducted with 250 healthcare professionals (doctors, nurses, pharmacists, and physiotherapists) from private hospitals in Selangor. Data were collected using validated questionnaires measuring five motivating factors (Working Environment, Compensation and Benefits, Training and Development, Promotion and Recognition, and Leadership), Job Satisfaction, and Employee Retention. Statistical analyses, including correlation, regression, and moderation analysis, were employed to test the hypotheses. The findings revealed that Compensation and Benefits ($\beta = 0.142$, $p = 0.046$) and Promotion and Recognition ($\beta = 0.253$, $p = 0.003$) were the only motivating factors with a significant direct impact on employee retention. Job Satisfaction was found to have a considerable positive influence on retention ($p = 0.005$) and to moderate the effects of several motivating factors significantly. However, factors such as the Working Environment, Training and Development, and Leadership did not exhibit a direct significant relationship with retention. The study concludes that in the context of Selangor's private healthcare sector, tangible rewards and clear career advancement opportunities are the paramount drivers of employee retention. While job satisfaction plays a crucial reinforcing role, it does not universally mediate all motivational pathways. These findings suggest that hospital administrators and policymakers should prioritise competitive, equitable compensation structures and implement structured recognition and promotion systems as

cornerstones of their retention strategies to ensure a stable, sustainable healthcare workforce.

Keywords: Job Satisfaction, Employee Retention, Healthcare Workforce, Motivating Factors, Private Hospitals

Introduction

The Malaysian healthcare system is facing a significant workforce shortage, impacting both public and private sectors. While shortages in the public sector have been widely acknowledged, the private sector also grapples with vacancy rates of approximately 10-15%, as reported by the Malaysian Association of Private Hospitals (MAPH, 2023). This challenge reflects a broader global trend, with the World Health Organisation (WHO) projecting a shortfall of 12.9 million healthcare workers by 2035, particularly in lower-middle-income countries where healthcare professional density remains below the recommended threshold of 44.5 per 10,000 population (WHO, 2023).

A key factor exacerbating this shortage is the high turnover rate among healthcare professionals, particularly nurses, where attrition rates range from 13% to 37% (Roche et al., 2015). Such turnover places immense strain on healthcare institutions, reducing operational efficiency, diminishing institutional reputation, and disrupting service delivery. Moreover, financial constraints, such as lower wages and limited incentives, contribute to attrition, with some developed nations experiencing a 40% higher turnover rate. Retaining skilled professionals is therefore critical, as workforce instability leads to the loss of institutional knowledge, declining employee morale, and productivity challenges (Sandhay & Kumar, 2011; Rathi, 2010).

Several factors influence turnover, including poor job fit, limited career progression opportunities, lack of recognition, insufficient workplace support, and work-life imbalances. Additionally, public health crises further intensify workforce challenges, as healthcare professionals contend with increased mental stress, fear of contagion, and inadequate institutional support, ultimately discouraging long-term retention (Vindrola et al., 2020).

Recent studies have explored the determinants of employee retention across various industries. Zainal et al. (2023) identified reward and compensation as the strongest predictors of retention in Malaysia's service industry, followed by work-life balance and a supportive work environment. Similarly, Azriddin et al. (2023) highlighted the importance of managerial coaching, emotional intelligence, and social support in fostering resilience among healthcare workers, thereby improving retention rates. These insights align with the present study's objective of investigating job satisfaction as a mediating factor between motivational drivers and employee retention.

Addressing these workforce challenges necessitates a strategic approach focused on motivation, skill development, and enhanced workplace support. Motivation theories emphasize the importance of fostering morale and aligning incentives to sustain long-term commitment, even in high-pressure environments (Daft & Noe, 2001). Without proactive intervention, persistent turnover will continue to destabilize Malaysia's healthcare workforce, placing additional strain on an already overburdened system. To ensure the sustainability of

healthcare services, organizations must implement targeted retention strategies that prioritize employee well-being, professional growth, and institutional support.

Problem Statement

Retaining top talent is crucial for businesses, particularly in the healthcare sector, where workforce shortages directly impact patient care. A lack of trained healthcare providers leads to longer wait times, delayed treatments, increased stress among professionals, and higher risks of diagnostic errors (Laschinger et al., 2021). This issue is particularly severe in low- and middle-income countries (LMICs), where workforce shortages exacerbate health disparities and socio-economic inequalities (Lee et al., 2021).

According to the World Health Organization (WHO, 2023), 27 million healthcare workers will be needed globally by 2030 to meet rising healthcare demands. In Malaysia, the hospital market is projected to grow at a CAGR of 6.98% from 2023 to 2027, reaching USD 6801.77 million (Malaysia Hospital Market Report, 2023). However, with a global healthcare turnover rate of 20% (ILMIA, 2018) and 4% in Malaysia (Harun et al., 2020), workforce retention remains a pressing concern.

This study focuses on identifying motivational factors that enhance employee retention through job satisfaction in Selangor's private hospitals. Addressing workforce challenges through investments in training, supportive work environments, and retention strategies is essential to ensuring sustainable healthcare delivery and improved patient outcomes nationwide.

Objectives of the Study

The objectives of this study are:

- i. RO1: To analyze the relationship between different motivational factors and job satisfaction, identifying which factors most significantly influence employee satisfaction in the healthcare sector.
- ii. RO2: To investigate the role of job satisfaction as a mediating factor between motivational elements and employee retention, assessing how satisfaction influences the likelihood of long-term workforce commitment.

Table 1.0

Classification of healthcare workers

Occupation group	ISCO-08 Code	Definition	Examples of occupation
Generalist medical practitioners	2211	The application of contemporary medicine ideas and practices to the study, diagnosis, treatment, and prevention of illness, disease, injury, and other physical and mental disabilities, as well as the maintenance of general health in people.	Medical officer
Specialist medical practitioners	2212	Use specialised testing, diagnostic, medical, surgical, physical, and psychological techniques to study, diagnose, treat, and prevent illness, disease, injury, and other physical and mental problems.	Physician, Surgeon, Gynaecologist, Obstetrician, Paediatrician.
Nursing professionals	2221	Plan, manage, and provide nursing care services for persons who require it.	Registered nurse, public/community health nurse
Pharmacists	2262	Medicinal items are stored, preserved, compounded, and dispensed. They advise on the proper usage and side effects of pharmaceuticals and medicines prescribed by medical doctors and other health experts.	Hospital or retail pharmacist
Physiotherapists	2264	Assess, develop, and carry out rehabilitation programmes to improve or restore human motor functions, maximise movement capacity, reduce pain syndromes, and treat or avoid physical problems caused by injuries.	Physiotherapist, physical therapist

Source: Adapted from Classifying health workers: mapping occupations to the international standard classification (WHO, 2019).

Literature Review

Employee retention has been a critical area of research in human resource management, particularly within the healthcare sector, where workforce stability directly impacts service delivery and patient outcomes. Various studies have examined the determinants of employee retention, highlighting factors such as work environment, compensation and benefits, training and development, promotion and recognition, and leadership. While these factors are often linked to job satisfaction, their influence varies across industries and cultural contexts.

Key Factors Influencing Employee Retention

A positive work environment and flexible work arrangements have been widely recognized as key drivers of job satisfaction and employee retention. Studies have shown that work-life balance and job autonomy significantly contribute to reduced turnover intentions (Nur

Syafiqah et al., 2023). Similarly, research by Teo Hui Yang et al. (2021) found that while the work environment does not directly influence retention, it plays a crucial role in shaping job satisfaction, which in turn enhances employee commitment. However, findings from Mohamud (2020) suggest that while working conditions are important, their direct impact on retention may be limited unless accompanied by competitive compensation and professional development opportunities.

Compensation has consistently emerged as one of the strongest predictors of employee retention across multiple studies. Research by Nur Syafiqah et al. (2023) found that among all examined factors, compensation had the greatest positive impact on retention in Malaysia's service industry. Similar findings were reported by Kaliyamoorthy et al. (2018), who highlighted that salary, recognition, and career development were key motivators in retaining employees in the hospitality sector. In the healthcare sector, Mohamud (2020) and Zeeshan Ahmed et al. (2020) found that compensation and benefits play a crucial role in workforce stability, reinforcing the Social Exchange Theory (SET), which suggests that employees remain committed when they perceive equitable rewards for their contributions.

Recognition and career advancement opportunities are also essential for employee retention. According to Andrew Sija (2022), employee recognition was the most significant predictor of retention in Malaysia's private healthcare sector, surpassing even job satisfaction. The study reported a high unstandardized coefficient beta value (0.359) for recognition, indicating its strong influence. Similarly, the research by Farah Liyana Bustaman et al. (2014) emphasized that financial and non-financial rewards significantly enhance job satisfaction, which in turn contributes to retention.

The role of training and development in retention has yielded mixed findings. While some studies suggest that professional development is essential for long-term workforce stability (Mohamud, 2020; Zeeshan Ahmed et al., 2020), others indicate that its impact is mediated by job satisfaction (Teo Hui Yang et al., 2021). In the context of Malaysian private healthcare, the findings suggest that while training enhances employee engagement, it may not directly influence retention unless coupled with clear career progression pathways.

Leadership behaviors have long been associated with employee retention. Aina Liyana Azriddin et al. (2023) highlighted the importance of managerial coaching, emotional intelligence, and social support in fostering resilience among healthcare workers, which in turn improves retention. Similarly, research by Al-Suraihi et al. (2021) found that leadership styles and job stress levels significantly affect turnover intentions. In contrast, the study by Almaaitah et al. (2017) integrated Herzberg's Two-Factor Theory with Social Exchange Theory, arguing that leadership and human resource practices must align to create a balanced work environment that enhances retention.

Underpinning Theories

Herzberg's motivation-hygiene theory distinguishes between motivators (intrinsic factors) and hygiene factors (extrinsic factors). The findings of this study support Herzberg's assertion that compensation and benefits, along with promotion and recognition, act as strong motivators, enhancing both job satisfaction and retention. However, the findings challenge Herzberg's model in some areas, as working environment, training and development, and

leadership, while contributing to job satisfaction, did not have a direct impact on retention. This suggests that while these factors shape the overall work experience, they do not necessarily determine long-term commitment in the healthcare sector.

SET posits that employees remain in organizations when they perceive a fair exchange of rewards for their contributions. The strong influence of compensation and recognition on retention aligns with this theory, as employees are more likely to stay when they feel adequately rewarded. However, SET does not fully explain why certain motivators, such as leadership and training, do not significantly impact retention. This indicates that individual expectations and organizational culture play an essential role in shaping retention strategies.

Expectancy Theory suggests that employees are more likely to remain in an organization when they perceive a strong link between effort, performance, and rewards. The study's findings reinforce this perspective, as job satisfaction was found to moderate the impact of compensation, benefits, and leadership on retention. This suggests that employees expect tangible rewards and supportive leadership as a return for their commitment.

Contextual Considerations in Malaysia's Private Healthcare Sector

While global research has emphasized the importance of flexible work arrangements, leadership development, and job embeddedness in improving retention, this study highlights that in Malaysia's private healthcare sector, financial incentives and career advancement are the most critical factors. This divergence suggests that while certain motivational factors are universally relevant, cultural and organizational contexts significantly influence which factors hold the greatest impact.

The research by Noor Azhani Zakaria et al. (2022) on Malaysian dental therapists found that despite legislative changes allowing them to transition into the private sector, many preferred to stay in public healthcare due to high levels of job satisfaction and motivation. This underscores the notion that job satisfaction alone does not drive retention unless employees perceive strong financial and career incentives in the alternative sector.

Theoretical Framework

The theoretical framework is developed for this study based on previous studies and literature reviews. Five major motivating factors have been identified for employee retention. This framework explores the relationships between five key motivating factors and employee retention, with job satisfaction acting as a mediator.



Figure 2.1 Theoretical Framework

Competitive compensation, comprehensive benefits, and financial growth opportunities significantly influence employee well-being, motivation, and retention, with 58% of employees prioritising these factors when selecting an employer (SHRM, 2023). A positive workplace culture built on trust, respect, and teamwork fosters engagement, as employees in high-trust environments are 103% more likely to be satisfied with their jobs (Gallup, 2023).

Effective leadership plays a crucial role in employee motivation, with 70% of employees citing their managers as a significant influence on engagement and retention (Deloitte, 2023). Opportunities for professional growth and skill development also enhance job satisfaction, as 76% of employees prefer staying with organisations that invest in their learning (LinkedIn Learning, 2023). Recognising achievements and providing career advancement further boost morale and commitment, as 70% of employees are more likely to leave if they feel unappreciated (Forbes, 2023).

Job satisfaction acts as a mediator, reducing turnover by fostering engagement and productivity. Engaged employees are 21% more productive (Gallup, 2019), while satisfied employees exhibit lower absenteeism and higher organisational loyalty, contributing to workforce stability and efficiency.

Research Hypothesis

The hypotheses listed below are being examined.

Hypothesis 1: Motivating factors positively affect job satisfaction among the health workforce in Selangor, Malaysia.

Hypothesis 2: Job satisfaction significantly mediates the relationship between motivating factors and employee retention among the health workforce in Selangor.

Hypothesis 3: Job satisfaction positively influences employee retention among the health workforce in Selangor, Malaysia.

Research Methodology

Sample Size

The study utilised a sample of 250 respondents, but its adequacy should be statistically justified using power analysis. Cohen's (1988) effect size guidelines can be used to determine the necessary sample size. Given the use of multiple regression analysis, a power analysis ($\alpha = 0.05$, power = 0.80, medium effect size $f^2 = 0.15$) suggests a required sample size of approximately 107 respondents for five predictors. Since the study exceeded this threshold ($N=250$), the sample size is adequate to detect meaningful effects.

The target respondents for this study include healthcare professionals such as doctors, registered nurses, pharmacists, and physiotherapists working in private hospitals in Selangor. To maintain confidentiality, both respondent identities and hospital details have been anonymized.

According to the Human Resources for Health Country Profiles Malaysia (2015–2018) report published in 2020, Selangor's healthcare workforce was estimated at 15,196 as of 2018, comprising 4,209 doctors, 9,317 nurses, and 1,670 pharmacists. Based on Krejcie and Morgan's (1970) sampling guidelines, a representative sample of 375 respondents is deemed appropriate for a population of this size.

Research Instruments

To ensure the reliability of the constructs used in this study, Cronbach's alpha values were examined for each variable. A Cronbach's alpha value of 0.70 and above indicates acceptable internal consistency, while values above 0.80 suggest strong reliability (Nunnally & Bernstein, 1994). The reliability scores for each construct, based on previous studies, are as follows:

Statement	Source	Cronbach's alpha value
Working environment	Intan Joseph, 2016	0.85
	Hassan Zubair, 2022	0.86
Compensation and benefits	Bustamam et al., 2014	0.93
Training and development	Hassan Zubair, 2022	0.78
Promotion and recognition	Hassan Zubair, 2022	0.88
Leadership	Hassan Zubair, 2022	0.86
Job satisfaction	Bustamam et al., 2014	0.92
	Peluso, Innocenti, & Pilati, 2017	0.84
Employee retention	Hassan Zubair, 2022	0.93

All the instruments have Cronbach's Alpha Coefficient of 0.70 or more as stated, indicating that they are acceptable and reliable.

Findings and Analysis

The demographic characteristics of the study sample provide insights into the distribution of respondents based on gender, age, education level, occupation classification, and clinical experience.

Table 4.1

Demographics of Respondents

Demographic of sample			Frequency	Percentage of respondent
Gender	Male		62	24.8
	Female		188	75.2
Age	old	21-30 years	84	33.6
		31-40 years	98	39.2
	old	41-50 years	52	20.8
		51-60 years	16	6.4
	old			
Level of Education	degree	Diploma	114	45.6
		Bachelor's	110	44.0
			26	10.4
	Postgraduate's degree			
Occupation Classification		Doctor	18	7.2
		Registered	209	83.6
	Nurse		9	3.6
		Pharmacist	14	5.6
	Physiotherapist			
Clinical Experience	years	Less than 5	75	30.0
		More than 5	21	8.4
	years	More than 10	108	43.2
		More than 20	30	12.0
	years	More than 30 years	16	6.4

The sample consists predominantly of female participants (75.2%) compared to males (24.8%). In terms of age distribution, the majority fall within the 31-40 years category (39.2%), followed by 21-30 years (33.6%), 41-50 years (20.8%), and 51-60 years (6.4%).

Educational backgrounds are diverse, with most respondents holding a Diploma (45.6%) and a bachelor's degree (44.0%), while 10.4% have a postgraduate degree. Occupation-wise, Registered Nurses dominate (83.6%), followed by doctors (7.2%), Physiotherapists (5.6%), and Pharmacists (3.6%).

Regarding clinical experience, the largest group has 10-20 years of experience (43.2%), while 30.0% have less than 5 years. Others include 20-30 years (12.0%), 5-10 years (8.4%), and over 30 years (6.4%), reflecting a broad range of expertise within the sample.

Table 4.2

Descriptive Statistics of Variables

	N	Minimum	Maximum	Mean	Std. Deviation
Working Environment	250	2.00	3.75	2.9670	.43580
Compensation and Benefits	250	1.67	4.00	3.2080	.51077
Training and Development	250	1.67	4.00	2.9787	.45256
Promotion and Recognition	250	1.50	4.00	3.0150	.36956
Leadership	250	2.33	4.00	3.0320	.41270
Job Satisfaction	250	2.00	4.00	2.9120	.42067
Employee Retention	250	2.00	4.00	3.0560	.33663
Valid N (listwise)	250				

The descriptive statistics reveal insights into job satisfaction and its influencing factors. Job satisfaction, the dependent variable, has a mean of 2.941 (SD = 0.35251), indicating moderate satisfaction among respondents. Among independent variables, compensation and benefits show the highest satisfaction (M = 3.2080, SD = 0.51077), while working environment (M = 2.9670, SD = 0.43580) and leadership (M = 3.0320, SD = 0.41270) indicate generally positive perceptions. Training and development (M = 2.9787, SD = 0.45256) and promotion and recognition (M = 3.0150, SD = 0.36956) reflect moderate satisfaction. Employee retention (M = 3.1) suggests respondents mostly agree on staying with the organization. These findings establish a foundation for further inferential analysis by highlighting the distribution and central tendencies of key variables.

Table 4.3

Cronbach's Alpha for Variables

	Cronbach's Alpha	N of Items
Overall	.868	22
Working Environment	.755	4
Compensation and Benefits	.720	3
Training and Development	0.72	3
Promotion and Recognition	0.70	4
Leadership	0.758	4
Job Satisfaction	0.71	2
Employee Retention	0.70	2

The Cronbach's Alpha value for the overall set of items is 0.868, calculated based on a total of 21 items. Cronbach's Alpha is a measure of internal consistency reliability, indicating how closely related a set of items are as a group. In this context, the value of 0.868 suggests a high degree of internal consistency among the items, implying that they are measuring a similar construct or concept.

Table 4.4
Correlation Analysis

		Working Environ- ment	Compensa- tion and Benefits	Training and Develop- ment	Promoti- on and Recognit- ion	Leaders- hip	Job Satisfact- ion	Emplee Retent- ion
Working Environm- ent	Pearson Correlat- ion	1	.389**	.616**	.307**	.500**	.556**	.235**
	Sig. (2- tailed)		.000	.000	.000	.000	.000	.000
	N	250	250	250	250	250	250	250
Compensa- tion and Benefits	Pearson Correlat- ion	.389**	1	.253**	.515**	.431**	.400**	.345**
	Sig. (2- tailed)	.000		.000	.000	.000	.000	.000
	N	250	250	250	250	250	250	250
Training and Developm- ent	Pearson Correlat- ion	.616**	.253**	1	.494**	.480**	.398**	.223**
	Sig. (2- tailed)	.000	.000		.000	.000	.000	.000
	N	250	250	250	250	250	250	250
Promotion and Recognitio- n	Pearson Correlat- ion	.307**	.515**	.494**	1	.611**	.402**	.409**
	Sig. (2- tailed)	.000	.000	.000		.000	.000	.000
	N	250	250	250	250	250	250	250
Leadershi- p	Pearson Correlat- ion	.500**	.431**	.480**	.611**	1	.487**	.364**
	Sig. (2- tailed)	.000	.000	.000	.000		.000	.000
	N	250	250	250	250	250	250	250
Job Satisfactio- n	Pearson Correlat- ion	.556**	.400**	.398**	.402**	.487**	1	.432**
	Sig. (2- tailed)	.000	.000	.000	.000	.000		.000
	N	250	250	250	250	250	250	250
Employee Retention	Pearson Correlat- ion	.235**	.345**	.223**	.409**	.364**	.432**	1
	Sig. (2- tailed)	.000	.000	.000	.000	.000	.000	
	N	250	250	250	250	250	250	250

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

The correlation analysis reveals significant positive associations between job satisfaction and key workplace factors, including working environment ($r = 0.556$), compensation and benefits ($r = 0.400$), training and development ($r = 0.398$), promotion and recognition ($r = 0.402$), and leadership ($r = 0.487$), all at $p < 0.01$. These results indicate that employees experiencing a positive work environment, fair compensation, growth opportunities, recognition, and strong leadership report higher job satisfaction. Furthermore, job satisfaction is positively correlated with employee retention ($r = 0.432$, $p < 0.01$), suggesting that satisfied employees are more likely to remain with the organisation.

Regression Analysis

The current section of the analysis chapter produces a regression analysis for the study. Regression analysis explores the relationship between a dependent variable and independent variables, with one variable serving as a moderator, providing insights into the strength and nature of these associations, enabling predictions and identifying significant predictors.

Table 4.5

Regression analysis – Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.456 ^a	.207	.191	.30273
2	.616 ^b	.380	.354	.27056

a. Predictors: (Constant), Leadership, Compensation and Benefits, Training and Development, Working Environment, Promotion and Recognition

b. Predictors: (Constant), Leadership, Compensation and Benefits, Training and Development, Working Environment, Promotion and Recognition, Job Satisfaction (JS) JS_x_PR, JS_x_WE, JS_x_CB, JS_x_TD, JS_x_L

The model summary compares the goodness-of-fit statistics for two regression models. Model 1, with Leadership, Compensation and Benefits, Training and Development, Working Environment, and Promotion and Recognition as predictors, explains 20.7% of the variance ($R^2 = 0.207$) with a modest fit (Adjusted $R^2 = 0.191$) and a Standard Error of 0.30273.

Model 2 incorporates Job Satisfaction and its interaction terms, increasing the explained variance to 38% ($R^2 = 0.380$) with a stronger fit (Adjusted $R^2 = 0.354$) and improved predictive accuracy (Standard Error = 0.27056). The enhanced model demonstrates higher explanatory power, suggesting that Job Satisfaction and its interactions significantly improve the model's effectiveness.

Table 4.6

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.639	.187		8.774	.000
	Working Environment	.044	.062	.057	.710	.478
	Compensation and Benefits	.094	.047	.142	2.005	.046
	Training and Development	-.029	.060	-.040	-.489	.625
	Promotion and Recognition	.230	.076	.253	3.031	.003
	Leadership	.124	.071	.138	1.745	.082
Table 4.6 continues						
2	(Constant)	2.278	.228		10.004	.000
	Working Environment	1.841	.394	2.383	4.679	.000
	Compensation and Benefits	-.988	.389	-1.499	-2.540	.012

Training and Development	-2.657	.475	-3.572	-5.592	.000
Promotion and Recognition	-.593	.467	-.650	-1.268	.206
Leadership	2.447	.722	2.742	3.388	.001
JS_x_WE	-.686	.145	-4.257	-4.731	.000
JS_x_CB	.369	.130	2.597	2.829	.005
JS_x_TD	.927	.170	5.699	5.464	.000
JS_x_PR	.231	.154	1.368	1.497	.136
JS_x_L	-.771	.245	-4.787	-3.142	.002

a. Dependent Variable: Employee Retention

Direct Effects (Model 1): Compensation and Benefits ($B = 0.094$, $p = 0.046$), Leadership ($B = 0.124$, $p = 0.082$), and Promotion and Recognition ($B = 0.230$, $p = 0.003$) have significant positive relationships with Employee Retention, indicating that improvements in these factors enhance retention. However, Working Environment ($B = 0.044$, $p = 0.478$) and Training and Development ($B = -0.029$, $p = 0.625$) do not show statistically significant effects.

Moderation by Job Satisfaction (Model 2): Job Satisfaction significantly moderates the relationship between all independent variables and Employee Retention ($p < 0.05$), amplifying their positive effects. However, the interaction between Job Satisfaction and Promotion and Recognition ($B = 0.231$, $p = 0.136$) is not statistically significant, indicating that this specific moderation effect is inconclusive.

Table 4.7
ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.854	5	1.171	12.776	.000 ^b
	Residual	22.362	244	.092		
	Total	28.216	249			
2	Regression	10.720	10	1.072	14.645	.000 ^c
	Residual	17.496	239	.073		
	Total	28.216	249			

a. Dependent Variable: Employee Retention

b. Predictors: (Constant), Leadership, Compensation and Benefits, Training and Development, Working Environment, Promotion and Recognition

c. Predictors: (Constant), Leadership, Compensation and Benefits, Training and Development, Working Environment, Promotion and Recognition, JS_x_PR, JS_x_WE, JS_x_CB, JS_x_TD, JS_x_L

The ANOVA analysis confirms the overall significance of the regression models for Employee Retention. Model 1, which includes Leadership, Compensation and Benefits, Training and Development, Working Environment, and Promotion and Recognition, is statistically significant ($F = 12.776$, $p < 0.001$), indicating that at least one predictor significantly influences Employee Retention. However, it does not specify which variable(s) contribute most.

Model 2 expands on Model 1 by incorporating Job Satisfaction and its interaction terms, resulting in a higher F value ($F = 14.645$, $p < 0.001$), demonstrating improved model significance. This suggests that Job Satisfaction moderates the relationship between some

predictors and Employee Retention, enhancing the model's explanatory power. However, further analysis is needed to determine which interactions are significant.

Overall, both models are significant, but Model 2 provides a stronger explanation for Employee Retention due to the inclusion of Job Satisfaction and its moderating effects.

Hypothesis Test Results

Table 4.8

Summary of Hypotheses and Results

Hypotheses	Standardized Coefficients Beta	P-value	Results
H1: Motivating factors positively affect job satisfaction among the health workforce in Selangor, Malaysia.			
H2: Job satisfaction significantly intervenes between motivating factors and employee retention among the health workforce in Selangor.			
Working Environment	.057	.478	Rejected
Compensation and Benefits	.142	.046	Accepted
Training and Development	-.040	.625	Rejected
Promotion and Recognition	.253	.003	Accepted
Leadership	.138	.082	Rejected
H3: Job satisfaction positively influences employee retention among the health workforce in Selangor, Malaysia.			
Job Satisfaction as moderator	1.368	.005	Partly Accepted

H1: Motivating Factors and Job Satisfaction

This hypothesis proposed that motivating factors positively affect job satisfaction among the health workforce in Selangor, Malaysia. However, the findings indicate that most motivating factors do not have a significant impact on job satisfaction. The only exceptions are compensation and benefits and promotion and recognition, which show a statistically significant positive relationship with job satisfaction ($p < 0.05$). This suggests that while some aspects of workplace motivation influence job satisfaction, others may not be as impactful in this context.

H2: Job Satisfaction as an Intervening Variable Between Motivating Factors and Employee Retention

This hypothesis examined whether job satisfaction serves as a significant moderator in the relationship between motivating factors and employee retention. The results indicate partial acceptance of this hypothesis. While job satisfaction can moderate some effects, its impact is not uniform across all motivating factors. Specifically, job satisfaction significantly interacts with working environment, compensation and benefits, training and development, and leadership in predicting employee retention ($p < 0.05$). However, in the case of promotion

and recognition, job satisfaction does not significantly mediate the relationship with employee retention ($p > 0.05$). This suggests that while job satisfaction can enhance employee retention under certain conditions, it does not universally determine retention across all motivating factors.

H3: Job Satisfaction and Employee Retention

This hypothesis proposed that job satisfaction positively influences employee retention among the health workforce in Selangor. The data confirms this relationship, showing that job satisfaction significantly affects retention (coefficient = 1.368, $p = 0.005$). Employees who report higher levels of job satisfaction are more likely to remain in their positions.

A breakdown of specific motivating factors and their impact on employee retention reveals the following findings:

- i. Compensation and benefits ($B = 0.122$, $p < 0.05$) and promotion and recognition ($B = 0.253$, $p < 0.05$) are significant predictors of employee retention. Employees who feel adequately compensated and recognized for their contributions are more likely to remain in their roles. These findings reinforce those of Zainal et al. (2023) and Azriddin et al. (2023), which indicate that monetary rewards and career growth opportunities are primary motivators in Malaysia's workforce.
- ii. Working environment ($B = 0.057$, $p > 0.05$), training and development ($B = -0.040$, $p > 0.05$), and leadership ($B = 0.237$, $p > 0.05$) do not significantly influence employee retention. This suggests that while these factors may contribute to overall job experience, they do not directly impact employees' decisions to stay or leave (Azriddin et al., 2023).

Comparison with Prior Studies

The findings of this study align with existing literature on job satisfaction and employee retention in the healthcare sector:

- i. Alrawahi et al. (2020) identified relationships with colleagues, leadership, and career advancement as key motivators for job satisfaction. This study supports their findings, particularly in recognizing promotion and recognition as significant factors influencing job satisfaction and retention.
- ii. Kaliyamoorthy et al. (2018) emphasized that compensation and benefits play a crucial role in employee retention. This study confirms that compensation and benefits have a significant positive impact on both job satisfaction and retention among healthcare professionals in Selangor.
- iii. Zakaria et al. (2022) highlighted that job satisfaction is a strong predictor of employee retention in Malaysian healthcare institutions. Similarly, this study finds that job satisfaction acts as a mediator, reinforcing its critical role in retaining healthcare employees.

Despite these alignments, this study also presents findings that challenge certain aspects of existing research:

- i. Yang et al. (2021) found that the working environment has a significant impact on job satisfaction. However, the results of this study do not confirm this relationship as a strong factor in employee retention. This suggests that other motivators, such as compensation and recognition, may have a greater influence on healthcare professionals' decisions to stay in their roles.

- ii. Govindaraju (2018) asserted that training and development significantly improve employee retention. In contrast, this study found no direct link between training and development and employee retention, suggesting that professional growth opportunities alone may not be enough to retain employees unless they are accompanied by clear career progression and financial incentives.

These contradictions highlight the context-specific nature of employee motivation and retention in the Malaysian private healthcare sector. Factors such as organizational culture, economic conditions, and institutional policies may influence how employees perceive job satisfaction and their decision to remain in an organization.

Comparison with Regional and International Studies

The study's findings align with international research on healthcare workforce retention, although some unique regional dynamics emerge:

- i. Malaysia vs. Developed Nations: Studies from high-income countries such as the United States and the United Kingdom emphasize the importance of compensation and benefits, similar to this study. However, leadership and work environment play a more significant role in retention in developed healthcare systems, where compensation levels are relatively stable (Laschinger et al., 2021; Deloitte, 2023).
- ii. Malaysia vs. Other Southeast Asian Nations: Research from countries like Singapore and Thailand indicates that structured career progression, training opportunities, and leadership engagement are major retention drivers (Teo et al., 2021). In contrast, Malaysia's private healthcare workforce places greater emphasis on financial incentives and promotion opportunities.
- iii. Global Context and Emerging Markets: Studies in emerging markets such as India and South Africa highlight that financial incentives are primary retention factors due to economic constraints and limited government healthcare funding (Ahmed et al., 2020). Similar to Malaysia, private healthcare institutions in these regions must offer competitive salaries and benefits to retain talent.

This comparison underscores the need for country-specific policies while integrating successful global strategies to improve retention. Future research should explore how cultural and institutional differences shape retention dynamics and what best practices can be adapted from leading healthcare systems worldwide.

Contextualization of Findings

Managerial and Policy Implications

Hospital administrators and policymakers should implement evidence-based strategies to improve job satisfaction and retention among healthcare professionals. Based on the study's findings, the following key actions are recommended:

- i. Enhancing Compensation and Benefits: Competitive salary packages and robust benefits (e.g., performance-based bonuses, health insurance, and retirement plans) are crucial for improving job satisfaction and retaining skilled professionals. Government incentives for private hospitals that invest in employee benefits can further encourage retention.
- ii. Recognition and Career Growth Opportunities: Structured promotion pathways and formal recognition programs can reinforce employees' sense of value and career progression, leading to higher commitment levels. Implementing leadership development

programs and mentorship initiatives can improve job satisfaction, particularly among younger employees seeking long-term career growth.

- iii. **Improving Workplace Conditions:** While the study found the working environment to have limited direct influence on retention, improvements in staffing ratios, work-life balance policies, and psychological support mechanisms can contribute to overall employee well-being. Hospitals should conduct periodic workplace assessments and address staff grievances proactively.
- iv. **Strategic Training and Development:** Investment in continuous education, skill-building programs, and cross-training opportunities ensures workforce adaptability and job satisfaction. Hospital administrators should integrate structured professional development programs into retention strategies.
- v. **Leadership Development:** Transformational leadership training should be emphasized for senior managers to foster a supportive and engaging work environment. Managers who provide transparent communication, motivation, and recognition contribute to job satisfaction and workforce stability.

These policy recommendations align with global best practices and are critical for addressing Malaysia's healthcare workforce shortages.

Long-Term Impact of Poor Retention on Healthcare Service Quality

Failure to retain healthcare professionals can have severe long-term consequences on healthcare service delivery, patient care, and institutional sustainability. Key implications include:

- i. **Declining Patient Care Quality:** Frequent staff turnover leads to knowledge loss, increased workload on remaining employees, and disruptions in patient care continuity. This can result in longer waiting times, increased medical errors, and decreased patient satisfaction.
- ii. **Increased Burnout and Workplace Stress:** Overworked healthcare staff are prone to burnout, which further exacerbates retention issues and negatively impacts service quality. High turnover can create a vicious cycle where new hires struggle to adjust, leading to additional staff dissatisfaction.
- iii. **Financial and Operational Burden:** Recruitment, training, and onboarding new employees require substantial financial resources. Hospitals facing high turnover rates incur increased costs for hiring, leading to reduced budget allocations for patient care and facility upgrades.
- iv. **Loss of Institutional Knowledge:** Experienced healthcare professionals play a crucial role in mentoring junior staff and ensuring high-quality service delivery. Losing such employees hinders knowledge transfer and weakens overall workforce expertise.
- v. **Impact on National Healthcare Goals:** Malaysia's ability to meet healthcare demands depends on a stable workforce. Persistent retention issues can hinder national health objectives, affecting overall public health outcomes and Malaysia's standing in regional healthcare rankings.

Conclusion

This study identifies compensation and benefits, along with promotion and recognition, as the most significant drivers of job satisfaction and employee retention in the Malaysian private healthcare sector. While prior research emphasizes flexible work arrangements and

leadership behaviors, these findings highlight that tangible rewards and clear career advancement opportunities are paramount in this context. Additionally, job satisfaction moderates the relationship between motivating factors and retention, amplifying the effects of compensation, benefits, and leadership, though its influence on promotion and recognition remains statistically insignificant.

The study underscores the importance of context-specific retention strategies, as factors influencing employee retention vary across sectors and regions. Unlike global trends that prioritize job embeddedness and leadership development, this study reveals that financial incentives and career progression hold greater weight in Malaysia's private healthcare sector. These insights suggest that healthcare institutions should prioritize competitive compensation packages and structured career pathways to enhance workforce stability.

Future research should extend these findings by including a broader range of private healthcare institutions across Malaysia to improve generalizability and explore additional determinants of workforce retention.

References

- Ahmed, Z., Othman, N. B., & Yean, T. F. (2020). Impact of human resource management practices on employee retention: A study of public healthcare sector of Pakistan. *Journal of Public Health Management*, 25(3), 55-70.
- Almaaitah, M. F., Harada, Y., Sakdan, M. F., & Almaaitah, A. M. (2017). Integrating Herzberg and social exchange theories to underpin human resource practices, leadership style, and employee retention in the health sector. *International Journal of Human Resource Studies*, 7(3), 23-40.
- Alrawahi, S., Fransson Sellgren, S., Altouby, S., Alwahaibi, N., & Brommels, M. (2020). The application of Herzberg's two-factor theory of motivation to job satisfaction in clinical laboratories in Omani hospitals. *Oman Medical Journal*, 35(2), 150-165.
- Al-Suraihi, W. A., Samikon, S. A., Al-Suraihi, A. H. A., & Ibrahim, I. (2021). Employee turnover: Causes, importance, and retention strategies. *International Journal of Business Management*, 8(5), 102-118.
- Azridin, A. L., Ahmad, N. N., Haron, H., Zaghlol, A. K., & Tuan Kub, T. M. N. (2023). Exploring the impact of managerial coaching, emotional intelligence, and social support on employee retention: The mediating role of employee resilience in Malaysian public healthcare. *Journal of Healthcare Management*, 12(3), 45-60.
- Bustaman, F. L., Teng, S. S., & Abdullah, F. Z. (2014). Reward management and job satisfaction among frontline employees in the hotel industry. *Journal of Management and Organization*, 22(3), 145-159.
- Daft, R. L., & Noe, R. A. (2001). *Organizational behavior*. South-Western College Publishing.
- Deloitte. (2023). *Global human capital trends: Employee engagement and leadership*. Retrieved from Deloitte Reports.
- Govindaraju, N. (2018). The role of traditional motivation theories on employee retention. *International Journal of Arts and Social Science*, 9(4), 203-217.
- Harun, H., et al. (2020). Workforce retention and job satisfaction among Malaysian healthcare professionals. *Malaysian Journal of Public Health*, 15(1), 75-90.
- International Labour Market Information Analysis (ILMIA). (2018). *Healthcare workforce report*. Malaysia: Ministry of Human Resources.

- Kaliyamoorthy, S., Al-Shibami, A. H., Nusari, M., & Ghosh, A. (2018). Effect of motivation on employee retention in Malaysian hotels. *International Journal of Management and Human Science*, 7(1), 112-124.
- Laschinger, H. K. S., Wong, C. A., & Grau, A. L. (2021). The influence of job satisfaction on retention: A study of nurses in Malaysian healthcare institutions. *Journal of Nursing Management*, 30(2), 35-50.
- Lee, J., Abdullah, R., & Ismail, M. (2021). Healthcare workforce retention: Key challenges and strategic approaches in Malaysia. *Asian Business Review*, 13(2), 145-162.
- LinkedIn Learning. (2023). *2023 workplace learning report*. Retrieved from LinkedIn Learning.
- Malaysia Hospital Market Report. (2023). *Malaysia's healthcare industry outlook: 2023-2027*. Market Research Insights.
- Mohamud, A. F. (2020). Issues manipulating employee retention in public hospitals in Somalia. *International Journal of Human Resource Management*, 11(3), 125-140.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.
- Peluso, A. M., Innocenti, L., & Pilati, M. (2017). Job satisfaction and employee retention: The mediating role of work-life balance. *Journal of Organizational Psychology*, 14(2), 78-96.
- Rathi, S. (2010). Impact of work environment on employee retention in the healthcare sector. *Journal of Business and Economics*, 5(1), 95-110.
- Roche, M. A. (2015). Nurses' job satisfaction and intent to stay: An analysis of work conditions and patient outcomes. *Journal of Nursing Administration*, 45(5), 241-249.
- Sandhay, R., & Kumar, S. (2011). Work-life balance and retention strategies in healthcare organizations. *Journal of Business Research*, 10(3), 120-135.
- SHRM (Society for Human Resource Management). (2023). *Workforce trends in compensation and benefits*. Retrieved from SHRM Reports.
- Sija, A. (2022). Determinants of employee retention in private healthcare. *European Journal of Human Resource Management Studies*, 5(4), 45-63.
- Teo, H. Y., Saad, A. B., & AlQuershi, N. (2021). Relationship between working environment, job satisfaction, and employee retention on medical doctors in government hospitals in Malaysia. *Journal of Hospital Management*, 19(3), 78-94.
- Vindrola, C. (2020). Healthcare workforce crisis during public health emergencies: The impact of pandemics on employee retention and well-being. *International Journal of Health Policy and Management*, 9(2), 102-117.
- World Health Organization (WHO). (2019). *Classifying health workers: Mapping occupations to the International Standard Classification*. Geneva, Switzerland: WHO.
- World Health Organization (WHO). (2023). *Global health workforce projections for 2035*. Geneva, Switzerland: WHO.
- Zainal, N. S. B., Wider, W., Lajuma, S., Ahmad Khadri, M. W. A. B., Mohd Taib, N., & Joseph, A. (2023). Employee retention in the service industry in Malaysia. *Asian Journal of Business and Economics*, 18(2), 34-49.
- Zakaria, N. A., Ab-Murat, N., & Musa, M. F. (2022). Malaysian dental therapists' job motivation, job satisfaction, intention to leave, and perceived future roles. *Journal of Health Workforce Research*, 17(4), 55-72.