Contributing Factors of Job Satisfaction among Industrial Workers in the Johor Industrial Sector

Subashini Goindan¹, Siti Sarah Omar^{2*} and Nurul Fadzilla Mohd Aris³

¹Smartronix Technology (M) Sdn. Bhd., Johor Bahru, Malaysia ²Johor Business School, Universiti Tun Hussein Onn, Batu Pahat, Johor, Malaysia ³Faculty of Technology Management and Business, Universiti Tun Hussein Onn, Batu Pahat, Johor, Malaysia

ABSTRACT

Employers must address job satisfaction to foster a positive workplace culture. A motivated employee will work hard to meet their personal and company goals within the given timeframe. This research aimed to identify factors that affected job satisfaction among workers in industrial companies in Johor. Using a quantitative correlation research design, data were collected from 145 respondents across electronics, molding, and filtration system manufacturers. Analysis using SPSS revealed that "working environment and culture" had the strongest effect on job satisfaction with a standardized regression coefficient of $\beta = 0.994$ and $R^2 = 0.987$, indicating that 98.7% of the variation in job satisfaction was contributed by this factor. This was followed by "leadership style" ($\beta = 0.976$, $R^2 = 0.952$), rewards and recognition ($\beta = 0.975$, $R^2 = 0.951$), "remuneration system" ($\beta = 0.974$, $R^2 = 0.948$), and "training and development" ($\beta = 0.971$, $R^2 = 0.943$). All relationships were statistically significant (p < 0.001). The findings highlight that while all factors positively influenced job satisfaction, the work environment and leadership style played a critical role. These results provide evidence-based insights for employers to develop targeted strategies to enhance job satisfaction, improve retention, and build a more productive workforce.

Keywords: Job Satisfaction, Remuneration, Employee Development, Workplace Culture, Employee Recognition

ARTICLE INFO

Article History:

Received: 11 December 2023 Accepted: 7 May 2025

Available online: 1 December 2025

Corresponding Author: Siti Sarah Omar; Address; Johor Business School, Universiti Tun Hussein Onn, Batu Pahat, 83000, Johor, Malaysia Email: sarah@uthm.edu.my; Tel: +60 13-779 3007

INTRODUCTION

Research on Malaysia's industrial sector shows that many organizations are struggling with a severe staff shortage. This shortage is making it difficult for businesses to meet the demands of their customers, both domestically and internationally. This statement is supported by a recent event where Dyson ended ATA IMS's contract because they could not meet the agreed targets (Lim, 2021). Furthermore, the lack of foreign workers caused by COVID-19 had greatly affected Malaysia's manufacturing industry. This shortage led to quarterly losses for ATA IMS, which struggled to secure the required workforce due to the government's freeze on foreign worker recruitment (Lim, 2021).

PIE Industrial Bhd, another company in the electronics manufacturing services (EMS) sector, has been struggling with a lack of staff since 2018, and it has been getting worse. Malaysia has a labour crisis despite the relaxed COVID-19 restrictions. The freeze on hiring foreign workers was extended until the end of 2021 because the unemployment rate was 4.6%, and about 749,000 people were jobless (Lim, 2021).

ATA IMS has tried to hire more people, increase pay, and improve safety, but it has not stopped employees from leaving. The Malaysian Trades Union Congress (MTUC) conducted interviews and found that employees left their jobs because they were unhappy with how they were treated by their employers (Lim, 2021). Additionally, many unemployed locals were reluctant to enter the industrial workforce due to concerns over job satisfaction and work-life balance.

This context revealed an important research gap; while policy and media discussions have centered on labour shortages and foreign worker dependency, there is limited empirical research examining the role of job satisfaction in retaining local industrial workers, particularly in high-output regions like Johor. Although job satisfaction is widely recognized as essential to employee retention and organizational productivity (Inayat & Khan, 2021), studies specific to Johor's electronics, molding, and filtration system manufacturers remain scarce.

Following that, this study particularly focused on job satisfaction among industrial workers in Johor. Due to Johor's strong industrial growth and substantial contribution to Malaysia's economy (MIDF, 2023), measuring job satisfaction among industrial workers was justified. Additionally, MIDF (2023) reported that Johor recorded a lower unemployment rate of 3.3% in 2022. Besides the ratio of salaried workers to total employment, Johor achieved a higher rate of 66.3% compared to Malaysia's 64.5% in 2021.

Furthermore, Johor, one of the most industrialized states in the country, had many manufacturing, logistics, and petrochemical companies that create jobs (Bank, 2022). This industrial diversity allowed for a comprehensive study of job satisfaction across industries, revealing how varied workplaces affected morale and productivity. Johor's status as Malaysia's third-largest GDP contributor (MIDF, 2023) madeit important for economic studies because job satisfaction in such an industrial hub can affect workforce stability, business performance, and regional and national economic growth.

Therefore, this study aimed to fill the empirical gap by examining the key determinants of job satisfaction among industrial workers in Johor. Understanding what drove satisfaction in this industrial region couldprovide insights into how organizations and policymakers might better attract, engage, and retain local talent, thereby reducing dependence on foreign labour and enhancing workforce stability in Malaysia's critical economic sectors.

Problem Statement

Despite Johor's industrial growth and economic contributions to Malaysia, industrial worker job satisfaction remains understudied. According to MIDF (2023), although Johor had a better labour market structure, wage growth was still a major concern. Hence, The remuneration structure, training and development, leadership style, working environment, and rewards and recognition are thought to affect employee satisfaction. There is little empirical study on how these factors affected industrial work satisfaction in Johor. Addressing workforce difficulties, enhancing efficiency, and ensuring the region's industrial workforce's sustainability requires a deeper understanding of these factors. Thus, this study examined how these characteristics affected job satisfaction among Johor industrial workers.

Significance of Study

This study has substantial significance from both theoretical and practical perspectives, particularly in enhancing the understanding of employee satisfaction within the manufacturing sector.

The theoretical significance of this study lies in the validation of key relationships between job satisfaction and critical factors such as remuneration, training and development, leadership style, work environment and culture, and rewards and recognition. By empirically testing these relationships, the study contributes to the existing body of knowledge on employee satisfaction, particularly in the industrial sector. This validation strengthens the concepts and lays the groundwork for future employee satisfaction research in other contexts.

From a practical standpoint, the study provides actionable insights for employers in the manufacturing sector to enhance worker satisfaction and, consequently, organizational performance. By understanding the strong influence of remuneration, training, leadership, work environment, and rewards, employers can create targeted initiatives to enhance these areas. A well-structured remuneration system and reward programs can encourage employees, while good leadership and a friendly workplace can prevent turnover and enhance engagement. Continuous training makes employees feel valued and competent, increasing job satisfaction. These insights help employers build a healthy, high-performing work culture, boosting corporate performance and employee loyalty.

Research Objectives

Accordingly, this study aimed:

- 1. RO1: To determine whether the "remuneration system" affects the job satisfaction of Johor's industrial sector workers.
- 2. RO1: To determine whether "training and development" affects the job satisfaction of Johor's industrial sector workers.
- 3. RO3: To determine whether "leadership style" affects the job satisfaction of Johor's industrial sector workers.

- 4. RO4: To determine whether "working environment and culture" affects the job satisfaction of Johor's industrial sector workers.
- 5. RO5: To determine whether "rewards and recognition" affect the job satisfaction of Johor's industrial sector workers.

LITERATURE REVIEW

Job Satisfaction

Bataineh (2019) claimed that job satisfaction greatly affected employee well-being at work and home. Madrid, Barros, and Vasquez (2020) defined job satisfaction as an emotional response to work. As such, employee satisfaction improved workplace dynamics by influencing emotions, behaviours, and attitudes.

Former scholars have stressed that job satisfaction comes from achieving goals, which makes work enjoyable – meanwhile, challenges or delays in goal achievement cause dissatisfaction (Sypniewska, Baran, & Kłos, 2023). Nickerson (2023) stated that positive feelings come from personal growth, trust, acknowledgement, and achievement. Dissatisfaction can result from poorly managed corporate policies, pay, and relationships (Nickerson, 2023).

Alrawahi, Sellgren, Altouby, Alwahaibi, and Brommels (2020) discussed Herzberg's Two-Factor Theory, which states that job satisfaction is linked to motivation and hygiene. Motivation, driven by work nature, achievements, promotions, and recognition, leads to satisfaction. Hygiene factors encompass policies, supervision, salaries, relations, and working conditions, all influencing job satisfaction.

Therefore, job satisfaction is a complicated interaction of achievement, emotions, and external circumstances. It influences employee attitudes, behaviors, and workplace dynamics, affecting well-being and performance.

Job satisfaction content theories

These theories characterize job factors that affect employee satisfaction. They examined how job intrinsics and extrinsics affected job satisfaction. Understanding these elements helps companies create jobs and work cultures that boost job satisfaction, motivation, and well-being. Table 1 summarizes several prominent content theories of job satisfaction, including (i) Maslow's Hierarchy of Needs (1943), (ii) Frederick Herzberg's Two-Factor Theory (1959), (iii) Douglas McGregor's Theory X and Theory Y (1960), (iv) Clayton Alderfers ERG Theory (1969), and (v) David Mcclelland's Needs Theory.

Table 1: Elements under Study within Job Satisfaction Content Theories

No.	Theory	Elements under Study	Source
1	Maslow's Hierarchy of Needs (1943)	Physiological, Safety, Belongingness and Love, Esteem, Self-actualisation	Mcleod (2023)
2	Frederick Herzberg Two Factor Theory (1959)	Hygiene Factors: Prevent dissatisfaction, e.g., job security and working conditions. Motivators: Contribute to job satisfaction and motivation, e.g., recognition and advancement opportunities.	Alrawahi, Sellgren, Altouby, Alwahaibi, and Brommels (2020)
3	Douglas McGregor's Theory X and Y (1960)	Theory X: Employee's workplace pessimism. Theory Y: Employee's workplace optimism. (Attitude, Direction, Responsibility, Motivation)	Galani and Galanakis (2022)
4	Clayton Alderfer's ERG Theory (1969)	Physiological, Safety, Social, Self-esteem, Self-actualisation	Arogundade and Akpa (2023)
5	David Mcclelland's Needs Theory	Achievement, Power, Affiliation	Siok, Sim, and Rahmat (2023)

Job satisfaction process theories

Job satisfaction process theories examine cognitive, emotional, and social factors that influence job satisfaction. These theories emphasize how expectations, social comparisons, emotions, and psychological states affect job satisfaction. Understanding these processes can help companies foster healthy job attitudes and employee well-being. Key process theories of job satisfaction include (i) Valence Expectancy Theory and (ii) Equity Theory. Table 2 summarises elements under study within the domain of process theories of job satisfaction.

Table 2: Elements under Study within Job Satisfaction Process Theories

No.	Theory	Elements under Study	Source
1	Expectancy Theory	 Job expectations: Employees believe their efforts will lead to specific performance and outcomes. Instrumentality: Performance rewards Valence: Employee's acknowledgement Motivation: Employee satisfaction 	Osafo, Paros, and Yawson (2021)
2	Equity Theory	 Job inputs = Job outputs Job input: E.g., hours worked, experience, education, work performance. Job outputs: E.g., salary, bonus, recognition, promotion. 	Davlembayeva and Alamanos (2023)

Remuneration System

The remuneration system employees receive varies based on their job role, experience, and position (Chen et al., 2020). Employees rely on their salary to meet living expenses, pay commitments, and save for emergencies. Any reduction in pay can negatively impact job performance as employees may struggle to meet their financial obligations, leading to stress and mental health issues (Jamil et al., 2023). A reliable and timely pay system can boost employee satisfaction, whereas pay cuts or freezes, especially during tough business periods, may force employees to seek better-paying jobs, including long-serving and talented staff.

Research shows that financial compensation plays a critical role in job satisfaction (Yen, Kiat, & Celeste Jee, 2022). As the cost of living rises, employees are driven to seek higher-paying jobs for better financial security and quality of life. If employees feel underpaid, they may experience emotional dissatisfaction, contributing to job dissatisfaction and staff turnover. Studies suggest that an effective remuneration system positively influences job satisfaction and organizational commitment (Chen et al., 2020). It is considered one of the most significant predictors of employee satisfaction across various sectors, including manufacturing and hospitality (Andrade, Miller, & Westover, 2021; Olajide et al., 2020). According to Herzberg's model of employee satisfaction, the remuneration system is an extrinsic factor – its absence leads to dissatisfaction, but its presence can improve employee satisfaction.

The relationship between job satisfaction and the remuneration system has been widely studied, with numerous findings indicating a positive link between the two. Industrial workers tend to feel more satisfied when their compensation aligns with their efforts, skills, and job demands. A fair and timely remuneration system can greatly influence workers' job satisfaction in Johor's industrial sector, where living expenses and financial commitments are significant. Thus, it is hypothesized that,

H1: There is a significant positive relationship between the remuneration system and job satisfaction among industrial workers in the Johor industrial sector.

Training and Development

Organizations need to stay updated with the latest trends and technologies in both national and global markets to ensure business survival. However, improvements made within the organization will not be effective if employees struggle to adapt to these changes. This is why training and development are crucial, as they help employees upgrade their skills and knowledge to align with the organization's evolving needs (Kanapathipillai & Azam, 2020).

A well-designed training and development program can boost employee motivation, confidence, and job satisfaction (Kanapathipillai & Azam, 2020). However, many employers avoid such programs due to concerns about increased administrative costs, time constraints, and the temporary loss of productivity during training sessions. Additionally, employers may worry that employees will seek new opportunities with their newly acquired skills.

Research is needed to determine whether training and development impact job satisfaction in Malaysia's manufacturing sector. Studies show that training helps employees develop the skills needed for their current roles and prepares them for future challenges, ultimately boosting job satisfaction and reducing turnover (Mampuru, Mokoena, & Isabirye, 2024). Companies that invest in employee development tend to have higher staff satisfaction and retention levels. Furthermore, training enhances employees' contributions to their roles and organizations, earning them respect from

colleagues and management, and may lead to corporate sustainability (Sult, Wobst, & Lueg, 2023).

Training and development are crucial factors influencing job satisfaction, directly impacting employees' skills and career growth. In Johor's industrial sector, where continuous learning and skill enhancement are vital, effective training programs can significantly enhance job satisfaction by helping workers feel more competent and valued. Therefore, it is hypothesized that,

H2: There is a significant positive relationship between training and development and job satisfaction among industrial workers in the Johor industrial sector.

Leadership Style

A good leader influences employees through their leadership style and management skills, shaping the work environment and culture. However, not all leaders can maintain effective leadership. Some may struggle with stress and pass it on to employees, while others may use a strict or authoritative approach to meet goals. This creates a stressful work environment that negatively affects employee job satisfaction. Unfortunately, employers may overlook poor leadership if it produces results without considering the long-term effects on employee morale.

It is essential to explore the influence of leadership style on job satisfaction in Malaysia's manufacturing sector. Understanding the impact of different leadership styles can help employers choose the best approach for their organization. Research shows that transformational leadership, which encourages innovation and support, positively impacts job satisfaction more than leadership styles focused solely on output without considering employee well-being (Khan, Rehmat, Butt, Farooqi, & Asim, 2020). Transformational leaders inspire a shared purpose and vision, leading to higher levels of satisfaction (Khan et al., 2020).

On the other hand, studies on transactional leadership have mixed results. While some research shows a positive link between transactional leadership and job satisfaction (Nazim & Mahmood, 2018; Munir & Iqbal,

2018), Banjarnahor, Hutabarat, Sibuea, and Situmorang (2018) suggested that it does not significantly impact employee satisfaction. In the Malaysian manufacturing sector, the findings of Visvanathan, Muthuveloo, and Ping (2018) showed no statistically significant relationship between job satisfaction and transactional leadership.

Leadership style is pivotal in shaping job satisfaction by influencing workplace culture and employee motivation. In Johor's industrial sector, where leadership approaches can either foster a supportive and productive environment or create stress and dissatisfaction, leadership style significantly impacts workers' overall job satisfaction. Thus, it is hypothesized that,

H3: There is a significant positive relationship between leadership style and job satisfaction among industrial workers in the Johor industrial sector.

Working Environment and Culture

The working environment and culture in an organization are shaped by the physical conditions of the workplace, employee demographics, and work pressure (Taheri, Miah, & Kamaruzzaman, 2020). When facilities are in good condition, which is clean, safe, and well-maintained, employees feel more comfortable and happier at work. On the other hand, a poor environment can lead to dissatisfaction. Additionally, the demographic diversity of employees, such as different nationalities, can influence workplace culture. Employees from rural areas, for example, may experience culture shock and personal conflicts among employees, like relationships or quarrels, which can create an unpleasant work environment, sometimes leading to resignations.

Employers should actively address these issues by understanding and managing employee grievances. Assessing how the work environment and culture impact job satisfaction in Malaysia's manufacturing sector is important.

The work environment includes all factors that influence employee performance, both positively and negatively. Research shows that a positive work environment that promotes safety, comfort, and collaboration boosts job satisfaction and employee productivity (Hassan, Ahmad, Sumardi, & Mat Halif, 2020). Employees prefer to work in safe, well-designed spaces, as these factors motivate them and improve their performance. In contrast, poor working conditions can increase stress and reduce job satisfaction.

Studies also show that a positive workplace culture encourages creativity, collaboration, and work-life balance, increasing organizational productivity (Hassan et al., 2020). Employee satisfaction and productivity improve when work conditions are maintained at a high standard.

The working environment and culture are crucial determinants of job satisfaction, as they shape employees' daily experiences and interactions. In Johor's industrial sector, a positive and supportive work environment, along with a healthy organizational culture, can significantly enhance job satisfaction by fostering comfort and collaboration. Consequently, it is hypothesized that,

H4: There is a significant positive relationship between the working environment and culture and job satisfaction among industrial workers in the Johor industrial sector.

Rewards and Recognition

The last factor investigated was the impact of rewards and recognition on employees' job satisfaction in Malaysia's manufacturing sector. Aside from salary, employees' motivation increases when they are rewarded and recognized for their hard work and loyalty. For example, attendance allowances can reduce absenteeism, long-service rewards encourage employee retention, and promotions motivate employees to work harder. However, many employers are reluctant to implement such programs due to the cost. This research aimed to highlight the importance of rewards and recognition programs.

Motivation drives employee behaviour and performance. According to Scanlan and Still (2019), motivation is a set of processes that influence behaviour toward a specific goal, helping create a positive work environment. The best company performance comes from motivated and engaged employees. Maintaining employee engagement and motivation through reward and recognition programs is essential for companies today.

Managers are vital in motivating employees and improving organizational effectiveness by rewarding good performance (Sarker & Ashrafi, 2018). Motivation, combined with employee skills and abilities, leads to effective performance. Rewards and recognition are crucial in boosting performance and motivation (McInerney, Korpershoek, Wang, & Morin, 2018).

Research shows that employees who are motivated by rewards perform better, giving companies a competitive edge (Scanlan & Still, 2019). Li, Zhang, Xiao, Chen, and Lu (2019) emphasized that employee commitment is closely tied to rewards and recognition. When organizations properly motivate and recognize their employees, they perform better. Kurdi, Alshurideh, and Alnaser (2020) found that recognition boosts productivity and organizational success.

Rewards and recognition play a pivotal role in boosting employee motivation and job satisfaction by acknowledging hard work and achievements. In Johor's industrial sector, when workers feel valued through tangible rewards and recognition, their job satisfaction will likely increase. Therefore, it was hypothesized that:

H5: There is a significant positive relationship between reward and recognition and job satisfaction among industrial workers in the Johor industrial sector.

Research Conceptual Framework

This study examined five Johor industrial workers' job satisfaction criteria. Thus, job satisfaction was the dependent variable (DV), which was the variable being measured and was supposed to depend on independent variables (IVs), which were "remuneration system," "training and development," "leadership style," "working environment and culture," and "rewards and recognition". In this study, these five IVs were variables that were controlled in an experiment and were investigated in relation to their effect on job satisfaction among industrial workers in the Johor industrial sector. The research conceptual framework in Figure 1 links DV (job satisfaction) to the five IVs.

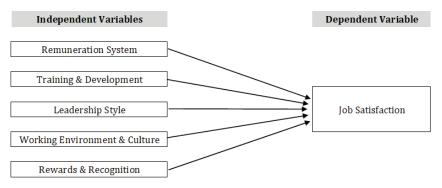


Figure 1: The Research Conceptual Framework
(Source: Own illustration)

RESEARCH METHODOLOGY

The research was conducted for causal analysis – a quantitative approach that was facilitated with the use of SPSS. Job satisfaction analysis requires quantitative research to quantify factors and statistically evaluate correlations. Earlier quantitative studies have examined how remuneration (Yen et al., 2022), training (Kanapathipillai & Azam, 2020), leadership style (Nazim & Mahmood, 2018), working environment (Hassan et al., 2020), and rewards affect job satisfaction (Scanlan & Still, 2019). This research was built on previous findings and gives a comprehensive statistical analysis of how these characteristics affected job satisfaction among Johor industrial workers using comparable methods. This methodological consistency improved comparability and reliability, providing useful field insights.

Research Instrument

This study examined Johor industrial sector employee satisfaction using a survey. The survey method was chosen because it collected job satisfaction data through organized questions and closed-ended responses. The questionnaire addressed key employee satisfaction aspects like "remuneration system," "training and development," "leadership style," "working environment and culture," and "rewards and recognition" in a clear, accessible format.

Population and Sample

The study used judgment sampling, starting with a survey and then purposive sampling. The study examined industrial workers in Johor Bahru, Malaysia, particularly in electronic, molding, and filtration system companies. These sectors were chosen due to their prevalence and economic significance in Johor's industrial landscape. Judgment sampling was appropriate as it enabled the selection of respondents with direct experience in manufacturing environments, ensuring the data collected was both relevant and sector-specific (Ahmed, 2024).

A total of 180 questionnaires were distributed proportionally based on 5% of the estimated workforce in each sector. This method ensured adequate representation across operational and management roles. Electronic manufacturing facilities received 50 surveys, filter system manufacturing facilities 100, and molding manufacturing facilities 30. Table 3 shows 145 of 180 employee questionnaires returned with complete answers, accounting for a response rate = 80.56%.

Questionnaire **Questionnaire Competed** Manufacturing Total Distribution & Returned Sector **Employees Total** Percentage Total Percentage Electronic 1000 50 5 43 86 100 5 84 Molding 2000 84 Filter System 600 30 5 18 60 TOTAL 3600 180 15 145 80.56

Table 3: Questionnaire Distribution

Data Collection

This study used a questionnaire to gather research data, and it was distributed to people across the industrial sector at various levels of age, gender, salary group, working experience, working departments, positions, and education. Face-to-face interactions and digital platforms were used to gather necessary information on the factors affecting satisfaction at work. The data-gathering process focused on three distinct categories of manufacturing enterprises in Johor, Malaysia: electronic, molding, and filter system manufacturers.

Data Analysis

Quantitative methods were used to analyze the data using SPSS. These methods included Cronbach's reliability test, Pearson's correlation analysis, and linear regression.

FINDINGS AND DISCUSSION

The data analysis results are presented in this section, starting with the reliability test, regression analysis, and correlation analysis.

Reliability Test

Cronbach's test was used to assess the reliability of employee satisfaction data. Table 4 shows the reliability test results for all variables.

Variable	Type of Variable	No. of Items	Cronbach's Alpha Coefficient Value (α)
(RENUM_SYST): Remuneration System	Independent	5	0.930
(TRAIN_DVLOPMENT): Training and Development	Independent	5	0.937
(LEADER_STYLE): Leadership Style	Independent	5	0.930
(WORK_ENV_CULT): Working Environment and Culture	Independent	5	0.945
(RWD_AND_RECOG): Reward and Recognition	Independent	5	0.888
(EMP_STSFCTN): Employees' Job Satisfaction	Dependent	5	0.960

Table 4: Reliability Tests' Results

Cronbach's reliability analysis showed that the satisfaction dataset was highly reliable, with all reliability values exceeding 0.8.

Regression Analysis

This study employed linear regression to predict dependent variable values from independent variables. This regression analysis examined how variables affected Johor industrial workers' satisfaction. Regression model

p-values below 0.05 indicated statistically significant correlations between variables. However, a model with a p-value greater than 0.05 demonstrated no statistically significant link between variables: Tables 5, 6, 7, 8, and 9 show regression results.

Table 5: Regression Analysis of the Remuneration System

	Model Summary						
Model R		R Square	Adjusted R Square	Std. Error of the Estimate			
1	.974ª	.948	.948	.21985			

a. Predictors: (Constant), RENUM SYST

ANOVA								
Model		Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	127.286	1	127.286	2633.376	.000b		
	Residual	6.912	143	0.48				
	Total	134.198	144					

a. Dependent Variable: EMP_STSFCTN

b. Predictors: (Constant), RENUM SYST

	Coeffients								
Model		Unsttandardized Coeffiecients		Standardized Coeffiecients	t	sig.			
		В	Std. Error	Beta					
1	(Constant)	081	.048		-1.683	.095			
	RENUM_ SYST	1.000	0.19	.974	51.316	.000			

a. Dependent Variable: EMP STSFCTN

From Table 5, the summary model revealed that the regression model was accurate with 0.948 R-squared. This implied that the model predicted industrial worker satisfaction. Job satisfaction and remuneration were statistically linked in the linear regression model, with a significance level of 0.000, below 0.05. Remuneration increased worker satisfaction by 97.4% in the Johor industrial sector, according to the standardized coefficient of 0.974. The regression model supported hypothesis H1, showing a positive correlation between the remuneration system (X_1) and job satisfaction (Y) in the Johor industrial sector, with the equation as follows:

$$Y = X_1 - 0.081$$

Table 6: Regression Analysis of Training and Development

				= = = = = = = = = = = = = = = = = = = =				
	Model Summary							
Model R		R Square	Adjusted R Square	Std. Error of the Estimate				
1	.971ª	.943	.943	.23119				

a. Predictors: (Constant), TRAIN DVLOPMENT

ANOVA								
Model		Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	126.555	1	126.555	2367.822	.000b		
	Residual	7.643	143	0.53				
	Total	134.198	144					

a. Dependent Variable: EMP_STSFCTN

b. Predictors: (Constant), TRAIN DVLOPMENT

	Coeffients								
Model		Unsttandardized Coeffiecients		Standardized Coeffiecients	t	sig.			
		В	Std. Error	Beta					
1	(Constant)	112	.051		-2.183	.031			
	TRAIN_ DVLOPMENT	1.012	0.21	.971	48.660	.000			

a. Dependent Variable: EMP_STSFCTN

From Table 6. the summary model fits the regression model 94.3% (R-squared = 0.943). This implied that the model predicted worker satisfaction. Training and development were linked to worker satisfaction in the linear regression study (p-value 0.000, below 0.05. Worker satisfaction improved by 97.1% with training and development (coefficient = 0.971). Thus, the regression analysis supported hypothesis H2, showing a positive correlation between training and development (X_2) and job satisfaction (Y) in the Johor industrial sector, with the equation as follows:

$$Y = 1.012X, -0.112$$

Table 7: Regression Analysis of Leadership Style

Model Summary							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate			
1	.976ª	.952	.952	.21124			

a. Predictors: (Constant), LEADER_STYLE

ANOVA								
Model		Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	127.817	1	127.217	2864.520	.000b		
	Residual	6.381	143	0.45				
	Total	134.198	144					

a. Dependent Variable: EMP_STSFCTN

b. Predictors: (Constant), LEADER_STYLE

	Coeffients								
Model		Unsttandardized Coeffiecients		Standardized Coeffiecients	t	sig.			
		В	Std. Error	Beta					
1	(Constant)	-0.98	.046		-2.100	.038			
	LEADER_ STYLE	1.014	0.19	.976	53.521	.000			

a. Dependent Variable: EMP_STSFCTN

As shown in Table 7 the summary model exhibited a 95.2% accuracy in regression model worker satisfaction predictions. This was supported by 0.952 R-squared. The regression investigation demonstrated a significant link between leadership style and worker satisfaction (p-value 0.000, below 0.05). Leadership style boosted worker satisfaction by 97.6% (standardized coefficient = 0.976). The regression model supported hypothesis H3, showing a positive correlation between leadership style (X_3) and job satisfaction (Y) in the Johor industrial sector, with the equation as follows:

$$Y = 1.014X_3 - 0.098$$

Table 8: Regression Analysis of Working Environment and Culture

Model Summary					
Model R R Square Adjusted R Square Std. Error of the Estimate					
1	.994ª	.987	.987	.10937	

a. Predictors: (Constant), WORK ENV CULT

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	132.487	1	132.487	11075.220	.000b
	Residual	1.711	143	0.12		
	Total	134.198	144			

a. Dependent Variable: EMP_STSFCTN

b. Predictors: (Constant), WORK ENV CULT

	Coeffients					
	Model		ndardized iecients	Standardized Coeffiecients	t	sig.
		В	Std. Error	Beta		
1	(Constant)	053	.023		-2.279	.024
	WORK_ENV_ CULT	1.015	0.10	.994	105.239	.000

a. Dependent Variable: EMP_STSFCTN

The summary model as in Table 8 shows that the regression model fits well with an R-squared of 0.987. This showed that the model predicts job satisfaction. A linear regression analysis indicated a significant correlation between work environment, culture, and job satisfaction (sig. = 0.000 < .05). Workplace culture and surroundings also increased worker satisfaction. The standardized coefficient of 0.994 showed that this component boosted industrial workers' satisfaction by 99.4%. The regression model supported hypothesis H4, showing a positive correlation between working environment and culture (X_4) and job satisfaction (Y) in the Johor industrial sector, with the equation as follows:

$$Y = 1.05X_4 - 0.053$$

Table 9: Regression Analysis of Rewards and Recognition

	•	•		•
Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.975ª	.951	.951	.21385

a. Predictors: (Constant), RWD_AND_RECOG

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	127.658	1	127.658	2791.462	.000b
	Residual	6.540	143	0.46		
	Total	134.198	144			

a. Dependent Variable: EMP_STSFCTN

b. Predictors: (Constant), RWD_AND_RECOG

	Coeffients					
	Model		ndardized iecients	Standardized Coeffiecients	t	sig.
		В	Std. Error	Beta		
1	(Constant)	-1.72	.048		-3.553	.001
	RWD_AND_ RECOG	1.023	0.19	.975	52.834	.000

a. Dependent Variable: EMP_STSFCTN

From Table 9, the summary model revealed that the regression model accurately predicted work satisfaction at 95.1%. This conclusion was backed by R-squared = 0.951. Rewards and recognition boosted worker satisfaction at p = 0.000, below the 0.05 threshold. The standardized coefficient of 0.975 showed that rewards and recognition boosted worker satisfaction by 97.5%. The regression model supported hypothesis H5, showing a positive correlation between rewards and recognition (X_5) and job satisfaction (Y) in the Johor industrial sector, with the equation as follows:

$$Y = 1.023X_5 - 0.172$$

Correlation Analysis

To determine the degree and direction of all variables' relationships, Pearson's correlation analysis indicated significant results. The significance criterion for industrial worker satisfaction data was 0.05. Pearson's correlation with a p-value < 0.05 indicated a statistical association. Suppose Pearson's correlation output significance surpassed 0.05; the factors will

not be significantly connected: Tables 10, 11, 12, 13, and 14 exhibit the varying correlations.

Table 10: Correlation Analysis of the Remuneration System

		EMP_STSFCTN	RENUM_SYST
	Pearson Correlation	1	.974**
EMP_STSFCTN	Sig. (2-tailed)		.000
	N	145	145
	Pearson Correlation	.974**	1
RENUM_SYST	Sig. (2-tailed)	.000	
	N	145	145

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

Table 11: Correlation Analysis of Training and Development

			·
		EMP_STSFCTN	TRAIN_DVLOPMENT
EMP_STSFCTN	Pearson Correlation	1	.971**
	Sig. (2-tailed)		.000
	N	145	145
TRAIN_DVLOPMENT	Pearson Correlation	.971**	1
	Sig. (2-tailed)	.000	
	N	145	145

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

Table 12: Correlation Analysis of Leadership Style

		EMP_STSFCTN	LEADER_STYLE
	Pearson Correlation	1	.976**
EMP_STSFCTN	Sig. (2-tailed)		.000
	N	145	145
	Pearson Correlation	.976**	1
LEADER_STYLE	Sig. (2-tailed)	.000	
	N	145	145

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

Table 13: Correlation Analysis of Working Environment and Culture

		EMP_STSFCTN	WORK_ENV_CULT
EMP_STSFCTN	Pearson Correlation	1	.994**
	Sig. (2-tailed)		.000
	N	145	145
WORK_ENV_CULT	Pearson Correlation	.994**	1
	Sig. (2-tailed)	.000	
	N	145	145

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

10010 141 0	rabio 14. Contolation Allaryolo of Nowardo and Nocognition				
		EMP_STSFCTN	RWD_AND_RECOG		
EMP_STSFCTN	Pearson Correlation	1	.975**		
	Sig. (2-tailed)		.000		
	N	145	145		
RWD_AND_RECOG	Pearson Correlation	.975**	1		
	Sig. (2-tailed)	.000			
	N	145	145		

Table 14: Correlation Analysis of Rewards and Recognition

Pearson's correlation analysis revealed a strong positive relationship between job satisfaction and various factors in Johor's industrial sector, including remuneration, training and development, leadership style, working environment and culture, and rewards and recognition. All correlation coefficients exceed.7, showing significant associations (Sig. = 0.000 < 0.05)). Specifically, remuneration (r = 0.974), training and development (r = 0.971), leadership style (r = 0.976), working environment and culture (r = 0.994), and rewards and recognition (r = 0.975) all showed a strong influence on worker satisfaction.

CONCLUSION

The findings confirmed that remuneration, training and development, leadership style, work environment and culture, and rewards and recognition all substantially enhance employee satisfaction. The study validated the hypotheses that these factors significantly influence job satisfaction among Johor's industrial workers. The implications for organizational management are clear: investing in fair remuneration, continuous training, strong leadership, a supportive work environment, and a system of rewards and recognition will not only enhance employee satisfaction but also lead to improved retention, morale, and productivity.

Companies can take several actionable steps to improve job satisfaction across key areas. In terms of remuneration, companies should introduce performance-linked bonuses, establish transparent pay structures, and implement cost-of-living adjustments to ensure fairness and motivation. For training and development, providing upskilling programs, cross-functional training, and clear career progression pathways can enhance employee capabilities and engagement.

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

Regarding leadership style, promoting transformational leadership through coaching and regular feedback can foster empathy, support, and a shared organizational vision. Improving the working environment and culture is also crucial; this can be achieved by enhancing workplace safety, ergonomics, and team collaboration while cultivating an inclusive culture that encourages open communication. Lastly, for rewards and recognition, companies should consider both monetary and non-monetary incentives, such as certificates, long-service awards, public acknowledgements, and flexible benefits, to make employees feel valued and motivated.

It is suggested that future researchers employ mixed methods, integrating both qualitative and quantitative approaches to examine the factors influencing employee satisfaction in the manufacturing sector. This combination will ensure more reliable and comprehensive findings. Additionally, this study employed judgment sampling, which was appropriate for ensuring contextual relevance. However, it limits generalizability due to its non-random nature. The risk of selection bias exists, and perspectives from contract or less-visible industrial workers may be underrepresented. Future studies may benefit from integrating random or stratified sampling to enhance representativeness and validity.

The broader impact of these findings is important. Johor, as one of Malaysia's most industrialized states and a major contributor to the national GDP, relies heavily on a stable, motivated, and skilled industrial workforce. Enhancing job satisfaction not only improves organizational performance at the firm level but also supports labour market stability, economic resilience, and industrial sustainability. Addressing job satisfaction strategically can reduce dependency on foreign labour, mitigate high turnover rates, and contribute to the long-term competitiveness of Malaysia's manufacturing sector.

REFERENCES

- Ahmed, S. K. (2024). Research methodology simplified: how to choose the right sampling technique and determine the appropriate sample size for research. *Oral Oncology Reports, 12*, 100662. https://doi.org/10.1016/j. oor.2024.100662.
- Alrawahi, S., Sellgren, S. F., 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. *Heliyon*, 6(9), e04829. https://doi.org/10.1016/j.heliyon.2020.e04829.
- Andrade, M. S., Miller, D., & Westover, J. H. (2021). Job satisfaction in the hospitality industry: The comparative impacts of Work-Life Balance, Intrinsic Rewards, Extrinsic Rewards, and work relations. *American Journal of Management*, 21(2). https://doi.org/10.33423/ajm.v21i2.4226.
- Banjarnahor, H., Hutabarat, W., Sibuea, A. M., & Situmorang, M. (2018). Job Satisfaction as a Mediator between Directive and Participatory Leadership Styles toward Organizational Commitment. *International Journal of Instruction*, 11(4), 869–888. https://doi.org/10.12973/iji.2018.11455a.
- Bank, A. D. (2022). Special Economic zones in the Indonesia–Malaysia– Thailand growth Triangle: Opportunities for Collaboration. Asian Development Bank.
- Bataineh, K. A. (2019). Impact of Work-Life Balance, happiness at work, on employee performance. *International Business Research*, *12*(2), 99. https://doi.org/10.5539/ibr.v12n2p99.
- Arogundade, A. M., & Akpa, V. O. (2023). Alderfer's ERG and McClelland's Acquired Needs Theories Relevance in today's organization. *Scholars Journal of Economics Business and Management, 10*(10), 232–239. https://doi.org/10.36347/sjebm.2023.v10i10.001.

- Chen, X., Liu, M., Liu, C., Ruan, F., Yuan, Y., & Xiong, C. (2020). Job satisfaction and hospital performance rated by physicians in China: A Moderated mediation analysis on the role of Income and Person–Organization FIT. *International Journal of Environmental Research and Public Health*, 17(16), 5846. https://doi.org/10.3390/ijerph17165846.
- Davlembayeva, D.& Alamanos, E.. (2023) *Equity Theory: A review*. In S. Papagiannidis (Ed), TheoryHub Book. Available at https://open.ncl. ac.uk / ISBN: 9781739604400.
- Galani, A., & Galanakis, M. (2022). Organizational Psychology on the Rise—McGregor's X and Y Theory: A Systematic Literature review. *Psychology*, *13*(05), 782–789. https://doi.org/10.4236/psych.2022.135051.
- Hassan, N., Ahmad, N. A., Sumardi, N. A., & Mat Halif, M. (2020). The effects of working environment towards job satisfaction among uniformed personnel in Pulau Pinang, Malaysia. *International Journal of Advanced Science and Technology*, 29(8), 4501–4512.
- Inayat, W., & Khan, M. J. (2021). A study of job satisfaction and its effect on the performance of employees working in private sector organizations, Peshawar. *Education Research International*, 2021, 1–9. https://doi.org/10.1155/2021/1751495.
- Jamil, A., Sehat, R. M., Johari, Y. C., Nordin, E., Hussein, W. S., & Hasin, H. (2023). Exploring the link between job stress and performance: identifying the root causes. *International Journal of Academic Research in Accounting Finance and Management Sciences*, 13(3). https://doi.org/10.6007/ijarafms/v13-i3/19073.
- Kanapathipillai, K., & Azam, S. M. F. (2020). THE IMPACT OF EMPLOYEE TRAINING PROGRAMS ON JOB PERFORMANCE AND JOB SATISFACTION IN THE TELECOMMUNICATION COMPANIES IN MALAYSIA. *European Journal of Human Resource Management Studies*, 4(3). https://doi.org/10.46827/ejhrms.v4i3.857.

- Khan, H., Rehmat, M., Butt, T. H., Farooqi, S., & Asim, J. (2020). Impact of transformational leadership on work performance, burnout and social loafing: a mediation model. *Future Business Journal*, *6*(1). https://doi.org/10.1186/s43093-020-00043-8.
- Kurdi, B. A., Alshurideh, M., & Alnaser, A. (2020). The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning. *Management Science Letters*, 3561–3570. https://doi.org/10.5267/j.msl.2020.6.038.
- Li, N., Zhang, L., Xiao, G., Chen, J., & Lu, Q. (2019). The relationship between workplace violence, job satisfaction and turnover intention in emergency nurses. *International Emergency Nursing*, *45*, 50–55. https://doi.org/10.1016/j.ienj.2019.02.001.
- Lim, I. (2021, October 31). Report: Malaysia faces manpower shortage in critical sectors even as economy opens up. *Malay Mail*. Retrieved from https://www.malaymail.com.
- Lim, J. (2021). ATA IMS' labour woes show it's a real problem for Malaysia. Retrieved from https://www.theedgemarkets.com/article/ata-ims-labour-woes-show-its-real-problem-malaysia.
- Madrid, H. P., Barros, E., & Vasquez, C. A. (2020). The emotion regulation roots of job satisfaction. *Frontiers in Psychology*, 11. https://doi.org/10.3389/fpsyg.2020.609933.
- Mampuru, M. P., Mokoena, B. A., & Isabirye, A. K. (2024). Training and development impact on job satisfaction, loyalty and retention among academics. *SA Journal of Human Resource Management, 22*. https://doi.org/10.4102/sajhrm.v22i0.2420.
- McInerney, D. M., Korpershoek, H., Wang, H., & Morin, A. J. (2018). Teachers' occupational attributes and their psychological well-being, job satisfaction, occupational self-concept and quitting intentions. *Teaching and Teacher Education*, 71, 145–158. https://doi.org/10.1016/j.tate.2017.12.020.

- McLeod, S. (2023, January 24). Maslow's Hierarchy of Needs. Retrieved from https://www.simplypsychology.org/maslow.html.
- MIDF. (2023). Heralding A New Growth Era for Johor. *MIDF Research*. Retrieved from https://www.midf.com.my/sites/corporate/files/2024-01/thematic-heralding a new growth era for johor-midf-310124.pdf.
- Munir, H., & Iqbal, M. Z. (2018). A Study of Relationship between Leadership Styles of Principals and Job Satisfaction of Teachers in Colleges for Women. *Bulletin of Education and Research*, 40(2), 65–78. Retrieved from http://files.eric.ed.gov/fulltext/EJ1209821.pdf.
- Nazim, F., & Mahmood, A. (2018). A study of relationship between leadership style and job satisfaction. *Journal of Research in Social Sciences*, 6(1), 165–181.
- Nickerson, C. (2023, September 28). Herzberg's Two-Factor Theory of Motivation-Hygiene. Retrieved from https://www.simplypsychology.org/herzbergs-two-factor-theory.html.
- Olajide, A. O., Sowunmi, C. O., Adeleke, B. O., Ojo, A., Ogunmodede, E., & Ajibade, B. L. (2020). Level of job satisfaction and influence of socio-demographic variables on nurses' job satisfaction in two selected government owned hospitals in Lagos, Nigeria. *The International Journal of Science & Technoledge*, 8(4). https://doi.org/10.24940/theijst/2020/v8/i4/st2004-016.
- Osafo, E., Paros, A., & Yawson, R. M. (2021). Valence–Instrumentality–Expectancy model of motivation as an alternative model for examining ethical leadership behaviors. *SAGE Open*, *11*(2), 215824402110218. https://doi.org/10.1177/21582440211021896.
- Sarker, M. a. R., & Ashrafi, D. M. (2018). The relationship between internal marketing and employee job satisfaction: A study from retail shops in Bangladesh. *Journal of Business & Retail Management Research*, 12(03). https://doi.org/10.24052/jbrmr/v12is03/art-13.

- Scanlan, J. N., & Still, M. (2019). Relationships between burnout, turnover intention, job satisfaction, job demands and job resources for mental health personnel in an Australian mental health service. *BMC Health Services Research*, 19(1). https://doi.org/10.1186/s12913-018-3841-z.
- Siok, T. H., Sim, M. S., & Rahmat, N. H. (2023). Motivation to learn Online: An analysis from McClelland's Theory of Needs. *International Journal of Academic Research in Business and Social Sciences*, *13*(3). https://doi.org/10.6007/ijarbss/v13-i3/16471.
- Sult, A., Wobst, J., & Lueg, R. (2023). The role of training in implementing corporate sustainability: A systematic literature review. *Corporate Social Responsibility and Environmental Management, 31*(1), 1–30. https://doi.org/10.1002/csr.2560.
- Sypniewska, B., Baran, M., & Kłos, M. (2023). Work engagement and employee satisfaction in the practice of sustainable human resource management based on the study of Polish employees. *International Entrepreneurship and Management Journal*, *19*(3), 1069–1100. https://doi.org/10.1007/s11365-023-00834-9.
- Taheri, R. H., Miah, M. S., & Kamaruzzaman, M. (2020). Impact of working environment on job satisfaction. *European Journal of Business Management and Research*, 5(6). https://doi.org/10.24018/ejbmr.2020.5.6.643.
- Visvanathan, P., Muthuveloo, R., & Ping, T. A. (2018). The impact of leadership styles and organizational culture on job satisfaction of employees in Malaysian manufacturing industry. *Global Business and Management Research*, 10(1), 247. Retrieved from https://www.questia.com/library/journal/1G1-562706499/the-impact-of-leadership-styles-and-organizational.
- Yen, P. K., Kiat, S. H., & Celeste Jee, W. L. (2022). The impacts of remuneration on employee retention and job satisfaction among private higher education institutions' lecturers. *International Journal of Service Management and Sustainability*, 7(2), 193–222. https://doi.org/10.24191/ijsms.v7i2.19953.