A Multiple Linear Regression Analysis of Factors Influencing Job Satisfaction Among Employees in a Selangor-Based Company

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Abstract: This study aims to examine the factors influencing job satisfaction among employees at a company in Selangor. Job satisfaction is a critical component of organizational success, directly affecting employee motivation, retention, and productivity. The study focuses on demographics (gender, position, department) and four key factors (compensation and benefits, work-life balance, work environment, career development opportunities). A quantitative approach was employed using a structured questionnaire distributed among 169 employees across various departments and positions. The data collected were analysed using descriptive and Multiple Linear Regression (MLR). The overall job satisfaction score among employees was 9.3 with all departments stated job satisfaction mean scores above 8.0. Meanwhile all mean scores for the key factors were above 8.9. In the regression analysis, the variable compensation and benefits was excluded due to multicollinearity issues. The finding shows that factors (work-life balance, career development opportunities, position) significantly influenced the job satisfaction among employees. The study highlights the importance of addressing these issues to enhance employee engagement and organizational performance. Ultimately, the insights gained can assist management in formulating targeted strategies to improve workplace satisfaction and retain top talent. In conclusion, the study offers evidence that may support both managerial decision-making and future research on employee job satisfaction.

Keywords: Job Satisfaction, Employees, Work Life Balance, Career Development Opportunities, Regression Analysis

1   Introduction

Job satisfaction refers to an employee's emotional state, encompassing a spectrum of feelings ranging from positive to negative, influenced by various workplace factors and individual experiences (Lee et al. [1]). This concept highlights the complex interplay between employees' perceptions of their roles, organizational practices, and personal expectations, shaping their overall satisfaction levels. Job satisfaction can be defined as the degree of positive or negative feelings employees experience during their work, encompassing their emotional responses to job roles, environments, and expectations. Recent research highlights that job satisfaction reflects a comprehensive evaluation of employees' experiences, including their emotional, cognitive, and behavioural responses to their job. It is characterized by a sense of fulfilment and alignment between an individual's expectations and the actual work environment (Ahmad et al. [2]; Chan and Lee [3]). Positive job satisfaction is often associated with increased motivation, productivity, and organizational commitment, while

dissatisfaction can lead to stress, disengagement, and turnover. Job satisfaction is important for how happy, productive, and engaged workers are in a company. It means how much people feel happy, appreciated, and driven in their jobs, linked to things like pay, balance between work and life, chances for promotion, and the workplace atmosphere (Robbins and Judge [4]). Job satisfaction impacts how well employees perform and stay loyal, and it also affects the success of the organization and the economy as a whole. In Malaysia, job satisfaction is becoming a bigger topic, as businesses see that creating a good work environment is key to keeping employees and improving overall performance (Hashim et al. [5]). Over the years, job satisfaction has been a general topic in many countries around the world. An individual's job performance generally depends on his or her job satisfaction level.

In Malaysia's diverse and evolving economy, job satisfaction varies significantly across industries and demographic groups. Recent studies indicate that Malaysian workers often express mixed feelings about their job satisfaction, with prevalent concerns surrounding compensation, career advancement opportunities, and achieving work-life balance. These factors are influenced by cultural norms, industry-specific practices, and regional economic conditions. Additionally, the growing emphasis on work-life balance reflects the changing expectations of the workforce as Malaysia continues its rapid economic transformation (Abdullah et al. [6]; JobStreet [7]).

In Selangor, a highly developed state in Malaysia that serves as a center for industrial and economic activities, job satisfaction trends align with national patterns but also display unique local variations. Selangor is home to a variety of sectors like manufacturing, services, and technology, which play a major role in employing a large portion of Malaysia's workforce. Study by Abdullah et al. [6] showed that workers in this region frequently express conflicting emotions regarding their level of satisfaction with their jobs, influenced by typical issues like pay, chances for career growth, and balancing work and personal life.

There are several key factors that influence job satisfaction in Malaysia stated by Abdullah et al. [6]. Firstly, compensation and benefits play a crucial role, as fair and competitive pay is essential for ensuring employees' happiness and financial security. Additionally, benefits such as healthcare, bonuses, and retirement plans significantly enhance employees' well-being and satisfaction. Many employees feel underpaid due to low wages and few benefits in some areas, which makes them look for better jobs, affecting their sense of financial stability and happiness at work. Second, balance between work and life has become more important, especially in city areas where job demands are high and can cause stress and tiredness. Many Malaysian employees value flexible work arrangements, although traditional work cultures in some sectors continue to limit this balance. Third, the work environment, both physical and psychological, plays a significant role in determining job satisfaction. A positive and supportive environment that promotes teamwork and provides adequate resources is associated with higher satisfaction levels, yet some industries still grapple with outdated practices. Finally, career development opportunities are crucial, as many employees perceive a lack of upward mobility, especially in fields with limited promotion and training prospects.

The World Happiness Report ranks Malaysia 80th in the world, hence in need of improvements in job satisfaction among employees in Malaysia. Specifically, the 2022 JobStreet survey [7] showed that approximately half of Malaysian employees are not happy with their jobs, concerned about compensation, work-life balance, and career growth. It is known that Malaysia's happiness index has a strong relation to levels of job satisfaction that would affect economic productivity and happiness at a personal level. Fundamentally, this will help in improving employees' well-being and organizational performance in Malaysia. As discussed in Ibrahim et al. [8], those companies that give top priority to paying a decent remuneration package, establishing a decent working environment, and helping them grow in their careers stand a better chance of retaining their talents to meaningfully contribute to the Malaysian economy and happiness index.

To sum up, job satisfaction significantly influences employees' happiness, productivity, and engagement, leading to a direct effect on both organizational success and the economy as a whole. In places like Selangor, Malaysia, job satisfaction trends are a result of various factors like salary, work-life balance, workplace environment, and career growth opportunities. It is crucial to tackle these

problems, as dissatisfaction can result in high turnover rates and disconnection, while promoting job satisfaction improves employee loyalty, motivation, and performance.

2 Methodology

A Study and Sampling Design

The cross-sectional study was conducted among full-time employees working in a company in Selangor. This includes employees across all departments. The total number of employees in this company in the year 2025 was 300 employees. The sample size about 186 employees was determined by using Sample Calculator Online by RaosoftInc with 5% margin of error and 95% confidence interval. An additional 10% of the sample was considered for non-response. A proportionate stratified random sampling was applied across three departments: Engineering Solutions ($n = 117$), Cloud, Security & Infrastructure Services ($n = 44$), and Enterprise Applications & Sales & Customer Support ($n = 25$).

B Research Instrument and Data Collection Method

A self-administered structured questionnaire was used as a research tool in this study. The questionnaire comprised six sections: (A) Demographics (gender, position, department); (B) Compensation and Benefits; (C) Work–life Balance); (D) Work Environment; (E) Career Development Opportunities; and (F) Job Satisfaction. The questions for sections B to F were constructed using a 10-point Likert scale from strongly disagree to strongly agree with five items respectively. Table 1 summarized the six sections of the questionnaire. The questionnaire was pre-tested on 20 employees and was modified based on the feedback. The finalized questionnaire, together with the information letter, was distributed to all 186 randomly selected employees. The questionnaire was distributed through various channels such as in-person, email, or online forms to ensure the high response rate.

Table 1: Summary of the Questionnaire by Section

Section	Variable	Number of Items
A	Demographic Profiles	5
B	Compensation and Benefits	5
C	Work Life Balance	5
D	Work Environment	5
E	Career Development Opportunities	5
F	Job Satisfaction Score Among Employees	5

C Statistical Analyses

The internal consistency and the stability of the items of the multiple Likert questions in this study for both, pilot and actual study were tested using reliability analysis. Reliability of the measuring instrument considered high if the Cronbach Alpha higher than 0.7 as stated in Nunally and Bernstein [12]. All quantitative variables (compensation and benefits, work life balance, work environment, career development opportunities and job satisfaction score among employees) were described as mean and standard deviation. Meanwhile, for qualitative variables (gender, position, and department), these variables were described by using frequency and percentage. Table 2 summarized the categories of variable for qualitative variables in this study.

Table 2: Categories of Qualitative Variable

Variable	Category
Gender	1 – Female 2 – Male
Position	1 – Entry-level 2 – Mid-level 3 – Managerial 4 – Senior Management
Department	1 – Engineering Solutions 2 – Cloud, Security & Infrastructure Services 3 – Enterprise Application and Sales & Customer Support

Multiple linear regression with a stepwise variable selection procedure was performed to identify the factors influencing job satisfaction among employees in a company in Selangor. The significant variables were checked for multicollinearity. Meanwhile, the assumptions of multiple linear regression, the significance of the regression model and model adequacy were assessed. The estimated multiple linear regression model is shown in Eq. (1).

$$\hat{y} = \hat{\beta}_0 + \hat{\beta}_1 x_1 + \hat{\beta}_{21} x_{21} + \hat{\beta}_{22} x_{22} + \hat{\beta}_{23} x_{23} + \hat{\beta}_{31} x_{31}$$

$$+ \hat{\beta}_{32} x_{32} + \hat{\beta}_4 x_4 + \hat{\beta}_5 x_5 + \hat{\beta}_6 x_6 + \hat{\beta}_7 x_7$$

(1)

where:

$\hat{y}$: Job Satisfaction Score

x_1: Gender

x_{21}: Position (1)

x_{22}: Position (2)

x_{23}: Position (3)

x_{31}: Department (1)

x_{32}: Department (2)

x_4: Compensation and Benefits

x_5: Work Life Balance

x_6: Work Environment

x_7: Career Development Opportunities

$\hat{\beta}_0$: Constant

β_j: Regression Coefficients; $j = 1\ldots,7$

The coding used for levels of categorical variables in multiple linear regression analysis was described as Table 3.

Table 3: Coding for Categories of Qualitative Variable

Variable	Coding
Gender	$x_1 = [1]$ if female $\quad [0]$ if male
Position (1)	$x_{21} = [1]$ if Mid-level $\quad [0]$ if others
Position (2)	$x_{22} = [1]$ if Managerial $\quad [0]$ if others
Position (3)	$x_{23} = [1]$ if Senior Management $\quad [0]$ if others
Department (1)	$x_{31} = [1]$ if Cloud, Security & Infrastructure Services $\quad [0]$ if others
Department (2)	$x_{32} = [1]$ if Enterprise Applications and Sales & Customer Support $\quad [0]$ if others

A two-sided hypotheses testing was used in all analyses with $p < 0.05$ was considered statistically significant. All the analyses were done by using Statistical Package for the Social Sciences (SPSS) version 23 (SPSS 23.0).

3 Results and Discussion

A Reliability Analysis

Table 4 shows the reliability test of the pilot and actual study. The Cronbach's Alpha Coefficient of the pilot study is from 0.836 to 0.918 which showed that the internal consistency for all constructs were approximately ranging good to excellent. Meanwhile, the range of the Cronbach's Alpha Coefficient of the real study is from 0.699 to 0.910 which showed that the internal consistency for all constructs ranging from acceptable to excellent.

Table 4: Cronbach's Alpha for Pilot and Actual Study

Variable	Cronbach's Alpha for Pilot Study	Cronbach's Alpha for Actual Study
Compensation and Benefits	0.918	0.910
Work-Life Balance	0.850	0.895
Work Environment	0.867	0.806
Career Development Opportunities	0.842	0.699
Job Satisfaction Score Among Employees	0.836	0.885

B   Descriptive Statistics

The total respondents for this study were 169 employees. The number of respondents for the department in Engineering Solutions with 59.17% (*n*=100) while the lowest percentage was department in Enterprise Application and Sales & Customer with 14.79% (*n*=25). Lastly, the department in Cloud, Security & Infrastructure Services was 26.04% (*n*=44). Majority of the respondents were female employees with 69.68% (*n*=111). Based on position of employees, the highest number of respondents was from Entry-Level with 45.56% (*n*=77) while the lowest percentage was Senior Management with 12.43% (*n*=21). Meanwhile, percentage of respondent for position of Managerial and Mid-Level were 23.08% (*n*=39), and 18.93% (*n*=32) respectively.

Table 5 summarizes the quantitative variables based on mean and standard deviation (*SD*). The mean score of job satisfaction among the 169 respondents is 9.297 with standard deviation 0.79. This value reflects the overall level of satisfaction experienced by the employees in a company in Selangor which may reflect employees highly satisfied with their job. The mean score of independent variables such as compensation and benefits, work-life balance, work environment and career development opportunities were above 8.9. The highest mean was work-life balance, 9.0. While the lowest mean was work environment which was 8.876. Moreover, the mean for compensation and benefits was 8.998. Lastly, the mean for career development opportunities was 8.908. Based on standard deviation obtained for all variables, the values range between 0.79 to 1.12, shows that the means responses are consistent. In conclusion, the respondents generally perceive their work environment, compensation, career opportunities, and work-life balance positively.

Table 5: Descriptive Statistics of Quantitative Variables

Variable	Mean (*SD*)
Compensation and Benefits	8.998 (1.117)
Work-Life Balance	9.000 (0.971)
Work Environment	8.876 (0.913)
Career Development Opportunities	8.908 (0.831)
Job Satisfaction Score Among Employees	9.297 (0.787)

C   Multiple Linear Regression

Table 6, showed the collinearity statistics for all independent variables in this study. The variable Compensation and Benefits and Work Life Balance showed the multicollinearity exists, because the value of tolerance is less than 0.1 and value of VIF is greater than 10. Due to a violation of the multicollinearity assumption, the variable Compensation and Benefits was excluded from the regression model to ensure a valid and interpretable model.

Table 6: Collinearity Statistics

Variable	Tolerance	VIF
Gender	0.335	2.981
Position (1)	0.413	2.424
Position (2)	0.523	1.912
Position (3)	0.252	3.969
Department (1)	0.406	2.463
Department (2)	0.303	3.297
Compensation and Benefits	0.085	11.801
Work Life Balance	0.097	10.336
Work Environment	0.204	4.912
Career Development Opportunities	0.205	4.873

The regression model obtained in this study was statistically significant with a *p*-value less than 0.05. The model was adequate since the assumption of normality of residuals, linearity, independent of residuals, and homoscedasticity for the model was met. The histogram with the normality curves in Figure 1 shows that the standardized residuals are normally distributed, indicating that the assumption of normality of errors is met.
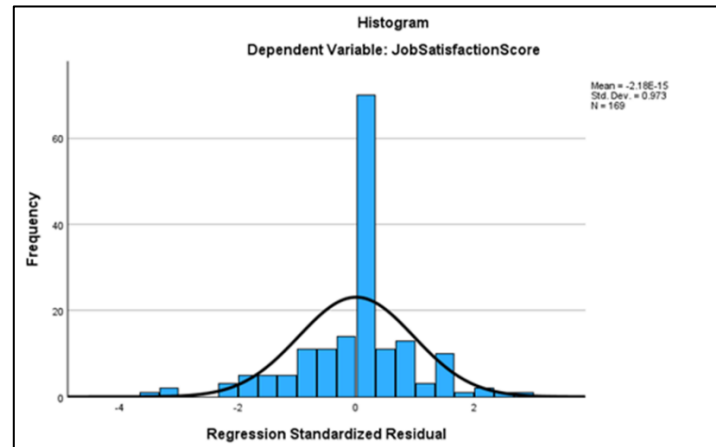

Figure 1: Histogram with Normality Curves of Standardized Residual

Meanwhile, as illustrated in Figure 2, the residuals display no discernible pattern and are evenly dispersed around zero on both axes, suggesting that the assumptions of residual homoscedasticity, linearity, and independence are met. The plot also indicates that no outliers are present. The multicollinearity does not exist among the independent variables since the value of Variance Inflation Factor (VIF) and tolerance were satisfied which were smaller than 10 and larger than 0.1, respectively, for each variable.
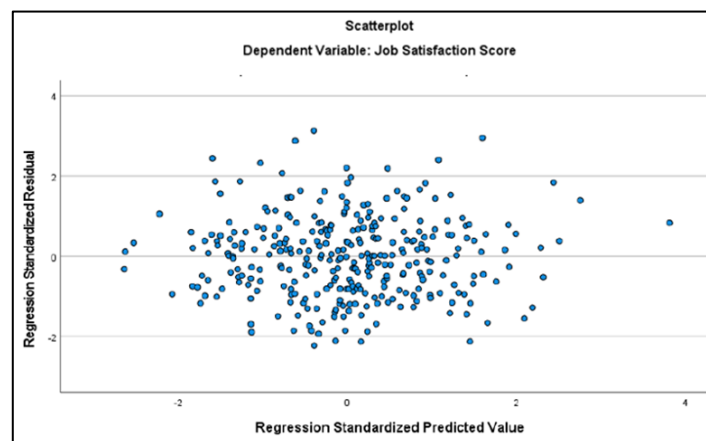

Figure 2: The Scatter Plot of Standardized Residual Against Standardized Predicted Value

Moreover, about 89.2% ($R^2 = 0.892$) of the total variation of the job satisfaction score among employees in a company in Selangor can be explained by the total variation in the significant independent variable (work life balance, career development opportunities and position (senior management)). Meanwhile, the 10.8 % of total variation can be explained by other factors.

Table 7 shows factor (work life balance, career development opportunities and position (senior management)) was found significantly influenced the job satisfaction among employees in a company in Selangor. Work Life Balance was found to be the most influential factor that influenced the job satisfaction among employees with beta coefficient equal to 0. 558. When all significant factors are

held at zero, the model estimates a job satisfaction score of 2.673. It can be concluded that, for every one-unit increase in Work Life Balance, the Job Satisfaction mean score will increase by 0.558 units. Moreover, for every one-unit increase in Career Development Opportunities, the Job Satisfaction mean score will increase by 0.180 units. However, being a position as Senior Management, their Job Satisfaction mean scores will decreases by 0.336 units than those in Entry-level position. This interpretation is valid for each significant factor provided that other factors are held constant.

Table 7: Regression Coefficient of the Regression Model

Variable	Beta Coefficient	t- statistics	p- value
Constant	2.673	9.609	<0.001
Work Life Balance	0.558	15.508	<0.001
Career Development Opportunities	0.18	4.349	<0.001
Position (Senior Management)	-0.336	-4.378	<0.001

Hence, the estimated regression models for this study are shown in Eq. (2).

$$\hat{y} = 2.673 + 0.558x_1 + 0.18x_2 - 0.336x_3 \tag{2}$$

where:

$\hat{Y}$: Job Satisfaction Score Among Employees

X_1: Work Life Balance

X_2: Career Development Opportunities

X_3: Position (Senior Management)

4   Conclusion and Recommendation

Although the intended sample size was 186 employees, due to non-responses from approximately 17 individuals (around 10% of the sample), the final number of valid responses was reduced accordingly. In this study, descriptive statistics and multiple linear regression were employed to examine the factors that significantly influence job satisfaction among employees in a company based in Selangor. The analysis revealed that Work-Life Balance, Career Development Opportunities, and Position (Senior Management) were significantly influenced the of job satisfaction among employees.

The findings revealed that Work-Life Balance and Career Development Opportunities were positively influenced the job satisfaction. These results highlight the growing demand among employees for flexible working arrangements and structured career advancement. The finding of Work-Life Balance significantly influenced the job satisfaction is consistent with several previous studies. For instance, a study by Haar et al. [10] found that employees who experience better work-life balance tend to report higher levels of job satisfaction and overall well-being. Similarly, works by Kumar and Janakiram [11] emphasized that organizations that promote flexible work arrangements and respect employees' personal time see improvements in employee satisfaction and retention. Hence, it is aligned with the results of the present study, indicating that the ability to balance work and personal life remains a critical factor for employee satisfaction, particularly in post-pandemic work environments.

The second significant factor, Career Development Opportunities, also aligns with findings from previous literature. According to a study by Tessema et al. [12], opportunities for career advancement and professional development are strong predictors of job satisfaction, especially among younger and

mid-career employees. When organizations invest in employee growth through training programs, mentorship, and clear promotion pathways, employees feel more valued and motivated, which directly influences their satisfaction levels. This finding is supported by De Vos and Meganck [13], who concluded that lack of career growth is one of the key reasons employees disengage and consider leaving their organizations.

In contrast, those in senior management positions significantly less satisfied on their job compare those in lower position possibly due to increased stress, higher responsibility, or limited work-life integration at higher roles. This result echoes the findings of Goh et al. [14], who noted that top executives often face higher levels of stress, greater responsibility, and longer working hours, which can diminish their overall job satisfaction despite higher compensation. Moreover, Karimi et al. [15] found that senior roles often come with increased psychological strain and less time for personal life, which could explain the lower satisfaction levels reported by senior managers in the current study.

Although other factors such as gender, department, compensation, and work environment were included, they did not exhibit statistically significant effects in the final model. Nevertheless, these variables may still hold practical relevance depending on organizational context and should not be dismissed entirely in future planning.

This study recommends that organizations enhance work-life balance through flexible hours, hybrid arrangements, and wellness programs to reduce stress and improve well-being. Career development should be strengthened with clear pathways, mentorship, and continuous learning opportunities to support employee growth. Special attention is needed for employees with lower position, with targeted support such as stress management, peer networks, and effective delegation strategies. Continuous monitoring through surveys and feedback systems is also essential to address issues promptly. Finally, a holistic human resource that combines fair compensation with a positive culture, inclusivity, and strong leadership is crucial to improving morale, reducing turnover, and fostering greater engagement and performance. Since this study only focusing only one company in Selangor, it is suggested that future studies consider a more comprehensive population, such as focuses on multiple companies or region to ensure more accurate generalizations. Besides, other variables such as leadership and management style, recognition and rewards, job security, relationship with colleagues, job role and responsibilities and organizational culture can be considered for further studies to obtain more comprehensive findings on job satisfaction among employees. It is also highly recommended to increase the number of questionnaire items for each construct to more comprehensively capture multi-dimensional factors such as work-life balance, career development opportunities, and work environment.

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