

Examining the Impact of Job Satisfaction Dimensions on Employee Productivity: Evidence from Malaysia's Manufacturing Industry

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ABSTRACT

This study examines the relationship between job satisfaction (salary, promotion, supervision, co-worker relationships) and employee productivity in Selangor's manufacturing sector, grounded in Herzberg's Two-Factor Theory and Maslow's Hierarchy of Needs. A quantitative survey of 108 employees was analyzed using Spearman's correlation and multiple regression. Results show that only co-worker relationships have a significant positive effect on productivity, while salary, promotion, and supervision are not significant predictors. The findings highlight the importance of interpersonal relations and teamwork for enhancing performance. Organizations should foster collaborative work environments and peer support.

Keywords: job satisfaction, employee productivity, co-worker relationships, manufacturing, Malaysia

ABSTRAK

Penelitian ini mengkaji hubungan antara kepuasan kerja (gaji, promosi, supervisi, hubungan dengan rekan kerja) dan produktivitas karyawan di sektor manufaktur Selangor, berdasarkan Teori Dua Faktor Herzberg dan Hierarki Kebutuhan Maslow. Survei kuantitatif terhadap 108 karyawan dianalisis menggunakan korelasi Spearman dan regresi berganda. Hasil menunjukkan bahwa hanya hubungan dengan rekan kerja yang berpengaruh positif signifikan terhadap produktivitas, sedangkan gaji, promosi, dan supervisi tidak signifikan. Temuan ini menekankan pentingnya hubungan interpersonal dan kerja sama tim dalam meningkatkan kinerja. Organisasi disarankan untuk membangun lingkungan kerja kolaboratif dan dukungan antar rekan.

Kata kunci: kepuasan kerja, produktivitas karyawan, hubungan rekan kerja, manufaktur, Malaysia

INTRODUCTION

The Job satisfaction serves as a fundamental determinant of employee behaviour and organizational effectiveness, particularly in labour-intensive sectors such as manufacturing. It reflects the extent to which employees experience fulfilment and contentment in their work, encompassing both intrinsic factors (e.g., recognition, personal growth) and extrinsic elements (e.g., salary, promotion opportunities, supervision, and workplace relationships) (Joo & Park, 2021). In today's increasingly competitive global economy, organizations face mounting pressure to enhance productivity while simultaneously safeguarding employee well-being.

In Malaysia, this challenge is particularly pertinent within the manufacturing industry, a key driver of national economic growth and employment generation. The state of Selangor, as the country's most industrialized region, contributes approximately 23% to Malaysia's GDP and employs around 16% of the national workforce (Department of Statistics Malaysia [DOSM], 2023). The sector's overall productivity is intricately linked to the motivation, satisfaction, and commitment of its employees. However, factors such as rapid industrialization, limited career advancement opportunities, and strained workplace relationships often undermine employee morale and performance (MIDA, 2023). Understanding how various dimensions of job satisfaction shape employee productivity is, therefore, crucial for ensuring the sector's long-term sustainability and global competitiveness.

Despite its significant economic contribution, the Malaysian manufacturing sector continues to grapple with persistent issues related to low motivation, job dissatisfaction, and high employee turnover. Previous studies have shown that employees frequently report discontentment with compensation systems, promotion pathways, and supervisory support (Aziz et al., 2020; Quadri, 2022). These factors have been empirically linked to decreased productivity and weakened organizational commitment (Putra & Asnur, 2020). While global research has extensively examined the relationship between job satisfaction and productivity, empirical evidence from Malaysia's manufacturing context remains limited. Moreover, existing local studies often conceptualize job satisfaction as a unidimensional construct, thereby overlooking the distinct contributions of its individual components.

Addressing this gap, the present study investigates how four specific dimensions of job satisfaction, salary, job promotion, supervision, and co-worker relationships affect employee productivity in the manufacturing industry of Selangor. The primary objective is to determine the extent to which each dimension contributes to variations in productivity levels among employees. To achieve this, the study seeks to answer the following research questions:

- Is there a significant relationship between salary and employee productivity?
- Is there a significant relationship between job promotion and employee productivity?
- Is there a significant relationship between supervision and employee productivity?
- Is there a significant relationship between co-worker relationships and employee productivity?

Based on these research questions, four hypotheses are proposed, suggesting that each of these dimension's salary, job promotion, supervision, and co-worker relationships has a significant relationship with employee productivity.

This study offers both theoretical and practical contributions to the understanding of workforce dynamics in industrial settings. Theoretically, it extends the applications of Herzberg's Two-Factor Theory and Maslow's Hierarchy of Needs by contextualizing them within Malaysia's manufacturing environment, illustrating how intrinsic and extrinsic motivators interact to influence employee outcomes. Practically, the study provides actionable insights for managers and policymakers in designing human resource strategies that foster interpersonal collaboration, transparent promotion systems, and supportive workplace environments.

By emphasizing the importance of co-worker relationships, this research underscores the potential of cultivating a cohesive and collegial work culture in enhancing both motivation and performance. Moreover, the findings can inform policy interventions aimed at aligning employee satisfaction initiatives with broader national objectives for industrial growth and workforce development. Ultimately, this study aspires to contribute toward strengthening human resource management practices and improving organizational productivity within Malaysia's manufacturing sector.

THEORETICAL BACKGROUND

Job satisfaction is a multidimensional construct that exerts substantial influence on employee attitudes, motivation, and performance outcomes. Within manufacturing environments characterized by repetitive tasks, teamwork, and structured supervision, understanding the specific dimensions of job satisfaction is essential to enhancing overall productivity. Previous research has identified various determinants of job satisfaction; however, their effects on productivity tend to vary across cultural, organizational, and industrial contexts (Ahmad et al., 2022; Quadri, 2022). This section reviews major scholarly contributions on each dimension of job satisfaction and examines their empirical linkages to employee productivity.

2.1. Job Satisfaction and Employee Productivity

Employee productivity is commonly defined as the degree of efficiency and effectiveness with which individuals transform inputs into valuable outputs (Egenius et al., 2020). Productivity is influenced by an array of factors including work environment, compensation, career advancement opportunities, and interpersonal relationships (Saidi et al., 2019; Hussain & Diaz, 2020). In manufacturing firms, productivity is not solely dependent on machinery or processes but is also shaped by the psychological and emotional well-being of employees. A large body of evidence demonstrates that higher job satisfaction fosters motivation, reduces absenteeism, and strengthens organizational commitment (Fatimah et al., 2023; Salam et al., 2022). Conversely, dissatisfaction contributes to disengagement, diminished morale, and increased turnover intention (Okolocha, 2021).

2.2. Salary and Productivity

Salary remains one of the most widely studied yet inconsistently supported predictors of productivity. While some scholars assert that fair and competitive compensation enhances motivation and performance (Khaliq, 2021; Darmawan, 2020), others contend that the motivational impact of salary declines in the absence of intrinsic satisfaction (Lee & Karim, 2023). Transparent and equitable pay structures can improve perceptions of fairness and trust within the organization (Salam et al., 2022). However, Putra and Asnur (2020) found that, within manufacturing contexts, productivity gains are more closely linked to non-monetary recognition and positive workplace relationships than to monetary rewards. This suggests that compensation alone may not sustain long-term motivation unless supported by a favorable managerial and social climate.

2.3 Job Promotion and Productivity

Career advancement opportunities are a central aspect of job satisfaction and a critical driver of employee engagement. Well-defined and transparent promotion systems strengthen organizational trust, commitment, and retention, leading to improved performance (Purba, 2020; Ligare et al., 2020). Conversely, perceptions of unfairness or favoritism in promotion decisions often lead to frustration and reduced job satisfaction (Hajar et al., 2021). In manufacturing environments, where hierarchical mobility tends to be limited, employees may view promotion as an unattainable goal (Chong et al., 2023). This highlights the need for performance-based recognition systems that reward contributions beyond hierarchical advancement, thereby maintaining employee enthusiasm and engagement.

2.4 Supervision and Productivity

Supervision plays a pivotal role in shaping employee engagement and organizational climate. Effective supervisors those who communicate clearly, provide constructive feedback, and support career development can significantly boost morale and productivity (Mwasawa & Wainaina, 2021; Quadri, 2022). In contrast, ineffective or authoritarian supervision often results in ambiguity, stress, and emotional detachment (Syahputra & Jufrizen, 2019). Contemporary human resource management literature emphasizes the evolution from control-oriented supervision toward empowering leadership, where supervisors act as mentors and facilitators (Low & Fernandez, 2023; Cheah & Noor, 2022). This shift nurtures psychological safety and innovation, both of which are essential in dynamic industrial settings. Nevertheless, excessive supervision or micromanagement can stifle creativity and reduce intrinsic motivation (Tan & Musa, 2024).

2.5 Co-worker Relationships and Productivity

Positive interpersonal relationships among co-workers are increasingly recognized as key determinants of job satisfaction and productivity, particularly in team-based manufacturing environments. Employees who experience supportive peer interactions exhibit higher levels of motivation, collaboration, and commitment (Andika et al., 2021; Ariyaza, 2023). Conversely,

interpersonal conflicts, competition, and mistrust undermine teamwork and contribute to stress (Saidi et al., 2019; Khaliq, 2021). According to Ekasari and Peranginangin (2019), cohesive teams promote knowledge sharing, coordination, and error reduction in production processes. Within Malaysian manufacturing firms, strong co-worker bonds can often compensate for deficiencies in supervision or compensation, underscoring the social dimension of workplace productivity.

2.6 Herzberg's Two-Factor Theory

Herzberg's (1966) Two-Factor Theory distinguishes between hygiene factors (e.g., salary, supervision, working conditions) and motivators (e.g., recognition, responsibility, advancement). Hygiene factors prevent dissatisfaction but do not necessarily create long-term satisfaction, whereas motivators drive sustained engagement and higher productivity. Within this study, salary, supervision, and co-worker relationships are treated as hygiene factors, while job promotion functions as a motivator. The limited impact of salary and supervision reported in prior studies (*Quadri, 2022; Manalo & Apat, 2021*) supports Herzberg's assertion that extrinsic rewards alone are insufficient to maintain high performance without the presence of intrinsic motivators.

2.7 Maslow's Hierarchy of Needs'

Maslow's (1943) Hierarchy of Needs conceptualizes human motivation as progressing through five levels: physiological, safety, social, esteem, and self-actualization. In workplace contexts, salary fulfills physiological and safety needs; supervision contributes to safety and esteem; co-worker relationships satisfy social needs; and opportunities for promotion fulfil esteem and self-actualization needs. This framework explains why employees may prioritize relational and developmental aspects once their basic financial needs are met (*Fanda & Slamet, 2019; Aziz et al., 2020*). Thus, the theory provides a comprehensive understanding of how various elements of job satisfaction jointly influence productivity.

2.8 Conceptual Framework

Integrating insights from Herzberg's and Maslow's theories, the conceptual framework of this study proposes that salary, job promotion, supervision, and co-worker relationships collectively influence employee productivity.

Independent Variables: Salary, Job Promotion, Supervision, Co-worker Relationships

Dependent Variable: Employee Productivity

Each independent variable is hypothesized to have a direct and positive relationship with employee productivity:

- **H₁:** Salary → Employee Productivity
- **H₂:** Job Promotion → Employee Productivity
- **H₃:** Supervision → Employee Productivity
- **H₄:** Co-worker Relationships → Employee Productivity

RESEARCH METHODS

This study adopted a quantitative, cross-sectional research design to examine the relationship between four dimensions of job satisfaction salary, job promotion, supervision, and co-worker relationships and employee productivity within the manufacturing sector of Selangor, Malaysia. Guided by a deductive research approach, the study was theoretically grounded in Herzberg's Two-Factor Theory and Maslow's Hierarchy of Needs.

A quantitative approach was deemed appropriate as it facilitates hypothesis testing and the measurement of relationships among variables using statistical methods (Bougie & Sekaran, 2019). Data were collected through a structured questionnaire administered to employees in large manufacturing firms. The responses were analyzed using both descriptive and inferential statistical techniques via the Statistical Package for the Social Sciences (SPSS) version 26.0.

3.1. Population and Sampling

The study population comprised full-time employees from large manufacturing firms located in Selangor, Malaysia—the state contributing the largest share to the national manufacturing GDP. In accordance with SME Corp Malaysia (2023), large firms were defined as organizations employing more than 200 full-time staff.

A purposive sampling technique was utilized to ensure that respondents possessed adequate knowledge of workplace operations and productivity practices (Etikan, Musa, & Alkassim, 2016). Based on Krejcie and Morgan's (1970) sample size determination table, a sample of 108 respondents was identified as sufficient for a population of approximately 150 employees, ensuring statistical representativeness and reliability. Although purposive sampling carries potential for selection bias, it was justified given the study's requirement for informed and experienced respondents from the industrial workforce.

3.2. Data Collection Method

Data were gathered using a structured, self-administered questionnaire, distributed through both physical copies and online forms (Google Forms) to enhance accessibility and response rate. The questionnaire consisted of three sections, as outlined below:

- **Section A:** Demographic information (gender, age, education level, years of experience, and salary range).
- **Section B:** Independent variables (salary, job promotion, supervision, and co-worker relationships).
- **Section C:** Dependent variable (employee productivity).

All items were measured on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). A pilot study involving 30 respondents was conducted to evaluate the clarity, reliability, and cultural appropriateness of the instrument. Feedback obtained from the pilot test informed minor revisions to wording and structure.

Ethical standards were maintained throughout the study. Respondents were assured of anonymity, voluntary participation, and data confidentiality, ensuring compliance with ethical research practices.

3.3 Reliability and Validity

Instrument reliability was evaluated using Cronbach's alpha coefficient, which assesses the internal consistency among items within each construct. All constructs recorded alpha values above the acceptable threshold of $\alpha \geq 0.70$, indicating strong reliability (Hair et al., 2021). The pilot study yielded Cronbach's alpha coefficients ranging from 0.802 to 0.823, while the main study produced coefficients between 0.757 and 0.860.

Construct validity was established through the use of previously validated measurement scales adapted from established studies, and content validity was ensured through expert review by academics specializing in human resource management. These measures collectively enhanced the credibility and robustness of the research instrument.

Table 1: Measurement of Variables

Variable	Operational Definition	Measurement Source
Salary (IV1)	Employee perception of fairness, competitiveness, and adequacy of pay relative to job role and effort.	Adapted from Darmawan (2020) and Khaliq (2021).
Job Promotion (IV2)	Opportunities for career advancement and transparency in promotion processes.	Adapted from Hajar et al. (2021) and Ligare et al. (2020).
Supervision (IV3)	Quality of managerial support, guidance, and communication with subordinates.	Adapted from Quadri (2022) and Mwasawa & Wainaina (2021).
Co-worker Relationships (IV4)	Level of collaboration, teamwork, and interpersonal harmony among peers.	Adapted from Andika et al. (2021) and Ariyaza (2023).
Employee Productivity (DV)	Efficiency and effectiveness of employee performance toward organizational objectives.	Adapted from Egenius et al. (2020) and Hussain & Diaz (2020).

Source: Author Data (2025)

3.4 Data Analysis Techniques

Data analysis proceeded in three sequential stages, each employing appropriate statistical techniques to address the research objectives:

1. **Descriptive Statistics:** Used to summarize respondents' demographic characteristics through frequency and percentage distributions.

2. **Correlation Analysis:** *Spearman's Rank Correlation* was applied to determine the strength and direction of associations among variables, appropriate given the non-normal distribution of the dataset.
3. **Multiple Linear Regression (MLR):** Conducted to assess both the collective and individual effects of the four independent variables (salary, job promotion, supervision, and co-worker relationships) on employee productivity.

The significance of the regression model was evaluated using ANOVA, with R^2 values indicating the explanatory power of the model, while standardized β coefficients and p-values (≤ 0.05) identified significant predictors of employee productivity.

The analytical model for the study is represented as follows:

$$EP = \beta_0 + \beta_1(\text{SAL}) + \beta_2(\text{JPROM}) + \beta_3(\text{SUP}) + \beta_4(\text{COW}) + \varepsilon \dots\dots\dots 1$$

Where:

EP = Employee Productivity;

SAL = Salary;

JPROM = Job Promotion;

SUP = Supervision;

COW = Co-worker Relationships;

ε = Error term.

Overall, the methodological design integrates rigorous quantitative procedures with established reliability and validity standards to ensure the robustness of findings. The application of statistical modelling enables a precise examination of how each dimension of job satisfaction influences productivity, providing empirical evidence grounded in motivational and satisfaction theories. This structured approach supports a deeper understanding of the determinants of employee productivity in Malaysia's manufacturing sector.

RESULT AND DISCUSSION

This chapter presents and discusses the empirical results of the study, which examined the relationships between four key dimensions of job satisfaction salary, job promotion, supervision, and co-worker relationships and employee productivity within the manufacturing sector of Selangor, Malaysia.

Through the application of descriptive statistics, reliability analysis, normality testing, correlation analysis, and multiple linear regression, the study explores how these dimensions interact to influence productivity outcomes. The findings are discussed in relation to Herzberg's Two-Factor Theory and Maslow's Hierarchy of Needs, offering a theoretical lens to interpret the statistical patterns observed in the Malaysian manufacturing context.

4.1. Descriptive Statistics

A total of 108 valid responses were collected, achieving a 100% response rate due to the effective internal distribution and follow-up procedures. The demographic analysis revealed a moderately diverse sample of manufacturing employees. Of the respondents, 56.5% were male and 43.5% were female. The majority (52.8%) were aged between 36 and 45 years, followed by 24.1% aged between 26 and 35 years. In terms of education, 55.6% of respondents held a bachelor's degree, while 50.9% had between 6 and 10 years of work experience. Regarding monthly income, 32.4% earned below RM2,000, and 24.1% earned above RM6,000. This demographic profile reflects a mature, experienced, and relatively well-educated manufacturing workforce, consistent with Malaysia's industrial employment patterns (DOSM, 2023).

4.2. Reliability Analysis

Reliability testing was conducted to assess the internal consistency of the measurement constructs. Cronbach's alpha coefficients indicated strong reliability across all variables: salary ($\alpha = 0.860$), job promotion ($\alpha = 0.830$), supervision ($\alpha = 0.840$), co-worker relationships ($\alpha = 0.757$), and employee productivity ($\alpha = 0.843$). Each value exceeded the minimum threshold of 0.70 recommended by Hair et al. (2021), confirming the internal consistency of the research instrument and its suitability for inferential analysis.

4.3 Normality Test

Normality testing using the Kolmogorov–Smirnov and Shapiro–Wilk tests revealed p-values below 0.05 for all variables, indicating a non-normal distribution of data. Consequently, non-parametric statistical techniques were employed. Specifically, Spearman's rank correlation was chosen to evaluate the relationships among the study variables, as it does not assume normality and is appropriate for skewed data.

4.4 Correlation Analysis

Spearman's rank correlation analysis revealed that co-worker relationships were positively and significantly correlated with employee productivity ($\rho = 0.199$, $p = 0.039$). However, salary ($\rho = 0.008$, $p = 0.936$), job promotion ($\rho = -0.039$, $p = 0.686$), and supervision ($\rho = 0.071$, $p = 0.467$) did not show statistically significant correlations with productivity. Strong inter-correlations were observed among independent variables, particularly between salary and supervision ($\rho = 0.766$, $p < 0.001$), indicating potential multicollinearity, which was later addressed through regression analysis. These findings suggest that interpersonal factors, such as peer relationships, play a more influential role in shaping productivity than financial or supervisory factors in Malaysia's manufacturing environment.

4.5 Multiple Linear Regression Analysis

A multiple regression model was used to determine the combined and individual effects of salary, job promotion, supervision, and co-worker relationships on employee productivity. The model summary revealed $R = 0.265$, $R^2 = 0.070$, and Adjusted $R^2 = 0.034$, indicating that the independent variables collectively explained 7% of the variance in employee productivity. The ANOVA results ($F(4,103) = 1.947$, $p = 0.108$) suggested that the overall model was not statistically significant. However, when examining individual predictors, only co-worker relationships showed a significant positive effect on productivity ($\beta = 0.272$, $p = 0.013$), whereas salary ($\beta = -0.124$, $p = 0.366$), job promotion ($\beta = -0.023$, $p = 0.746$), and supervision ($\beta = 0.059$, $p = 0.676$) were not significant. These results table 2 confirm that among the four job satisfaction dimensions, only co-worker relationships significantly enhance employee productivity in Selangor's manufacturing industry.

Table 2: Hypothesis Testing Summary

Hypothesis	Statement	Result
H ₁	Salary has a significant relationship with employee productivity.	✗ Rejected
H ₂	Job promotion has a significant relationship with employee productivity.	✗ Rejected
H ₃	Supervision has a significant relationship with employee productivity.	✗ Rejected
H ₄	Co-worker relationships have a significant relationship with employee productivity.	✓ Accepted

Source : Processed Data (2025]

The results collectively demonstrate that interpersonal dynamics among employees are a critical determinant of productivity in the manufacturing sector. The insignificant influence of salary, job promotion, and supervision indicates that Malaysian manufacturing employees may prioritize social cohesion, teamwork, and peer support over financial and hierarchical rewards. These findings are aligned with Herzberg's Two-Factor Theory, which posits that while hygiene factors such as pay and supervision prevent dissatisfaction, true motivation and productivity stem from intrinsic and relational motivators. Consequently, fostering strong co-worker relationships emerges as a vital, cost-effective strategy for improving organizational performance.

4.6 Relationship Between Salary and Productivity

The absence of a significant relationship between salary and productivity contrasts with classical motivational perspectives that emphasize financial compensation as a primary driver of performance (Darmawan, 2020). In this study, while employees acknowledged the importance of pay, it did not serve as a determinant of productivity. This aligns with Maslow's Hierarchy of Needs, where salary satisfies lower-level needs but ceases to motivate once basic security is achieved. Similarly, Herzberg's theory identifies salary as a hygiene factor its

insufficiency causes dissatisfaction, but adequacy does not guarantee enhanced motivation. Therefore, in stable employment contexts like Malaysia's manufacturing sector, employees likely seek non-financial sources of fulfillment once their financial needs are met (Lee & Karim, 2023; Ahmad et al., 2022).

4.7 Relationship Between Job Promotion and Productivity

Job promotion was also found to have no significant impact on productivity, a result that may stem from limited upward mobility in manufacturing organizations, where career advancement opportunities are scarce or reserved for senior employees (Chong et al., 2023). Perceived inequity or lack of transparency in promotion processes may further dampen employees' motivation. This finding supports Ibrahim and Said (2022), who reported that when promotion systems are viewed as biased or unattainable, their motivational value diminishes. Organizations, therefore, should complement traditional promotion structures with horizontal career pathways such as skills development and recognition-based advancement.

4.8 Relationship Between Supervision and Productivity

Although supervision displayed a positive relationship with productivity, it was not statistically significant. This suggests that supervisory behavior in the manufacturing context may lack the motivational influence necessary to drive performance. Studies by Tan and Musa (2024) and Low and Fernandez (2023) indicate that excessive supervision can hinder employee autonomy. In contrast, Cheah and Noor (2022) highlight that transformational supervision marked by empathy and empowerment can foster engagement. The findings here may reflect a predominance of transactional leadership practices, emphasizing compliance over mentorship. To improve productivity, supervisors should adopt supportive, coaching-based approaches that encourage communication, trust, and development.

4.9 Relationship Between Co-Worker Relationships and Productivity

Co-worker relationships emerged as the only significant predictor of employee productivity, underscoring the vital role of social connectedness in collaborative work settings. This aligns with findings by Andika et al. (2021), Ariyaza (2023), and Saidi et al. (2019), who found that positive peer interactions foster teamwork, reduce stress, and improve morale. In manufacturing operations, where interdependence is essential, strong co-worker relationships enable smoother coordination and shared responsibility. The result also resonates with Maslow's social needs and Herzberg's dual-factor framework, suggesting that interpersonal bonds can serve as both hygiene and motivator factors in collectivist work cultures like Malaysia.

4.10 Theoretical Implications

This study contributes to the theoretical discourse on HRM by reinforcing the centrality of relational satisfaction in productivity. It validates the social dimension of job satisfaction, demonstrating that interpersonal relationships are as vital as economic incentives (Ariyaza, 2023). The findings refine Herzberg's Two-Factor Theory, showing that hygiene factors such as

salary and supervision prevent dissatisfaction but do not drive motivation in collectivist cultures. Moreover, the results extend Maslow's Hierarchy by illustrating that in Malaysian contexts, social and esteem needs often outweigh self-actualization, thereby modifying the motivational sequence. Finally, the study proposes an integrated relational model of motivation that complements traditional incentive-based frameworks, linking interpersonal satisfaction directly with productivity outcomes.

4.11 Managerial Implications

The findings have substantial implications for management and HR practitioners. Organizations should institutionalize initiatives that strengthen workplace relationships, such as team-building, peer mentoring, and cross-departmental collaboration. Supervisory practices must evolve toward participative and supportive leadership, emphasizing empathy and communication. Compensation systems should combine financial and non-financial incentives, including recognition, flexible work arrangements, and professional growth opportunities. Transparent promotion policies are essential to uphold trust and fairness, while HR policies must align with Malaysia's collectivist culture by prioritizing teamwork, respect, and social harmony. Together, these strategies can enhance satisfaction and productivity across manufacturing firms.

4.12 Policy Implications

From a policy perspective, the findings advocate for the inclusion of employee relationship management within Malaysia's industrial productivity framework. The Ministry of Human Resources (MOHR) and industry associations could establish national guidelines emphasizing relational well-being as a core component of productivity assessment. Training programs for supervisors on transformational leadership and emotional intelligence should be institutionalized. Additionally, labour policies should incorporate psychological and social well-being indicators into performance evaluations. Such initiatives will promote sustainable industrial growth, human capital development, and alignment with Malaysia's Shared Prosperity Vision 2030.

CONCLUSION

This study examined the relationship between four dimensions of job satisfaction salary, job promotion, supervision, and co-worker relationships and employee productivity in Selangor's manufacturing industry, guided by Herzberg's Two-Factor Theory and Maslow's Hierarchy of Needs.

The results revealed that only co-worker relationships had a significant positive effect on employee productivity, while salary, job promotion, and supervision were not statistically significant. These findings directly address the study's research questions and objectives, confirming that interpersonal and social factors play a more decisive role in influencing productivity than financial or structural motivators.

This suggests that employees in Malaysia's manufacturing sector derive motivation primarily from peer support, teamwork, and harmonious workplace relationships, reflecting the nation's collectivist cultural values. Accordingly, while extrinsic factors like pay and promotion remain necessary to prevent dissatisfaction, intrinsic and relational factors are more effective in sustaining motivation and performance.

In conclusion, the study fulfils its objectives by demonstrating that job satisfaction is multidimensional, and that enhancing co-worker relationships offers the strongest pathway to improving employee productivity. Organizations should, therefore, prioritize fostering a collaborative, supportive, and inclusive work culture alongside fair compensation and transparent promotion systems to achieve sustainable productivity growth in Malaysia's manufacturing industry.

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REFERENCES

- Ahmad, R., Lim, S. Y., & Rahman, N. A. (2022). Job satisfaction and employee performance in manufacturing industries: The mediating role of work motivation. *Asia Pacific Journal of Human Resources*, 60(4), 865–883. <https://doi.org/10.1111/1744-7941.12320>
- Andika, P., Halim, M., & Sari, R. (2021). The effect of co-worker relationships and communication on employee productivity. *International Journal of Management Studies*, 28(2), 145–158. <https://doi.org/10.32890/ijms2021.28.2.6>
- Ariyaza, N. (2023). Workplace harmony and productivity: The moderating role of social connectedness. *Journal of Organizational Psychology*, 23(1), 75–90. <https://doi.org/10.33423/jop.v23i1.6000>
- Aziz, N. A., Rahim, R., & Omar, F. (2020). Examining intrinsic motivation factors affecting job satisfaction among Malaysian manufacturing employees. *Asian Social Science*, 16(12), 24–36. <https://doi.org/10.5539/ass.v16n12p24>
- Bougie, R., & Sekaran, U. (2019). *Research methods for business: A skill-building approach* (8th ed.). Wiley.
- Cheah, W. K., & Noor, M. F. (2022). Supervisory communication and its impact on employee engagement in industrial firms. *International Journal of Business and Society*, 23(3), 1021–1037. <https://doi.org/10.33736/ijbs.4627.2022>
- Chong, K. L., Hamzah, N., & Lau, S. M. (2023). Career stagnation and performance: A Malaysian manufacturing perspective. *Malaysian Journal of Business and Economics*, 10(1), 56–70. <https://doi.org/10.24191/mjbe.v10i1.200>
- Darmawan, A. (2020). Salary satisfaction and its effect on job performance in industrial sectors. *International Journal of Human Resource Studies*, 10(1), 50–65. <https://doi.org/10.5296/ijhrs.v10i1.15849>

- Department of Statistics Malaysia. (2023). *Labour productivity statistics 2023: Manufacturing sector*. DOSM.
- Egenius, K., Rauf, A., & Wahab, Z. (2020). Factors affecting labor productivity in industrial firms. *Journal of Productivity and Development*, 5(2), 102–115.
- Ekasari, A., & Peranginangin, J. (2019). Predictors of employee performance in Indonesian manufacturing companies using path analysis. *Organization and Management Journal*, 15(2), 166–180.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Fatimah, R., Hadi, N., & Rahman, Z. (2023). Linking job satisfaction and employee performance: The role of organizational support. *European Journal of Management Studies*, 28(1), 45–63. <https://doi.org/10.1108/EJMS-05-2022-0045>
- Fanda, M., & Slamet, P. (2019). Motivation and satisfaction in Malaysian industries: Revisiting Maslow's hierarchy. *Asian Journal of Management Research*, 9(2), 111–124.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). Sage.
- Hajar, A., Noor, M., & Nordin, S. (2021). Job promotion, work commitment, and productivity: An empirical assessment in the Malaysian context. *Journal of Business and Economic Analysis*, 9(2), 98–115. <https://doi.org/10.32934/jbea.v9i2.241>
- Herzberg, F. (1966). *Work and the nature of man*. World Publishing.
- Hussain, M., & Diaz, M. (2020). Employee satisfaction and performance linkage: Evidence from developing economies. *International Journal of Business Administration*, 11(3), 101–112. <https://doi.org/10.5430/ijba.v11n3p101>
- Ibrahim, M. N., & Said, S. (2022). Fairness in promotion systems and employee motivation. *Journal of Human Capital Development*, 15(2), 66–80. <https://doi.org/10.32890/jhcd2022.15.2.6>
- Joo, B.-K., & Park, S. (2021). Employee well-being, job satisfaction, and organizational commitment: A meta-analytic approach. *Human Resource Development Review*, 20(2), 120–142. <https://doi.org/10.1177/1534484320987365>
- Khaliq, N. (2021). The effect of compensation fairness on performance outcomes in manufacturing industries. *Global Journal of Human Resource Management*, 9(1), 20–34.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610.
- Lee, C., & Karim, M. (2023). The diminishing return of monetary incentives: Evidence from industrial workplaces. *Journal of Behavioral Economics and Management*, 15(1), 45–59. <https://doi.org/10.1177/26317859231101529>
- Ligare, C., Yusuf, S., & Hassan, R. (2020). Promotion opportunities and employee engagement in industrial settings. *Asia-Pacific Human Resource Management Review*, 8(1), 33–49.
- Low, E., & Fernandez, D. (2023). Transformational supervision and productivity: The mediating role of employee engagement. *Malaysian Journal of Human Resource Management*, 11(2), 112–128. <https://doi.org/10.24191/mjhrm.v11i2.122>

- Manalo, A., & Apat, J. (2021). Motivation and job satisfaction as predictors of performance among industrial workers. *International Journal of Productivity Studies*, 12(4), 88–104.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396.
- Malaysian Investment Development Authority. (2023). *Malaysia investment performance report 2023*. MIDA.
- Mwasawa, T., & Wainaina, L. (2021). Supervision and employee engagement in manufacturing industries. *African Journal of Human Resource Development*, 7(2), 50–67.
- Okolocha, C. C. (2021). Job satisfaction and turnover intention among industrial employees: The moderating role of leadership. *Nigerian Journal of Management Sciences*, 9(2), 89–105.
- Purba, D. (2020). Career growth and employee performance: Mediating effect of motivation. *Human Resource Research*, 4(2), 25–38. <https://doi.org/10.5296/hrr.v4i2.17233>
- Putra, R., & Asnur, Z. (2020). The impact of intrinsic and extrinsic rewards on performance in manufacturing SMEs. *Journal of Human Resource and Sustainability*, 5(1), 15–28.
- Quadri, A. (2022). Supervisory practices and employee engagement: A case of Asian manufacturing firms. *International Journal of Employment Studies*, 30(1), 90–108.
- Saidi, M., Karim, R., & Liew, J. (2019). Interpersonal trust, team cohesion, and productivity in Malaysian industrial organizations. *Journal of Management Development*, 38(6), 470–489. <https://doi.org/10.1108/JMD-05-2018-0142>
- Salam, F., Hadi, S., & Rahman, H. (2022). Linking pay satisfaction to organizational commitment: The mediating effect of work engagement. *Asian Academy of Management Journal*, 27(1), 75–96. <https://doi.org/10.21315/aamj2022.27.1.4>
- Syahputra, M., & Jufrizen, J. (2019). Leadership style, supervision, and job satisfaction in manufacturing sectors. *International Journal of Management Research*, 17(2), 55–71.
- Tan, L. H., & Musa, R. (2024). The paradox of supervision: Balancing control and autonomy in industrial management. *Industrial and Organizational Review*, 18(1), 41–59. <https://doi.org/10.1177/20413866231201744>