

# Job-hopping behaviour in the engineering sector in Penang Malaysia

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**Abstract: Purpose:** This research aims to explore the phenomenon of job-hopping in the engineering sector in Penang, Malaysia, focusing on how factors like positive work culture, compensation and benefits, and job satisfaction influence an engineer's propensity to frequently change jobs. **Design/methodology/approach:** The study adopted a cross-sectional survey design, targeting 200 engineers in Penang. It was grounded in Herzberg's Motivation-Hygiene Theory. Data collection was conducted using online questionnaires, which were adaptations of instruments used in previous research. Statistical analysis, including Pearson correlation and multiple linear regression, was performed using SPSS software. **Findings:** The Pearson correlation analysis revealed significant negative relationships between positive work culture, compensation and benefits, job satisfaction, and the tendency to job-hop. However, in the regression analysis, only job satisfaction emerged as a significant predictor of job-hopping behavior. This finding suggests that while factors like work culture and compensation/benefits contribute to the overall work environment, they do not primarily drive job mobility among engineers in this region. The study indicates that job satisfaction plays a more crucial role in influencing engineers' decisions to change jobs frequently. **Conclusion:** The study enriches the field of organizational psychology by applying Herzberg's theory to understand job-hopping behavior in the engineering sector. For organizations in Penang, the findings highlight the importance of enhancing job satisfaction as a strategy for reducing job-hopping and retaining talent. This insight is valuable for both academic research and practical application in the industry, emphasizing the critical role of job satisfaction in curbing job-hopping tendencies within the engineering field.

**Keywords:** job-hopping behaviour; positive work culture; compensation and benefits; job satisfaction; economic growth

## 1. Introduction

Job-hopping, characterized by the frequent changing of jobs, has emerged as a significant phenomenon in the modern workforce, particularly within specialized industries such as engineering (Ali et al., 2021; Lee et al., 2023). In the engineering sector of Penang, Malaysia, a critical hub for technological innovation, understanding the dynamics of job-hopping behavior is essential. Engineers transitioning between employers within a short timeframe pose significant implications for both individuals and the broader industry. This tendency leads to several challenges, including the loss of specialized knowledge and expertise (Hassan et al., 2019) and disrupting project continuity (Juliana et al., 2021). The application of Herzberg's Motivation-Hygiene

Theory provides a critical framework for understanding how factors such as work culture, compensation and benefits, and job satisfaction can influence this behavior in the engineering industry (Peramatzis and Galanakis, 2022). This theory is also well-acknowledged as the most useful model for measuring job satisfaction (Yousaf, 2020).

This research is driven by the need to address the challenges posed by job-hopping in Penang's engineering sector. The frequent movement of engineers between jobs, evidenced by recent surveys indicating a 20% rate of engineers planning to change jobs (FMT Reporters, 2022), highlights a critical gap in understanding the local context and its influence on this behavior. The study seeks to address the following research questions: Which of these factors (work culture, compensation and benefits, and job satisfaction) is the most significant predictor of job-hopping behavior in the engineering sector of Penang?

In Herzberg's framework, key motivators such as recognition, meaningful work, and growth opportunities align with a positive work culture and are essential for job satisfaction and retention (Tan and Waheed, 2011). Conversely, compensation and benefits are considered hygiene factors that are crucial for preventing dissatisfaction but do not necessarily contribute to long-term satisfaction if other job aspects are lacking (Larasati and Aryanto, 2020). The presence of motivators and hygiene factors lead to job satisfaction (Miah and Hasan, 2022). By understanding and aligning these elements, organizations can enhance overall job satisfaction and reduce the likelihood of engineers seeking job alternatives.

Despite the prevalence of job-hopping in Penang's engineering sector, there is a lack of comprehensive research focused on this local context (Tetteh et al., 2021). Therefore, this research aims to fill this gap by examining factors influencing job-hopping among engineers in Penang's engineering sector and exploring the implications for individuals, organizations, and the sector as a whole. The study's significance lies in its potential contributions to talent retention, human resource planning, industry competitiveness, policy and strategy development, and knowledge transfer and skill development within the engineering sector. Understanding job-hopping behavior, especially in the context of technological advancements, global market trends, and local industry dynamics, is vital for developing targeted strategies to attract and retain engineering talent (Nguyen and Le, 2022).

Using Herzberg's Two-Factor Theory as a guide, our research explores the variables influencing the job-hopping behavior of engineers in Penang's engineering sector. This theory categorizes factors affecting job-hopping behavior into two types: motivators and hygiene factors. Our study focuses on work culture, compensation and benefits, and job satisfaction, selecting these focal points because of their reported impact on job-hopping within the local industry context, as supported by empirical data. Intrinsic motivators, including achievement, recognition, and advancement, are central to our analysis. According to Bukhari et al. (2023), these are the elements that significantly affect job satisfaction and personal growth, thus playing a vital role in talent retention. Hygiene factors, outlined by Larasati and Aryanto (2020) as salary, workplace policies, and interpersonal relations, are considered crucial for preventing dissatisfaction. While not direct enhancers of job satisfaction, their absence can be detrimental, leading to increased turnover.

The choice to concentrate on these specific factors was strategic, rooted in their relevance to Penang's specialized engineering sector and the need to provide actionable insights for talent management and human resource strategies. The intent is to contribute to a better understanding of job-hopping dynamics and to assist in improving competitiveness and policy-making within the industry. Our approach ensures a focused and profound exploration of the key factors driving engineers to change jobs and their implications on the industry, aligning with our objective of yielding detailed insights that can support the development of targeted strategies to attract and retain engineering talent in Penang's vibrant sector.

## **2. Literature review**

### **2.1. Positive work culture on job-hopping behaviour**

In the field of organizational dynamics, the impact of a positive work culture on job-hopping behaviour is profound and multifaceted. The concept of 'working culture' encompasses the collective values, beliefs, customs, and behaviors that shape an organization's internal environment and its interactions with the external world (Sukardi et al., 2020). A positive work culture is marked by transparent communication, trust, cooperation, and a commitment to employee well-being, fostering a sense of belonging and active involvement among staff. This kind of environment leads to increased job satisfaction and enhanced job performance. Google, often cited for its exemplary work culture, offers the "20% time" policy, allowing employees to dedicate part of their working hours to personal projects, thus fostering innovation and demonstrating trust in their capabilities (Burton et al., 2017). Such policies, along with benefits that support work-life balance, contribute to a culture that is attractive to employees and conducive to high levels of job satisfaction.

Diversity and inclusivity in the workplace, as integral aspects of a positive work culture, can lead to innovation and better decision-making. Embracing differences in employee backgrounds, experiences, and perspectives (Bernstein et al., 2021) brings diverse viewpoints to the table, enhancing creativity in problem-solving and generating innovative solutions. IBM's commitment to diversity, evidenced by their Accessibility Research team's development of the first screen reader, highlights the benefits of diverse perspectives in fostering innovation (Chiang et al., 2005). Furthermore, the working culture significantly impacts employee well-being and mental health. Cultures that prioritize work-life balance and mental health support contribute to better mental health, whereas those that promote overwork or neglect mental health can lead to burnout and other mental health issues (Rahman and Arif, 2021). Major tech companies like Apple and Facebook have recognized this by introducing mindfulness and mental health programs, aiming to improve employee well-being and, consequently, job satisfaction and productivity. Based on these insights, we hypothesized that:

H1: Positive work culture has a negative effect on job-hopping behaviour.

### **2.2. Compensation and benefits on job-hopping behaviour**

Compensation and benefits play a pivotal role in an organization's strategy to

attract, retain, and motivate employees. Compensation includes the financial rewards given for work, like salaries and bonuses, while benefits refer to non-monetary perks such as healthcare and leave policies (Omaliko and Akwuobi, 2022). A well-structured compensation and benefits package ensures fair employee compensation and enhances their overall work experience. Microsoft, for instance, is renowned for its strong compensation and benefits strategy, featuring competitive salaries and bonuses, comprehensive healthcare, and generous parental leave, contributing to a positive workplace culture and high employee satisfaction (Annabi and Lebovitz, 2022).

Moreover, compensation and benefits can be strategic tools for achieving business objectives. They can be used to motivate employees towards specific goals or to align their interests with those of shareholders. Starbucks' approach of offering stock options to all employees, including part-timers, and providing comprehensive health benefits, exemplifies how compensation and benefits can be aligned with company performance and employee well-being (Faragalla, 2022). Additionally, competitive compensation and attractive benefits are seen by employees as indicators of their value to an organization. They boost morale, foster loyalty, and can reduce turnover rates. On the flip side, inadequate compensation or lack of benefits can lead to employee dissatisfaction and encourage them to seek other opportunities. In summary, compensation and benefits are essential components of an organization's rewards strategy and powerful tools for attracting, motivating, and retaining talent, achieving strategic objectives, influencing employee engagement, and expressing organizational culture and values (Chong et al., 2020). Therefore, it is hypothesized that:

H2: Compensation and benefits have a negative effect on job-hopping behaviour.

### **2.3. Job satisfaction on job-hopping behaviour**

Job satisfaction is a complex and multifaceted construct that significantly influences employee well-being, performance, and organizational success. It relates to the extent to which employees feel content and fulfilled in their job roles, encompassing various aspects like satisfaction with the work itself, relationships with colleagues and supervisors, and overall work environment (Fathima and Umarani, 2022). High job satisfaction is linked with increased productivity, lower turnover, and better physical and mental health among employees. Companies like Southwest Airlines, known for prioritizing employee satisfaction, consistently rank high in employee engagement and satisfaction, which translates into improved organizational performance (Japura et al., 2023).

The relationship between job satisfaction and employee turnover is well-established. Employees who are satisfied with their jobs are less likely to leave their organizations voluntarily (Kakada and Deshpande, 2021). Job satisfaction contributes to higher commitment and loyalty, as employees are inclined to stay with employers that provide a positive work experience. Google, known for its focus on creating an environment conducive to job satisfaction, has managed to maintain low turnover rates and retain top talent, avoiding the costs associated with frequent employee turnover (Dimitrakaki, 2022).

Job satisfaction also has a close connection with employee performance. Satisfied

employees are generally more productive, innovative, and committed to their roles (Antony and Das, 2022). High levels of job satisfaction led to increased creativity and problem-solving abilities, as happy employees are more proactive in seeking solutions and taking ownership of tasks. Additionally, job satisfaction can lead to organizational citizenship, where employees contribute positively beyond their job descriptions. Adobe Systems, with its focus on job satisfaction, exemplifies this, resulting in a highly engaged workforce that delivers innovative products and strong financial performance (Halid et al., 2022). Leadership and management play a critical role in shaping job satisfaction. Effective leadership that provides clear communication, recognition, and growth opportunities results in higher job satisfaction among teams. Zappos is an example of a company that has emphasized creating a positive work environment through effective leadership, leading to high levels of job satisfaction and a reputation for excellent customer service (Weirauch et al., 2023). In conclusion, job satisfaction is a comprehensive concept with significant impacts on employees and organizations alike. Prioritizing job satisfaction leads to a multitude of benefits, including increased productivity, employee retention, and overall success. Thus, it is hypothesized that:

H3: Job satisfaction have a negative effect on job-hopping behaviour.

### **3. Methods**

#### **Participants**

Our research focused specifically on the engineering sector in Penang, which is a hub for a wide range of engineering disciplines. The diversity within this sector offers a rich context for examining job-hopping behavior, considering the different challenges and opportunities faced by professionals in various engineering fields. This sector's contribution to Penang's technological and economic landscape provides a meaningful backdrop for our study, underscoring the importance of understanding job hopping within this critical industry.

Considering the complexity and breadth of the engineering sector in Penang, our sampling strategy was designed to encompass a representative cross-section of this industry. Participants were drawn from a range of engineering disciplines, reflecting the sector's diverse nature. The aim was to include professionals engaged in various aspects of engineering, from design and development to production and management, ensuring a comprehensive understanding of job-hopping behavior across different areas of the engineering sector. The participants in this study, therefore, were not just employees of a single engineering discipline but represented a wide spectrum of the engineering sector in Penang. This diversity within our participant pool was crucial for gaining a holistic view of the factors influencing job-hopping behavior in an industry that is integral to Penang's status as a hub of technological innovation and economic development.

A cross-sectional research design was adopted, entailing data collection from participants at a single point in time (Hall et al., 2022). This approach provided a snapshot view of the variables under investigation, capturing a comprehensive understanding of the current job-hopping scenario in Penang's engineering sector. The target population for this study was estimated at approximately 25,000 employees in

Penang's engineering sector (Penang Institute, 2021). The sampling design utilized non-probability sampling methods, where questionnaires (see Appendix) were distributed via email to selected engineers, considering time constraints. These questionnaires reached participants through various channels, including colleagues, family, friends, and a broader network of contacts. The minimum sample size was determined to be 119, calculated using G\*Power's sample size predictor. Aiming for comprehensive data collection, a total of 200 questionnaires were distributed, enhancing the likelihood of gathering sufficient and meaningful data.

#### **4. Research instruments**

The instrument utilized in this study is a structured questionnaire, designed to capture data pertinent to understanding job-hopping behavior in the engineering sector. Participants commence by providing basic demographic details, including gender, age, educational background, and years of experience in the engineering sector.

**Job-hopping behavior:** This variable comprising four items measured on a scale from 'Strongly Disagree' (1) to 'Strongly Agree' (5), this section assesses aspects of job-hopping. An example item is "I have changed jobs multiple times in the past five years". The design of these items is adapted from the work of Ali et al. (2021). The Cronbach alpha value is 0.896.

**Positive work culture:** This subsection includes four items on the same five-point Likert scale, assessing aspects of the working culture. An example item is "The working culture in my current organization encourages collaboration and teamwork". This item's design is adapted from Pawirosumarto et al. (2017). The Cronbach alpha value is 0.886.

**Compensation and benefits:** Also consisting of four items, this part evaluates aspects related to compensation and benefits. An example item is "I am satisfied with the compensation and salary structure in my current position". The structure of these items is adapted from Feraro-Banta and Shaikh (2017). The Cronbach alpha value is 0.873.

**Job satisfaction:** This part includes four items to assess job satisfaction, such as "I find my current job to be personally fulfilling and meaningful". The segment is adapted based on Ali et al. (2021). The Cronbach alpha value is 0.847.

#### **Data analysis**

In our research, the data analysis phase was pivotal to uncovering the intricate relationships between various factors influencing job-hopping behavior. We employed the Statistical Package for the Social Sciences (SPSS) Version 26 for this purpose, beginning with a comprehensive descriptive analysis of the collected data. Before the pilot research commenced, we rigorously examined the dataset for reliability. Our survey instrument underwent extensive pre-testing with intended participants to fine-tune its accuracy and applicability. The instrument's reliability was assessed using Cronbach's alpha coefficient, a widely recognized standard in research for measuring the internal consistency of a survey. A Cronbach's alpha value of 0.7 or higher indicates acceptable reliability (Warshawski, 2022), affirming the consistency of our survey results.

The first stage of data analysis involved applying descriptive statistics. This method helped us summarize and organize the data, making it easier to interpret and present. It also set the foundation for the subsequent inferential statistical analyses. Within descriptive statistics, we calculated the frequency, percentage, and mean of demographic variables, providing an insightful overview of our sample population. For the inferential analysis, we first used the Pearson correlation to investigate the relationships between variables, such as the connection between a positive work culture and employee performance. This correlation analysis offers insights into the strength and direction of these relationships. The core of our inferential analysis was the multiple linear regression analysis. This method was employed to determine the predictive power of various independent variables (like positive work culture, compensation and benefits, and job satisfaction) on the dependent variable—job-hopping behavior. A *p*-value of less than 0.05 is considered statistically significant in social sciences research. Thus, in our multiple linear regression analysis, any independent variable with a *p*-value less than 0.05 was considered to have a statistically significant impact on job-hopping behavior, allowing us to draw more confident conclusions about the factors influencing this phenomenon in Penang’s engineering sector.

## 5. Results

The demographic profile of the respondents is presented in the **Table 1**. Out of the 200 respondents, 56% (*n* = 112) were from male respondents, 42% (*n* = 84) from female respondents, and the remaining 2% (*n* = 4) chose not to disclose their gender. The majority of participants in the study fell within the 30–49 age bracket, constituting 62% (*n* = 124). The next largest segment was respondents aged 18–29, accounting for 20% (*n* = 40), followed by those aged 50 years and above, representing 18% (*n* = 36). Most participants held an undergraduate degree, which accounted for 60% (*n* = 120), followed by those with a diploma education at 16% (*n* = 32), postgraduate degree at 14% (*n* = 28), high school/secondary school and below accounting for 8% (*n* = 16), and respondents with no formal education constituting 2% (*n* = 4). The majority of respondents had been working in the engineering sector for between 5 to 10 years (38%, *n* = 76), followed by 10 to 20 years (28%, *n* = 56), more than 20 years (22%, *n* = 44), and less than 5 years (12%, *n* = 24).

**Table 1.** Demographic profile of respondents (*N* = 200).

Demographic	Categories	Frequency	Percentage (%)
Gender	Male	112	56
	Female	84	42
	Prefer not to say	4	2
Age	18–29	40	20
	30–49	124	62
	>50	36	18

**Table 1.** (Continued).

Demographic	Categories	Frequency	Percentage (%)
Educational Background	High School or Equivalent	16	8
	Diploma	32	16
	Undergraduate Degrees	120	60
	Postgraduate Degrees	28	14
	No Formal Education	4	2
Years of Experience in the Engineering Sector	<5 years	24	12
	<10 years	76	38
	<20 years	56	28
	>20 years	44	22

The Pearson correlation results indicate significant correlations between working culture ( $r = -0.577, p < 0.01$ ), compensation and benefits ( $r = -0.561, p < 0.01$ ), job satisfaction ( $r = -0.627, p < 0.01$ ), and job-hopping behaviour. These findings suggest a statistically significant linear relationship, revealing negative associations between the independent variables and the dependent variable.

Next, a multiple linear regression was utilized to explore the relationship between factors (positive work culture, compensation and benefits, job satisfaction) and job-hopping behavior. The  $R$ -squared value, a measure of how well the variables in the model predict the outcome, indicates the proportion of variance in the outcome explained by the predictors (Lee, 2022). In this study, the results of the regression, summarized in **Table 2**, indicated that the model explained 40.7% of the variance in job-hopping behavior [ $R^2 = 0.407, F(3, 196) = 219.456, p < 0.001$ ]. This indicates that 40.7% of the variance in the independent variables, namely positive work culture, compensation and benefits, and job satisfaction, contributes positively to the dependent variable, job-hopping behavior. Specifically, job satisfaction emerged as a significant predictor of job-hopping behavior ( $\beta = -0.425, p < 0.001$ ), suggesting that higher job satisfaction is associated with lower job-hopping behavior. However, positive work culture ( $\beta = -0.156, p = 0.139$ ) and compensation and benefits ( $\beta = -0.089, p = 0.389$ ) were not significant predictors in this model.

**Table 2.** Summary result of the multiple regression.

Dependent Variable	Predictor	Beta	$t$	$R^2$	F	$p$ -value
Job-hopping behaviour	Positive work culture	-0.156	3.809			0.139
	Compensation and benefits	-0.089	6.949	0.407	219.456**	0.389
	Job satisfaction	-0.425	3.776			0.00

## 6. Discussion

In this study, we explored the impact of various factors on job-hopping behavior in the Engineering Sector in Penang, Malaysia. Our findings provided intriguing insights that both align with and diverge from existing literature.

Contrary to our initial hypothesis (H1), the study found that a positive work culture did not have a statistically significant negative effect on job-hopping behavior.



This finding contrasts with prevalent literature that underscores the importance of working culture in employee retention. For instance, Google's "20% time" policy and its focus on work-life balance highlight the significance of a positive workplace atmosphere in fostering employee satisfaction and reducing job turnover (Burton et al., 2017). However, our study suggests that in the specific context of the Engineering Sector in Penang, other factors may overshadow the influence of working culture on job-hopping behavior. This could be attributed to unique industry dynamics or specific organizational cultures within the region that differ from broader trends.

Similarly, our second hypothesis (H2), which posited that compensation and benefits would negatively affect job-hopping behavior, was not supported by our findings. This outcome challenges the widely held view, as discussed by Feraro-Banta and Shaikh (2017), that compensation and benefits are crucial in attracting and retaining employees. While these factors are critical components of an organization's rewards strategy, their influence on job-hopping behavior in Penang's engineering sector appears to be less significant than expected. This might be due to the multifaceted nature of job satisfaction and employee engagement, which encompasses more than just financial rewards. According to Herzberg, compensation is a hygienic factor; therefore, we acknowledge that "Success in rejecting the null hypothesis was not achieved". This insight suggests a need to reassess the impact of compensation and benefits within the broader framework of what influences job-hopping behavior.

Conversely, our third hypothesis (H3) was strongly supported, indicating that job satisfaction has a significant negative effect on job-hopping behavior. This aligns with existing literature that links high job satisfaction to lower turnover rates (Fathima and Umarani, 2022). Companies like Google and Adobe have demonstrated the effectiveness of creating environments that enhance job satisfaction, thus reducing the propensity of employees to seek new opportunities (Dimitrakaki, 2022; Halid et al., 2022). This finding is particularly relevant for organizations in the engineering sector in Penang, emphasizing the need to prioritize job satisfaction to retain talent.

Our study contributes to the ongoing discourse on employee retention strategies, highlighting the necessity for organizations, particularly in the engineering sector of Penang, to focus on enhancing job satisfaction as a primary means of reducing job-hopping behavior. However, the findings also indicate that focusing solely on hygiene factors, while neglecting motivators, will not effectively reduce job-hopping behavior, as hygiene factors cannot motivate and may produce negative effects over time (Acquah et al., 2021). Although working culture and compensation and benefits are important, their impact on job-hopping behavior may not be as significant as the influence of job satisfaction. This insight encourages a re-evaluation of retention strategies, emphasizing the multifaceted nature of job satisfaction and its pivotal role in employee retention. Hygiene factors may prevent dissatisfaction but do not necessarily produce satisfaction (Alrawahi et al., 2020). Recognizing the significant impact of job satisfaction, organizations should prioritize strategies that contribute to employee contentment, such as ensuring meaningful work (Pimenta de Devotto et al., 2022), offering avenues for skill development (Raab, 2020), maintaining a positive work-life balance (Sudibjo and Suwarli, 2020), and establishing clear career growth paths (Yukongdi and Shrestha, 2020).

Although our survey did not find a significant correlation between working culture and job-hopping, fostering a positive, inclusive, and collaborative work environment remains crucial. Selvanathan et al. (2021) found that lecturers in private universities in Malaysia tend to job-hop when faced with an imbalanced work-life culture, alongside inadequate compensation and benefits. Therefore, a supportive culture can contribute to overall employee well-being and may indirectly impact job satisfaction. Even though the current findings do not establish a strong link between compensation and benefits and job-hopping behavior, it is advisable for organizations to periodically review and adjust their compensation structures, especially since findings in the Malaysian construction sector showed a positive effect between compensation and benefits and job-hopping behavior (Wider et al., 2023). Keeping salaries and benefits competitive can contribute to employee satisfaction and retention.

Given that job satisfaction is identified as the key factor influencing job-hopping behavior in Penang's engineering sector, Malaysia, recommendations should focus on making jobs more fulfilling and meaningful for employees. This could include aligning projects with personal interests, offering creativity opportunities, or tasks that contribute to a sense of purpose. It is also recommended to review job scopes for potential overload and exhaustion, factors contributing to job-hopping behavior (Majeed et al., 2023). Establishing a robust system for recognizing and providing feedback to employees is important. Acknowledging contributions through formal recognition programs, regular performance reviews, or simple, timely acknowledgment can significantly impact (Chantal et al., 2022). Developing and communicating clear career growth paths within the organization is vital (Ferdiana et al., 2023), as is providing training programs, mentorship opportunities, and a transparent promotion process to enhance employees' skills and capabilities (Pârjoleanu, 2020). In conclusion, while working culture and compensation and benefits were not found to be significant factors in job-hopping behavior in the surveyed engineering sector in Penang, prioritizing job satisfaction and aligning strategies with individual preferences emerge as key considerations for talent retention in the industry.

## **7. Implications**

The study examines job-hopping behaviour in the Engineering Sector in Penang, Malaysia, using Herzberg's Motivation-Hygiene Theory. It provides valuable insights for academic research and industry practice. From an academic perspective, it expands upon Herzberg's influential theory, which originally concentrated on analysing job satisfaction and dissatisfaction, by conducting a detailed investigation into job mobility. This application of the theory to the specific context of job-hopping in engineering showcases its significance and flexibility in understanding various workplace phenomena. The study enhances the theoretical discourse by pinpointing specific motivators and hygiene factors that are relevant to engineers in Penang. Motivators include career advancement opportunities and recognition, while hygiene factors encompass aspects such as working culture and compensation. Having a sophisticated comprehension of this matter is crucial for extending Herzberg's theory in the field of engineering and adds to the wider scholarly discourse on employee

motivation and turnover. This finding aligns with the research conducted by Bhardwaj et al. (2021) in Jaipur, India. Their study revealed a strong correlation between job satisfaction and employee retention in the banking industry. Specifically, the duration of an employee's tenure in the organization is directly related to their level of satisfaction. Even within the metallurgical industry, employees who are content with their work feel a sense of belonging to the company (Dziuba et al., 2020).

Practically, the study has various implications for organisations operating in the engineering industry. The findings indicate that in order to successfully retain skilled individuals, organisations should prioritise the improvement of job satisfaction. This entails developing strategies that not only tackle fundamental hygiene factors but also actively promote motivators such as individual satisfaction, acknowledgment, and prospects for career advancement. The study emphasises the significance of comprehending the particular context and requirements of engineers in Penang. It suggests that strategies that have proven successful in other sectors or regions may not be directly applicable in this specific setting. Human resource professionals must customise compensation, benefits, and cultural initiatives to align with the distinct preferences and expectations of their workforce. In addition, the study's results question certain traditional assumptions regarding the impact of work culture and remuneration on job-switching tendencies, highlighting the complex nature of these interactions. Although these factors are undeniably crucial, their influence on job-hopping behaviour was comparatively less significant than job satisfaction in this specific context. This insight is pivotal for organisations, indicating that although endeavours to foster a positive work culture and provide competitive compensation are beneficial, they should be integrated into a comprehensive strategy that places job satisfaction as a top priority in order to effectively reduce job-hopping tendencies.

## **8. Conclusion, limitation, and future recommendation**

This research provides a thorough analysis of job-hopping behavior in the Engineering Sector in Penang, Malaysia. It began with an introduction that set the context for the study, emphasizing the relevance and implications of job-hopping in the engineering field. The literature review delved into the concepts of positive work culture, compensation and benefits, and job satisfaction, framing these within Herzberg's Motivation-Hygiene Theory. The study's findings challenge some conventional assumptions about job-hopping. Contrary to expectations, it was found that positive work culture, and compensation and benefits had a limited impact on job-hopping behavior, while job satisfaction emerged as a significant factor. These insights contribute to a better understanding of the dynamics of job-hopping in Penang's engineering sector and offer guidance for developing effective talent retention strategies. Further research can extend into examine why the hygiene factors i.e. work culture, compensation and benefit seems unable to prevent job-hopping behavior in Penang's engineering sector or the companies emphasis too much on hygiene factors and neglecting the motivator.

Despite its contributions, the study has limitations. Our methodology is robust, yet it acknowledges the drawback of relying solely on Cronbach's Alpha to determine reliability, rather than performing an exploratory factor analysis (EFA) for

questionnaire validation. This decision was motivated by the constructs' established validation in prior research and the specific goal of evaluating internal consistency within our sample. Given our questionnaire's reliance on well-established constructs, Cronbach's Alpha offered a practical and adequate measure of scale reliability, despite EFA's recognized value in uncovering item-factor relationships. Future studies are expected to build on this groundwork by utilizing EFA to further validate and refine the questionnaire across different populations and contexts, enhancing its usefulness and applicability. The study's focus on Penang's engineering sector may limit the generalizability of its findings to other regions or industries. Future research could broaden the study's scope, incorporate qualitative methods for deeper insights, and examine additional factors influencing job-hopping behavior. There is also value in comparing job-hopping behavior across different engineering sub-sectors within Penang and extending this comparison to other industries in the region. Investigating the impact of technological advancements on job mobility, exploring the global mobility of engineering talent, and assessing the relationship between job-hopping behavior and mental health represent valuable avenues for future exploration.

Another interesting area for future exploration is the job-hopping behavior among different age groups, cultural backgrounds, and genders based on Herzberg's Motivation-Hygiene Theory. As the workforce begins to integrate Gen Z, this cohort may bring about significant changes in the future workforce (Agarwal and Vaghela, 2018). Examining how an employee's cultural background plays a vital role in shaping their feelings, thinking, and behavior is crucial (Adamovic, 2022). Additionally, studying the job-hopping behaviors of males and females will provide further insight (Pandey, 2019).

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## **Appendix: Questionnaire items**

### **Job hopping behaviour**

- I have changed jobs multiple times in the past five years.
- I am actively seeking new job opportunities at this time.
- I often consider switching jobs to find better career advancement opportunities.
- I have left previous jobs primarily due to dissatisfaction with work conditions or job-related factors.

### **Working culture**

- The working culture in my current organization encourages collaboration and teamwork.
- I feel that I have opportunities for skill development and growth in my current work environment.
- Communication is open and transparent within my organization, facilitating a positive working culture.
- The working culture in my organization values diversity and inclusion.

### **Compensation and benefits**

- I am satisfied with the compensation and salary structure in my current position.
- The benefits package offered by my organization meets my needs and expectations.
- I believe that my organization offers fair and competitive compensation compared to the industry standards.
- The financial incentives, such as bonuses or performance-based rewards, are motivating factors for me to remain in my current role.

### **Job Satisfaction**

- I find my current job to be personally fulfilling and meaningful.
- I am satisfied with my work-life balance in my current position.
- I receive adequate recognition and feedback for my contributions in my organization.
- I perceive opportunities for career growth and advancement within my current organization.