

The Relationship between Job Stress, Job Satisfaction and Career Development with Turnover Intention Among Production Workers in X Bakery Company

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DOI: <https://doi.org/10.30880/rmtb.2025.06.02.041>

Article Info

Received: 30 September 2025

Accepted: 01 November 2025

Available online: 01 December 2025

Keywords

Job stress, Job satisfaction, Career development, Employee turnover intention

Abstract

This study examines the factors that impact employee turnover intentions at X bakery company, emphasizing job stress, job satisfaction, and career development possibilities. The research objectives are to determine the employee turnover intention level among production employees at X bakery company and to investigate the relationship between job stress, job satisfaction, career development, and employee turnover intentions among production employees at X bakery company. The findings show that excessive job demands, insufficient resources, and a lack of professional growth chances are significant factors in employee discontent and stress, which drive turnover. The researcher will better grasp the subject by using quantitative methods and SPSS analysis to collect data and then doing descriptive and correlational analysis assessments. The research will gain valuable insight to X bakery company management to design employee retention strategies to retain the employees.

1. Introduction

Fast-Moving Consumer Goods (FMCG), another name for Consumer-Packaged Goods (CPG), are goods that are sold immediately and at reasonably low expense (Dhanalakshmi & Abdul Azees, 2018). Besides that, Kenton (2024) noted that nondurable goods have a shelf life of less than three years and are used promptly. FMCGs are used by everyone regularly. FMCGs are tiny scale buying decisions people make at produce stands, grocery shops, supermarkets, and warehouses. Dairy products, cookies, fruits and veggies, soda drinks, soaps, pens, aspirin, and other low-expense household goods are among the examples. Today, the globe has gone digital, and digitising support services in FMCG is increasingly critical for maintaining an excellent reputation. Modern technology will eventually reduce labour-intensive workers, leading to an increase in unemployment. Aburumman *et al.* (2020) pointed out that FMCG businesses are experiencing employee turnover, and the rate of employees leaving their employment is increasing yearly. Various reasons lead to losing labourers, such as low salaries, uncertain employment, professional growth chances, unsafe workplaces, lack of acknowledgement, ineffective leadership, and work satisfaction, which can increase employees' turnover intentions. Iqbal and Faisal (2023) presented that employee turnover impacts a business directly and indirectly, including the loss of valuable intellectual property.

Worker turnover will directly affect it because workers possess the essential expertise and mastery experiences critical for an organisation. As they resign, they bring their intellectual property, which may damage the organisation if they shift to another rival in the same industry. On the other hand, employee turnover can

indirectly affect a firm's reduced productivity. When the previous workers leave the company, the workload and stress on the existing personnel will increase, making them feel burnt out and dissatisfied, further provoking them to resign, and the firm's productivity will worsen. The company should comprehend its staff's demands, allowing it to implement specific measures to boost staff productivity and minimise employee turnover rates. In addition, applying employee retention solutions will improve job fulfilment, inspiration, and effectiveness for both workers and employers, potentially reducing unemployment issues, absenteeism, and layoffs (Al-Suraihi *et al.*, 2021). Thus, effectively maintaining worker turnover and retention is necessary for organisations to ensure long-term success. The researcher will conduct the study in an organisation called Mighty Bakery Sdn. Bhd., or X bakery company. X bakery company is a fast-moving consumer goods (FMCG) manufacturing company that has been operating since 1995 and has been in business for 28 years. X bakery company typically delivers products to customers in Malaysia. It produces various products such as sandwich bread, buns, cakes, and spreads in many flavours and sends them to distributors such as supermarkets and grocery shops. Employee turnover is a significant concern worldwide because it affects efficiency, team spirit, and the bottom line. Employee turnover has recently received more attention due to its possible implications for organisational strength and performance. The research will focus on the high turnover rate of production employees at X bakery company, such as technicians and warehouse operators. Employees' turnover intentions refer to workers possibly leaving their present position (Rajapaksa & Kalyanaratne, 2024).

Furthermore, Ooi and Teoh (2021) represented that employee turnover intention may arise when an employee experiences a lack of enthusiasm, promotion, and accomplishments in the job environment, which leads to the individual quitting the position and leaving the organisation. Teegarden (2024) suggested that the organisation's size determines a reasonable turnover percentage in manufacturing. Prokopets (2024) highlighted that most companies determine the average turnover rates ranging from 10% to 15%. Research by Romaiha *et al.* (2023) stated that in 2019, the manufacturing sector had a high turnover rate of 24%, hence being the country's most significant contributor. The prevalence of worker turnover and its implications for companies, such as increased recruitment costs, decreases in productivity, brain drain, low-quality production, delayed operations, poor organisational performance, and reduced profitability due to high workers' turnover intention, indicate that this company's human resource department must look for fresh hires to fill vacant positions. Therefore, identifying the factors influencing employees' turnover intention is critical for the organisation's top management, which must develop successful retention measures and cultivate a happy work environment. For example, it can guarantee the continuity of operations and maintain quality standards on the products to deliver on time to end users, satisfy their expectations, and become loyal customers to support the company. Based on the reviews of X bakery company on the Jobstreet website, employees face challenges, such as job stress, job satisfaction, and career development. First, because of a lack of workforce, they usually work 8.5 hours each day, and the extremely tight deadlines require finishing the job assigned, such as a site sketch, in a short lunch break, which leads to job stress. In addition, the firm will penalise small mistakes, such as being late by 5 minutes, resulting in a wage deduction, and there will be no suitable guidelines for new employees. There have also been complaints about a highly harsh working atmosphere, which means the employees' jobs are dissatisfied. After interviewing X bakery company's Quality Assurance Manager, Madam T, the researcher learned about the production employees' situation in the company. In X bakery company, the job characteristics of production workers are simple, constant and repeatable, and they will work six days and rest one day a week. The employee's minimum wage in Malaysia is typically RM 1500. For X bakery company, their production workers usually work from 7 am to 5 pm plus overtime to work two hours each week, so the wages will increase to RM 2000 and above, which means they pay their labour and time to earn a living and support their living expenses.

Moreover, by conducting the interview, the researcher also knew that the issue faced by the company was higher employee turnover intentions among the production workers compared to other workers within the company. There are several causes of high staff turnover: overwork, job dissatisfaction, lack of training, and career advancement. X bakery company sometimes offered several jobs to employees for long hours, and excessive workload influenced workers' intentions to resign because they were too exhausted to multitask and preferred to complete fixed and uncomplicated duties in the past. Furthermore, the company did not offer training and career development for all production employees, choosing a few potential production personnel as technical personnel and allowing them to learn how to control the machines to accomplish the work, such as operating the machines that package goods in the manufacturing line. Otherwise, they feel unsatisfied with their current job positions' wages; since the company location is near Singapore, the workers will desire to work in Singapore to meet their work satisfaction and earn higher wages in the same hours due to the currency exchange rate from Singapore to Malaysia triple. To conclude, these challenges are likely linked to job stress, job satisfaction and career development among X bakery company's production employees, which lead to higher turnover. Thus, the research will investigate the relationships based on these elements: job stress, job satisfaction, and career development toward turnover intention among X bakery company's production employees.

The scope of this study will be conducted at X bakery company in Ulu Tiram, Johor, and the targeted population will be among production employees to know if there are any relationships between job stress, job satisfaction and career development with frequent turnover among the company's employees. The data collection will use a quantitative research method to distribute the online questionnaire to the workers and collect it from them via Google Forms. Then, the data analysis uses the Statistical Package for the Social Sciences (SPSS) to analyse and examine the study results. The significance of the study is to investigate the relationship between job stress, job satisfaction, career development, and employee turnover intentions among production employees at X bakery company. Then, the importance of it is in its potential contributions to many parties inside and outside of X bakery company. By determining the aspects that impact the intentions of workers to leave, the research gives X bakery company's administration practical information for developing successful talent retention approaches, resulting in higher staff satisfaction, fewer layoffs, and increased overall efficiency and productiveness. The results will help human resources personnel gain insight into the leading causes of employee turnover and design specific strategies, such as modifying wages and benefits, expanding possibilities for career growth, and boosting working environments to create a more positive and motivating work atmosphere. Other than that, this research contributes to the existing pool of research on worker turnover in the Fast-Moving Consumer Goods (FMCG) industry by supplying practical data and analysis that researchers and academics can apply to conduct future research on related topics about employee turnover intentions in associated businesses. This study aims to determine the relationships between job stress, job satisfaction, career development, and employee turnover intentions. Accordingly, this chapter discusses the concept of independent and dependent variables. Researchers will highlight studies and model theories related to job stress, job satisfaction, career development, and employee turnover intentions. This chapter also represents the conceptual framework and the research hypotheses between the four variables built based on the previous study: job stress, job satisfaction, career development, and employee turnover intentions.

2. Literature Review

2.1 Employee Turnover Intention

Employee turnover intention is the personnel expressed desire to quit their company within a specified time frame, and it is frequently employed to examine accurate worker turnover (Lazzari *et al.*, 2022). According to Wubetie *et al.* (2020), the reasons for leaving intentions consist of income discontent, professional growth opportunities, working circumstances, overwork, and individual concerns. Regardless of size, place of operation, or business style, each firm has frequently focused on employee turnover intentions (Belete, 2018).

2.2 Job Stress

Job stress is the reaction people might feel when confronted with job-related obligations and stresses that are incompatible with their skills and experience and challenge their capability to handle them (World Health Organisation, 2020). Then, Leka *et al.* (2018) mentioned that it can lead to physical illnesses, including cardiovascular disease and musculoskeletal ailments, as well as mental health conditions like despair, anxiety, and exhaustion. Job stress has also expanded to cover one's reaction to job expectations and the larger community and organisational setting (Cavanaugh *et al.*, 2020). It is a prevalent problem affecting people across various sectors, resulting in negative implications like reduced satisfaction with work, achievement, and happiness (Jamil *et al.*, 2023). Thus, job stress is a typical occurrence that can impact worker health, well-being, work efficiency, and fulfilment.

Based on studies written by past researchers, Omar *et al.* (2020) stated that in the insurance industry, workers who have experienced high levels of stress at work might consider leaving the company. In addition, Steiner and Woo (2021) mentioned that people contemplating quitting their positions may face more difficult workplace environments and work-related pressures in the education industry. Then, Fonseca *et al.* (2020) explained that poor health due to insufficient individual resources, such as effort and time, will impact workers' psychological well-being. As a result, job stress positively affects staff turnover intentions, which means high work stress makes the individual consider shifting employment.

H1: Job stress positively and significantly impacts employee turnover intention.

2.3 Job Satisfaction

Job satisfaction represents how employees feel satisfied about their job performance (Dwesini & Sisulu, 2019). Alam and Asim (2019) stated that employees' sense of happiness and accomplishment comes from human resource policy, benefits, leadership, work clarity, and career advancement once they notice their job is worthwhile. Job satisfaction characteristics include workplace conditions, income, guidance, and assistance from coworkers (Dewi & Nurhayati, 2021). In contrast, when the workers feel dissatisfied with their positions,

the company has a high worker turnover intention among employees. Hence, job satisfaction has a negative influence on employee turnover intention.

H2: Job satisfaction negatively and substantially affects employee turnover intention.

2.4 Career Development

Career development means the sequence of short-term actions required to reach professional objectives in the future (Whitfield, 2022). For example, it entails developing skill sets specific to a role, including attending night courses, finding a mentor online or in the real world, and trying new duties at existing employment to gain new workplace experiences. Dwesini and Sisulu (2019) showed that investing in personnel development and training is crucial for worker retention. Hence, organisations should prioritise employee development through cutting-edge technologies to provide helpful career advancement programmes and reduce employee turnover intentions.

In the research context of Dewi and Nurhayati (2021), career development may minimise employee turnover. According to studies by Pratiwi and Lo, (2020), career development has a negative effect on staff intentions to leave. Additionally, Fatmawati and Chaerudin (2021) stated that job advancement negatively influences the workers’ intention to quit the organisation because effective career development in a company can drive people to advance and accomplish their intended occupations. This situation may become a negative factor and reduce the employees’ intention to hunt for other positions because they understand how to attain their preferred job in their present firm.

H3: Career development negatively and significantly influences employee turnover intention.

2.5 Research Framework

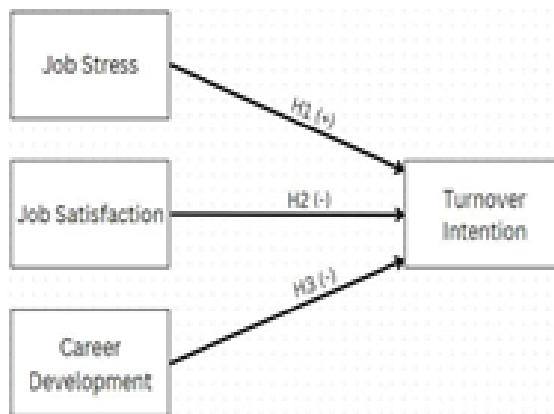


Fig. 1 Research framework

3. Research Methodology

This section includes the research design, sample size, sampling, instruments, processes, and data analysis. The study involves systematically addressing difficulties and uncertainty. It outlines the study methodology to examine the relationship between job stress, job satisfaction, career advancement, and employee turnover intention among X bakery company employees.

3.1 Research Design

According to a review of the research of Blair *et al.* (2023), the research design indicates the entire method used to address the research objectives. A study's design often specifies the concepts and hypotheses that drive a project, the research questions for obtaining the required information, and a method for extracting results from the collected data. The study aims to determine the employee turnover intention level among production employees at X bakery company, located in Ulu Tiram, Johor. The researcher employs a quantitative research approach to investigate the relationship between job stress, job satisfaction, career development, and staff turnover intention among X bakery company production employees. The study will collect the employees' data over two months, providing an in- depth understanding of the present scenario within X bakery company. The reason for using this method is based on the research objectives to decide the research methodology. Ahmad *et al.* (2019) presented that the quantitative research approach is the main research structure in social science studies. It involves a set of methods, practices, and concepts for investigating psychological, social, and economic

phenomena using numerical trends to gather numeric information and facts. Moreover, it uses a bigger sample size and requires less data collection time than the qualitative research method (Rahman, 2020). Another reason is that this method will apply less time to do the data analysis due to the use of statistical software like Statistical Package for the Social Sciences (SPSS).

3.2 Population and Sampling

The research population will be focused on X bakery company production employees. Marinaki (2022) mentioned that production employees are accountable for keeping goods quality requirements and production schedules. They inspect for flaws, assemble items, maintain production machinery, and strictly adhere to legal rules to avoid mistakes in the workplace where ingredients are potentially harmful, such as machine operators, assembly line workers, and quality control inspectors. According to an interview with X bakery company's Human Resource Manager, Madam Chan, there are 300 production workers within the organisation. Then, the sample size will be 169 workers based on the Krejcie and Morgan table to identify the appropriate sample size based on the research of Bukhari (2021). The sampling technique will apply non-probability sampling to filter the respondents that the research needs. The sampling technique will be convenient sampling for gathering the information required.

3.3 Research Instruments

A quantitative survey will be conducted to gather information about job stress, job satisfaction, career development and employee turnover intentions. The survey measurements are based on job stress, job satisfaction, career development, and employee turnover intention, which refer to past studies used to create a questionnaire. The online questionnaire was created and then given to the X bakery company employees through Google Forms to collect and know employees' opinions at X bakery company about the relationships between job stress, job satisfaction, career development, and employee turnover intention.

The questionnaire includes five sections. Section A will be the demographic questions to gather the respondents' background, comprising six aspects: age, gender, race, job position, year of service, and monthly income. Sections B, C, and D will comprise of the research questionnaire about three independent variables: job stress, job satisfaction, and career development. The survey questions for each independent variable have three questions. Section E will be the survey instrument about the dependent variable, employee turnover intention, which has three questions to identify the employee turnover intention level within the company.

In the questionnaire, researcher will use a five-point Likert scale with the following options: strongly disagree, disagree, moderate, agree, and strongly agree. This research will use several well-established measures to assess critical variables. Job stress will be measured using items derived from Lee *et al.* (2022), Salama *et al.* (2022) and Ketkaew *et al.* (2020). The survey will evaluate job satisfaction via Sharma and Tripathi (2023), Maqableh *et al.* (2023) and Skelton *et al.* (2019). Career development will be assessed using items adapted from Jayasri and Annisa (2023), Dewi and Nurhayati (2021) and Burhanudin and Wijanarko (2022). Finally, the employee turnover intention will be assessed using items derived from Wan and Duffy (2022), Lee *et al.* (2022) and Dirar and Tamara (2021).

3.4 Pilot Test

According to Sundram and Romli (2023), a pilot test is conducted on a limited scale to assess the survey measurement quality used in the study based on validity and reliability. It is a procedure used to verify and confirm the information's dependability on a questionnaire. It will also refer to the initial testing of study instruments, such as questionnaires or interviews. According to Ghazali, Md. Sakip and Samsuddin (2020), a pilot study, aims to determine possible participants' problems with understanding or interpreting a question rather than gathering information. The preliminary questionnaires will be distributed and delivered fairly among the individuals chosen to get an overall perspective of participants. This action can help identify and show the reliability of the measurement by examining the dependability of Cronbach's Alpha value range using SPSS.

3.5 Data Analysis

The researcher will analyse the data using the Statistical Package for the Social Sciences (SPSS) to analyse and examine the study's results. The data analysis methods used are descriptive analysis and correlation analysis. Descriptive analytics analyses past and present information to detect patterns and connections (Cote, 2021). It is commonly referred to as the easiest type of statistical analysis since it simply shows trends and connections without delving further. Then, correlation analysis is an analysis tool for illustrating the close connection of one connected variable to another (Senthilnathan, 2019).

Through SPSS, the researcher will apply the descriptive analysis test to determine the first research

objective: to identify the employee turnover intention level among X bakery company’s production employees. In addition, the researcher uses correlation analysis to evaluate the second research objective, which is to investigate the relationships between job stress, job satisfaction, career development, and employee turnover intention among X bakery company’s production employees.

Table 1 *Research Objectives and Method of Analysis*

Research Objectives	Method of Analysis
To identify the employee turnover intention level among X bakery company’s production employees.	Descriptive Analysis - Frequency - Percentage - Mean Score - Standard Deviation
To investigate the relationships between job stress, job satisfaction, career development, and employee turnover intention among Mighty White’s employees.	Correlation Analysis

4. Results and Discussion

This section provides an overview of the data collected from respondents and analysed using descriptive analysis of variables and respondent characteristics. The evaluation and selection of the data, along with the validation of the tools used in the questionnaires, are also detailed. 169 survey questionnaires were distributed among production employees at X bakery company, and 103 responses were successfully collected. The respondents' response rate is 61%. The data obtained were analysed to address two primary objectives. First, the demographic information of the respondents was examined and summarised. Second, the factors influencing turnover intention among production employees at X bakery company were identified. Subsequently, reliability and normality tests were conducted to assess and refine the data. Hypotheses were tested to analyse the relationships between independent and dependent variables through descriptive and correlation analyses. Data analysis was performed using IBM Statistical Package for the Social Sciences (SPSS) software, Version 27, to ensure a thorough and accurate evaluation.

4.1 Demographics of Respondents

The data collected from demographics was 100% valid, and there were no missing values. In terms of age, the majority are between 26-35 years (53.4%), followed by those aged 18-25 years (30.1%), while smaller proportions fall within the 36-45 years (10.7%) and 46-55 years (5.8%) age groups. The workforce is predominantly male (89.3%), with females constituting only 10.7%. Race distribution indicates that Malay respondents form the largest group (70.9%), followed by Chinese (14.6%), foreigners (13.6%), and Indians (1.0%). Most respondents are based in the Production Department (69.9%), with smaller groups in the Engineering (11.7%), Warehouse (10.7%), and QA/QC (7.8%) departments. The Operator position is the most common role (54.4%), followed by Technicians (11.7%), Supervisors (9.7%), and Warehouse Operators (10.7%), with other roles such as QC (3.9%), Production Planner (3.9%), QA (2.9%), and Production Officer (2.9%) representing smaller proportions. In terms of years of service, 43.7% of respondents have 1-3 years of service, followed by those with 4-6 years (39.8%), 7-10 years (13.6%), less than one year (1.9%), and more than ten years (1.0%). Finally, the majority earn a monthly income of RM 2,000–RM 3,000 (74.8%), with smaller groups earning RM 3,001–RM 4,000 (17.5%), RM 4,001–RM 5,000 (5.8%), and less than RM 2,000 (1.9%). In short, this data illustrates the distribution of X bakery company production employees across various categories: age, gender, race, job department, job position, year of service and monthly income.

Table 2 *Respondents demographic profiles*

Item	Description	Frequency	Percentage (%)
Age	18-25 years	31	30.1
	26-35 years	55	53.4
	36-45 years	11	10.7
	46-55 years	6	5.8
Gender	Male	92	89.3
	Female	11	10.7
Race	Malay	73	70.9
	Chinese	15	14.6
	Indian	1	1.0

Job Department	Foreigner	14	13.6
	Production Department	72	69.9
	Engineering Department	12	11.7
	QAQC Department	8	7.8
Job Position	Warehouse Department	11	10.7
	Operator	56	54.4
	Supervisor	10	9.7
	Technician	12	11.7
	QC	4	3.9
	QA	3	2.9
	Warehouse Operator	11	10.7
	Production Planner	4	3.9
	Production Officer	3	2.9
	Year of Service	Less than one year	2
1-3 years		45	43.7
4-6 years		41	39.8
7-10 years		14	13.6
More than ten years		1	1.0
Monthly Income	Less than RM 2,000	2	1.9
	RM 2,000 – RM 3,000	77	74.8
	RM 3,001 – RM 4,000	18	17.5
	RM 4,001 – RM 5,000	6	5.8

4.2 Descriptive Analysis

Respondents were required to respond to each survey question by assigning a score on a scale of 1 to 5, reflecting their personal opinions. The responses were analysed and computed using SPSS to calculate the mean score, representing the average response for each item. The computed mean scores were further categorised into levels based on their range, estimating the degree of opinion. The level of mean scores on the Five-Point Likert Scale is established by Abu-Baker *et al.* (2019), as shown in Table 3. A mean score between 4.21 and 5.00 is classified as "Very High," while scores between 3.41 and 4.20 are categorised as "High." Mean scores ranging from 2.61 to 3.40 are labelled as "Average," those between 1.81 and 2.60 as "Low," and mean scores between 1.00 and 1.80 are considered "Very Low."

Table 3 Level of Mean Scores

Mean Scores	Degree of Estimation
1.00 – 1.80	Very Low
1.81 – 2.60	Low
2.61 – 3.40	Average
3.41 – 4.20	High
4.21 – 5.00	Very High

Table 4 illustrates the descriptive analysis for the variables under study, namely job stress (JS), job satisfaction (JA), career development (CD), and turnover intention (TI), providing insights into the respondents' responses. For job stress, all 103 responses were valid, with no missing data. The scores ranged from a minimum of 2.00 to a maximum of 5.00, with a mean score of 4.5170 and a standard deviation of 0.48666, indicating that respondents generally experienced very high levels of job stress.

Similarly, all 103 responses were valid and no missing data for job satisfaction. The scores ranged from a minimum of 2.25 to a maximum of 5.00, and the mean score was 4.6092 and the standard deviation of 0.44786, indicating that most respondents reported a high degree of satisfaction with their jobs. For career development, the data revealed valid responses from all 103 participants. The scores ranged from a minimum of 2.50 to a maximum of 5.00, with a mean score of 4.4175 and a standard deviation of 0.46625. This shows that respondents generally perceived career development opportunities positively. Lastly, 103 valid responses were included for turnover intention without missing data. The scores ranged from a minimum of 2.00 to a maximum of 5.00, with a mean of 4.3762 and a standard deviation of 0.53191, indicating a relatively high level of turnover intention among participants. In summary, the data reveals consistent patterns of high scores across all four variables, highlighting significant trends in their experiences and perceptions.

Table 4 Descriptive analysis

Descriptive Analysis						
Job Stress (JS)	N		Minimum	Maximum	Mean	Standard Deviation
	Valid	Missing				
	103	0	2.00	5.00	4.5170	0.48666
Job Satisfaction (JA)	N		Minimum	Maximum	Mean	Standard Deviation
	Valid	Missing				
	103	0	2.25	5.00	4.6092	0.44786
Career Development (CD)	N		Minimum	Maximum	Mean	Standard Deviation
	Valid	Missing				
	103	0	2.50	5.00	4.4175	0.46625
Turnover Intention (TI)	N		Minimum	Maximum	Mean	Standard Deviation
	Valid	Missing				
	103	0	2.00	5.00	4.3762	0.53191

The first research objective was to determine the level of employee turnover intention among production employees at X bakery company. Table 4.9 highlights the distribution of turnover intention levels, categorised into four ranges: “Low”, “Average”, “High”, and “Very High”, based on mean scores. Table 4.9 reveals that a significant majority of employees (70.9%, n = 73) reported a “Very High” level of turnover intention, indicating that most production employees are considering leaving their current roles. This finding points to a critical organisational issue, as a high percentage reflects unmet employee needs. Additionally, 26.2% (n = 27) of employees reported a “High” level of turnover intention, further emphasising a concerning trend. Combining these two categories accounts for nearly all respondents (97.1%, n = 100), showing that most of the workforce is experiencing varying degrees of intent to leave the organisation. Conversely, a very small percentage of employees reported “Low” (1.0%, n = 1) or “Average” (1.9%, n = 2) turnover intention. This indicates that only a minimal portion of the workforce is either content or uncertain about leaving their current roles.

The descriptive analysis indicates that the workforce is predominantly young, with 53.4% aged 26- 35 years and 30.1% aged 18-25 years. This aligns with research suggesting that younger employees are more likely to seek external opportunities to advance their careers (Imran *et al.*, 2020). Additionally, the high proportion of male employees (89.3%) in operational roles, such as operators (54.4%), reflects a demographic often associated with demanding and repetitive work environments, which may contribute to high job stress. Most respondents (74.8%) earn a monthly income of RM 2,000–RM 3,000, which, while common in production roles, may not meet employees' expectations for financial security, especially amidst rising living costs in Malaysia (Colette, 2024). Furthermore, the high representation of employees in the Production Department (69.9%) suggests a potential concentration of job demands and limited upward mobility, which could amplify dissatisfaction and turnover intention.

These results underscore a pressing issue for X bakery company's management to address. The high levels of turnover intention may stem from factors such as stress from leadership practices, inadequate compensation, poor work-life balance or external work opportunities. Further investigation into these potential causes is necessary to develop targeted interventions to improve employee retention. By addressing the underlying factors contributing to turnover intention, the organisation can work towards fostering a more supportive and engaging work environment, ultimately reducing the risk of losing valuable talent.

4.3 Reliability Analysis

Table 5 shows that the reliability analysis was conducted to assess the internal consistency of the measurement scales used for the four variables in the study: job stress, job satisfaction, career development, and turnover intention. Cronbach’s Alpha was used as the reliability coefficient, with all variables demonstrating acceptable reliability levels. For job stress, the scale consisted of five items and yielded a Cronbach’s Alpha of 0.720, indicating an acceptable level of reliability. Similarly, the job satisfaction scale consisting of five items showed a higher Cronbach’s Alpha of 0.819, reflecting good reliability. The career development scale, which included five items, had a Cronbach’s Alpha of 0.717, slightly lower than the other variables but still acceptable reliability. Lastly, the turnover intention scale demonstrated good reliability, with a Cronbach’s Alpha of 0.800 across its five items. In summary, the reliability analysis confirms that the measurement instruments used in this study are consistent and reliable for evaluating the variables, ensuring the credibility and dependability of the results.

Table 5 Reliability analysis

Reliability Analysis	Total number of items	Cronbach's Alpha	Number of respondents
Job Stress (JS)	5	0.720	103
Job Satisfaction (JA)	5	0.819	103
Career Development (CD)	5	0.717	103
Turnover Intention (TI)	5	0.800	103

4.4 Normality Test

Table 6 shows that the data distribution for independent and dependent variables is not normal because the significance for all variables is < 0.001 . As referred to in the Kolmogorov-Smirnov and Shapiro-Wilk normality test, the significance (p-value) is lower than 0.05, which is not normal.

Table 6 Normality test

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Job Stress	0.179	103	< 0.001	0.819	103	< 0.001
Job Satisfaction	0.216	103	< 0.001	0.795	103	< 0.001
Career Development	0.153	103	< 0.001	0.906	103	< 0.001
Turnover Intention	0.194	103	< 0.001	0.870	103	< 0.001

4.5 Correlation Analysis

Because of the non-normal distribution of the data, Spearman's rho correlation coefficient was utilised for the Correlation Analysis. The IBM SPSS software was applied to examine the relationship between independent and dependent variables and compute Spearman's rho correlation coefficient. According to Schober *et al.* (2018), the value of Spearman's rho ranges from -1 to +1, with higher absolute values indicating a stronger relationship between the variables under the research. Spearman's correlation coefficients are interpreted based on Schober *et al.* (2018), where values between 0.00 and 0.10 indicate "Negligible Correlation", 0.10 to 0.39 suggest "Weak Correlation", 0.40 to 0.69 indicate "Moderate Correlation", 0.70 to 0.89 suggest "Strong Correlation", and 0.90 to 1.00 reflect "Very Strong Correlation", as presented in Table 4.7.

Table 7 Spearman's Correlation Coefficient interpretation (Schober *et al.*, 2018)

Spearman's Correlation Coefficient, r	Interpretation
0.00 - 0.10	Negligible Correlation
0.10 - 0.39	Weak Correlation
0.40 - 0.69	Moderate Correlation
0.70 - 0.89	Strong Correlation
0.90 - 1.00	Very Strong Correlation

The Spearman's correlation analysis was conducted to examine the relationships between Job Stress, Job Satisfaction, and Career Development with Turnover Intention. The analysis showed a weak positive correlation between Job Stress and Turnover Intention ($r_s = 0.228$ and $p < 0.05$). This suggests that as employees experience higher levels of job stress, there is a small but significant increase in their turnover intention. Conversely, a weak positive correlation was observed between Job Satisfaction and Turnover Intention ($r_s = 0.212$ and $p < 0.05$). This indicates a slight, unexpected association where higher job satisfaction may still coincide with turnover intention, possibly reflecting complex workplace dynamics.

Finally, Career Development demonstrated a weak positive correlation with Turnover Intention ($r_s = 0.345$ and $p < 0.01$). This suggests that employees perceiving opportunities for career development may also exhibit increased turnover intentions, potentially due to aspirations for external career progression. These findings highlight nuanced relationships between workplace variables and emphasize the need for further exploration of factors influencing employee retention.

Table 8 Spearman's correlation analysis

Spearman's Correlation Analysis		Turnover Intention
Job Stress	Spearman's Correlation Coefficient	0.228*
	Sig. (2-tailed)	0.020
	N	103
Job Satisfaction	Spearman's Correlation Coefficient	0.212*
	Sig. (2-tailed)	0.031
	N	103
Career Development	Spearman's Correlation Coefficient	0.345**
	Sig. (2-tailed)	< 0.001
	N	103

Based on the findings derived from Spearman's correlation analysis, a significant positive correlation was observed between job stress and employee turnover intention ($r = 0.228, p = 0.020$). This indicates that higher levels of job stress are associated with increased turnover intentions among production employees. Hypothesis 1 (H1) is accepted, as the results align with the hypothesis that job stress positively and significantly impacts turnover intention. These findings are consistent with the study by Naiemah *et al.* (2021), who emphasised that excessive job stress undermines employees' mental well-being and motivates them to seek alternative employment opportunities.

Regarding job satisfaction, the analysis revealed a weak positive correlation ($r = 0.212, p = 0.031$) with employee turnover intention. While this finding is statistically significant, it contradicts the initial Hypothesis 2 (H2) that job satisfaction negatively affects turnover intention. As a result, H2 is rejected. This suggests that higher job satisfaction does not necessarily mitigate turnover intentions, possibly due to other overriding factors, such as workplace stress or external career opportunities. Similar patterns were reported by Nguyen *et al.* (2022), who noted that job satisfaction alone may not suffice to retain employees, especially in demanding work environments. For career development, the results show a weak positive and significant correlation ($r = 0.345, p < 0.001$) with employee turnover intention. Contrary to the original Hypothesis 3 (H3), which proposed a negative relationship, these findings suggest that enhanced career development opportunities may inadvertently increase turnover intentions as employees gain skills and confidence to pursue better external opportunities. Consequently, H3 is also rejected. This observation aligns with the research by Vizano *et al.* (2021), who found that while career development programs are intended to retain employees, they can sometimes have the opposite effect if employees perceive better prospects elsewhere.

Table 9 Results of the Hypotheses Testing with Correlation Analysis

Hypothesized Relationship	Correlation Coefficient	P value (Sig.)	Result
H1: Job stress positively and significantly impacts employee turnover intention.	0.228*	0.020	Hypothesis 1 is accepted
H2: Job satisfaction negatively and substantially affects employee turnover intention.	0.212*	0.031	Hypothesis 2 is rejected
H3: Career development negatively and significantly influences employee turnover intention.	0.345**	< 0.001	Hypothesis 3 is rejected

Table 10 presents the results for two primary research objectives related to turnover intention among X bakery company production employees. The first research objective was to determine the employee turnover intention level among production employees at X bakery company. The findings revealed a critical organisational challenge, as a significant majority of employees (70.9%, $n = 73$) reported a "Very High" level of turnover intention, while 26.2% ($n = 27$) reported a "High" level, collectively accounting for 97.1% of respondents. These results indicate that most employees are considering leaving their roles, reflecting unmet needs and organizational issues. Conversely, only 1.0% ($n = 1$) and 1.9% ($n = 2$) of respondents reported "Low" and "Average" levels of turnover intention, respectively, highlighting a minimal proportion of content or uncertain employees.

The second research objective was to investigate the relationships between job stress, job satisfaction, career development and employee turnover intentions among production employees at X bakery company. The findings revealed nuanced insights into workplace dynamics. Job stress exhibited a weak positive correlation

with turnover intention, indicating that increased stress levels among employees slightly heightened their likelihood of considering leaving the organisation. Similarly, job satisfaction and career development were also found to have weak positive correlations with turnover intention. This suggests that even higher job satisfaction or perceived opportunities for career development might coexist with turnover intention, possibly due to external career aspirations or complex workplace dynamics. These findings underscore the importance of targeted strategies to address these issues.

Table 10 Summary of Research Objectives' Results

Research Objectives	Results
To determine the employee turnover intention level among production employees at X bakery company.	The results gained from Chapter 4 showed that 97.1% of production employees at X bakery company reported "Very High" or "High" turnover intention levels. Only a small percentage (2.9%) reported "Low" or "Average" turnover intention levels.
To investigate the relationships between job stress, job satisfaction, career development, and employee turnover intentions among production employees at X bakery company.	The results gained from Chapter 4 have presented that job stress positively influences turnover intention since the significant value obtained is less than 0.05, with a value of $0.02 < 0.05$. Job satisfaction has a weak positive correlation with turnover intention and the significant value is less than 0.05, with a value of $0.03 < 0.05$. Career development represented a weak positive and significant correlation with employee turnover intention because the significance is less than 0.01, with a value of $0.001 < 0.01$.

5. Conclusion

This study provides valuable insights into turnover intention among X bakery company production employees. The first research objective revealed that 97.1% of employees reported "Very High" or "High" turnover intention levels, underscoring a significant organizational issue requiring urgent attention. The second research objective demonstrated weak positive correlations between job stress, job satisfaction, and career development with turnover intention, highlighting the need for targeted interventions. By addressing these workplace dynamics through stress management, job satisfaction enhancement and structured career development opportunities, X bakery company can reduce turnover risks and promote employee retention. These findings emphasize the importance of continuous efforts to create a supportive workplace culture, ensuring the organization's long-term success and the well-being of its employees.

Acknowledgement

The authors would also like to thank the Faculty of Technology Management and Business (FPTP), Universiti Tun Hussein Onn Malaysia for its support to publish this article.

Conflict of Interest

Authors declare that there is no conflict of interests regarding the publication of the paper.

Author Contribution

*The authors confirm contribution to the paper as follows: **study conception and design:** Low Xing Yi, Siti Anisah Atan; **data collection:** Low Xing Yi; **analysis and interpretation of results:** Low Xing Yi, Siti Anisah Atan; **draft manuscript preparation:** Low Xing Yi, Siti Anisah Atan. All authors reviewed the results and approved the final version of the manuscript.*

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