Factors affecting the turnover intention among employees in Penang manufacturing industry

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Abstract

Purpose: The objective of the present study is to examine how work engagement, job demands and organizational commitment affect turnover intention among employees in Penang manufacturing industry.

Research Methodology: Quantitative approach was used in this study by distributing the online questionnaire to collect data from a sample of 75 employees drawn from manufacturing companies in Penang, Malaysia.

Results: The present study found out that work engagement and job demands have no significant relationship with turnover intention. Besides, the present study indicates that organizational commitment is negatively related to turnover intention.

Limitations: In this research, only 75 employees from Penang manufacturing industry had participated in the study. Since this small number of employees could not represent the entire Malaysia population, future research should expand to involve a bigger sample of employees from Malaysia manufacturing industry to collect more reliable results.

Contribution: The findings of this research provide benefits to the Federation of Malaysian Manufacturing (FFM) and manufacturing companies as they can understand the devastating effects of turnover and be equipped with strategies to decrease the turnover rate.

Keywords: Employee, Job demands, Manufacturing industry, Organizational commitment, Turnover intention, Work engagement

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1. Introduction

The purpose of the present study is to identify the factors that affect the turnover intention among employees from Penang manufacturing industry. The manufacturing industry is very important and often acts as a crucial role in economy because of its contribution on economic growth in developing countries (Haruguchi, Charles & Smeets, 2017). Herman (2016) has stated that manufacturing industry has created the basis of many national economies as manufacturing industry has provided high share of total output, employment, and revenue, that make it a very important factor in creating a sustainable economic growth. Besides, Kurniati and Yanfitri (2010) has mentioned that manufacturing industry has made a significant contribution to the economy which makes it an inseparable factor in the economic cycle. Kaldor (1969) also stated manufacturing industry is important in economic growth and characterized as the main engine of fast growth.
Turnover intention can be referred to the likeliness of an employee to leave his or her current job position (Ngamkroeckjoti, Ounprechavanit & Kijboonchoo, 2012). Yankeelov, Barbee, Sullivan and Antle (2008) has also stated that turnover intention can be explained as a situation where an employee leaves the organization due to several reasons. According to Kumar (2011) and Hassan (2014), turnover is a crucial issue for human resource department in every sector of the economy as it could affect the productivity and service quality. According to Holtom, Mitchell, Lee and Eberly (2008), when an employee decides to leave the organization, it would affect the company’s cost and result in the loss of the company’s competitive advantages. A few researchers stated that company could experience a poor performance in terms of profit due to the high turnover rate (Barrows, 1990; Hogan, 1992; Wasmuth & Davis, 1993). Therefore, many researchers such as scholars, academics and managers have focused on the turnover intention among employees as an important concern due to its depressing impact (Mamun & Hasan, 2017).

According to Bares (2017), the turnover rate of manufacturing industry around the world in 2016 was 16%, and this is the fifth highest among all industries. Munir and Tobi (2020) also stated that the turnover intention of employees has become a serious issue in developing countries including Malaysia. They further added that manufacturing industry shows a higher turnover intention compared to other sectors due to its working environment. Moreover, prior studies have stated that Malaysia manufacturing industry has suffered a high turnover rate (Chin, 2018; Zaiuddin, Mad Nor & Johari, 2015). This statement is further supported by Othman, Alias, Ariadi, Abdullah, Koe, Ismail and Ridzuan (2017) who stated that Malaysia manufacturing industry is struggling to reduce the turnover rate among employee.

In the present study, a total of three potential factors will be used to examine its relationship with the turnover intention. The potential factors that could affect the turnover intention are work engagement (Lin & Liu, 2017), job demands (Bester, 2012) and organizational commitment (Jehanzeb, Rasheed & Rasheed, 2013). Therefore, the present research focused on the effects of work engagement, job demands, and organizational commitment on turnover intention among employees from Penang manufacturing industry.

2. Literature review and hypotheses development

2.1. Turnover intention

According to Ngamkroeckjoti, Ounprechavanit and Kijboonchoo (2012), turnover intention is the likeliness of an employee’s intention to leave the current job Chang, Black and William (2013), further explained that turnover intention is the willingness of an employee to leave his or her current organization. Turnover intention could occur when there are lack of motivation, promotion and performance in the workplace, which results in the employee to quit the job and leave the organization (Bhayo, Shah & Chachar, 2017).

Moreover, turnover can be separated into two categories, voluntary and involuntary turnover (Alias, Rohmanan, Ismail, Koe & Othman, 2018). According to Bebe (2016), voluntary turnover is the situation that an employee quits the organization intentionally while involuntary turnover is the situation that an employee quit the company unwillingly and was forced to resign from his or her position due to several factors such as poor performance.

2.2. Work engagement

According to Schaufeli, Bakker and Salanova (2006), work engagement is a positive working state that consists of vigor, dedication and absorption. Vigor can be defined as the high level of energy in work; dedication is referred as the high involvement of an individual in work; and absorption can be comprehended as the state of an individual being fully focused on work (Ahmad, Saffardin & Teoh, 2020). The presence of these three factors could create engaged employees who possess high levels of energy and are fully immersed in their work. Shropshire and Kadlec (2013) defined work engagement as the positive relationship between one’s energy and his or her psychological attachment towards the performance of the related job. Kunte and Rungruang (2019) further explained that work engagement
is very important for organizations as employers need to identify the meaning of aspects of work so that they could create a more energized and engaged working environment for their employees.

2.3. Job demands
Although majority of the job stress models indicated that job demands may bring adverse implication (Karasek, 1979; Bakker & Demorouti, 2007), other research studies have found out that certain job demands could bring positive results such as motivation (LePine, LePine & Jackson, 2014). Job demands can be further categorized into challenge and hindrance demands (Cavanaugh, Boswell, Roehling & Bondreau, 2000). Challenge demands are referred to the job demands that could benefit the employees while hindrance demands are referred to the job demands that could harm the employees (Teoh & Kee, 2018; Teoh & Kee, 2019; Teoh & Kee, 2020). However, the general job demands, such as role conflict, role overload and job ambiguity (De Jong & Janssen, 2005; Hardy & West, 2000), were focused in the study to determine its impact on the turnover intention.

2.4. Organizational commitment
Meyer, Allen and Smith (1993) defined organizational commitment as an individual’s psychological state that connects employees to their organization. Porter, Steers, Mowday and Boulian (1974) also stated that organizational commitment is the employee’s commitment to the organization. According to Meyer and Allen (1991), organizational commitment can be divided into three categories, that are affective commitment, continuance commitment and normative commitment. Affective commitment can be understood as an employee’s decision to stay in the organization due to their own willingness; continuance commitment is defined as the employee’s decision to stay in the organization due to financial support from the organization; and normative commitment refers to the employee’s decision to remain in the organization as he or she feels obligated to do so because of the support provided by the organization.

2.5. Relationship between work engagement and turnover intention
According to Lin and Liu (2017), work engagement has a negative relationship with turnover intention. Abraham (2012) also stated that work engagement can be used to predict turnover intention. When an employee is fully immersed in his or her work, they would not leave their current job (Khan, 1990). This statement is supported by Saks (2006) who stated that when an employee is occupied with positive energy and fully immersed in his or her work, he or she tends to have no time and space to think of negative thought, such as having thought to quit the organization. Freene and Tiernan (2006) further explained that when employees know what they need to do in work, they would tend to have a high satisfaction level and thus reducing their turnover intention. Based on the discussion above, the following hypothesis is formed:
H1: Work engagement has a significant negative relationship with turnover intention.

2.6. Relationship between job demands and turnover intention
According to previous researches, job demands have a positive relationship with turnover intention (Asiwe, Hill & Jorgensen, 2015; Houkes, Janssen, De Jonge & Bakker, 2003). When the workload of employees is overloaded and they are not capable of handling the tasks, it would lead to job stress (French & Caplan, 1972) and followed by turnover intention (Houkes et al., 2003). Moreover, Maslach, Jackson and Leiter (1996) have indicated that during the presence of specific job demands such as work overloaded and absence of specific job resources, it would lead to burnout and result in employee’s turnover. Furthermore, according to Leo, González-Ponce, Sánchez-Miguel, Ivarsson and García-Calvo (2015), one of the job demands, that is role ambiguity, could result in low level of confidence among employees and lead to high turnover. Meanwhile, role ambiguity can also cause high turnover intention among employees when they are unsure about the expectation of supervisors in the organization. As a result, the following hypothesis is postulated:
H2: Job demands have a significant positive relationship with turnover intention.
2.7. Relationship between organizational commitment and turnover intention

Previous research had found out that organizational commitment has a negative relationship with turnover intention (Jehanzeb, Rasheed & Rasheed, 2013). According to Tnay, Othman, Siong and Lim (2013), when the employees’ values are similar with the organization’s goals, it would result in their willingness to stay in the organization instead of leaving. Smith (1996) has mentioned that when an employee is satisfied with the organization, he or she tends to be more committed towards the organization. On the contrary, employees who are dissatisfied with the organization, they will tend to have the turnover intention by having plan to leave their current organization. Meyer and Allen (1997) further explained that when employees are committed towards the organization, they are willing to contribute beyond their minimum duties at work and increase the likeliness to stay in the organization. Based on the discussions above, the following hypothesis is forwarded:

H3: Organizational commitment has a significant negative relationship with turnover intention.

2.8. Research framework

Figure 1 indicates the research framework used in the present study. The independent variables include work engagement, job demands and organizational commitment whereas the dependent variable is turnover intention.

![Figure 1: Research Framework](image)

3. Research methodology

3.1. Study design

The present study uses quantitative research method to examine the relationship between the independent variables and dependent variable. According to Aliaga and Gunderon (2002), quantitative research method is a research method that gathers information in numerical form and analyze it with statistical methods. Furthermore, Williams (2007) had stated that the steps in conducting a quantitative research are:

1. Develop a problem statement
2. Create research hypotheses
3. Conduct a literature review
4. Execute a quantitative analysis of data

The steps in conducting a quantitative research are aligned with the present study, therefore, quantitative research method is being adapted to examine the relationship of work engagement, job demands, organizational commitment and turnover intention.

3.2. Sample

The targeted population in this research includes all employees who are working in Penang manufacturing industry. In the present study, only full-time employees from Penang manufacturing industry who have been working more than one year were chosen to take part in this research. According to Emiroglu, Akova and Tanriverdi (2015), employees who have lower working experience, such as...
The research method used in the present study is purposive sampling. After one week, the respondents in this research, measured with a 5-point Likert scale, ranging from 1(Strongly Disagree) to 5(Strongly Agree). For job demands, the measurement by Martin, Salanova and Peiro (2007) was used and there are total of 7 items. The measurement for job demands was measured with a 5-point Likert scale, ranging from 1(Strongly Disagree) to 5(Strongly Agree). Lastly, the measurement by Mobley, Horner and Hollingsworth (1978) was used to measure turnover intention and there are total of 3 items. The measurement for turnover intention was measured with a 5-point Likert scale, ranging from 1(Strongly Disagree) to 5(Strongly Agree).

3.3. Data collection method
Primary data was obtained through the use of the online questionnaire by distributing it to full-time employees who have been working more than one year in Penang manufacturing industry. Firstly, an online questionnaire based on all variables is created by using Google Form. Next, the present researchers shared the questionnaire link in various social media platform including Facebook, Instagram and Telegram. After one week, the present researchers checked the progress of the respondents. Since, the responses are still not satisfactory, the present researchers contacted their network to share the online questionnaire link again. Besides, the present researchers also obtained the email addresses of Penang manufacturing companies and sent them a cover letter to request for their participation in the survey. After another one week, the present researchers checked and recorded the submitted responses. At the end of two weeks, the researcher collected 75 responses and the data collection period ended.

3.4. Research instruments
The research questionnaire consists of a cover letter and 5 sections. Section A measures work engagement in the workplace, Section B measures job demands in the workplace, Section C measures organizational commitment in the workplace, Section D measures turnover intention in the workplace and Section E collects the demographic data of respondents.

To measure work engagement, the measurement developed by Schaufeli, Shimazu, Hakanen, Salanova and De Witte (2017) was used and there are total of 3 items. The measurement for work engagement was measured with a 7-point Likert scale, ranging from 1(Never) to 7(Every Day). For job demands, the measurement by Martin, Salanova and Peiro (2007) was used and there are total of 7 items. The measurement for job demands was measured with a 5-point Likert scale, ranging from 1(Strongly Disagree) to 5(A Great Deal). The measurement by Mowday, Steers and Porter (1979) was used to measure organizational commitment and there are total of 15 items. The measurement for organizational commitment was measured with a 5-point Likert scale, ranging from 1(Strongly Disagree) to 5(Strongly Agree). Lastly, the measurement by Mobley, Horner and Hollingsworth (1978) was used to measure turnover intention and there are total of 3 items. The measurement for turnover intention was measured with a 5-point Likert scale, ranging from 1(Strongly Disagree) to 5(Strongly Agree).
Hence, the summary of all research instruments used in the present study is presented at Table 1.

Table 1
Research Instrument

| Variables                  | Items | Cronbach’s alpha | Sources                                      |
|----------------------------|-------|------------------|----------------------------------------------|
| Turnover Intention         | 3     | 0.90             | Mobley, Horner and Hollingsworth (1978)      |
| Work Engagement            | 3     | 0.95             | Schaufeli, Shimazu, Hakanen, Salanova and De Witte (2017) |
| Job Demands                | 7     | 0.90             | Martin, Salanova and Peiro (2007)            |
| Organizational Commitment  | 15    | 0.73             | Mowday, Steers and Porter (1979)             |

4. Results and discussions
4.1. Result
The respondents in this study are full-time employees from Penang manufacturing industry who have been working for more than one year. A total of 200 questionnaires was distributed and 75 questionnaires were collected, which indicates a 37.5% of response rate. Table 2 shows the demographic data of respondents, where the majority of respondents were female (54.7%), aged from 26 – 35 years old (61.3%), were working at least 1 year to 5 years (58.7%), and were Diploma graduates (73.3%).

Table 2
Respondents’ Profile

| Demographic variable     | Category            | Frequency | Percentage |
|--------------------------|---------------------|-----------|------------|
| Gender                   | Male                | 34        | 45.3       |
|                          | Female              | 41        | 54.7       |
| Age                      | 18 – 25 years old   | 7         | 9.3        |
|                          | 26 – 35 years old   | 46        | 61.3       |
|                          | 36 – 45 years old   | 20        | 26.7       |
|                          | 46 – 55 years old   | 1         | 1.3        |
|                          | 56 years old and above | 1    | 1.3        |
| Ethnic                   | Malay               | 1         | 1.3        |
|                          | Chinese             | 72        | 96.0       |
|                          | Indian              | 0         | 0          |
|                          | Other               | 2         | 2.7        |
| Marital Status           | Single              | 43        | 57.3       |
|                          | Married             | 31        | 41.3       |
|                          | Divorced            | 1         | 1.3        |
|                          | Widowed             | 0         | 0          |
|                          | Separated           | 0         | 0          |
| Experience               | 1 – 5 years         | 44        | 58.7       |
|                          | 6 – 10 years        | 23        | 30.7       |
|                          | 11 – 15 years       | 3         | 4.0        |
|                          | 16 – 20 years       | 3         | 4.0        |
|                          | 21 years and above  | 2         | 2.7        |
| Education Level          | SPM                 | 2         | 2.7        |
|                          | STPM                | 0         | 0          |
|                          | A-level/Foundation/Matriculation | 5 | 6.7 |
|                          | Diploma             | 55        | 73.3       |
|                          | Bachelor’s Degree   | 10        | 13.3       |
|                          | Master’s Degree     | 3         | 4.0        |
|                          | Doctorate’s Degree  | 0         | 0          |
Table 3 indicates the measurement model of the present research. As shown in Table 3, the AVEs are all greater than 0.5 and the CRs are all greater than 0.7. The loadings were also acceptable with only six loadings of organizational commitment lower than 0.708 (Hair, Risher, Sarstedt and Ringle, 2019).

Meanwhile, the HTMT values should be ≤ 0.85 for the stricter criterion, and ≤ 0.90 for the more lenient criterion. As indicated in Table 4, all HTMT values were lesser than 0.85. Therefore, it can be concluded that respondents are aware that the 4 constructs were different. Based on these results, it is shown that the measurement models are both valid and reliable.

Table 3
Measurement Model

| Constructs             | Items  | Loadings | AVE  | CR   |
|------------------------|--------|----------|------|------|
| Work Engagement        | WE1    | 0.844    | 0.850| 0.944|
|                        | WE2    | 0.959    |      |      |
|                        | WE3    | 0.959    |      |      |
| Job Demands            | JD1    | 0.831    | 0.564| 0.899|
|                        | JD2    | 0.529    |      |      |
|                        | JD3    | 0.849    |      |      |
|                        | JD4    | 0.763    |      |      |
|                        | JD5    | 0.842    |      |      |
|                        | JD6    | 0.726    |      |      |
|                        | JD7    | 0.663    |      |      |
| Organizational Commitment | OC1   | 0.764    | 0.653| 0.943|
|                        | OC2    | 0.857    |      |      |
|                        | OC4    | 0.560    |      |      |
|                        | OC5    | 0.785    |      |      |
|                        | OC6    | 0.903    |      |      |
|                        | OC8    | 0.911    |      |      |
|                        | OC10   | 0.897    |      |      |
|                        | OC13   | 0.724    |      |      |
|                        | OC14   | 0.810    |      |      |
| Turnover Intention     | TI1    | 0.923    | 0.878| 0.956|
|                        | TI2    | 0.952    |      |      |
|                        | TI3    | 0.936    |      |      |

Note: OC3, OC7, OC9, OC11, OC12, OC15 were deleted due to low loadings

Table 4
Discriminant Validity (HTMT)

| Variable                | 1    | 2    | 3    | 4    |
|-------------------------|------|------|------|------|
| 1. Job Demands          |      |      |      |      |
| 2. Organizational Commitment | 0.682|      |      |      |
| 3. Turnover Intention   | 0.262| 0.468|      |      |
| 4. Work Engagement      | 0.406| 0.431| 0.225|      |

Firstly, the effect of the 3 predictors on turnover intention was examined and showed that the R square as 0.224, which indicates that all the 3 predictors explained 22.4% of the variance in turnover intention. As shown in Table 5, it is found that work engagements ($\beta = -0.033, p > 0.5$) and job demands ($\beta = -0.020, p > 0.5$) are not significantly related to turnover intention in this present study. Thus, H1 and H2 were not supported. However, organizational commitment ($\beta = -0.471, p < 0.5$) was shown to have a significant positive relationship with turnover intention in the present study. Therefore, H3 was supported.
4.2. Discussion
The purpose of the present study is to examine the effects of work engagement, job demands and organizational commitment on turnover intention. The result of this study indicated that work engagement and turnover intention did not have a significant relationship. This result can be explained where the high levels of work engagement among employees projected no effect on the turnover intention. However, this result is inconsistent with the previous study which stated that work engagement has a negative relationship with turnover intention (Lin & Liu, 2017). Thus, H1 is not supported. This phenomenon can be explained as over half of the respondents in the present study are having 1 to 5 years of working experience (58.7%) and it was once claimed by Emiroglu et al. (2015) that employees with lower working experience tend to experience turnover intention. As a result, work engagement does not play its role on turnover intention since the respondents in the present study are more towards lower working experience category. Therefore, work engagement has no effect on turnover intention of employees in Penang manufacturing industry.

In this research, job demands are not significantly related to turnover intention. The result explains that when the workload of an employee is high, it would not cause the increment of turnover intention among employees. Thus, H2 was not supported. The result of the present study is different with the previous studies where job demands are positively related to turnover intention (Asiwe et al., 2015; Houkes et al., 2003; Maslach et al., 1996). This occurrence can be understood from the perspective of teaching experience of the respondents in the present study. As discussed earlier, over half of the respondents are having 1 to 5 years of working experiences and undoubtedly, they tend to experience turnover intention easily regardless the levels of job demands. Therefore, job demands are not significantly related to turnover intention among employees in Penang manufacturing industry.

Lastly, the result of this research indicated that organizational commitment is negatively related to turnover intention. Thus, H3 was supported. The result of this study is aligned with previous study that organizational commitment has a negative significant relationship with turnover intention (Jehanzeb, Rasheed & Rasheed, 2013). According to Tnay et al. (2013), employees tend to remain in the organization when their perceived values are aligned with the organization’s goals and objectives. Lumley, Coetzee, Tladinyane and Ferreira (2011) further stated that when employees are having a decent relationship with the organization and a positive attitude towards the goals and values of the organization, they will tend to remain in the organization which they are currently working with. Besides, a number of researchers have also stated that when employees are satisfied and committed to their jobs, they will be less likely to resign from their job (DiPietro & Bufquin, 2017; Kim & Kao, 2014; Matz, Wells, Minor, & Angel, 2013; Wang, Tsai, Lei, & Lai, 2016). Moreover, when the employees are committed to the organization, they tend to contribute more than what they need to do at work, thus this increases their willingness to stay in the company (Meyer and Allen, 1997). Therefore, a high level of organizational commitment among Penang manufacturing industry employees can reduce their turnover intention.

5. Conclusion
The present study is very important as it examines the factors that affect the turnover intention in Penang manufacturing industry. In this present study, it was found that work engagement and job demands are not significantly related to turnover intention, which are different from the previous studies. However,
organizational commitment was found to have a significant negative relationship with turnover intention. Thus, the management of the manufacturing companies should be aware in creating the working cultures which could fit well on employees with lower working experience so that they can be engaged with their work, and subsequently making them to have lower turnover intention. On the other hand, efforts can be focused to increase the employees’ commitment towards the organization in order to avoid the experience of high turnover intention.

**Limitation and study forward**

*Managerial implication*

The findings of this research are significant because the value of organizational commitment is important to reduce the turnover intention among employees from Penang manufacturing industry. The result of this research could be beneficial to the Federation of Malaysian Manufacturers (FFM) and all the manufacturing companies in Malaysia as they could understand the nature and the factors which affect the turnover intention. Based on the findings in the present study, FFM and manufacturing companies in Malaysia could be equipped with strategies and planning to increase the employees’ intention to retain in the company by creating a suitable working environment and culture that promote for organizational commitment. By aligning the company’s goals together with the employees’ value, it will significantly increase the employees’ commitment towards the organization while reducing their likeliness to quit from their current serving organization.

*Limitation*

Although the result of the present study contributed to the existing literature, it is yet to be generalized to the entire population. The data collected in this present research is merely from Penang manufacturing industry with a sample size of 75. Therefore, the results of the present study could not represent the opinions of employees from the entire Malaysia manufacturing industry. Therefore, this research should expand to the entire Malaysia manufacturing industry in the future so as to obtain a more representative sample to study the turnover intention among employees.

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