
Predictors of turnover intention among multinational corporation employees

Wong Foong Yee, Siew Imm Ng* and
Pang Im Lim

School of Business and Economics,
Universiti Putra Malaysia,
43400 Serdang, Selangor, Malaysia
Email: fywong@upm.edu.my
Email: imm_ns@upm.edu.my
Email: pangim_0403@hotmail.com
*Corresponding author

Xin-Jean Lim

Faculty of Economics and Management,
Universiti Kebangsaan Malaysia,
43600 Bangi, Selangor, Malaysia
Email: lim.xinjean@yahoo.com

Abstract: The main objective of this study was to understand the impacts of job satisfaction, organisational commitment, job stress, and safety climate on turnover intention among Malaysian employees working in multinational corporations (MNCs). A total of 130 valid responses were collected from MNC employees through both online and offline surveys. The data was then analysed using partial least squares structural equation modelling (PLS-SEM). Notably, our findings showed that job satisfaction and organisational commitment are negatively related to turnover intention, while job stress is positively related to turnover intention. The outcomes of this study provide valuable insights to practitioners, particularly in reducing the turnover rate in MNCs.

Keywords: job satisfaction; job stress; organisational commitment; safety climate; turnover intention; multinational corporations; MNCs; partial least squares structural equation modelling; PLS-SEM.

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Biographical notes: Wong Foong Yee is a Senior Lecturer at the School of Business and Economics, Universiti Putra Malaysia. She teaches marketing, consumer behaviour and strategic management at the university. Her research interests are in the areas of consumer behaviour, firm management and marketing strategy. She has written numerous journal articles, cases, subject modules as well as book chapters in local and international publications.

Siew Imm Ng completed her PhD in Management from the University of Western Australia. She is currently an Associate Professor in the School of Business and Economics, Universiti Putra Malaysia. She has industry experience in the areas of human resource and export management with

internationalising Malaysian companies. She teaches business and management courses like principles of management, cross cultural management and business research methods. She has authored and co-authored many articles in refereed and professional journals, including *Tourism Management*, *International Marketing Review*, *Journal of Hospitality and Tourism Research* and *Journal of Air Transport Management*.

Pang Im Lim completed her Bachelor of Business Administration degree from the Universiti Putra Malaysia. Subsequently, she completed nutrition course from the Stanford School of Medicine as a certified nutrition consultant. She is currently working as a Senior HR Advisor in Shell Business Operation at Cyberjaya, Malaysia.

Xin-Jean Lim is a Senior Lecturer in Faculty of Economics and Management, Universiti Putra (Kebangsaan) Malaysia. She currently teaches data analysis in business research methods, principles of marketing and consumer behaviour. Her research interests include consumer behaviour, social media marketing, online marketing, customer relationship management and technology management. Her papers are published in *British Food Journal*, *Marketing Intelligence and Planning*, *Young Consumers*, *Asia Pacific Journal of Marketing and Logistics*, and *Journal of Retailing and Consumer Services*.

1 Introduction

A multinational corporation (MNC) is any company or group that derives at least a quarter of its receipts from operations outside its home country. Having played a crucial role in supporting the Malaysian economy, MNCs are anticipated to be the backbone of industrial development (Invest Byte, 2014). A survey conducted by Asia Business Outlook Survey (2013) ranked Malaysia at fourth place in Asia as an investment destination for a global MNC. In 2013, the Malaysian government mandated Invest KL Corporation Sdn Bhd to attract and facilitate large global MNCs' set up of their regional businesses as well as innovation and talent hubs in the country's capital of Kuala Lumpur. Through Invest KL, Malaysia has managed to attract a total investment of nearly RM 14 billion from 91 different MNCs (NST Business, 2020). According to the Senior Minister and Minister of International Trade and Industry, Datuk Seri Azmin Ali, these 91 MNCs have created more than 12,584 high-skill jobs in different regions (NST Business, 2020). Indeed, Prospect ASEAN's (2018) survey illustrated that Petrolim Nasional Berhad (Petronas), Shell Malaysia, Nestle Malaysia, AirAsia, IBM Malaysia, Sime Darby, Hewlett-Packard Enterprise (HPE) Services, Sunway Berhad, Tenaga Nasional Berhad (TNB), and Malaysia Airports Holding Berhad (MAHB) are considered the ten best companies to work with.

Despite MNCs being well-recognised for providing employees an excellent work environment and various opportunities for professional development, human resource issues such as turnover remain the most critical challenge encountered by them. Consistent with this, a review of literature reveals that the selection and recruitment of competent expats along with international human resource management issues are key obstacles for many MNCs operating in the Asian region (Budhwar and Boyne, 2004; McDowell et al., 2008; Nankervis and Compton, 2006). In Malaysia, employee turnover issues arose in the early 90s and have gradually intensified owing to high workforce

demand (Demirtas and Akdogan, 2015). A recent statistical report by the Institute of Labour Market Information and Analysis (ILMIA) found that the average turnover rate in Malaysia underwent a substantial increment from 12.3% in 2012 to 20% in 2017 (Ministry of Human Resources, 2017). Today, the culture of job hopping has almost become a norm among employees around the globe as they feel more mobile and capable of grabbing better positions and benefits.

Practically, the impact of high turnover is costly as organisations have to spend more time and financial resources on finding, recruiting, and training new employees to replace leaving ones (Zheng and Lamond, 2010). Turnover among top performers, such as senior executives and professionals, can also tarnish an organisation's overall performance and success (Gim and Ramayah, 2020; Lin, 2020). Further, Tan et al. (2019a) implied that employee turnover translates into a decrease in the quality of services and ultimately, a decrease in profits. Likewise, from the human resource management perspective, a higher turnover rate has been found to disrupt a company's performance and productivity as well as its competitiveness in the long run (Juhdi et al., 2013). Although the importance of examining employee turnover is emphasised in the literature, a model explaining MNC employees' turnover in Malaysia 'has not yet been fully developed'. Therefore, this critical research gap is addressed in this study.

An overview of previous studies indicates several major variables that significantly impact turnover intention in various contexts, including job satisfaction (Lam et al., 2003; MacIntosh and Doherty, 2010; Robinson and Beesley, 2010), job commitment (Gunlu et al., 2010), job stress (Arshadi and Damiri, 2013), and job embeddedness (Allen, 2006); however, research on these factors in the MNC context is scant. Likewise, Newman et al. (2011) stated that there is limited research focusing on MNCs compared to small and medium enterprises (SMEs). Due to the detrimental consequences of the lack of empirical attention on MNCs, this study offers an interesting direction by shedding light on how job perceptions affect employee turnover intention in this context. In response to Kath et al.'s (2010) work, the main purpose of this study was to explore the effects of job satisfaction, organisational commitment, safety climate, and job stress on turnover intention.

The outcomes of this study are perceived to provide beneficial guidelines to researchers and practitioners. Theoretically, we extend the applicability of two theories, i.e., the social exchange theory (SET) and the job demands-resources (JD-R) model, to the context of MNCs. Practically; this study contributes significant insights to human resource managers in developing more timely and feasible strategies to retain MNC employees.

2 Literature review and hypothesis development

2.1 Social exchange theory

The SET proposed by Blau in 1964 highlights that the exchange relationship between two parties usually goes beyond economic exchange and should include social exchange. Similarly, organisational research contends that the exchange between organisation and its employees involves both impersonal resources, (i.e., monetary) and socio-emotional resources, i.e., approval, respect, acknowledgement, and support) (Eisenberger et al., 2001). Indeed, Blau's SET is related closely with the custom of reciprocity (Gouldner,

1960), especially in illustrating the psychological process underlying employee attitudes and behaviours (Settoon et al., 1996; Wayne et al., 2002; Yacob et al., 2018). The reciprocity rule states that employees are more likely respond to an organisation with positive attitudes, better job behaviour, and more affective engagement if they receive a high level of support from their employers. For example, an employer may pay his employees not only because he has agreed to do so, but also because he believes the worker has earned his wages (Gouldner, 1960). It has also been found that the empowering style of leadership creates a sense of reciprocity wherein recipients are more open to sharing their knowledge (Tan et al., 2019b), which in turn results in a lower turnover rate (e.g., Gharakhani and Zaferanchi, 2019; Scanlan and Still, 2019). In other words, the SET predicts that the exchange of favourable treatment would be extended if the receipt of resources from another party is highly needed and actions are discretionary (Blau, 1964; Eisenberger et al., 1997). Based on the abovementioned arguments, it is reasonable to employ SET as the theoretical foundation in examining the influences of job satisfaction, organisational commitment, safety climate, and job stress on turnover intention among MNC employees in Malaysia.

2.2 JD-R model

The JD-R model was proposed by Bakker and Demerouti in 2007, emphasising that work-related strain happens when there is an imbalance between job demands and job resources. According to Mauno et al. (2006, p.212), job demands refer to “physical, psychological, social, or organisational features of the job, which require physical and/or psychological effort and energy from an employee, and are consequently related to physiological and/or psychological costs (i.e., strain)”. Some examples of job demands are high work pressure, an unfavourable physical environment, and irregular working hours (Meijman and Mulder, 1998). Similar to the core features of a job, (i.e., physical, psychological, social, or organisational), job resources significantly influence the achievement of job goals, the reduction of job demands, and the advancement of individual growth and development (Mauno et al., 2006). Job resources comprise, for example, peer or employer support, job security, and job autonomy. Consistent with the JD-R model’s propositions and with support from previous works, (e.g., Newman et al., 2020; Wu et al., 2019), it is expected that job demands heighten employees’ turnover intention while job resources, (e.g., safety climate) diminish turnover intention.

2.3 Job satisfaction and turnover intention

According to McShane and Von Glinow (2008), job satisfaction denotes an individual’s evaluation of his or her work context. The importance of job satisfaction has been widely highlighted in past studies, especially in boosting employees’ job performance (Lu et al., 2016; Rich et al., 2010) and retention (Chen et al., 2015) as well as firm performance (Chi and Gursoy, 2009). The basic job satisfaction facets within an organisation consist of co-workers, rewards, benefits, job environment, salary and wages, job promotion, supervision, and organisational rules or procedures (Spector, 1997). Employees who are highly satisfied with their jobs tend to exhibit a positive attitude towards all their tasks; thus, they would strive to perform at their maximum level (Chen et al., 2008; Duraisingam et al., 2009). Conversely, employees who perceive low satisfaction would display a passive attitude towards their job performance and be reluctant to complete

their tasks (Mathieu and Babiak, 2016). Therefore, it is of great importance for researchers to capture the influence of job satisfaction on turnover among MNC employees. Thus, it was hypothesised that:

H1 There is a negative relationship between job satisfaction and turnover intention among MNC employees.

2.4 Organisational commitment and turnover intention

Organisational commitment is a critical factor that positively impacts employee loyalty and dedication (Yin-Fah et al., 2010; Gatling et al., 2016; Rhoades et al., 2001) and negatively impacts turnover intention (Çakmak-Otluoğlu, 2012; Solinger et al., 2008). Compared to satisfaction, organisational commitment is perceived as one of the strong indicators of effectiveness and turnover within an organisation (Gatling et al., 2016; Koch and Steers, 1978). Employees who experience successful employment are more likely to exhibit higher levels of desirable behaviour, well-being, and organisational commitment, as well as lower levels of turnover intention (Tan et al., 2019b). In fact, there have been numerous human resource studies linking organisational commitment to turnover intention. For example, organisational commitment as an important predictor of turnover intention was affirmed by the work of Joo and Park (2010). In a similar vein, Cho et al. (2009) found that organisational commitment is adversely related to turnover intention; while Gunlu et al. (2010) revealed that both affective and normative commitment have a significant effect on turnover intention. Hence, in this study, we attempted to predict a similar relationship between organisational commitment and turnover intention in the MNC context by hypothesising that:

H2 There is a negative relationship between organisational commitment and turnover intention among MNC employees.

2.5 Job stress and turnover intention

In the current era, job stress has been recognised as a critical issue faced by many employees around the globe (Ahmad and Afgan, 2016). This phenomenon is caused by several factors, including high demand for excessive work, ergonomic inadequacies, time pressure, negative work environment, and employer-employee conflict (Nawaz et al., 2011). Research conducted by Arshadi and Damiri (2013) found that job stress is positively related to turnover intention. Likewise, a significant relationship between job stress and turnover intention was discovered by Layne et al. (2004). Bakker et al. (2003) claimed that stressors lead to a depletion of energy and a lack of motivation, especially if they exceed employee capacity. This can culminate in negative work outcomes such as job dissatisfaction and turnover intention. Therefore, there exists a parallel relationship between job stress and turnover intention, where the greater the amount of stress, the greater the probability of an employee leaving their job (Applebaum et al., 2010; Chen et al., 2011). Hence, it was plausible to hypothesise that:

H3 There is a positive relationship between job stress and turnover intention among MNC employees.

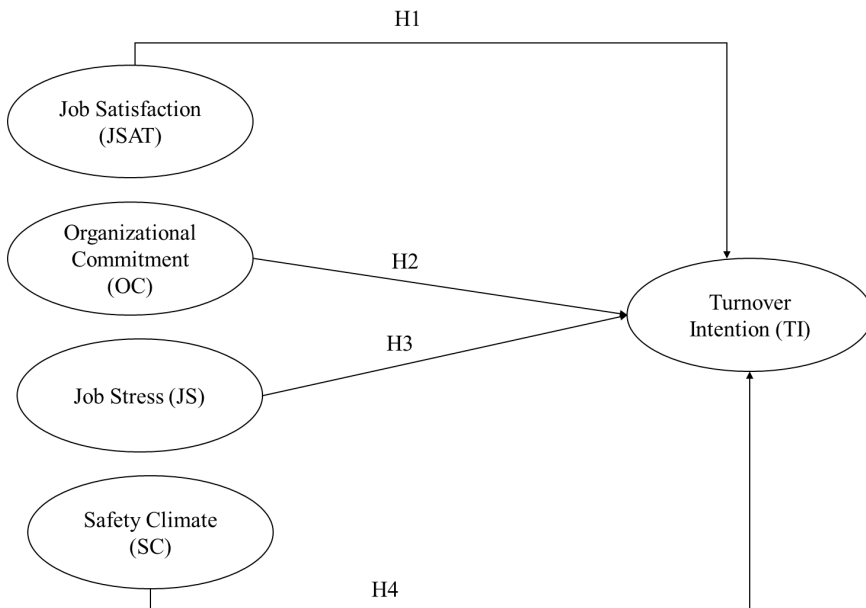
2.6 Safety climate and turnover intention

Safety climate has been found to be a predictor of safety performance (Lin et al., 2008). This demonstrates that an organisation’s actions to ensure employee safety can directly affect positive attitudes towards safety and ultimately develop an organisation’s safety climate. It is thus important to assure that employees feel genuine interest in their welfare (Barling and Hutchinson, 2000). In a similar vein, Naveh et al. (2005) contended that employees are less likely to involve in risky behaviours if they perceive that their organisation prioritises security issues. Similarly, Zohar and Luria’s (2005) study outlined that safety climate in an organisation should go beyond an isolated approach to security; it should also take into account relative priorities between different security policies, procedures, and practices and their competing areas (e.g., productivity or efficiency). Therefore, it is logical that safety climate affects employees’ turnover intention, such that when an employee perceives a higher safety climate within his or her organisation, he or she will have a lower intention to quit. Accordingly, it was hypothesised that:

H4 There is a negative relationship between safety climate and turnover intention among MNC employees.

Based on the aforementioned hypotheses, the research model of this study is presented in Figure 1.

Figure 1 Research model



3 Methodology

The present research adopted the quantitative approach, mainly due to the need to test the proposed hypotheses on the large population being studied. In terms of data collection, the snowball sampling technique (a non-probability sampling approach) was applied to reach MNC employees currently working in Malaysia at both executive and non-executive levels. A questionnaire was developed and distributed to suitable employees, both online and offline. Of the 200 responses received, a total of 130 responses were finalised for data analysis after eliminating those with high missing values and straight-lining answers. The final dataset of 130 responses fulfilled the requirement of power analysis with an effect size of 0.15 and a power level of 80% (Faul et al., 2007).

This study's survey was divided into six sections. Section 1 captured respondents' demographic information (i.e., gender, race, age group, level of education, years of employment, job position, and monthly income). The following five sections solicited respondents' perceptions towards the measurement items for the five study constructs. All the measurement scales used in the survey were adapted or adopted from previous research. Specifically, job satisfaction was measured using 20 items adapted from Weiss et al. (1967); organisational commitment was assessed using 18 items adapted from Trice and Beyer (1984); job stress was measured using nine items adapted from Cohen et al. (1983), and safety climate was measured using 19 items developed by Griffin and Neal (2000) and Vinodkumar and Bhasi (2009). A three-item scale from Mobley et al. (1978) was used to measure the dependent variable, turnover intention. All items were rated on a five-point Likert scale.

A pilot test was conducted on 30 employees from MNCs in Malaysia before actual data collection as a way to ensure the selected items were effective, well-understood, and reliable. The feedback from the pilot test was considered, and alterations were made accordingly to improve the quality of the instruments. Upon data collection and data screening, data analysis of the 130 responses was performed using SPSS software for descriptive statistics and SmartPLS for hypothesis testing. This study chose partial least squares structural equation modelling (PLS-SEM) because of the technique's 'causal-predictive' nature [Joreskog and Wold, (1982), p.270], which allows researchers to achieve a balance between explanation and prediction (Chin et al., 2020). That is, while our hypotheses and the ensuing path model were grounded in causal explanations, we expect our model to have high predictive accuracy as well, which should yield meaningful managerial implications. Following a two-step approach, the analysis was divided into two parts, the first being the evaluation of the measurement model and the second being the evaluation of the structural model.

4 Results

4.1 Demographic profile

The frequency test results demonstrated that most of the respondents were female (62%), 25 years old or below (67%), and single (89%). A majority of them had completed a bachelor's degree (85%) and earned a monthly income of RM2,000 to RM3,999 (44%). In terms of their professional background, almost 79% of the respondents had one to five

years of work experience in MNCs, 62% of them held an executive position, and 38% of them were from departments other than marketing, finance, and human resource (see Table 1).

Table 1 Demographic profile

<i>Demographic profile</i>		<i>Frequency</i>	<i>Percent (%)</i>
Age	Below 25	87	67
	26–35	36	28
	36–45	7	5
Gender	Male	49	38
	Female	81	62
Marital status	Single	116	89
	Married	14	11
Level of education	Diploma or equivalent	13	10
	Bachelor's degree	111	85
	Master's degree	4	3
	Other	2	2
Years of employment	Less than 1 year	19	15
	1–5 years	102	79
	6–10 years	7	5
	More than 11 years	2	2
Job position	Executive	49	38
	Non-executive	81	62
Job department	Marketing	23	18
	Finance	25	19
	Human resource	33	25
	Other	49	38
Monthly income	RM1,999 or below	52	40
	RM2,000 to RM3, 999	57	44
	RM4,000 and above	21	16

4.2 Descriptive statistics

The descriptive statistics results are illustrated in Table 2. Job stress attained the highest mean score of 3.19 and a standard deviation of 0.63. This suggests that, overall, respondents experienced some stress at work. On the other hand, the mean scores of safety climate (mean = 2.84; SD = 0.26), organisational commitment (mean = 2.65; SD = 0.61), and job satisfaction (mean = 2.25; SD = 0.53) indicate that respondents generally did not perceive their workplace to be safe, had low commitment, and were less satisfied with their current job. Next, the mean score for turnover intention was 3.06, with a standard deviation of 0.84. This implies that respondents were indifferent about their intention to quit their current job.

Table 2 Mean and standard deviation

<i>Construct</i>	<i>No. of items</i>	<i>Mean</i>	<i>Standard deviation (SD)</i>
Job satisfaction	12	2.25	0.53
Organisational commitment	14	2.65	0.61
Job stress	7	3.19	0.63
Safety climate	9	2.84	0.26
Turnover intention	3	3.06	0.84

4.3 *Measurement model*

The SmartPLS 3.2.8 software was used to assess the measurement model. A series of tests was performed to evaluate the validity and reliability of the constructs as reflected by their internal consistency, convergent validity, and discriminant validity. A construct is deemed to show internal consistency when its Cronbach's alpha (CA) and composite reliability (CR) exceed the threshold value of 0.7. As shown in Table 3, the CR values for all the constructs (i.e., job satisfaction, organisational commitment, safety climate, job stress, and turnover intention) ranged from 0.89 to 0.94 (> 0.70) (Hair et al., 2010). Similarly, the results in Table 3 showed that all the constructs had CA values above the threshold score of 0.70 (Hair et al., 2019). It was therefore concluded that the constructs had satisfactory internal consistency. Next, factor loadings and average variance extracted (AVE) were used to assess convergent validity. The evaluation of factor loadings resulted in several items being deleted due to low loadings. This included eight items from job satisfaction (JSAT1, JSAT2, JSAT5, JSAT6, JSAT7, JSAT8, JSAT9, and JSAT18), four items from organisational commitment (OC3, OC4, OC5, and OC13), two items from job stress (JS2 and JS4), and ten items from safety climate (SC5, SC6, SC7, SC8, SC10, SC12, SC13, SC17, SC18, and SC19). Nevertheless, the AVE values for all five constructs were in the range of 0.50 to 0.78, which exceeded the recommended value of 0.5 (see Table 3) (Hair et al., 2010; Ramayah et al., 2016). Convergent validity was thus established for the model.

Table 3 Results of the measurement model

<i>Construct</i>	<i>Items code</i>	<i>Factor loadings</i>	<i>CA</i>	<i>CR</i>	<i>AVE</i>
Job satisfaction	JSAT 1	D	0.91	0.92	0.5
	JSAT 2	D			
	JSAT 3	0.66			
	JSAT 4	0.63			
	JSAT 5	D			
	JSAT 6	D			
	JSAT 7	D			

Notes: Some items were deleted due to low loadings.

1. Job satisfaction: JSAT 1, JSAT 2, JSAT 5, JSAT 6, JSAT 7, JSAT 8, JSAT 9, JSAT 18
2. Organisational commitment: OC3, OC4, OC5, OC13
3. Job stress: JS2, JS4
4. Safety climate: SC5, SC6, SC7, SC8, SC10, SC12, SC13, SC17, SC18, SC19.

Table 3 Results of the measurement model (continued)

<i>Construct</i>	<i>Items code</i>	<i>Factor loadings</i>	<i>CA</i>	<i>CR</i>	<i>AVE</i>
Job satisfaction	JSAT 8	D	0.91	0.92	0.5
	JSAT 9	D			
	JSAT 10	0.70			
	JSAT 11	0.74			
	JSAT 12	0.64			
	JSAT 13	0.65			
	JSAT 14	0.76			
	JSAT 15	0.74			
	JSAT 16	0.77			
	JSAT 17	0.74			
	JSAT 18	D			
	JSAT 19	0.71			
	JSAT 20	0.76			
Organisational commitment	OC1	0.75	0.86	0.89	0.52
	OC2	0.75			
	OC3	D			
	OC4	D			
	OC5	D			
	OC6	0.78			
	OC7	0.68			
	OC8	0.76			
	OC9	0.76			
	OC10	0.59			
	OC11	0.58			
	OC12	0.62			
	OC13	D			
	OC14	0.76			
	OC15	0.76			
	OC16	0.82			
	OC17	0.74			
	OC18	0.72			

Notes: Some items were deleted due to low loadings.

1. Job satisfaction: JSAT 1, JSAT 2, JSAT 5, JSAT 6, JSAT 7, JSAT 8, JSAT 9, JSAT 18
2. Organisational commitment: OC3, OC4, OC5, OC13
3. Job stress: JS2, JS4
4. Safety climate: SC5, SC6, SC7, SC8, SC10, SC12, SC13, SC17, SC18, SC19.

Table 3 Results of the measurement model (continued)

<i>Construct</i>	<i>Items code</i>	<i>Factor loadings</i>	<i>CA</i>	<i>CR</i>	<i>AVE</i>
Job stress	JS1	0.63	0.93	0.94	0.54
	JS2	D			
	JS3	0.63			
	JS4	D			
	JS5	0.73			
	JS6	0.71			
	JS7	0.86			
	JS8	0.85			
	JS9	0.73			
Safety climate	SC1	0.66	0.88	0.9	0.5
	SC2	0.81			
	SC3	0.82			
	SC4	0.67			
	SC5	D			
	SC6	D			
	SC7	D			
	SC8	D			
	SC9	0.65			
	SC10	D			
	SC11	0.61			
	SC12	D			
	SC13	D			
	SC14	0.74			
	SC15	0.75			
	SC16	0.61			
Turnover intention	TI 1	0.9	0.86	0.91	0.78
	TI 2	0.83			
	TI 3	0.92			

Notes: Some items were deleted due to low loadings.

1. Job satisfaction: JSAT 1, JSAT 2, JSAT 5, JSAT 6, JSAT 7, JSAT 8, JSAT 9, JSAT 18

2. Organisational commitment: OC3, OC4, OC5, OC13

3. Job stress: JS2, JS4

4. Safety climate: SC5, SC6, SC7, SC8, SC10, SC12, SC13, SC17, SC18, SC19.

To determine the constructs' discriminant validity, the AVE value extracted for each construct was compared with the squared correlations between the constructs, following the guidelines of Fornell and Bookstein (1982). As shown in Table 4, all off-diagonal elements were lower than the square roots of AVE (italic on the diagonal). Thus, it was concluded that the model demonstrated adequate discriminant validity.

Table 4 Discriminant validity

<i>Construct</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
1 Job satisfaction	<i>0.71</i>				
2 Job stress	-0.43	<i>0.72</i>			
4 Organisational commitment	0.55	-0.21	<i>0.74</i>		
4 Safety climate	-0.59	0.23	-0.36	<i>0.71</i>	
5 Turnover intention	-0.52	0.45	-0.56	0.23	<i>0.88</i>

Note: Diagonals (in ital) represent the square roots of AVE while the other entries represent the correlations.

4.4 Structural model

Assessment of the structural model incorporates three main analyses:

- 1 coefficient of determination (R^2)
- 2 predictive relevance (Q^2)
- 3 path coefficient.

The R^2 value indicates the amount of variance in the dependent variable that is explained by the endogenous variables. A larger R^2 value is deemed to increase the predictive accuracy of a structural model. In this study, we found that 46% of the variance in turnover intention was explained by job satisfaction, organisational commitment, and job stress; thus, the endogenous variables proved sufficient explanatory power. Subsequently, the Q^2 was assessed to illustrate predictive relevance of the path model (Geisser, 1975; Stone, 1974). Using the blindfolding procedure, the Q^2 value for turnover intention was 0.33 (> 0), validating the predictive relevance of the model.

Table 5 Path coefficients

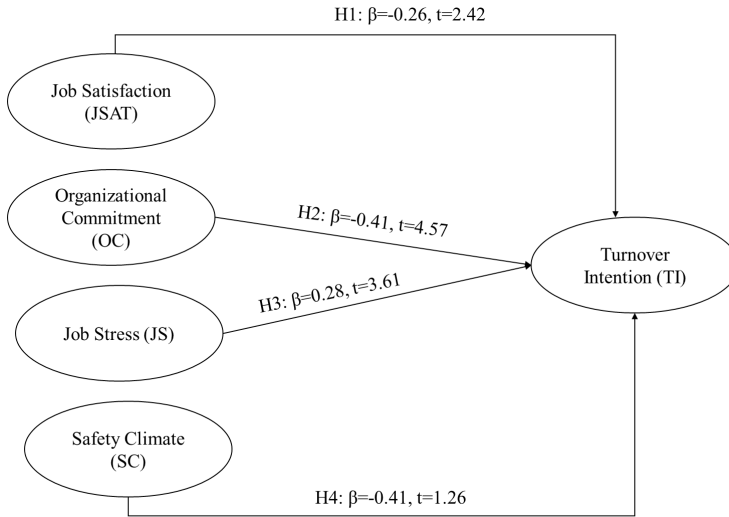
<i>Hypothesis</i>	<i>Relationship</i>	<i>Std. beta</i>	<i>Std. error</i>	<i>t-value</i>	<i>Decision</i>
H1	JSAT \rightarrow TI	-0.26	0.11	2.42**	Supported
H2	OC \rightarrow TI	-0.41	0.09	4.57**	Supported
H3	JS \rightarrow TI	0.28	0.08	3.61**	Supported
H4	SC \rightarrow TI	-0.14	0.11	1.26	Not supported

Note: ** $p < 0.01$; JSAT = job satisfaction; OC = organisational commitment; JS = job stress; sc = safety climate; TI = turnover intention.

Furthermore, the bootstrapping approach with 5,000 subsamples was applied to test the significance of the path relationships (Streukens and Leroi-Werelds, 2016). As presented in Table 5, three of the four hypotheses were supported. As predicted, job satisfaction (H1: $\beta = -0.26$, $t = 2.42$, $p < 0.01$) and organisational commitment (H2: $\beta = -0.41$, $t = 4.57$, $p < 0.01$) were negatively related to turnover intention, whereas job stress (H3: $\beta = 0.28$, $t = 3.61$, $p < 0.01$) was positively related to turnover intention; thus, H1, H2, and H3 were supported (see Figure 2). However, the relationship between safety climate and turnover intention was not significant (H4: $\beta = -0.14$, $t = 1.26$, $p > 0.01$), so H4 was rejected. Further, the path coefficients illustrated that organisational commitment

was the most significant predictor of turnover intention, followed by job stress and job satisfaction.

Figure 2 Overall result



5 Discussion

This study has filled several gaps in the literature. Specifically, in the context of MNC employees in Malaysia, we have confirmed that job satisfaction, organisational commitment, and job stress are significant predictors of turnover intention that explain 46% of the latent variance. The findings gained from this study thus provide constructive implications for managers and researchers.

In the present study, job satisfaction was identified to have a negative and significant effect on turnover intention ($\beta = -0.26, t = 2.42, p < 0.01$). In the context of MNCs, employees are motivated to stay in the company longer if the company satisfies their needs. This result parallels that of previous studies that found a negative association between job satisfaction and employee turnover (Griffin and Neal, 2000; Price and Mueller, 1981). Also, this finding is consistent with the results of Salleh et al. (2012), which revealed that all satisfaction facets (except for co-workers) are significantly and negatively related to turnover intention.

The significant and negative relationship between organisational commitment and turnover intention ($\beta = -0.41, t = 4.57, p < 0.01$) was also observed and supported. This finding is in line with previous studies conducted by Culpepper (2011) and Nadiri and Tanova (2010), which indicated that commitment is inversely related to turnover intention. In the context of MNCs, organisational commitment was found to be the most significant factor in reducing employees' intention to leave. As such, it can be deduced that employees can be motivated to stay in an organisation by exerting effort into offering them better job prospects that increase their commitment.

Next, job stress was found to have a significant and positive relationship with turnover intention ($\beta = 0.28$, $t = 3.61$, $p < 0.01$), indicating that the greater the amount of stress, the higher the intention to leave. This relationship has received support from previous studies (Arshadi and Damiri, 2013; Layne et al., 2004). Also, this result suggests that job stress is an important predictor of turnover intention among MNC employees in Malaysia in particular. Therefore, reducing work-related stress can be an effective tool to motivate employees to work longer in an MNC.

The relationship between safety climate and turnover intention ($\beta = -0.14$, $t = 1.26$, $p > 0.01$) was found to be non-significant for MNC employees in Malaysia. The lack of a safety climate is viewed as less persuasive in triggering employees' intention to leave, compared to low job satisfaction, low organisational commitment, or high job stress. Research conducted by Kath et al. (2010) and Mearns et al. (2010) showed that safety climate significantly impacts the prevention of accidents; thus, it is somewhat unconvincing in explaining employees' withdrawal behaviour. In the context of MNCs, safety climate is even less impactful due to the fact that a majority of these companies rely on well-structured and well-maintained safety policies, unlike other organisations like SMEs where safety is a larger concern.

6 Implications

Theoretically, this study provides support to the SET (Blau, 1964) and the JD-R model (Bakker and Demerouti, 2007). The SET posits that the mutual exchange between two parties produces a norm of reciprocity (Cropanzano and Mitchell, 2005; Uhl-Bien and Maslyn, 2003), whereby favourable treatment received by one party highly obligates him or her to provide favourable treatment in return (Gouldner, 1960). Meanwhile, the JD-R model mainly focuses on actively motivating employees by furnishing them with adequate resources to meet their job demands (Corso-de-Zúñiga et al., 2020). The findings of this study are in line with these theoretical frameworks, such that, when employees perceive feelings of satisfaction and commitment as well as less stress from their organisations, they reciprocate by staying with the organisation.

The findings of this research are also relevant to practitioners, especially MNC managers who intend to reduce the turnover rate in their companies. Based on the findings, the most important predictor of turnover intention is organisational commitment, followed by job stress and job satisfaction. In order to retain MNC employees in Malaysia, managers should thus boost organisational commitment. For example, if an employee is doing a good job, he or she should be acknowledged in-person with appreciative remarks, as this is viewed to directly increase the personal meaning of the job and the commitment of the employee. Apart from this, special employment benefits, (e.g., compassionate care for employees who are off work to look after a seriously ill family member) could be an effective means of increasing employee commitment. To increase job satisfaction, allowing employees to try their own work methods may be a good strategy, as it empowers them. MNCs can also offer opportunities for career advancement through extensive internal learning programs, (e.g., new hire on boarding, on-the-job learning, virtual learning, etc.) and self-development resources. In addition, employees should be encouraged to apply for internal job postings and to discuss job advancement, promotion, and career pathways with their managers to boost their satisfaction.

Knowing that job stress increases turnover intention, managers should recognise the types of stress, (e.g., physical or emotional) experienced by employees and endeavour to mitigate it. One useful approach is managers actively acting as personal mentors and guiding employees to overcome stress. They should also inspire and lead employees in stress relief activities like post-work exercise sessions, balanced dieting, walking breaks, and meditating events.

Through this study, MNC managers gain a better understanding of the main factors influencing their staff to quit. With this knowledge, managers can develop more timely and feasible strategies to retain employees. Thus, the turnover rate in MNCs in Malaysia can be reduced.

7 Limitations and future research directions

Several inevitable limitations restrained this study. First, this study may suffer from sample bias. The demographic profile analysis revealed that the sample is skewed towards females, non-executives, and degree holders, which may have influenced the results of the study. Next, a limited number of variables were employed to predict turnover intention. Though 46% of the variance in turnover intention was accounted for by the study's model, the remaining 54% is explained by variables not considered in this study.

The contributions and limitations of the present study assist future researchers in more comprehensively understanding the predictors of turnover intention among MNC employees in Malaysia. Accordingly, this study makes several recommendations that should be considered by future researchers. To balance demographic data and reduce sample bias, quota sampling should be used instead of snowball sampling. Quota sampling would select an equal number of samples from the categories of gender (male/female) and position (executive/non-executive). Additionally, future research should enhance the predictive power of the research model by taking into account underlying mechanism that explains the effects of predictor variables on turnover intention. As such, a more extensive study can be conducted by considering the mediators linking job satisfaction, organisational commitment, and job stress to turnover intention.

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References

- Ahmad, A. and Afgan, S. (2016) 'The relationship of job stress and turnover intention in commercial banks of Pakistan by assessing the mediating role of burnout', *Journal of Business Strategies*, Vol. 10, No. 1, pp.1–23.
- Allen, D.G. (2006) 'Do organizational socialization tactics influence newcomer embeddedness and turnover?', *Journal of Management*, Vol. 32, No. 2, pp.237–256.

- Applebaum, D., Fowler, S., Fiedler, N., Osinubi, O. and Robson, M. (2010) 'The impact of environmental factors on nursing stress, job satisfaction and turnover intention', *The Journal of Nursing Administration*, Vol. 40, Nos. 7–8, pp.323–328.
- Arshadi, N. and Damiri, H. (2013) 'The relationship of job stress with turnover intention and job performance : moderating role of OBSE', *Procedia – Social and Behavioral Sciences*, Vol. 84, pp.706–710.
- Asia Business Outlook Survey (2013) *Asia Business Outlook Survey 2013: Investing in an Accelerating ASIA? Insights from Asia's Business Leaders on their Outlook for 2013* [online] https://www.corporatenetwork.com/sites/default/files/ABOS_2013_report_final.pdf (accessed 20 February 2021).
- Bakker, A., Demerouti, E. and Schaufeli, W. (2003) 'Dual processes at work in a call centre: an application of the job demands–resources model', *European Journal of Work and Organizational Psychology*, Vol. 12, No. 4, pp.393–417.
- Bakker, A.B. and Demerouti, E. (2007) 'The job demands-resources model: state of the art', *Journal of Managerial Psychology*, Vol. 22, No. 3, pp.309–328.
- Barling, J. and Hutchinson, I. (2000) 'Commitment vs. control-based safety practices, safety reputation and perceived safety climate', *Canadian Journal of Administrative Sciences/Revue Canadienne Des Sciences De L'administration*, Vol. 17, No. 1, pp.76–84.
- Blau, H. (1964) *The Impossible Theater: A Manifesto*, Macmillan, New York, NY..
- Budhwar, P.S. and Boyne, G. (2004) 'Human resource management in the Indian public and private sectors: an empirical comparison', *The International Journal of Human Resource Management*, Vol. 15, No. 2, pp.346–370.
- Çakmak-Otluoğlu, K.Ö. (2012) 'Protean and boundaryless career attitudes and organizational commitment: the effects of perceived supervisor support', *Journal of Vocational Behavior*, Vol. 80, No. 3, pp.638–646.
- Chen, H.C., Chu, C.I., Wang, Y.H. and Lin, L.C. (2008) 'Turnover factors revisited: a longitudinal study of Taiwan-based staff nurses', *International Journal of Nursing Studies*, Vol. 45, No. 2, pp.277–285.
- Chen, I.H., Brown, R., Bowers, B.J. and Chang, W.Y. (2015) 'Work-to-family conflict as a mediator of the relationship between job satisfaction and turnover intention', *Journal of Advanced Nursing*, Vol. 71, No. 10, pp.2350–2363.
- Chen, M.F., Lin, C.P. and Lien, G.Y. (2011) 'Modelling job stress as a mediating role in predicting turnover intention', *The Service Industries Journal*, Vol. 31, No. 8, pp.1327–1345.
- Chi, C.G. and Gursoy, D. (2009) 'Employee satisfaction, customer satisfaction and financial performance: an empirical examination', *International Journal of Hospitality Management*, Vol. 28, No. 2, pp.245–253.
- Chin, W., Cheah, J.H., Liu, Y., Ting, H., Lim, X.J. and Cham, T.H. (2020) 'Demystifying the role of causal-predictive modeling using partial least squares structural equation modeling in information systems research', *Industrial Management and Data Systems*, Vol. 120, No. 12, pp.2161–2209.
- Cho, S., Johanson, M.M. and Guchait, P. (2009) 'Employees intent to leave: a comparison of determinants of intent to leave versus intent to stay', *International Journal of Hospitality Management*, Vol. 28, No. 3, pp.374–381.
- Cohen, S., Kamarck, T. and Mermelstein, R. (1983) 'A global measure of perceived stress', *Journal of Health and Social Behavior*, Vol. 24, No. 4, pp.385–396.
- Corso-de-Zúñiga, S., Moreno-Jiménez, B., Garrosa, E., Blanco-Donoso, L.M. and Carmona-Cobo, I. (2020) 'Personal resources and personal vulnerability factors at work: an application of the job demands-resources model among teachers at private schools in Peru', *Current Psychology*, Vol. 39, No. 1, pp.325–336.
- Cropanzano, R. and Mitchell, M.S. (2005) 'Social exchange theory: an interdisciplinary review', *Journal of Management*, Vol. 31, No. 6, pp.874–900.

- Culpepper, R.A. (2011) 'Three-component commitment and turnover: an examination of temporal aspects', *Journal of Vocational Behavior*, Vol. 79, No. 2, pp.517–527.
- Demirtas, O. and Akdogan, A.A., (2015) 'The effect of ethical leadership behavior on ethical climate, turnover intention and affective commitment', *Journal of Business Ethics*, Vol. 130, No. 1, pp.59–67.
- Duraisingam, V., Pidd, K. and Roche, A.M. (2009) 'The impact of work stress and job satisfaction on turnover intentions: a study of Australian specialist alcohol and other drug workers', *Drugs: Education, Prevention and Policy*, Vol. 16, No. 3, pp.217–231.
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P.D. and Rhoades, L. (2001) 'Reciprocation of perceived organizational support', *Journal of Applied Psychology*, Vol. 86, No. 1, pp.42–51.
- Eisenberger, R., Cummings, J., Armeli, S. and Lynch, P. (1997) 'Perceived organizational support, discretionary treatment and job satisfaction', *Journal of Applied Psychology*, Vol. 82, No. 5, pp.812–820.
- Faul, F., Erdfelder, E., Lang, A.G. and Buchner, A. (2007) 'G-Power 3: a flexible statistical power analysis program for the social, behavioural and biomedical sciences', *Behaviour Research Methods*, Vol. 39, No. 2, pp.175–191.
- Fornell, C. and Bookstein, F.L. (1982) 'Two structural equation models: LISREL and PLS applied to consumer exit-voice theory', *Journal of Marketing Research*, Vol. 19, No. 4, pp.440–452.
- Gatling, A., Kang, H.J.A. and Kim, J.S. (2016) 'The effects of authentic leadership and organizational commitment on turnover intention', *Leadership and Organization Development Journal*, Vol. 37, No. 2, pp.181–199.
- Geisser, S. (1975) 'The predictive sample reuse method with applications', *Journal of the American Statistical Association*, Vol. 70, No. 350, pp.320–328.
- Gharakhani, D. and Zaferanchi, A. (2019) 'The effect of job burnout on turnover intention with regard to the mediating role of job satisfaction', *Journal of Health*, Vol. 10, No. 1, pp.109–117.
- Gim, G.C. and Ramayah, T. (2020) 'Predicting turnover intention among auditors: is WIPL a mediator?', *The Service Industries Journal*, Vol. 40, Nos. 9–10, pp.726–752.
- Gouldner, A.W. (1960) 'The norm of reciprocity: a preliminary statement', *American Sociological Review*, Vol. 25, No. 2, pp.161–178.
- Griffin, M.A. and Neal, A. (2000) 'Perceptions of safety at work: a framework for linking safety climate to safety performance, knowledge and motivation', *Journal of Occupational Health Psychology*, Vol. 5, No. 3, pp.347–358.
- Gunlu, E., Aksarayli, M. and Şahin Perçin, N. (2010) 'Job satisfaction and organizational commitment of hotel managers in Turkey', *International Journal of Contemporary Hospitality Management*, Vol. 22, No. 5, pp.693–717.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010) *Multivariate Data Analysis: Global Edition*, Vol. 7, Pearson, Upper Saddle River, NJ.
- Hair, J.F., Ringle, C.M. and Sarstedt, M. (2013) 'Partial least squares structural equation modeling: rigorous applications, better results and higher acceptance', *Long Range Planning*, Vol. 46, Nos. 1–2, pp.1–12.
- Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019) 'When to use and how to report the results of PLS-SEM', *European Business Review*, Vol. 31, No. 1, pp.2–24.
- Invest Byte (2014) *Logistics Sector Generating Economic Growth*, May [online] <https://www.mida.gov.my/env3/uploads/EnewsletterPDF/2014/52014.pdf> (accessed 10 January 2021).
- Joo, B.K. and Park, S. (2010) 'Career satisfaction, organizational commitment and turnover intention: the effects of goal orientation, organizational learning culture and developmental feedback', *Leadership and Organization Development Journal*, Vol. 31, No. 6, pp.482–500.
- Joreskog, K.G. and Wold, H.O. (Eds.) (1982). 'The ML and PLS technique for modelling with latent variables: historical and comparative aspects', *iSystems Under Indirect Observation, Part I*, pp.263–270, North-Holland, Amsterdam.

- Juhdi, N., Pa'wan, F. and Hansaram, R.M.K. (2013) 'HR practices and turnover intention: the mediating roles of organizational commitment and organizational engagement in a selected region in Malaysia', *The International Journal of Human Resource Management*, Vol. 24, No. 15, pp.3002–3019.
- Kath, L.M., Magley, V.J. and Marmet, M. (2010) 'The role of organizational trust in safety climate's influence on organizational outcomes', *Accident Analysis and Prevention*, Vol. 42, No. 5, pp.1488–1497.
- Koch, J.L. and Steers, R.M. (1978) 'Job attachment, satisfaction and turnover among public sector employees', *Journal of Vocational Behavior*, Vol. 12, No. 1, pp.119–128.
- Lam, T., Baum, T. and Pine, R. (2003) 'Subjective norms: effects on job satisfaction', *Annals of Tourism Research*, Vol. 30, No. 1, pp.160–177.
- Layne, C.M., Hohenshil, T.H. and Singh, K. (2004) 'The relationship of occupational stress, psychological strain and coping resources to the turnover intentions of rehabilitation counselors', *Rehabilitation Counseling Bulletin*, Vol. 48, No. 1, pp.19–30.
- Lin, C.P. (2020) 'Exploring career commitment and turnover intention of high-tech personnel: a socio-cognitive perspective', *The International Journal of Human Resource Management*, Vol. 31, No. 6, pp.760–784.
- Lin, S.H., Tang, W.J., Miao, J.Y., Wang, Z.M. and Wang, P.X. (2008) 'Safety climate measurement at workplace in China: a validity and reliability assessment', *Safety Science*, Vol. 46, No. 7, pp.1037–1046.
- Lu, L., Lu, A.C.C., Gursoy, D. and Neale, N.R. (2016) 'Work engagement, job satisfaction and turnover intentions: a comparison between supervisors and line-level employees', *International Journal of Contemporary Hospitality Management*, Vol. 28, No. 4, pp.737–761.
- MacIntosh, E.W. and Doherty, A. (2010) 'The influence of organizational culture on job satisfaction and intention to leave', *Sport Management Review*, Vol. 13, No. 2, pp.106–117.
- Mathieu, C. and Babiak, P. (2016) 'Corporate psychopathy and abusive supervision: Their influence on employees' job satisfaction and turnover intentions', *Personality and Individual Differences*, Vol. 91, pp.102–106.
- Mauno, S., Kinnunen, U. and Ruokolainen, M. (2006) 'Exploring work-and organization-based resources as moderators between work–family conflict, well-being and job attitudes', *Work and Stress*, Vol. 20, No. 3, pp.210–233.
- McDowell, L., Batnitzky, A. and Dyer, S. (2008) 'Internationalization and the spaces of temporary labour: the global assembly of a local workforce', *British Journal of Industrial Relations*, Vol. 46, No. 4, pp.750–770.
- McShane, S.L. and Von Glinow, M.A.Y. (2008) *Organizational Behavior: Emerging Realities for the Workplace Revolution*, 4th ed., McGraw-Hill/Irwin, New York.
- Mearns, K., Hope, L., Ford, M.T. and Tetrick, L.E. (2010) 'Investment in workforce health: exploring the implications for workforce safety climate and commitment', *Accident Analysis and Prevention*, Vol. 42, No. 5, pp.1445–1454.
- Meijman, T.F. and Mulder, G. (1998) 'Psychological aspects of workload', in *Handbook of Work and Organizational Psychology*, pp.5–33, Psychology Press, Hove.
- Ministry of Human Resources (2017) *Jobs, Salaries and Vacancies 2017* [online] https://www.ilmia.gov.my/ebook/research/ILMIA_ArtcFREPI_2019_NER2018.pdf (accessed 2 February 2021).
- Mobley, W.H., Horner, S.O. and Hollingsworth, A.T. (1978) 'An evaluation of precursors of hospital employee turnover', *Journal of Applied Psychology*, Vol. 63, No. 4, pp.408–414.
- Nadiri, H. and Tanova, C. (2010) 'An investigation of the role of justice in turnover intentions, job satisfaction and organizational citizenship behavior in hospitality industry', *International Journal of Hospitality Management*, Vol. 29, No. 1, pp.33–41.
- Nankervis, A.R. and Compton, R.L. (2006) 'Performance management: theory in practice?', *Asia Pacific Journal of Human Resources*, Vol. 44, No. 1, pp.83–101.

- Naveh, E., Katz-Navon, T. and Stern, Z. (2005) 'Treatment errors in healthcare: a safety climate approach', *Management Science*, Vol. 51, No. 6, pp.948–960.
- Nawaz, M.M., Mohsan, F. and Khan, M.S. (2011) 'Impact of stress on job performance of employees working in banking', *Interdisciplinary Journal of Contemporary Research in Business*, Vol. 3, No. 2, pp.1982–1991.
- Newman, A., Round, H., Wang, S. and Mount, M. (2020) 'Innovation climate: a systematic review of the literature and agenda for future research', *Journal of Occupational and Organizational Psychology*, Vol. 93, No. 1, pp.73–109.
- Newman, A., Thanacoody, R. and Hui, W. (2011) 'The impact of employee perceptions of training on organizational commitment and turnover intentions: a study of multinationals in the Chinese service sector', *The International Journal of Human Resource Management*, Vol. 22, No. 8, pp.1765–1787.
- NST Business (2020) *Malaysia Attracts 91 MNCs with Nearly RM 14bil Investments* [online] <https://www.nst.com.my/business/2020/05/593540/malaysia-attracts-91-mncs-nearly-rm14bil-investments> (accessed 19 August 2020).
- Price, J.L. and Mueller, C.W. (1981) 'A causal model of turnover for nurses', *Academy of Management Journal*, Vol. 24, No. 3, pp.543–565.
- Prospect ASEAN (2018) *The Top 10 Most Attractive Companies in M'sia to Work for in 2019* [online] <https://www.prospectsasean.com/most-attractive-companies-malaysia/> (accessed 18 December 2020).
- Ramayah, T., Cheah, J., Chuah, F., Ting, H. and Memon, M.A. (2016) *Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 3.0: An Updated and Practical Guide to Statistical Analysis*, Pearson, Singapore.
- Rhoades, L., Eisenberger, R. and Armeli, S. (2001) 'Affective commitment to the organization: the contribution of perceived organizational support', *Journal of Applied Psychology*, Vol. 86, No. 5, pp.825–836.
- Rich, B.L., Lepine, J.A. and Crawford, E.R. (2010) 'Job engagement: antecedents and effects on job performance', *Academy of Management Journal*, Vol. 53, No. 3, pp.617–635.
- Robinson, R.N.S. and Beesley, L.G. (2010) 'Linkages between creativity and intention to quit: an occupational study of chefs', *Tourism Management*, Vol. 31, No. 6, pp.765–776.
- Salleh, R., Nair, M.S. and Harun, H. (2012) 'Job satisfaction, organizational commitment and turnover intention: a case study on employees of a retail company in Malaysia', *World Academy of Science, Engineering and Technology*, Vol. 72, No. 12, pp.316–323.
- Scanlan, J.N. and Still, M. (2019) 'Relationships between burnout, turnover intention, job satisfaction, job demands and job resources for mental health personnel in an Australian mental health service', *BMC Health Services Research*, Vol. 19, No. 1, p.62.
- Settoon, R.P., Bennett, N. and Liden, R.C. (1996) 'Social exchange in organizations: perceived organizational support, leader-member exchange and employee reciprocity', *Journal of Applied Psychology*, Vol. 81, No. 3, pp.219–227.
- Solinger, O.N., Van Olffen, W. and Roe, R.A. (2008) 'Beyond the three-component model of organizational commitment', *Journal of Applied Psychology*, Vol. 93, No. 1, pp.70–83.
- Spector, P.E. (1997) *Job Satisfaction: Application, Assessment, Cause, and Consequences*, Sage, Thousand Oaks, CA.
- Stone, M. (1974) 'Cross-validatory choice and assessment of statistical predictions', *Journal of the Royal Statistical Society: Series B (Methodological)*, Vol. 36, No. 2, pp.111–133.
- Streukens, S. and Leroi-Werelds, S. (2016) 'Bootstrapping and PLS-SEM: a step-by-step guide to get more out of your bootstrap results', *European Management Journal*, Vol. 34, No. 6, pp.618–632.
- Tan, K.L., Lew, T.Y and Sim, A.K.S. (2019a) 'An innovative solution to leverage meaningful work to attract, retain and manage generation Y employees in Singapore's hotel industry', *Worldwide Hospitality and Tourism Themes*, Vol. 11, No. 2, pp.204–216.

- Tan, K.L., Lew, T.Y and Sim, A.K.S. (2019b) 'Is meaningful work the silver bullet? Perspectives of the social workers', *Journal of Asia Business Studies*, Vol. 13, No. 4, pp.612–632.
- Trice, H.M. and Beyer, J.M. (1984) 'Studying organizational cultures through rites and ceremonials', *Academy of Management Review*, Vol. 9, No. 4, pp.653–669.
- Uhl-Bien, M. and Maslyn, J.M. (2003) 'Reciprocity in manager-subordinate relationships: components, configurations and outcomes', *Journal of Management*, Vol. 29, No. 4, pp.511–532.
- Vinodkumar, M.N. and Bhasi, M. (2009) 'Safety climate factors and its relationship with accidents and personal attributes in the chemical industry', *Safety Science*, Vol. 47, No. 5, pp.659–667.
- Wayne, S.J., Shore, L.M., Bommer, W.H. and Tetrick, L.E. (2002) 'The role of fair treatment and rewards in perceptions of organizational support and leader-member exchange', *Journal of Applied Psychology*, Vol. 87, No. 3, pp.590–598.
- Weiss, D.J., Dawis, R.V. and England, G.W. (1967) *Manual for the Minnesota Satisfaction Questionnaire. Minnesota Studies in Vocational Rehabilitation*, Industrial Relations Center, University of Minnesota.
- Wu, T.J., Yuan, K.S., Yen, D.C. and Xu, T. (2019) 'Building up resources in the relationship between work-family conflict and burnout among firefighters: moderators of guanxi and emotion regulation strategies', *European Journal of Work and Organizational Psychology*, Vol. 28, No. 3, pp.430–441.
- Yacob, Y., Ali, J.K., Hii, J.W.S. and Lim, X.J. (2018) 'Members' participation in service co-creation: the mediating effect of satisfaction towards loyalty', *Asian Journal of Business Research*, Vol. 8, No. 2, pp.18–33.
- Yin-Fah, B.C., Foon, Y.S., Chee-Leong, L. and Osman, S. (2010) 'An exploratory study on turnover intention among private sector employees', *International Journal of Business and Management*, Vol. 5, No. 8, pp.57–64.
- Zheng, C. and Lamond, D. (2010) 'Organisational determinants of employee turnover for multinational companies in Asia', *Asia Pacific Journal of Management*, Vol. 27, No. 3, pp.423–443.
- Zohar, D. and Luria, G. (2005) 'A multilevel model of safety climate: cross-level relationships between organization and group-level climates', *The Journal of Applied Psychology*, Vol. 90, No. 4, pp.616–628.