Role stressors and turnover intention among doctors in Malaysian public hospitals: work–family conflict and work engagement as mediators

Ifrah Harun, Rosli Mahmood and Hishamuddin Md. Som Putra Business School, Universiti Putra Malaysia, Serdang, Malaysia Role stressors and turnover intention

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Abstract

Purpose – This study aims to investigate the role of work–family conflict (WFC) and work engagement (WE) and its influence on role stressors and turnover intention among medical doctors in Malaysian public hospitals. Doctors who experience higher work stress will inevitably experience WFC, consequently triggering their intention to quit.

Design/methodology/approach – A total of 202 structured questionnaire responses were collected from medical doctors in four Malaysian public hospitals. The study used partial least squares structural equation modeling (SmartPLS 3.0) for hypotheses testing.

Findings – As hypothesized, WFC encourages turnover intention while WE mitigate the relationship between role ambiguity (RA)-TI. RA is also observed to reduce WE, which, in turn, increases the intention to quit. Findings showed that both role conflict and WFC share a positive relationship with TI while WE and TI are negatively related. Furthermore, it was found that WE and WFC are significant mediators in the RA and TI relationship. WFC is also reported to be a significant mediator between the RC and TI relationship.

Research limitations/implications – The causality effects remain limited due to the nature of the cross-sectional design. Future studies should use a longitudinal approach to gauge a better understanding of these relationships.

Practical implications – This study provides insights for policymakers in resolving the increase of turnover issues by providing support and relieving medical doctors' stress levels. Health directors should be encouraged to focus on the key aspects that may directly affect the well-being of medical doctors and eventually reduced staff turnover.

Originality/value – The study contributes to existing knowledge by measuring variables such as job demand (RS and WFC), personal resources (WE) and job outcomes (TI) in the public health care sector. Additionally, research involving COR theory in Asian countries like Malaysia remains relatively underexplored.

Keywords Role stressors, Work-family conflict, Work engagement, Turnover intention, Health-care

Paper type Research paper

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PRR Introduction

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With the rise of emerging illnesses and a recent global pandemic, the burden of the medical staff's workload in the health care sector also increases. The health care sector remains one of the most critical sectors in confronting a dearth of labor shortage globally (Kirk, 2017). According to the International of Labor Organization (ILO), there was a 13.6 million gap in the global health workforce that was expected to fulfill the demands of health-care in 2015. A similar notion was reported by the World Health Organization (WHO) where a total of 27 million health care personnel are required by 2030 to fully cater to the unmet health care expectations. If this crisis remains unresolved, the likelihood of achieving both the Sustainable Development Goal (SDGs) and Millennium Development Goal (MDGs) seems far-fetched (ILO, 2017). At present, the turnover rate in the global health care industry is reported to be 20% (ILMIA, 2018), where the Malaysian health care sector alone accounts for 4% of the total amount. This issue has sparked the interest of many academic scholars and industry key-players. Health workers are often highly susceptible to stress and may succumb to burnout. This detrimental effect on their well-being is one of the contributing factors in medical staff resigning from their jobs, thereby increasing staff shortage when the workforce is already stretched. The situation is worsened by the constraint of the limited availability of current resources in preventing staff turnover.

Turnover has always been a perennial concern among managers while among scholars, it has been an actively studied subject matter for over a decade (Hom *et al.*, 2017). The seminal work of Mobley (1977) classically described the term employee turnover as an experience to be voluntarily dismissed from current employment ties. The implications of increased turnover events are cumbersome considering the unnecessary costs incurred besides the productivity impairment and stress that could happen due to the shortage of manpower and inexperience substitutes (Hom et al., 2017). Turnover trajectories are often closely-associated with stressful working environments and taxing demands of the job. High work demand could hinder health care professionals from performing their role to the best of their ability and may consequently lead to stress. A higher work stress level could subsequently produce detrimental effects on the staff's health and well-being. Undeniably, health care workers are left to deal with role stress, lengthy working hours, increased job obligations, besides shouldering excessive workload (Hämmig, 2018). These job obstacles pose a potential threat to patients' care and safety. This adverse circumstance has led researchers to focus and emphasize the interactions between work role stressors and work environment besides investigating physical and psychological symptoms, as well as individual attitudes and behavior (Brough and Driscoll, 2005; Driscoll and Dewe, 2001).

Purpose

The novelty of this study lies in the conceptual connections between stress, work engagement (WE) and work–family conflict (WFC) in studies related to health care management practices and their impact on organizational outcomes (Meyers *et al.*, 2019; Van De Voorde *et al.*, 2016). This study examines how WE act as a plausible barrier in deterring employee turnover. Podsakoff *et al.* (2007) found that role stressors can exert adverse implications on performance and attitude besides impairing turnover intuitions. However, the relationship between role stressors and critical work outcomes from an empirical perspective remains unclear and needs to be further elucidated (Moura *et al.*, 2014). Similarly, the direct impact of WFC on work stress or burnout has also been widely investigated. However, the effects of role stressors on WFC, WE and TI are still not fully explored and understood. Taking into account the numerous empirical evidence, this study establishes the link between role stressors and the tendency to quit via WE and WFC in the context of Asian countries.

Literature review

Role stressors as job demands and depleted resources

Generally, workers are more exposed and disposed to role stress whether in the work or family environment. Therefore, it is not surprising that role stressors are central in most discussions on work stressors in the health care literature (Jensen, 2016; Portoghese *et al.*, 2017). Role stressors are often identified by its two distinct variables, namely, role ambiguity (RA) and role conflict (RC). Collectively, both stressors are said to induce and exacerbate distressful emotions and energy depletion in the workplace (Eatough *et al.*, 2011; Gilboa *et al.*, 2008). The RA variable refers to one's belief that the job requirements were not clearly articulated and in turn, causes uncertainty in where to channel one's effort (Bedeian and Armenakis, 1981; Kahn and Byosiere, 1992). On the other hand, RC involves employees receiving incompatible or contradictory demands from different parties which may lead to confusion and difficulty in task accomplishment (Fisher and Gitelson, 1983). RC is correlated with frustration and quantitative workload (Che *et al.*, 2017), burnout (Kleiner and Wallace, 2017) and performance (Arnold *et al.*, 2009). The increased prevalence of new diseases and the low doctor-patient ratio often lead to the intense workload which makes work a strenuously demanding obligation for health personnel.

Considering employees' susceptibility to role stress in the contemporary work environment, it can be asserted that the critical focus should be on, both, the predictors and outcomes of role stress. Based on previous stress literature, the effects of role stressors on different outcomes and occasions demonstrated contradictory results (Bowling *et al.*, 2015). Additionally, little empirical evidence was found on the underlying causes which linked these stressors to either individual or organizational outcomes (Karatepe *et al.*, 2014), especially in the context of Asian countries where the collectivist culture is practiced. Undoubtedly, employees who encounter exposure to the high level of stress tend to suffer adverse effects on their health and psychological well-being (Larner *et al.*, 2017; Tucker *et al.*, 2005). Thus, this study assessed the role of stressors (RA and RC) in turnover intentions. The following hypothesis is proposed for this variable:

H1. (a) RA is associated positively with TI, (b) RC is associated positively with TI.

Work engagement as personal and protective resources

WE is a motivational construct which remained a scholarly interest over the past two decades (Schaufeli *et al.*, 2006). The definition of WE, as accorded by Schaufeli *et al.* (2002, p. 74) mainly refers to "a positive, fulfilling work-related state of mind that is characterized by vigor, dedication and absorption." WE is a personal resource, which has been considered as one of the most crucial factors of well-being at the workplace (Bakker and Demerouti, 2008). The components of WE are relatively distinct, but they are generally correlated to each other. A component of WE is vigor, which is defined as the psychological endurance and elevated energy level during work, eagerness in investing effort at work and resilience when experiencing stress at work. In contrast, the absorption component of WE refers to the state of becoming fully focused and absorbed in one's work where it would be difficult to pry them away from work. The last component of WE, dedication, is a feeling of being important, passionate, motivated, dignified amid the struggle when at work.

Several scholars claimed WE as the inverse situation of burnout (Willard-Grace *et al.*, 2019). In health care settings, medical personnel is expected to build rapport and caring connection with their patients. Being empathetic and engaging patients is one of the most important elements in their job scope. An engaged employee is often considered as the most prized asset in most organizations (Huynh *et al.*, 2014). This notion is further supported by the fact that WE

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potentially encourage vast improvement in organizations (Bailey *et al.*, 2017). Although long working hours are deemed as detrimental, it does contribute to impactful work experience through WE (Dåderman and Basinska, 2016). The seminal work of Schaufeli and Bakker (2004) found that a declined in WE could further enhance the intention of leaving employment. Moreover, WE are also found to be negatively connected to turnover intentions (Saks, 2019). Another study by Coetzee and De Villiers (2010) revealed that RA causes a decline in WE after researching staff in a financial institution based in South Africa.

Previous literature on role stressors was not able to provide conclusive findings on its impact on work outcomes. As the connection between role stressors and work-outcomes cannot be fully established, the existence of a mediating mechanism is possible (Hämmig, 2018; Montani and Dagenais-Desmarais, 2018). Greater attention needs to be given to this notion as there were mixed results reported concerning work stressors framework in the current health care literature. Previous studies have overlooked the role of WE in relation to role stressors-turnover intentions, as most researchers are inclined to study these variables independently (Vandenberghe *et al.*, 2011). As such, the establishment of the empirical connection between role stressors and WE requires further investigation (Curran and Prottas, 2017; Olugbade and Karatepe, 2019). Based on the empirical and theoretical findings from past literature, it is anticipated that an increased level in each stressor will reduce the level of WE, thus, elevated turnover intention. Thus, this study predicts:

- H2. WE is negatively associated with TI.
- *H3.* (a) WE is a significant mediator of the RC and TI relationship, (b) WE is a significant mediator of the RA and TI relationship.

Work-family conflict as a threat of resource loss

WFC is an essential element to both individual and organizational outcomes. Studies over the past three decades demonstrated the damaging impact of WFC toward one's health and well-being (Frone *et al.*, 1997). The negative repercussions of WFC often stemmed from taxing demands of work conditions which in turn, caused the decline in work outcomes (Sirgy and Lee, 2018). The present study adopts the unidimensional terms of WFC from the works of Netemeyer *et al.* (1996) which advocated WFC as a type of inter-RC where the common job demand, time spent and strain of work intervenes the fulfillment of family obligations. WFC usually happens when one is incapable of balancing the demands between work and family as these demands are incompatible. As proposed by the COR theory, WFC also potentially leads to resource depletion as a consequence of employees juggling both work and family responsibilities (Grandey and Cropanzano, 1999).

A study by Michel *et al.* (2011), classified four distinct groups of work-related factors impacting WFC, namely, work stressors, work characteristics, work social support and work involvement. Of these four factors, work role stressors dominated the mainstream literature as it significantly impacts WFC. This finding is consistent with the work by Rubel *et al.* (2017), who denoted that the positive relationship between work role stressors and WFC is through stressors-strain relationship, a predominant find in several stress models. Considering the significance of role stressors, the present study adopted two components of role stressors, namely, RA and RC due to the prevalent empirical and theoretical relationship these stressors share with WFC (Matthews *et al.*, 2010a, 2010b; Stoeva *et al.*, 2002). Besides indicating an inconsistency when it comes to the relationship between RS, WFC and TI, this literature also noted inconclusive deductions on the role stressors-work outcome. For example, Rubel *et al.* (2017) concluded that all the three role stressors (RA, RC and role overload) predicted turnover through a taxing WFC/

FWC while Matthews *et al.* (2010a, 2010b) reported otherwise (RA shares a negative relationship with work-to-family conflict while RC shares a positive relation). These limitations warrant further investigation to understand the dynamics of the relationship between the said variables better. Hence, based on the findings of these studies, we postulated that:

- H4. WFC is positively associated with TI.
- H5. (a) WFC is a significant mediator in the RC and TI relationship, (b) WFC is a significant mediator in the RA and TI relationship.

Theoretical frameworks

Hobfoll's conservation of resources theory

Stressors' theoretical frameworks are frequently dependant on role theory. However, when it comes to studying WFC, the role theory may not be sufficient as role theory pay less focus to family roles, which an essential aspect in fully understanding WFC (Grandey and Cropanzano, 1999). Moreover, critics also argued that the role theory is unable to explain the motivational aspect of one's behavior and failed to examine the individual subjective experience (Kossek *et al.*, 2017). In other words, role theory failed to explicitly elucidate why people behave the way they do besides neglecting an individual's experiences in attempting to amend the role's boundaries by changing current social practices. Recognizing the limitations of role theory, there is a need for an equally established and appropriate theoretical framework for the purpose of the present study. The COR theory appears to be one of the most viable theoretical perspectives which could be used to comprehensively clarify the conflict relating to both, work and family aspects.

Theoretically, this study attempts to address a few research gaps in the stressor framework using the COR theory. Developed by esteemed scholars (Hobfoll, 1989, 2011; Hobfoll *et al.*, 2018), the COR theory presents that stress is most likely to occur when there is a lack of available resources and when one is unable to conserve and sustain these resources. In this context, resources could refer to personal characteristics, various energies or states that are of significance or value to oneself. This theory states that people aspire to sustain, acquire and protect their available resources (quality of life, health, family life and well-being) from being depleted. Individuals would make effort in safeguarding these resources while establishing some new resources in a bid to diminish stress. The present study examines the personal resources component (WE) in the COR theory besides investigating the issue of WFC as job demands (resource depletion) increases psychological role stressors and weakened WE. The depletion of resources often takes place whenever employees are exposed to stressful work environment factors, consequently leading to withdrawal in behavior. This study extends the findings of previous literature on WFC and stress literature (Dettmers, 2017; Rubel *et al.*, 2017). The proposed research framework as stipulated in Figure 1.

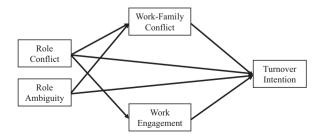


Figure 1. Research framework

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Table 1. Profile of respondents

6.1 Sample and procedure

Adopting a quantitative framework, a cross-sectional design survey was implemented as the instrument of the study while the systematic random sampling approach was used for participant selection. The survey was distributed to 400 participants, all of whom were medical doctors and specialists in 4 selected public hospitals in Malaysia. Seven departments took part in the survey, namely, the emergency and trauma department, the surgical department, the psychiatric department, the medical department, the orthopedic department, the obstetrics and gynecology department and the anesthesiology department. These departments were selected as there was a relatively high number of physicians available. After two weeks, follow up visits were conducted where 282 surveys were collected. There were a total of 202 responses available after the elimination of invalid questionnaires, charting a 50.5% overall response rate. The reported sample size exceeded the minimum requirement of the PLS-SEM software (Hair *et al.*, 2014, 2016, 2019). Harman's one-factor test was implemented to test the common method variance (CMV). The findings revealed only 29.56% which means that the CMV is not a main concern in this study. Table 1 presents a summary of respondents' characteristics.

Measuring instruments

Each participant was required to complete the self-report survey online or manually using a pen or pencil. The survey comprises five main parts, namely, role stressors, WFC, WE, turnover intention and demographics. The first part of the survey and encompasses 14 questions on role stressors: eight questions on RC and six questions on RA. RS was measured using the scales found in a study by Rizzo, House and Lirtzman (1970). The second part of the survey and is related to WFC. This variable was gauged using three

Characteristics	Frequency	(%)	
Sample size	202		
Gender			
Male	56	27.7	
Female	146	72.3	
Age			
21–25 years	5	2.5	
26–30 years	74	36.6	
31–35 years	74	36.6	
36–40 years	30	14.9	
>40 years	19	9.4	
Marital status			
Married	120	59.4	
Single	79	39.1	
Divorced/widow	3	1.5	
Tenure			
<1 years	29	14.4	
1–3 years	61	30.2	
4–9 years	73	36.1	
10–14 years	24	11.9	
>15 years	15	7.4	

questions on WFC from Matthews *et al.* (2010a, 2010b) measurement framework for WFC. The third part of the survey, addressing the WE variable. There are nine questions in this section which was adapted from the Utrecht WE Scale in Schaufeli *et al.*'s (2006) study. The fourth part of the survey involving six questions to measure turnover intention. These questions were adapted from a study by Bothma and Roodt (2013). The question format in the survey was in the form of a Likert scale with responses ranging from 1 (strongly disagree) to 7 (strongly agree). Table 2 presents the statistical description of the variables tested in this study.

Results

Measurement model

PLS-SEM analysis begun with the testing of measurement traits of the outer model (Hair *et al.*, 2019). The measurements that can be churned out by the Smart PLS ranges from the Cronbach's alpha to *t*-values. To test the router model, the constructs and their indicators were tested to establish the relationship between them. Indicators with loadings below 0.70 were eliminated after the examination of loadings was carried out (Hair *et al.*, 2014). The items were deemed reliable as it achieves a significance level (t > 1.96) indicated by the standardized outer loading between 0.723 and 0.953. The internal consistency of the constructs was also deemed adequate as the composite reliability value was between 0.83 and 0.92 for all five constructs exceeded 0.70. On the other hand, convergent validity was also confirmed as the measurement model recorded an average variance extracted (AVE) above 0.60 for all constructs with a cut-off of 0.50 (Hair *et al.*, 2014). The results of the measurement model as tabulated in Table 3.

As for the confirmation of discriminant validity, all AVEs were reported to have a higher value compared to the squared inter-construct correlations (Table 4) according to the Fornell–Larcker criterion (Henseler *et al.*, 2014). The heterotrait-monotrait (HTMT) value for all indicators was also recorded to be below 0.90 (Table 5). These values confirmed the significance of the discriminant validity for all the indicators in this study.

Structural model

The important components in the assessment of the structural models are the size and significance of the path coefficients, the level of the coefficient of determination (R^2) values and the predictive relevance as measured by Q² (Hair *et al.*, 2014). Based on Cohen's (1988) study, the R^2 values in this study were greater than 0.10 (TI = 0.310 (substantial); WE = 0.111 (weak); WFC = 0.181 (moderate). R^2 reflects the cumulative effects of exogenous latent variables on the endogenous latent variable where its value should be sufficient for a model to be deemed usable for the explanation (Urbach and Ahlemann, 2010). In this case, the target value should equal to or greater than 0.10 for R^2 to be considered sufficient (Falk and

Constructs	Mean	SD	RC	RA	WFC	WE	TI	
RC RA WFC WE TI	3.6901 2.8135 4.7937 4.7071 4.1205	1.17824 0.84438 1.35791 0.99911 1.62495	$1\\0.140^{*}\\0.407^{**}\\-0.066\\0.367^{**}$	$1\\0.181^{**}\\-0.317^{**}\\0.161^{*}$	$1\\-0.288^{**}\\0.438^{**}$	$1 \\ -0.368^{**}$	1	Table 2. Means (M values), standard deviations
Notes: *Correction (two-tailed)	elation is sig	nificant at the	0.05 level (two	-tailed); **Corre	lation is signifi	cant at the 0.01	level	(SDs) and correlations

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PRR 6,1	Items	Loadings	Cronbach's alpha	Composi	ite reliability (CR)	rho_A	Average variance extracted (AVE)
	RA4r RA5r RA7r	0.759 0.843 0.777	0.705		0.836	0.706	0.630
8	RC5 RC6 RC8 RC10	0.795 0.768 0.767 0.790	0.834		0.882	0.837	0.600
	RC10 RC11 AB3 AB4 DE2 DE3 VI2	0.753 0.796 0.723 0.845 0.813 0.796	0.888		0.914	0.902	0.640
	VI3 WFC1 WFC2 WFC3	0.819 0.927 0.953 0.805	0.876		0.925	0.885	0.805
Table 3. Measurement model outcome	T1 T4 T5	$\begin{array}{c} 0.803 \\ 0.891 \\ 0.930 \\ 0.844 \end{array}$	0.867		0.919	0.873	0.790
	Construc	ts	RA	RS	TI	WE	WFC
Table 4. Fornell Larcker test	RA RS TI WE WFC		0.794 0.148 0.159	0.775 0.367 -0.088 0.405	0.889 0.383 -0.438	0.80 -0.29	00
for discriminant validity		agonal values	in Italic are AVEs an				
					-0		
	Construc	ts	RA	R	.5	TI	WE
Table 5.	RS		0.188		101		
Heterotrait-monotrait	TI WE		0.204 0.406	0.4 0.1	131 30	0.421	
ratio (HTMT)	WFC		0.241	0.150		0.501	0.322

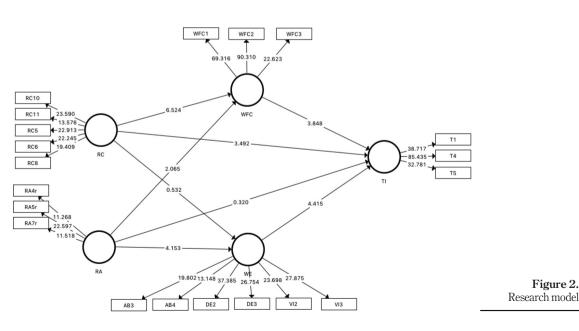
Miller, 1992). On the other hand, all constructs show Q^2 values more than 0, indicating their predictive relevancy. A Q^2 value that is larger than zero signifies that the path model is relevant to the endogenous constructs and reflective indicators. Q^2 or predictive relevance is usually calculated using the blindfolding technique. Another important value that needs to be taken into consideration is the f^2 values which indicate the significance of the exogenous construct. In this study, the f^2 values mostly showed small and medium effect sizes (Table 6).

Once the reliability and validity of all the constructs were confirmed, the results of the structural model were examined to extract occurring patterns in the data, thus commencing the hypotheses testing. The relevant components that were tested include the size and significance of the path coefficients which represented the hypotheses. The bootstrapping analysis of 5,000 subsamples was conducted to identify the levels of significance of the hypotheses (Hair *et al.*, 2016). Figure 2 shows the final structural model used for hypotheses testing. The summary of findings for the hypotheses testing is shown in Table 7.

Discussion

The findings of the current study provide an improved insight into the role of stress in triggering employees' turnover intention and aligned with the postulation of the COR theory (Hobfoll, 1989). Furthermore, these findings also corresponded to the studies by scholars (Vandenberghe *et al.*, 2011b; Hwang and Kim, 2017; Wen *et al.*, 2020) where they found a positive correlation between RC and TI. Although the current study discovered that RA does not share a relationship with TI, a study done by Kim *et al.* (2015) echoes the same sentiment where RA did not significantly influence turnover intention. This inconsistency may be due to the difference in how employees perceived the notion of RC and RA. The similar results on RA could be attributed to the fact that individuals are not diligent enough in identifying details, which can aid in lessening ambiguity. Besides that, the inability of

Constructs	R^2	Q^2	RA	f ² RC	WE	WFC	Table 6. Coefficient (R^2) ,
TI WE WFC	0.310 (substantial) 0.111 (weak) 0.181 (moderate)	0.235 0.065 0.137	0.001 (none) 0.116 (small) 0.020 (small)	0.069 (small) 0.002 (none) 0.178 (medium)	0.103 (small)	0.074 (small)	predictive relevance (Q^2) and effect size (f^2) values



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organizational surroundings in providing clear strategic objectives could also be a contributing factor to the consistency results reflecting RA (Kammeyer-Mueller and Wanberg, 2003).

In regard to the link between WE and TL results demonstrated that WE have a significant negative effect on TI, thus decreasing it. Despite the consistent role of WE in relation to the other stressors, its role as a mediator was not as predicted in the hypotheses of the current study. For example, it was observed that the transmission of the RA effect on TI was done by WE where it serves as a mediating role. This not the same in the case of transmitting the RC effect. Findings also reported that only RA decreases WE, subsequently elevating the levels of quitting intentions. The COR theory and the principle of the spiral of loss resources support these findings. As the depletion of family resources may induce future loss, WE plays an important role in enhancing employees' well-being in and outside the workplace. Another study by Babakus et al. (2016) found that both challenge and hindrance stressors are considered triggers in employees' intention to quit their jobs. The findings of this study are also supported by the works of Karatepe *et al.* (2018) where they revealed that hindrance stressors (RC and RA) are often damaging on the outcomes (e.g. quitting intentions). Their study also reported that the mediating role of WE is a potential solution in resolving the impacts caused by other stressors. The mixed results on the role of stressors, WE and job outcomes imply that further research in this area can be done to arrive at a more conclusive finding.

As for the impacts of WFC on turnover intentions, findings were reported to be in line with previous studies (Amstad et al., 2011) and consistent with the expectations of the current study. WFC is observed to hold a positive impact on turnover intention among medical doctors. This implies that when health workers are highly stressed, they are more prone to conflict in handling patients. This strenuous circumstance can eventually lead to job resignation as the burden becomes too heavy to bear. This result conforms with Dåderman and Basinska (2016), who demonstrated the positive relationship between WFC. quantitative workload and quitting intentions. The works of Nohe and Sonntag (2014) and Chen et al. (2016), also denoted the impact of WFC only on turnover intentions as FWC is found to have no relation. Another study by Wang et al. (2018) study among employees in the automobile industry reported that a work-family climate which focused on sacrifice and sharing increases the level of work attention among employees. As a result, employees may experience a higher level of WFC which subsequently, leads to higher number of staff leaving their jobs.

Overall, the findings also highlighted the positive impacts of RS on TI as mediated by WFC. The accumulation of stress among employees is undoubtedly straining work and family obligations. The damaging effects of stress are often exhibited physically,

	Hypothesis	Hypotheses paths	Path coefficients	<i>t</i> -values	<i>p</i> -values	Significance (yes/no)		ULCI (95%)
Table 7. Results of hypotheses tests based on PLS-SEM based model	H1(a) H1(b) H2 H3(a) H3(b) H4 H5(a) H5(b)	$\begin{array}{l} RA {\rightarrow} TI \\ RC {\rightarrow} TI \\ WE {\rightarrow} TI \\ RA {\rightarrow} WE {\rightarrow} TI \\ RC {\rightarrow} WE {\rightarrow} TI \\ WFC {\rightarrow} TI \\ RA {\rightarrow} WFC {\rightarrow} TI \\ RC {\rightarrow} WFC {\rightarrow} TI \end{array}$	$\begin{array}{c} -0.021\\ 0.24\\ -0.293\\ 0.095\\ 0.012\\ 0.259\\ 0.034\\ 0.100\\ \end{array}$	0.323 3.519 4.725 3.262 0.471 3.740 1.813 3.007	$\begin{array}{c} 0.374 \\ 0.000 \\ 0.000 \\ 0.001 \\ 0.319 \\ 0.000 \\ 0.035 \\ 0.001 \end{array}$	No Yes Yes No Yes Yes Yes Yes	$\begin{array}{c} -0.128\\ 0.130\\ -0.398\\ 0.054\\ -0.029\\ 0.147\\ 0.005\\ 0.051\end{array}$	$\begin{array}{c} 0.097 \\ 0.342 \\ -0.196 \\ 0.146 \\ 0.051 \\ 0.376 \\ 0.065 \\ 0.162 \end{array}$

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psychologically and even in a behavioral shift. Using the structural equation modeling method, WFC is demonstrated as a strong mediator of the RS (RA and RC) and TI relationship. As RS is said to have indirect effects on TI, stressed employees do not opt for immediate resignation unless they have experienced a high level of WFC. This consequence of RS through WFC is potentially possible, even with WE as a mediator in reducing turnover intentions by alleviating individual conflicts. These findings are similar to previous studies where WFC is denoted as a concrete contributing factor in the employee's turnover situation (Rajkonwar and Rastogi, 2018; Wang *et al.*, 2017; Wen *et al.*, 2020). Studies on the interactive effects relating to job conditions postulated that workplaces, which provide supportive resources to cope with stress can counter the effects of role stressors (Wu *et al.*, 2012).

On the same note, Choi (2008) highlighted the effect of family demands on personal stress where it was found that work demands affect personal stress through WFC. Medical staff experience WFC as a result of the failure of meeting their work and family obligation. This inability is often due to the depletion of valuable resources where they find their time and energy completely spent. Dealing with high work demands is most likely where they used most of their resources. With no other support or ways to replenish their resources, the development of the conflict between work and family roles is bound to happen. Additionally, Jain and Nair (2016) also discovered that WFC plays a mediating role in the relationship between work demands and turnover intentions which aligned with the works of Netemeyer *et al.* (1996) where WFC was found to be a mediator of the RA and RC effects on TI. The theory of Hobfoll *et al.* (2018) states that when employees encounter resources and better deal with the overlapping work and family responsibilities. Some of these strategies include WE a potential factor in buffering against WFC, thus lowering turnover intentions.

Practical contributions

This study benefits both health care management and staff. Based on the findings of this study, health care managers should introduce initiatives that can strengthen the balance of both work and personal life for their employees. By focusing on family-centered practices such as the provision of child-care at the workplace and the implementation of flexible working hours (e.g. reducing on-call time), the impact of RS and WFC can be alleviated. With long work-shifts, health workers often dedicate a large amount of time to their work, thus, allowing them more time to fulfill their personal needs is crucial. This strategy is particularly useful for employees who are free from family commitments. A variety of programs should be made available to cater to the different needs of individual employees.

Limitations

There are a few limitations reported in this study. First, as this is a quantitative study, the results may not reflect the necessary justifications and genuine perspectives of the health care employees. Hence, future studies can use in-depth interviews or a diary study for a deeper exploration of the issue. The testing of the research model for validation in other relevant sectors should also be conducted. Next, the sample in this study is cannot represent the viewpoint of public hospitals as there were only 4 selected public hospitals in the Klang Valley. The cross-sectional design of the current study also posed a limitation in the data collection method as this implies that the causality effect is limited. Therefore, future studies should use a longitudinal design approach to rectify this shortfall. This study can also be extended to include managers and upper management, as the focus of participants was only on doctors who directly handles patient care.

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PRR Conclusions

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This study elucidated the factors that impact RS and TI, consequently providing insights for both academic researchers and health care researchers in overcoming the longstanding issues of high turnover rates. By understanding the role of RS in inducing WFC, better working conditions and proper support can be made available to health care staff. These resources ensure that staff continues to provide exceptional care to their patients and perform their job well, maintaining a competitive advantage in the health care sector. Furthermore, this study also included the understudied role of WE on individual well-being, fulfilling a research gap. Additionally, this study also contributes to existing knowledge by:

- Conducting the study from the Asian perspective, covering the Eastern context; and
- Further supports the existing theory of conservation resources of Hobfoll *et al.* (2018), particularly on the loss of resources.

References

- Amstad, F.T., Meier, L.L., Fasel, U., Elfering, A. and Semmer, N.K. (2011), "A meta-analysis of workfamily conflict and various outcomes with a special emphasis on cross-domain versus matchingdomain relations", *Journal of Occupational Health Psychology*, Vol. 16 No. 2, pp. 151-169.
- Arnold, T., Flaherty, K.E., Voss, K.E. and Mowen, J.C. (2009), "Role stressors and retail performance: the role of perceived competitive climate", *Journal of Retailing*, Vol. 85 No. 2, pp. 194-205.
- Babakus, E., Yavas, U. and Karatepe, O. (2016), "Work engagement and turnover intention correlates and customer orientation as a moderator", *International Journal of Contemporary Hospitality Management*, Vol. 29 No. 6, pp. 1580-1598.
- Bailey, C., Madden, A., Alfes, K. and Fletcher, L. (2017), "The meaning, antecedents and outcomes of employee engagement: a narrative synthesis", *International Journal of Management Reviews*, Vol. 19 No. 1, pp. 31-53.
- Bakker, A.B. and Demerouti, E. (2008), "Towards a model of work engagement", *Career Development International*, Vol. 13 No. 3, pp. 209-223.
- Bedeian, A.G. and Armenakis, A.A. (1981), "A path-analytic study of the consequences of role conflict and ambiguity", *Academy of Management Journal*, Vol. 24 No. 2, pp. 417-424.
- Bothma, C.F.C. and Roodt, G. (2013), "The validation of the turnover intention scale", *SA Journal of Human Resource Management*, Vol. 11 No. 1, pp. 1-12.
- Bowling, N.A., Alarcon, G.M., Bragg, C.B. and Hartman, M.J. (2015), "A meta-analytic examination of the potential correlates and consequences of workload", *Work and Stress*, Vol. 29 No. 2, pp. 95-113.
- Brough, P. and Driscoll, M.O. (2005), "Work-family conflict and stress", in Antoniou S.G. and Cooper C. L. (Eds), *Research Companion to Organizational Health Psychology*, Edward Elgar, Cheltenham, pp. 346-365.
- Che, X.X., Zhou, Z.E., Kessler, S.R. and Spector, P.E. (2017), "Stressors beget stressors: the effect of passive leadership on employee health through workload and work–family conflict", *Work and Stress*, Vol. 31 No. 4, pp. 338-354.
- Chen, S., Lin, S., Ruan, Q., Li, H. and Wu, S. (2016), "Workplace violence and its effect on burnout and turnover attempt among chinese medical staff", Archives of Environmental and Occupational Health, Vol. 71 No. 6, pp. 330-337.
- Choi, J. (2008), "Work and family demands and life stress among chinese employees: the mediating effect of work-family conflict", *The International Journal of Human Resource Management*, Vol. 19 No. 5, pp. 878-895.

- Coetzee, M. and De Villiers, M. (2010), "Sources of job stress, work engagement and career orientations of employees in a South African financial institution", *Southern African Business Review*, Vol. 14 No. 1, pp. 27-58.
- Cohen, J. (1988), *Statistical Power Analysis for the Behavioral Sciences*, 2nd Edition. Lawrence Erlbaum Associates NJ.
- Curran, T.M. and Prottas, D.J. (2017), "Role stressors, engagement and work behaviours: a study of higher education professional staff", *Journal of Higher Education Policy and Management*, Vol. 39 No. 6, pp. 642-657.
- Dåderman, A.M. and Basinska, B.A. (2016), "Job demands, engagement, and turnover intentions in polish nurses: the role of work-family interface", *Frontiers in Psychology*, Vol. 7
- Dettmers, J. (2017), "How extended work availability affects well-being: the mediating roles of psychological detachment and work-family-conflict", *Work and Stress*, Vol. 31 No. 1, pp. 24-41.
- Driscoll, M. and Dewe, P.J. (2001), "Mediators and moderators of stressor-strain linkages", *Exploring Theoretical Mechanisms and Perspectives*, Vol. 1, pp. 257-287.
- Eatough, E.M., Chang, C.H., Miloslavic, S.A. and Johnson, R.E. (2011), "Relationships of role stressors with organizational citizenship behavior: a meta-analysis", *Journal of Applied Psychology*, Vol. 96 No. 3, pp. 619-632.
- Falk, R. and Miller, N.B. (1992), A Primer for Soft Modeling, University of Akron Press, Akron.
- Fisher, C.D. and Gitelson, R. (1983), "A meta-analysis of the correlates of role conflict and ambiguity", *Journal of Applied Psychology*, Vol. 68 No. 2, pp. 320-333.
- Frone, M.R., Russell, M. and Cooper, M.L. (1997), "Relation of work-family conflict to health outcomes", Journal of Occupational and Organizational Psychology, Vol. 70 No. 4, pp. 325-335.
- Gilboa, S., Shirom, A., Fried, Y. and Cooper, C.L. (2008), "A meta-analysis of work demand stressors and job performance", *Personnel Psychology*, Vol. 61 No. 2, pp. 227-271.
- Grandey, A.A. and Cropanzano, R. (1999), "The conservation of resources model applied to work-family conflict and strain", *Journal of Vocational Behavior*, Vol. 54 No. 2, pp. 350-370.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2014), *Multivariate Data Analysis*, Pearson Education Limited, London.
- Hair, J.F., Hult, T.M., Ringe, C.M. and Sarstedt, M. (2016), A Primer in Partial Least Squares Structural Equation Modeling (PLS–SEM), Sage New York, NY.
- 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.
- Hämmig, O. (2018), "Explaining burnout and the intention to leave the profession among health professionals – a cross-sectional study in a hospital setting in Switzerland", *BMC Health Services Research*, Vol. 18 No. 1, pp. 1-11.
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2014), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.
- Hobfoll, S.E. (1989), "Conservation of resources: a new attempt at conceptualizing stress", *American Psychologist*, Vol. 44 No. 3, pp. 513-524.
- Hobfoll, S.E. (2011), "Conservation of resource caravans and engaged settings", Journal of Occupational and Organizational Psychology, Vol. 84 No. 1, pp. 116-122.
- Hobfoll, S.E., Halbesleben, J., Neveu, J.P. and Westman, M. (2018), "Conservation of resources in the organizational context: the reality of resources and their consequences", *Annual Review of Organizational Psychology and Organizational Behavior*, Vol. 5 No. 1, pp. 103-128.
- Hom, P.W., Lee, T.W., Shaw, J.D. and Hausknecht, J.P. (2017), "One hundred years of employee turnover theory and research", *Journal of Applied Psychology*, Vol. 102 No. 3, pp. 530-545.

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and turnover

intention

PRR 6,1	Huynh, J.Y., Xanthopoulou, D. and Winefield, A.H. (2014), "The job demands-resources model in emergency service volunteers: examining the mediating roles of exhaustion, work engagement and organizational connectedness", Work and Stress, Vol. 28 No. 3, pp. 305-322.
	 Hwang, H.M. and Kim, M.J. (2017), "Relationship of gender role conflict and job satisfaction to turnover intention for men in nursing", <i>Journal of Korean Academy of Nursing Administration</i>, Vol. 23 No. 1, p. 32.
14	ILMIA (2018), Jobs, Salaries and Vacancies 2017, Institute of Labour Market Information and Analysis (ILMIA), Selangor.
	ILO (2017), "World social protection report 2017–2019: universal social protection to achieve the sustainable development goals".
	Jain, S. and Nair, S.K. (2016), "The mediating role of work-family conflict in the relationship between demands and turnover intentions", <i>International Journal of Happiness and Development</i> , Vol. 3 No. 1, pp. 22-32.
	Jensen, M.T. (2016), "A two wave cross-lagged study of work-role conflict, work-family conflict and emotional exhaustion", <i>Scandinavian Journal of Psychology</i> , Vol. 57 No. 6, pp. 591-600.
	Kahn, R.L. and Byosiere, P. (1992), "Stress in organizations", Handbook of Industrial and Organizational Psychology, Vol. 3, 2nd edition, Consulting Psychologists Press, CA, pp. 571-650.
	Kammeyer-Mueller, J.D. and Wanberg, C.R. (2003), "Unwrapping the organizational entry process: disentangling multiple antecedents and their pathways to adjustment", <i>Journal of Applied</i> <i>Psychology</i> , Vol. 88 No. 5, pp. 779-794.
	Karatepe, O.M., Beirami, E., Bouzari, M. and Safavi, H.P. (2014), "Does work engagement mediate the effects of challenge stressors on job outcomes? Evidence from the hotel industry", <i>International</i> <i>Journal of Hospitality Management</i> , Vol. 36, pp. 14-22.
	Karatepe, O.M., Yavas, U., Babakus, E. and Deitz, G.D. (2018), "The effects of organizational and personal resources on stress, engagement, and job outcomes", <i>International Journal of</i> <i>Hospitality Management</i> , Vol. 74, pp. 147-161.
	Kim, S.S., Im, J. and Hwang, J. (2015), "The effects of mentoring on role stress, job attitude, and turnover intention in the hotel industry", <i>International Journal of Hospitality Management</i> , Vol. 48, pp. 68-82.
	Kirk, M. (2017), "Strategies for health care administration leaders to reduce hospital employee turnover", ProQuest Dissertations and Theses. Walden University.
	Kleiner, S. and Wallace, J.E. (2017), "Oncologist burnout and compassion fatigue: investigating time pressure at work as a predictor and the mediating role of work-family conflict", <i>BMC Health</i> <i>Services Research</i> , Vol. 17 No. 1, pp. 1-8.
	Kossek, E.E., Lee, K.H., Kossek, E.E. and Lee, K.H. (2017), "Work-family conflict and work-life conflict", Oxford Research Encyclopedia of Business and Management, Vol. 1, pp. 1-23.
	Larner, R.J., Wagstaff, C.R.D., Thelwell, R.C. and Corbett, J. (2017), "A multistudy examination of organizational stressors, emotional labor, burnout, and turnover in sport organizations", <i>Scandinavian Journal of Medicine and Science in Sports</i> , Vol. 27 No. 12, pp. 2103-2115.
	Matthews, R.A., Bulger, C.A. and Barnes-Farrell, J.L. (2010a), "Work social supports, role stressors, and work-family conflict: the moderating effect of age", <i>Journal of Vocational Behavior</i> , Vol. 76 No. 1, pp. 78-90.
	Matthews, R.A., Kath, L.M. and Barnes-Farrell, J.L. (2010b), "A short, valid, predictive measure of work- family conflict: item selection and scale validation", <i>Journal of Occupational Health Psychology</i> , Vol. 15 No. 1, pp. 75-90.
	Meyers, M.C., Kooij, D., Kroon, B., de Reuver, R. and van Woerkom, M. (2019), "Organizational support for strengths use, work engagement, and contextual performance: the moderating role of age", <i>Applied Research in Quality of Life</i> , Vol. 15 No. 2.

- Michel, J.S., Kotrba, L.M., Mitchelson, J.K., Clark, M.A. and Baltes, B.B. (2011), "Antecedents of workfamily conflict: a meta-analytic review", *Journal of Organizational Behavior*, Vol. 32 No. 5, pp. 689-725.
- Mobley, W.H. (1977), "Intermediate linkages in the relationship between job satisfaction and employee turnover", *Journal of Applied Psychology*, Vol. 62 No. 2, pp. 237-240.
- Montani, F. and Dagenais-Desmarais, V. (2018), "Unravelling the relationship between role overload and organizational citizenship behaviour: a test of mediating and moderating effects", *European Management Journal*, Vol. 36 No. 6, pp. 757-768.
- Moura, D., Orgambidez-Ramos, A. and Gonçalves, G. (2014), "Role stress and work engagement as antecedents of job satisfaction: results from Portugal", *Europe's Journal of Psychology*, Vol. 10 No. 2, pp. 291-300.
- Netemeyer, R.G., Boles, J.S. and McMurrian, R. (1996), "Development and validation of work-family conflict and family-work conflict scales", *Journal of Applied Psychology*, Vol. 81 No. 4, pp. 400-410.
- Nohe, C. and Sonntag, K. (2014), "Work-family conflict, social support, and turnover intentions: a longitudinal study", *Journal of Vocational Behavior*, Vol. 85 No. 1, pp. 1-12.
- Olugbade, O.A. and Karatepe, O.M. (2019), "Stressors, work engagement and their effects on hotel employee outcomes", *The Service Industries Journal*, Vol. 39 No. 3-4, pp. 279-298.
- Podsakoff, N.P., Lepine, J.A. and Lepine, M.A. (2007), "Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: a Metaanalysis", *Journal of Applied Psychology*, Vol. 92 No. 2, pp. 438-454.Doctors who experience higher work stress will inevitably experience work-family conflict (WFC), consequently triggering their intention to quit. Work engagement is also seen as a contributing factor in issues regarding turnover.
- Portoghese, I., Galletta, M., Burdorf, A., Cocco, P., D'Aloja, E. and Campagna, M. (2017), "Role stress and emotional exhaustion among health care workers: the buffering effect of supportive coworker climate in a multilevel perspective", *Journal of Occupational and Environmental Medicine*, Vol. 59 No. 10, pp. 187-193.
- Rajkonwar, B. and Rastogi, M. (2018), "The impact of work-family issues on turnover intentions among nurses? A study from North-Eastern India", *Journal of Health Management*, Vol. 20 No. 2, pp. 164-177.
- Rizzo, J.R., House, R.J. and Lirtzman, S.I. (1970), "Role conflict and ambiguity in complex organisations", Administrative Science Quarterly, Vol. 15 No. 2, pp. 150-163.
- Rubel, M.R.B., Kee, D.M.H. and Rimi, N.N. (2017), "The mediating role of work–family conflict on role stressors and employee turnover intention relationship in labour-oriented organizations", *Global Business Review*, Vol. 18 No. 6, pp. 1384-1399.
- Saks, A.M. (2019), "Antecedents and consequences of employee engagement revisited", Journal of Organizational Effectiveness: People and Performance, Vol. 6 No. 1, pp. 19-38.
- Schaufeli, W.B. and Bakker, A.B. (2004), "Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study", *Journal of Organizational Behavior*, Vol. 25 No. 3, pp. 293-315.
- Schaufeli, W.B., Bakker, A.B. and Salanova, M. (2006), "The measurement of work engagement with a short questionnaire", *Educational and Psychological Measurement*, Vol. 66 No. 4, pp. 701-716.
- Schaufeli, W.B., Salanova, M. and Bakker, V.G. (2002), "The measurement of engagement and burnout: a two sample confirmatory factor analytic approach", *Journal of Happiness Studies*, Vol. 3 No. 1, pp. 71-92.
- Sirgy, M.J. and Lee, D.J. (2018), "Work-life balance: an integrative review", Applied Research in Quality of Life, Vol. 13 No. 1, pp. 229-254.
- Stoeva, A.Z., Chiu, R.K. and Greenhaus, J.H. (2002), "Negative affectivity, role stress, and work-family conflict", *Journal of Vocational Behavior*, Vol. 60 No. 1, pp. 1-16.

Role stressors and turnover intention

15

PRR 6,1	Tucker, J.S., Sinclair, R.R. and Thomas, J.L. (2005), "The multilevel effects of occupational stressors on soldiers' well-being, organizational attachment, and readiness", <i>Journal of Occupational Health</i> <i>Psychology</i> , Vol. 10 No. 3, pp. 276-299.
	Urbach, N. and Ahlemann, F. (2010), "Structural equation modeling in information systems research using partial least squares", <i>Journal of Information Technology Theory and Application</i> , Vol. 11 No. 2, pp. 5-40.
16	Van De Voorde, K., Veld, M. and Van Veldhoven, M. (2016), "Connecting empowerment-focused HRM and labour productivity to work engagement: the mediating role of job demands and resources", <i>Human Resource Management Journal</i> , Vol. 26 No. 2, pp. 192-210.
	Vandenberghe, C., Panaccio, A., Bentein, K., Mignonac, K. and Roussel, P. (2011), "Assessing longitudinal change of and dynamic relationships among role stressors, job attitudes, turnover intention, and well-being in neophyte newcomers", <i>Journal of Organizational Behavior</i> , Vol. 32 No. 4, pp. 652-671.
	Wang, L., Cheng, M.Y. and Wang, S. (2018), "Carrot or stick? The role of in-group/out-group on the multilevel relationship between authoritarian and differential leadership and employee turnover intention", <i>Journal of Business Ethics</i> , Vol. 152 No. 4, pp. 1069-1084.
	Wang, I.A., Lee, B.W. and Wu, S.T. (2017), "The relationships among work-family conflict, turnover intention and organizational citizenship behavior in the hospitality industry of Taiwan", <i>International Journal of Manpower</i> , Vol. 38 No. 8, pp. 1130-1142.
	Wen, B., Zhou, X., Hu, Y. and Zhang, X. (2020), "Role stress and turnover intention of front-line hotel employees: the roles of burnout and service climate", <i>Frontiers in Psychology</i> , Vol. 11, pp. 1-13.
	Willard-Grace, R., Knox, M., Huang, B., Hammer, H., Kivlahan, C. and Grumbach, K. (2019), "Burnout and health care workforce turnover", <i>The Annals of Family Medicine</i> , Vol. 17 No. 1, pp. 36-41.
	Wu, S., Li, H., Zhu, W., Lin, S., Chai, W. and Wang, X. (2012), "Effect of work stressors, personal strain, and coping resources on burnout in chinese medical professionals: a structural equation model", <i>Industrial Health</i> , Vol. 50 No. 4, pp. 279-287.

Further reading

Coetzee, M. and van Dyk, J. (2018), "Workplace bullying and turnover intention: exploring work".

Corresponding author

Ifrah Harun can be contacted at: ifrah.phd_mgt18@grad.putrabs.edu.my

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