

**PSYCHOSOCIAL SAFETY CLIMATE AND
BURNOUT AMONG MALAYSIAN RESEARCH
UNIVERSITY ACADEMICIANS: THE
MEDIATING ROLES OF WORK ENGAGEMENT
AND JOB DEMANDS**

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UNIVERSITI SAINS MALAYSIA

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by

TEOH KOK BAN

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LIST OF ABBREVIATIONS

APEX	Accelerated Programme for Excellence
AVE	Average Variance Extracted
CD	Challenge Demands
COR	Conservation of Resources Theory
HD	Hindrance Demands
HIWP	High-Involvement Work Practices
HRM	Human Resource Management
HTMT	Heterotrait-Monotrait Ratio of Correlations
JD-R	Job Demands-Resources
KPI	Key Performance Index
LMX	Leader-Member Exchange
MOHE	Ministry of Higher Education Malaysia
MyRA	Malaysian Research Assessment
NHESP	National Higher Education Strategic Plan
PLS	Partial Least Squares
PLS-SEM	Partial Least Squares Structural Equation Modeling
PSC	Psychosocial Safety Climate
QS	Quacquarelli Symonds
RU	Research University
SEM	Structural Equation Modeling
SPSS	Statistical Package for the Social Sciences
UKM	Universiti Kebangsaan Malaysia
UM	Universiti Malaya

UPM	Universiti Putra Malaysia
USM	Universiti Sains Malaysia
UTM	Universiti Teknologi Malaysia
UWES	Work and Well-Being Survey
VIF	Variance Inflation Factor
WE	Work Engagement

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**IKLIM KESELAMATAN PSIKOSOSIAL DAN KELELAHAN DALAM
KALANGAN AHLI AKADEMIK UNIVERSITI PENYELIDIKAN
MALAYSIA: PERANAN PERANTARAAN KETERLIBATAN KERJA DAN
PERMINTAAN PEKERJAAN**

ABSTRAK

Pada masa kini, kelaziman melelah dalam kalangan ahli akademik sedang meningkat dalam Universiti Penyelidikan Malaysia. Tambahan pula, tahap permintaan kerja yang tinggi dan tahap sumber kerja yang rendah telah menyebabkan ahli akademik mengalami lebih banyak kelelahan. Justeru, ia adalah penting untuk mengkaji peramal tahap kelelahan dalam kalangan ahli akademik dari Universiti Penyelidikan Malaysia. Berdasarkan Teori Sumber Pemuliharaan, kajian ini membina satu model penyelidikan untuk memerintah penyiasatan bagi iklim keselamatan psikososial, permintaan cabaran, permintaan hambatan dan keterlibatan kerja sebagai peramal tahap kelelahan dengan keterlibatan kerja, permintaan cabaran dan permintaan hambatan sebagai pemboleh ubah perantaraan. Borang soal selidik atas talian telah dihantar kepada semua ahli akademik yang bekerja di Universiti Penyelidikan Malaysia, iaitu Universiti Malaya, Universiti Kebangsaan Malaysia, Universiti Sains Malaysia, Universiti Putra Malaysia dan Universiti Teknologi Malaysia. Seramai 686 ahli akademik dari universiti-universiti penyelidikan Malaysia mengambil bahagian dalam kajian ini. Data yang dikumpul dianalisis dengan menggunakan ‘partial least squares structural equation modeling’. Berdasarkan analisis, hasil kajian menunjukkan bahawa iklim keselamatan psikososial dan keterlibatan kerja mempunyai hubungan negatif yang signifikan dengan kelelahan manakala permintaan cabaran dan permintaan hambatan mempunyai hubungan positif

yang signifikan dengan kelelahan. Hasil kajian turut mempamerkan bahawa iklim keselamatan psikososial dan permintaan cabaran mempunyai hubungan positif yang signifikan dengan keterlibatan kerja sedangkan permintaan hambatan mempunyai hubungan negatif yang signifikan dengan keterlibatan kerja. Di samping itu, ia telah ditunjukkan bahawa iklim keselamatan psikososial mempunyai hubungan negatif yang signifikan dengan permintaan cabaran dan permintaan hambatan. Selain itu, iklim keselamatan psikososial dan permintaan hambatan telah dikenal pasti mempunyai hubungan tidak langsung yang signifikan dengan kelelahan, melalui keterlibatan kerja sebagai pemboleh ubah perantaraan. Sementara itu, ia telah ditentukan bahawa permintaan cabaran adalah pemboleh ubah perantaraan yang signifikan ke atas hubungan antara iklim keselamatan psikososial dan kelelahan manakala permintaan hambatan adalah pemboleh ubah perantaraan yang signifikan ke atas hubungan-hubungan antara iklim keselamatan psikososial dan keterlibatan kerja, dan juga antara iklim keselamatan psikososial dan kelelahan. Hasil kajian ini adalah berfaedah untuk ahli akademik dan pengamal universiti yang ingin memahami peramal tahap kelelahan supaya kelaziman melelah dalam kalangan ahli akademik dari universiti penyelidikan dapat diurus dan dikurangkan.

**PSYCHOSOCIAL SAFETY CLIMATE AND BURNOUT AMONG
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MEDIATING ROLES OF WORK ENGAGEMENT AND JOB DEMANDS**

ABSTRACT

Nowadays, the burnout prevalence among academicians is inclining in Malaysian Research Universities. Moreover, a high level of job demands and a low level of job resources have lead academicians to experience more burnout. Hence, it signals the need to examine the predictors of burnout level among Malaysian research university academicians. Based on Conservation of Resources Theory, this study builds a research framework to govern the investigation of psychosocial safety climate, challenge demands, hindrance demands and work engagement as the predictors of burnout level with work engagement, challenge demands and hindrance demands as the mediating variables. Online questionnaire was sent to all academicians working in Malaysian Research Universities, namely Universiti Malaya, Universiti Kebangsaan Malaysia, Universiti Sains Malaysia, Universiti Putra Malaysia and Universiti Teknologi Malaysia. A total of 686 academicians from Malaysian research universities participated in the research. The data collected were analysed using partial least squares structural equation modeling. Based on the analysis, the study indicated that psychosocial safety climate and work engagement have a significant negative relationship with burnout while challenge demands and hindrance demands have a significant positive relationship with burnout. The results also exhibited that psychosocial safety climate and challenge demands have a significant positive relationship with work engagement whereas hindrance demands has a significant negative relationship with work engagement. Furthermore, it was shown that

psychosocial safety climate has a significant negative relationship with challenge demands and hindrance demands. On the other hand, psychosocial safety climate and hindrance demands had been identified to have a significant indirect relationship with burnout, through work engagement as a mediator. Meanwhile, it was determined that challenge demands are the significant mediator on the relationship between psychosocial safety climate and burnout while hindrance demands are the significant mediator on the relationships between psychosocial safety climate and work engagement as well as between psychosocial safety climate and burnout. The findings of this study are beneficial to both academics and university practitioners who wish to apprehend the predictors of burnout level so that the burnout prevalence among research university academicians can be managed and reduced.

CHAPTER 1

INTRODUCTION

1.1 Introduction

The background of the study, problem statements, research objectives, research questions, and the significance of the study are presented in this chapter. It is followed by the definition of key terms and the organisation of thesis.

1.2 Background of the Study

In the recent years, Malaysian public universities are evolving towards being excellent Research Universities (RUs) whereby the constitutes of research and publication are progressively recognised as a vital aspect and vanguard of an entity as part of the Accelerated Programme for Excellence (APEX) initiative by the Malaysian Ministry of Higher Education (MOHE) (Henny, Anita, Hayati & Rampal, 2014). RUs have become one of the important strategies for the government to move the entire nation towards the knowledge-based industrial country to attain greater prosperity (Ramli et al., 2013). In 2006, the Malaysian government awarded four public universities with RU status in Malaysia, namely Universiti Malaya (UM), Universiti Kebangsaan Malaysia (UKM), Universiti Sains Malaysia (USM), and Universiti Putra Malaysia (UPM). Another public university, Universiti Teknologi Malaysia (UTM) was also recognised as RU in 2010 (MOHE, 2017a). In addition, USM was awarded as an APEX status university on September 3, 2008 by the MOHE, where a fast track development programme is provided to USM in becoming world class entites. On March 17, 2016, New Straits Times reported that the APEX initiative is undergoing a

second phase at USM from 2014 to 2019, and this implies that the process of transforming USM into an APEX university is still in progress (Dzulkipli, 2016).

Meanwhile, according to the statistics recorded by MOHE (2018), it is claimed that the total number of RU academicians in Malaysia is 10,079 people as of 31st December 2017. The breakdown for the number of academicians from all campuses in each RU is shown in Table 1.1.

Table 1.1
Summary of Total Academicians in Research Universities

Research University	Number of Academician
Universiti Malaya	2,211
Universiti Kebangsaan Malaysia	2,163
Universiti Sains Malaysia	1,983
Universiti Putra Malaysia	1,873
Universiti Teknologi Malaysia	1,849
Total	10,079

Source: Ministry of Higher Education Malaysia (2018)

The formation of RUs has enhanced the quality of research outcomes mainly because of the competitiveness among them for acquiring external fund to finance their research projects (Ramli et al., 2013). As a result, the measure of performance for all academicians has turned into an agenda item in all Malaysian RUs due to limited individual and institutional resources, as well as increasing competitive pressure and higher demand for universal access. In relation to that, Key Performance Index (KPI) was established for greater improvement and accountability of RU academicians, but regrettably placing them under stress. Besides, the purposes of RUs in delivering the

KPI are to enhance the activities of research, promote for development and commercialisation, increase the number of post-graduate and post-doctoral students, increase the number of academicians with Ph.D degree, increase the number of foreign students, strengthen the centers of excellence as well as to improve the ranking of higher learning institutions in Malaysia (MOHE, 2017b).

Another purpose of having KPI for RUs is also the long-term strategy for The Malaysian Higher Education Institution to stay in line with the aim of putting RUs in the top 100 universities in world university ranking. Nevertheless, the Quacquarelli Symonds (QS) World University Ranking, which is exhibited in Table 1.2, demonstrates that all Malaysian RUs are yet to be in the top 100 ranking, except UM who managed to secure in the world ranking of 87 out of 1,000 participating universities in 2019. As a consequence, RU academicians are in the risk of burnout due to the need in fulfilling the KPI where all Malaysian RUs are ultimately to be in the top 100 universities in world university ranking.

Table 1.2
Quacquarelli Symonds World University Ranking for Research Universities

Research University	2019 Ranking	2018 Ranking	2017 Ranking
Universiti Malaya	87	114	133
Universiti Kebangsaan Malaysia	184	230	302
Universiti Putra Malaysia	202	229	270
Universiti Sains Malaysia	207	264	330
Universiti Teknologi Malaysia	228	253	288

Source: Quacquarelli Symonds (2019a)

It is noticed from Table 1.2 that all staff from their respective RUs have strived to achieve significant improvements in the world university ranking from 2017 to 2019. These improvements could only be realised when each RU focuses on the six metrics used by the QS world university ranking for evaluation purpose. The six metrics employed are academic reputation (40%), employer reputation (10%), faculty-over-student ratio (20%), citations per faculty (20%), international faculty ratio (5%), and international student ratio (5%) (QS, 2019b).

On the other hand, betterment among Malaysian RUs from 500 participating Asia universities is also shown in the QS Asia University Rankings as demonstrated in Table 1.3.

Table 1.3

Quacquarelli Symonds Asia University Ranking for Research Universities

Research University	2019 Ranking	2018 Ranking	2017 Ranking
Universiti Malaya	19	24	27
Universiti Kebangsaan Malaysia	41	43	55
Universiti Putra Malaysia	34	36	49
Universiti Sains Malaysia	43	46	51
Universiti Teknologi Malaysia	47	49	63

Source: Quacquarelli Symonds (2019c)

Undeniably, all Malaysian RUs have put in their efforts to achieve the eleven indicators used to compile the QS Asia University Ranking, namely academic reputation (30%), employer reputation (20%), faculty-over-student ratio (10%), international research network (10%), citations per paper (10%), papers per faculty

(5%), staff with a PhD (5%), proportion of international faculty (2.5%), proportion of international students (2.5%), proportion of inbound exchange students (2.5%), and proportion of outbound exchange students (2.5%) (QS, 2019d). Hence, academicians as well as non-academic staff from all Malaysian RUs are said to possess challenging KPI, where their respective RUs world rankings and Asia rankings need to be improved continuously by fulfilling different evaluation criteria set in the QS World University Rankings and QS Asia University Rankings.

Consequently, academicians are confronted with combating demands between the projection of RUs and personal motivation of academicians for career advancement as well as the dedication for the profession. It seems that the KPI set by some RUs is barely possible to obtain. For example, Azman, Pang, Sirat and Md. Yunus (2014) stated that one of the leading RUs in Malaysia, namely Universiti Malaya established the challenging criteria for promotion and standard academic accomplishment target by benchmarking against global RUs in Asia and also other regions. In relation to challenging promotion criteria, Arma and Ismail (2016) found that research component is the main stressful promotion criteria among Malaysian RUs since doing research is financially costly, while some academicians have to spend outside of office hours to do their research. Thereupon, there are obvious movements of academicians from universities particularly RUs to non-RUs due to the rigid promotion process (Md. Yunus & Pang, 2015). Although there is no empirical evidence to show the level of brain exodus within Malaysian universities, the mass media has claimed a few arguable statements relating to this issue. On May 20, 2014, the Star Online reported that there were numbers of medical lecturers leaving public universities, with thirty-eight medical lecturers quitting from Universiti Sains Malaysia in the last six months and twenty-one clinical lecturers left Universiti Malaya

in 2013 due to the issues of being overworked (Florence, Christina, Rebecca & Tan, 2014). It is further reported that these lecturers are captivated by the better salaries and less workload in private schools and hospitals.

Furthermore, higher education industry is in transition to recent changes that placed more mental, technical and emotional pressure on academic personnel (Byrne, Chughtai, Flood, Murphy & Willis, 2013). Hence, academicians are exposed to different types of stressors which contribute to the development of burnout like symptoms where academic staff start facing both physical and psychological symptoms that impact on their work and performance (Unterbrink et al., 2012). Moreover, academicians are possible candidates for burnout syndrome regarding their relationships with a large number of students, university staff, and administrators (Blix, Cruise, Mitchell & Blix, 1994).

In addition, more burnout issues were identified during the data collection in this present study. One of USM academicians commented that the issues of burnout were usually kept for themselves rather than sharing with others. Besides, he also added that his RU does not really concern about the burnout matters among academicians. Hence, this suggests that some of RU academicians might not be aware if they are encountering burnout since this seems to be the unspoken topic among academic staff while no proper mechanism is taken by the mentioned RU to monitor the psychological health and well-being of academicians. This is further seconded by Villavicencio-Ayub, Jurado-Cardenas and Valencia-Cruz (2015) that job burnout tends to be unnoticed and usually discovered at the last few stages of burnout, inducing severe physical, emotional and behavioural deterioration among employees. Besides, there was another feedback provided by an academician from UKM that the job stresses were mainly come from teaching and researching. Thus, he hoped that the job

scope can be defined in detail so that these two primary stressors were examined thoroughly. With that, it is noticed that some academicians are aware about the sources of burnout within their job demands. Additionally, there was one of UPM academicians requesting the present researcher to inform her about the findings of this study. She was interested to find out if the solutions recommended in this study are really helpful to overcome the burnout issues faced by RU academicians. Therefore, this indicates that burnout has become one of the concerns among RU academicians.

On the other hand, the head of unit for leadership and well-being, academic enhancement and leadership development centre from University of Malaya mentioned that based on the anecdotal data, it is believed that there is high amount of stress and burnout among academics at UM. Hence, she hoped to get the management endorsement to offer workshops on stress management and burnout. Therefore, she requested collaboration with the present researcher in this study so that the empirical evidences of burnout that are related to UM (without confidential information) can be obtained to convince her RU management to offer more courses to help academicians in managing their stress levels while safeguarding their psychological well-being. Consequently, a collaboration agreement as attached in Appendix A (p. 243) was drawn up to specify the use of findings from this present study and both parties agreed to collaborate together in identifying the burnout level of UM academicians. Thus, it is once again stressed that the implications of burnout on academicians need to be addressed and resolved.

The impact of job stress undergone by university staff was highly substantial because it may influence not only academicians but also their students (Sarafino & Ewing, 1999). It is found from the research conducted by a few universities in Malaysia that academicians experienced more stress from the management due to

competitive pressure from other universities (Sigler & Wilson, 1988). The universities are now contending with each other to get a better rank in attaining a fantabulous university in the country, and indirectly pushing academicians to boost up their performance to achieve this goal. The job demands as an academician include being a teacher, clinician, researcher, students' supervisor, and even administrator. Hence, the level of stress among academicians and even university management is high and inclining worldwide (Hendel & Horn, 2008).

Moreover, academic staff from RUs are experiencing more stress since they need to compete against one another to sustain their RU title. In order to maintain RU status, the aims to be attained are broken down to the academics based on the goals set by Malaysian Research Assessment (MyRA). The higher standards established in an RU imply that the criteria for promotion become stringent and KPI imposed to each academician is also more demanding. Bilal and Ahmed (2017) claimed that the limited and challenging promotion opportunities lead to the occurrence of burnout. They further explained that academicians tend to perceive their careers coming to an impediment when there is little chance of advancing themselves in the university. Consequently, this circumstance causes stress and disappointment among RU academicians, which ultimately lead them to burnout (Bilal & Ahmed, 2017).

1.3 Problem Statements

The days when the academic community was perceived as a low-stress working environment are over (Chen et al., 2014). The prevalence of occupational stress among academic staff is inclining in developed and developing countries. The job demands are not only in teaching but also include consulting, doing research, publications and even administrative work. Darabi, Macaskill and Reidy (2016) found

that rise in the administrative workload, obtaining research funding, increasing student numbers and having less time with students are all significant factors of stress for academics. Moreover, as Malaysian universities are developing towards becoming world-class RUs, academicians are now facing higher stress, making them more vulnerable to burnout (Henny et al., 2014).

In addition, the types of university may effect on multiplying workload and job complexity on academicians, which would directly lead to the risk of having a stressful working condition (Safaria, Othman & Wahab, 2011). In conjunction with that, RU academicians are claimed to experience more burnout as opposed to academicians in other public universities due to the need in meeting the expected criteria of RUs, such as exhibiting high standard teaching, conducting remarkable research, and commercialising their research products (Sadeghi, Zaidatol, Habibah & Foo, 2012). Although burnout is an option for all academicians, but RU academicians are unavoidable from encountering burnout due to the requirements of conducting impactful research (Altbach, 2009), taking part in research contracts with business sector progressively, as well as publishing their research findings (Wang, 2001). MOHE (2012) stated that at least 30% of the Malaysian researches are from RUs, while 10% of these research outcomes need to be commercialised. Hence, the findings of scientific research have become one of the criteria for promotion among RU academicians. This is further noted when a few specified KPIs must be achieved by each RU, especially in publishing two papers in national or international refereed and cited journal every year by each academic staff as well as obtaining research grant of RM50,000 for each academic staff per year which at least 20% from international sources and 20% from private sector (MOHE, 2017c).

On the other hand, Arma and Ismail (2016) claimed that there are five RUs in Malaysia contending against one another while endeavor to maintain their RU title and ranking. Therefore, this will develop more stress not only to the RU management, but also to their academicians (Arma & Ismail, 2016). It is noted from 2019 QS World University Rankings that the five Malaysian RUs, namely UM, UKM, UPM, USM, and UTM are in the world ranking of 87, 184, 202, 207, and 238 respectively. Given the fact that there is an intense competition among Malaysian universities, particularly RUs, academicians from these RUs are more likely to experience burnout. They are expected to fulfil the required KPI where all Malaysian RUs are ultimately to be in the top 100 universities in world university ranking. Furthermore, the National Higher Education Strategic Plan (NHESP), which was legislated in 2007, placed stress on all Malaysian academicians indirectly since it aimed to list at least three universities to be the top 100 and one university in the top 50 of world prominent universities by 2020.

According to Arma and Ismail (2016), career advancement is the primary contributor of burnout among RU academicians. They further stressed that the university demands or government for professional growth in each RU are the most stressful indication deriving from career advancement. The non-conformance in expectations between the university and academicians has led to deferred career advancement path, insufficient social support, and exhausted work environment (Ofoegbu & Nwandiani, 2006). Hence, higher level of stress is claimed emanating from impractical expectations from the university management (Ahmady, Changiz, Masiello & Brommels, 2007).

Likewise, the demanded publication for promotion in RUs is another factor that causes job burnout in career advancement (Arma & Ismail, 2016). Their study found that publication itself does not lend to burnout, but when publication is set as

the prerequisite for promotion, most academicians regard this as a distressing event in their profession. The ambitiousness to be promoted to a higher academic rank is indeed stress driving since academicians ought to comply with the absolute criteria, such as the number of publications they need to produce each year (Archibong, Bassey & Effiom, 2010).

In respect to one of the Malaysian impulsion in the NHESP, the number of students enrolled in each RU needs to be increased, while attaining an average of 10% international students of the overall enrolment (MOHE, 2012). Consequently, the workloads such as marking examination scripts and collation of results will be intensified accordingly. As a result, the likelihood for academicians to work under short time frame while demanding for more assistance is increased due to the growth in enrolment of students which in turn increased workloads (Wei, Hui & Lie, 2011). Hence, teaching has become a source of burnout for Malaysian RU academicians.

The local researchers, Ahsan, Abdullah, Yong and Alam (2009) indicated a few stress triggering factors among academicians, such as work overburden, role doubtfulness, and performance stress. Besides, it is exhibited that role oppress, role inadequacy, and lack of research grant are significantly related to job stress among academicians in universities (Tytherleigh, Webb, Cooper & Ricketts, 2005). Hence, the mechanisms in reducing the prevalence of burnout for RU academicians due to stress from job demands need to be found so that the quality of teaching and high job commitment as well as paving the way for the Malaysian RUs to transit towards a world-class RU can be ensured.

However, there are limited studies on burnout level among academicians from Malaysian RUs (Watts & Robertson, 2011; Henny et al., 2014). Hence, the researcher of the present study has conducted a preliminary survey related to burnout

in USM so that the extent of burnout among academicians is identified. In the preliminary survey, there are total of 13 questions adopted from Scott (2018) who is the author of the book “8 Keys to Stress Management”. The preliminary survey is attached in Appendix B (p. 244). A total of 50 academicians in USM was randomly selected to participate in the survey and the results showed that USM academicians have a moderate level of burnout ($M = 4.14$, $SD = 0.652$) (See Appendix C (p. 245)). However, during the data collection in the present study, one of USM academicians claimed that burnout issues among academicians are usually kept among themselves rather than sharing with others. Moreover, he added that no proper action taken by his RU to address the psychological health and well-being of academicians. Hence, this suggests that some RU academicians might not be aware if they are experiencing burnout since there is no discussion among them about this issue, as well as no significant measures taken by the mentioned RU to monitor the burnout level among academicians. Hence, there could be more unreported serious burnout scenarios occurring at Malaysian RUs. As a result, the preliminary survey and feedback during the data collection serve as the evidences of the burnout experience among academicians from Malaysian RUs.

Based on the discussions of burnout scenarios among RU academicians, it is noted that overwhelming job demands lead to the prevalence of burnout among academicians from Malaysia RUs. This is in line with the findings by Demerouti, Bakker, Nachreiner and Schaufeli (2001) who stated that burnout occurs when job demands are high. They further stated that negative working conditions with unmanageable job demands could lead to energy depletion and eventually weaken employee motivation. Hence, the local researchers, Idris, Dollard and Winefield (2011) suggested that Psychosocial Safety Climate (PSC) is useful in this context since

it is claimed as a leading indicator of a better working environment by providing manageable job demands and a high level of job resources to cope with demands at work (Bond, Tuckey & Dollard, 2010; Dollard & Bakker, 2010; Law, Dollard, Tuckey & Dormann, 2011; Dollard et al., 2012). With that, the present study believes that PSC can reduce the burnout level of RU academicians, via developing manageable job demands.

In addition, Idris et al. (2011) also added that additional potential mediators may exist in between the direct effect of PSC and burnout, and therefore this needs to be further investigated in future research. In conjunction with that, the present study proposes work engagement as a potential mediator on the relationships between PSC, job demands and burnout since past empirical studies demonstrated that work engagement is a significant mediator between PSC and work-related outcomes (Idris, Dollard & Tuckey, 2015; Lee & Idris, 2017; Mansour & Tremblay, 2018) as well as between job demands and work-related outcomes (Sulea, Virga, Maricutoiu, Schaufeli, Dumitru & Sava, 2012; Yulita, Idris & Dollard, 2014).

Nevertheless, job demands are not necessarily negative. Hence, Cavanaugh, Boswell, Roehling and Boudreau (2000) and Yulita et al. (2014) suggested that job demands should be differentiated into challenge demands and hindrance demands so that the impacts of these two demands on work and individuals can be disclosed accurately. Challenge demands represent the job demands which are anticipated to build challenges or opportunities for personal growth and attainment, whereas hindrance demands are defined as the job demands which are perceived as obstacles to personal growth or demands that interfere with or hinder one's ability to achieve valued goals (Cavanaugh et al., 2000). In relation with both challenge demands and hindrance demands, it triggers the interest of present researcher to investigate further

if high PSC contexts in RUs are prone to create more positive challenging demands for academicians, while unlikely to generate negative hindrances to work goal attainment. Moreover, it is interesting to examine in the present study if both challenge demands and hindrance demands project different effects on burnout. On the other hand, since PSC emphasises on psychological health and well-being of employee, it is excited to do further researches in the present study relating the way these both demand types create different processes via which PSC influences work engagement and burnout respectively.

Furthermore, Garrick, Mak, Cathcart, Winwood, Bakker and Lushington (2014) mentioned that a working environment with manageable job demands due to higher perceived PSC tends to lead the level of work engagement among employees to escalate at a greater pace compared with employees from the organisation with lower perceived PSC. It is further pointed that PSC could have triggered employees to put in more personal resources to engage with job demands so that the valuable psychological care provided by the organisation is being recompensed. Consequently, a high level of work engagement is cultivated due to high personal resources, and this could guard employees from being exposed to burnout (Maricutoiu, Sulea & Iancu, 2017). Hence, the present research proposes that PSC can enhance work engagement level of RU academicians, whereas a promising level of work engagement can reduce the burnout level of RU academicians. Meanwhile, Lesener, Gusy and Wolter (2019) advised that the different effects of challenge demands and hindrance demands on work engagement should be examined in future research since they postulate that these different types of job demands influence work engagement differently. As a result, the present researcher takes the calls to examine the implications of challenge demands and hindrance demands on work engagement of RU academicians. Consequently, this

alerts the present researcher to further verify if both challenge and hindrance demands affect work engagement differently, which in turn bringing the dissimilar repercussions on burnout level of RU academicians.

As a nutshell, the present research intends to examine a study of PSC relating its effects on burnout of RU academic staff so that a healthier and productive job design is guaranteed through work engagement and two types of job demands, which are challenge demands and hindrance demands. Hence, the present research proposes work engagement, challenge demands and hindrance demands can be the potential mediators for the relationship between PSC and burnout. The researcher of the present research believes that job demands and work engagement among RU academicians can help to minimise their burnout level. With that, the limited research on burnout among RU academicians is enriched and the management as well as policy-makers of RUs are beneficial by developing the excellent job design for their academic staff.

1.4 Research Objectives

The objectives of this research are:

1. To examine the relationship between PSC and burnout.
2. To examine the relationship between job demands (challenge demands and hindrance demands) and burnout.
3. To examine the relationship between work engagement and burnout.
4. To examine the relationship between PSC and work engagement.
5. To examine the relationship between job demands (challenge demands and hindrance demands) and work engagement.
6. To examine the relationship between PSC and job demands (challenge demands and hindrance demands).

7. To examine the mediating role of work engagement on the relationship between PSC and burnout.
8. To examine the mediating role of work engagement on the relationship between job demands (challenge demands and hindrance demands) and burnout.
9. To examine the mediating role of job demands (challenge demands and hindrance demands) on the relationship between PSC and burnout.
10. To examine the mediating role of job demands (challenge demands and hindrance demands) on the relationship between PSC and work engagement.

1.5 Research Questions

The research aims to answer the research questions as follows:

1. Does PSC have a relationship with burnout?
2. Do job demands (challenge demands and hindrance demands) have a relationship with burnout?
3. Does work engagement have a relationship with burnout?
4. Does PSC have a relationship with work engagement?
5. Do job demands (challenge demands and hindrance demands) have a relationship with work engagement?
6. Does PSC have a relationship with job demands (challenge demands and hindrance demands)?
7. Does work engagement mediate the relationship between PSC and burnout?

8. Does work engagement mediate the relationship between job demands (challenge demands and hindrance demands) and burnout?
9. Do job demands (challenge demands and hindrance demands) mediate the relationship between PSC and burnout?
10. Do job demands (challenge demands and hindrance demands) mediate the relationship between PSC and work engagement?

1.6 The Significance of the Study

The significance of this study can be viewed from theoretical, practical and methodological aspects in the area of burnout among academicians of Malaysian RUs.

1.6.1 Theoretical Significance

Firstly, the present research helps to enrich the literature on burnout issues. Henny et al. (2014) mentioned that there is scarcity of research on burnout within the higher learning institutions. This is further seconded by Watts and Robertson (2011) who claimed that the studies on burnout across the universities in Malaysia are limited. Hence, this study takes the initiative to examine the burnout level among academicians from Malaysian RUs. Besides, different antecedents, such as PSC, challenge demands, hindrance demands and work engagement, are used in this study as the predictors of burnout level among RU academicians so that the literature on burnout is embellished with new perspectives. Consequently, the findings of this study could serve as a guideline and reference to other researchers who are interested in this burnout related issue. Moreover, the application of PSC into the working conditions of RUs may enlighten the future researchers to have a good idea and better understanding regarding

the mechanisms in resolving the burnout level among employees in higher education institutions or any workforce within Malaysia.

Secondly, this study becomes significant through the use of Conservation of Resources (COR) Theory by inspecting the effects of stressors and resources towards burnout level among RU academicians in a comprehensive research framework. Westman, Hobfoll, Chen, Davidson and Laski (2005) recommended that researchers should enrich COR theory by developing on any contemporary research with the examination of various variables. As a result, PSC, challenge demands, hindrance demands, work engagement and burnout are used to contribute to the body of knowledge in COR theory.

Thirdly, this study is also significant through the testing of mediating roles of work engagement, challenge demands and hindrance demands between the independent variables and dependent variable. Based on call for the examination of potential mediators between PSC and burnout (Idris et al., 2011), the indirect effects between PSC, differentiated job demands and burnout, via work engagement as a mediator, are investigated in this study. Meanwhile, the present study also takes the initiative to build on the recommendations by Cavanaugh et al. (2000) and Yulita et al. (2014) that the job demands should be separated into challenge demands and hindrance demands so that the effects of these demands on work and employees can be interpreted accurately. Moreover, Lesener et al. (2019) also suggested that the different influences of challenge demands and hindrance demands on work engagement should be further explored. Hence, this study employs both challenge demands and hindrance demands as the mediators to examine the indirect relationships between PSC and work engagement as well as between PSC and burnout. As a result, a better understanding is obtained about the causal mechanism behind the relationships

between the independent variables and dependent variable, through the examination on work engagement, challenge demands and hindrance demands as the mediators.

Lastly, by expanding the Job Demands-Resources (JD-R) model with PSC, a better job design for RU academicians is ensured through promoting the challenge demands which promise for good results, while avoiding hindrance demands which bring the negative effects such as burnout and poor work engagement. Although it is not shown in any relevant previous theory-driven research from Malaysia to describe the psychological health and engagement in RUs, the application of PSC is expected to be significantly helpful in minimising the level of burnout through job demands (Idris et al., 2011). Hence, the literature of burnout is further enriched with the help of PSC in job demands.

1.6.2 Practical Significance

This study intends to decrease the burnout level among academicians from Malaysian RUs. Both the RU management and policy-makers would be interested to find out the way in decreasing the burnout level among academicians, which eventually ensuring the formation of world-class RUs. It is thus practically substantial to investigate the predictors of burnout so that effective interference and efficient policies can be enacted by the policy-makers to decrease the burnout level among RU academicians.

Focusing the context of this study, particularly within Malaysian RUs, should give a greater apprehension to the RU practitioners on the predictors of burnout occurrence among academicians (Boswell, Ren & Hinrichs, 2008). This study should be beneficial to the RU management and policy-makers by stimulating them to reduce the stressors and to escalate the resources in RU working environment. Furthermore,

Singh, Goolsby and Rhoads (1994) mentioned that a sole stressor may not be destructively malfunctioned, but the aggregate of various stressors may surpass the resources available for an individual to deal with job demands at work, which subsequently lead to strain and burnout. Hence, this study is anticipated to give insights to Malaysian RUs on how PSC, which serves as a job resource, promotes a better working environment through job demands, which in turn enhancing the work engagement level and ultimately leading to minimum level of burnout among academicians. Therefore, directly and indirectly, in-depth PSC contexts (high commitment from management, priority, communication and participation for academicians' psychosocial health and safety) should result in improved performance. Although it is very well acknowledged for the impact of job stress on employee well-being and performance (Demerouti, Verbeke & Bakker, 2005; Bakker, Van Emmerik & Van Riet, 2008), the measurement of PSC could offer a useful tool to help in the change of management practices of RUs and consecutively the academic staff' health and effectiveness.

Besides, though job stress prevention strategies nowadays are becoming more popular in organisations (Noblet & LaMontagne, 2006), critics about current practices of these strategies implied that they focus too much on the individual rather than working conditions. Hence, building a strong PSC is favoured since it is the key role to promote healthy working conditions.

In terms of management perspective, the RU management or policy-makers may be beneficial with the application of PSC into the job design of academicians. The relevant and suitable KPIs can be developed for academicians based on the revamped job demands while achieving the vision and mission of RUs. This approach is critical to ensure the prevalence of burnout among academicians is at the minimum level.

Moreover, this study also provides insights to practitioners on the implications of PSC, challenge demands and hindrance demands on work engagement. With that, the RU management can gather the ideas from this study regarding the way to increase the work engagement level among academicians through the manipulation of PSC, challenge demands and hindrance demands.

Lastly, this study prepares the RU management with awareness whether elevating work engagement could help to reduce the burnout level among academicians. In conjunction with that, the RU management and policy-makers can identify the factors to dwindle the burnout level and hence allowing them to take corrective steps in order to preserve the benefits of Malaysian RUs.

1.6.3 Methodological Significance

This study also offers a few methodological significances by employing partial least squares structural equation modelling (PLS-SEM) and the bootstrapping technique to examine the hypothesised relationships in this model.

Foremost, PLS-SEM is considered as suitable preference for statistical analysis due to its ability in maximising explained variance in the dependent variable; working perfectly with complex model; imposing lesser requirements on the data normality and having stronger statistical power (Hair, Ringle & Sarstedt, 2011). Moreover, it is demonstrated that majority of the behavioural studies do not fulfil the normality requirement (Micceri, 1989; Peng & Lai, 2012) and still, the PLS-SEM results are robust despite the data are greatly skewed (Hair, Sarstedt, Ringle & Mena, 2012; Peng & Lai, 2012). Thus, the employment of PLS-SEM is justified in the present study.

Next, certain findings can only be discovered with the application of PLS-SEM which would not be revealed with the use of multiple regression. This is because PLS-SEM rather than multiple regression can provide more predictive accuracy and a lesser risk of chance correlation (Cramer, 1993). As a consequence, the use of PLS-SEM is foreseen to provide not only extra methodological significance to the burnout level among RU academicians, but also interesting additional findings.

Last but not least, the bootstrapping technique rather than the causal procedure by Baron and Kenny (1986) or Sobel test is used in this study to test the mediation effects. Hair, Hult, Ringle and Sarstedt (2017) noted that researchers should follow Preacher and Hayes (2004, 2008) to bootstrap the sampling distribution of the indirect effect when testing mediating effects. They further added that this method works well for simple and multiple mediator models. Moreover, the bootstrapping technique is perceived to be utterly fit for PLS-SEM due to the absence of assumption made about the shape of the constructs' distribution, or the sampling distribution of the statistics and hence, this makes bootstrapping technique applicable to small sample sizes (Preacher & Hayes, 2008; Hair et al., 2017). With that, it is concluded that the application of the bootstrapping approach contributes methodologically significant to this present study.

1.7 Definition of Key Terms

Definitions of the key terms in this study are presented below:

Burnout

A state of emotional exhaustion, depersonalisation and reduced personal accomplishment that is caused by stress (Maslach, Jackson & Leiter, 1996). In this

study, burnout is referred as a phenomenon that is characterised by feelings of (emotional, physical and cognitive) exhaustion due to the demands of work among employees (Demerouti, Bakker, Vardakou & Kantas, 2003).

Psychosocial Safety Climate (PSC)

A shared perception among employees regarding policies, practices and procedures in the workplace as they relate to workers' psychological health and well-being (Dollard & Bakker, 2010). In this study, PSC is referred as an up-stream resource that concerns with the values and attitudes of senior management toward the care and practices in relating to employees' psychosocial well-being (Hall, Dollard & Coward, 2010).

Challenge demands

Job demands that are viewed by employees as rewarding work experiences that create an opportunity for personal growth (Cavanaugh et al., 2000). In this study, challenge demands are referred as job responsibility, job complexity, job scope, workload and time constraint that promote to personal development, creativity and innovative attainment among employees (Cavanaugh et al., 2000; LePine, Podsakoff & LePine, 2005).

Hindrance demands

Job demands that are viewed as obstacles to personal growth or demands that interfere with or hinder one's ability to achieve valued goals (Cavanaugh et al., 2000). In this study, hindrance demands are referred as role ambiguity, red tape, role conflict, job insecurity and organisational politics that decrease personal achievement and trigger

negative affections, such as feeling of ineptitude and tension among employees (Cavanaugh et al., 2000; LePine et al., 2005; Crawford, LePine & Rich, 2010).

Work engagement

A positive, fulfilling, work-related state of mind that is constituted by energy, enthusiasm and immersion in work (Schaufeli, Shimazu, Hakanen, Salanova & De Witte, 2017).

Research University (RU)

A public university that is recognised by The Cabinet on the 11 October 2006 as an excellent hub for education and research (MOHE, 2015). The RUs are UM, UKM, USM, UPM and UTM.

1.8 The Organisation of Thesis

The thesis is divided into five chapters. Chapter 1 exposes the readers to the background of the study, problem statements, research objectives, research questions, the significance of the study and definition of key terms. Literature relating to the study variables is reviewed in Chapter 2. Besides, the underlying theory, the research framework, and hypotheses are also included in Chapter 2. Meanwhile, Chapter 3 presents the research methodology employed in this study, which consists of the research philosophy, research design, population and source of data, unit of analysis, sampling technique, minimum sample size, data collection procedures, research instruments, common method bias, pre-testing of questionnaire and the statistical analyses used for the research. Chapter 4 presents the statistical results of this research. Lastly, Chapter 5 discusses the findings, implications of the study, limitations of this study and suggestions for future research.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The purpose of this study is to investigate the relationships between PSC, challenge demands, hindrance demands, work engagement, and burnout. In addition, the mediating roles of challenge demands, hindrance demands and work engagement are examined in this study. The relevant literature leading to the development of the research framework is reviewed in this chapter. Particularly, literature relating to PSC, challenge demands, hindrance demands, work engagement, and burnout are discussed. Previous empirical findings pertaining to each variable are explored as well. Besides, the theory that supports the research framework is exhibited and discussed. Lastly, the research framework and the hypotheses of this study are presented.

2.2 Burnout

Burnout is a state of physical, emotional and mental exhaustion due to long-term involvement in work-related situations that are excessively demanding (Harrison, 1999). Over the years, it is shown by empirical research that burnout involves all employees regardless of the job they do (Leiter & Schaufeli, 1996; Maslach, Leiter & Schaufeli, 2008) as long as there is an imbalance between their job demands (physical workload, time pressure, recipient contact, physical environment, shift work) and the available resources (feedback, rewards, job control, participation, job security, supervisor support) (Karasek, 1979; Demerout et al., 2001). Similarly, it is supported by the job-resources model of burnout as shown in Figure 2.1 (p. 26) that job demands lead to exhaustion while job resources lead to disengagement.