

**PSYCHOSOCIAL SAFETY CLIMATE AND
WORK-RELATED OUTCOMES AMONG
ACADEMICIANS IN MALAYSIAN RESEARCH
UNIVERSITIES**

GAN KIA HUI

UNIVERSITI SAINS MALAYSIA

2022

**PSYCHOSOCIAL SAFETY CLIMATE AND
WORK-RELATED OUTCOMES AMONG
ACADEMICIANS IN MALAYSIAN RESEARCH
UNIVERSITIES**

by

GAN KIA HUI

**Thesis submitted in fulfilment of the requirement
for the degree of
Doctor of Philosophy**

January 2022

ACKNOWLEDGEMENT

I would like to express my deepest gratitude to my supervisor, Associate Professor Dr. Daisy Kee Mui Hung, for her patience, encouragement, and guidance. Under her supervision, I have acquired vast knowledge related to the topic under study. Furthermore, her constant care and advice have assisted me in completing the thesis on time.

I am also grateful to my parents and my husband. With their love and support, I was able to conjure all my energy on completing the thesis and finishing it on time. Special thanks go to my beloved parents, Mr. Gan Ah Youn and Mrs. Tang Kok Hua, who gave unconditional support to me during the course of the study. Also, I would like to express my heartfelt thanks to my dearest husband, Jason Teh. Without their continuous encouragement and support, it would be impossible for me to accomplish this research.

Last but not the least, I would like to thank those who participated in my survey for their valuable time and sincere feedbacks.

TABLE OF CONTENTS

ACKNOWLEDGEMENT	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	ix
LIST OF FIGURES	xii
LIST OF ABBREVIATIONS	xiii
LIST OF APPENDICES	xiv
ABSTRAK	xvi
ABSTRACT	xvii
CHAPTER 1 INTRODUCTION	1
1.1 Introduction	1
1.2 Background of the Study	1
1.3 Problem Statement	11
1.4 Research Objectives	15
1.5 Research Questions	16
1.6 The Significance of the Study	17
1.6.1 Theoretical Significance	17
1.6.2 Practical Significance	20
1.7 Scope of the Study	21
1.8 Definition of Key Terms	22
1.9 Organization of the Thesis	23

CHAPTER 2 LITERATURE REVIEW	25
2.1 Introduction	25
2.2 Background of Research Universities (RUs)	25
2.3 Work Engagement	26
2.4 Job Satisfaction	30
2.5 Organizational Commitment	33
2.6 Psychosocial Safety Climate (PSC)	36
2.7 Job Demands	41
2.8 Job Resources	45
2.9 Job Performance	47
2.10 Underlying Theories	62
2.10.1 Conservation of Resources (COR) Theory	62
2.10.2 Job Demands-Resources Theory	67
2.11 Research Framework	70
2.12 Gaps in the Literature	75
2.13 Hypotheses	76
2.13.1 Relationships between Psychosocial Safety Climate (PSC), Job Demands, Job Resources and Work Engagement.....	77
2.13.2 Relationships between Psychosocial Safety Climate (PSC), Job Demands, Job Resources and Job Satisfaction	83
2.13.3 Relationships between Job Resources, Work Engagement, Job Satisfaction and Organizational Commitment	87

2.13.4	Relationships between Psychosocial Safety Climate (PSC) and Job Demands	92
2.13.5	Relationships between Psychosocial Safety Climate (PSC) and Job Resources	94
2.13.6	The Mediating Role of Job Demands on the Relationship between PSC, Work Engagement, Job Satisfaction and Organizational Commitment	96
2.13.7	The Mediating Role of Job Resources on the Relationship between PSC, Work Engagement, Job Satisfaction and Organizational Commitment	98
2.13.8	Relationship between Work Engagement, Job Satisfaction, Organizational Commitment and Job Performance	100
2.14	Summary of Hypotheses	111
2.15	Summary	112
CHAPTER 3 RESEARCH METHODOLOGY.....		113
3.1	Introduction	113
3.2	Research Philosophy	113
3.3	Research Design	115
3.4	Population and Source of Data.....	115
3.5	Unit of Analysis	117
3.6	Sampling Technique.....	117
3.7	Minimum Sample Size	119
3.8	Data Collection Procedures	120

3.9	Research Instruments	122
3.9.1	Psychosocial Safety Climate	123
3.9.2	Job Demands and Job Resources	125
3.9.3	Work Engagement.....	126
3.9.4	Job Satisfaction	127
3.9.5	Organizational Commitment.....	128
3.9.6	Job Performance.....	129
3.10	Common Method Bias	129
3.11	Pre-Testing of Questionnaire	130
3.12	Pilot Test	132
3.13	Statistical Analyses	133
3.13.1	Data Screening	134
3.13.2	Descriptive Statistics	135
3.13.3	Assessment of the Measurement Model.....	136
3.13.4	Assessment of the Structural Model.....	138
3.14	Summary	141
	CHAPTER 4 DATA ANALYSIS AND RESULTS.....	142
4.1	Introduction	142
4.2	Response Rates.....	142
4.3	Profiles of the Respondents.....	145
4.4	Data Screening	148
4.4.1	Missing Data	148

4.4.2	Outliers	149
4.4.3	Normality	149
4.4.4	Common Method Variance	150
4.5	PLS-SEM Analysis	151
4.6	Measurement Model.....	151
4.6.1	Construct Validity	152
4.6.2	Convergent Validity	152
4.6.3	Discriminant Validity.....	154
4.6.4	Heterotrait-Monotrait Ratio of Correlations (HTMT)	155
4.6.5	Reliability	155
4.7	Means Scores and Standard Deviation Scores of Study Variables	167
4.8	Structural Model.....	168
4.8.1	Path Coefficients and Coefficients of Determination	169
4.8.2	Effect Size	182
4.8.3	Predictive Relevance	185
4.8.4	Predictive Effect Size q^2	186
4.8.5	PLS Predict.....	188
4.9	Summary of Hypotheses	190
4.10	Summary	191
	CHAPTER 5 DISCUSSION AND CONCLUSION.....	193
5.1	Introduction	193
5.2	Recapitulation of the Study's Findings	193

5.3	Discussion	197
5.3.1	Relationship between Psychosocial Safety Climate (PSC), Job Demands, and Job Resources have a relationship with work-related outcomes (Work Engagement, Job Satisfaction, and Organizational Commitment)	197
5.3.2	Relationship between Psychosocial Safety Climate (PSC), Job Demands, and Job Resources.....	208
5.3.3	Mediating Role of Job Demands	211
5.3.4	Mediating Role of Job Resources.....	214
5.3.5	Relationship between Work Engagement, Job Satisfaction, Organizational Commitment and Job Performance	217
5.4	Contributions and Implications of the Study.....	221
5.4.1	Theoretical Contributions.....	221
5.4.2	Practical Contributions	224
5.5	Limitations of the Study	228
5.6	Suggestions for Future Research.....	230
5.7	Conclusion.....	230
	REFERENCES.....	233
	APPENDICES	
	LIST OF PUBLICATIONS	
	LIST OF ACTIVITIES	

LIST OF TABLES

	Page
Table 2.1 Summary of Literature Review for the variables in this study.....	50
Table 2.2 Summary of Literature Review relating between PSC, Job Demands, Job Resources, Work Engagement, Job Satisfaction, and Organizational Commitment.....	103
Table 3.1 Number of Academicians in the Research Universities.....	115
Table 3.2 Summary of Measurements used in the Study.....	123
Table 3.3 Measurements Items for Psychosocial Safety Climate (PSC).....	124
Table 3.4 Measurements Items for Job Demands.....	125
Table 3.5 Measurements Items for Job Resources.....	126
Table 3.6 Measurements Items for Work Engagement.....	127
Table 3.7 Measurements Items for Job Satisfaction.....	128
Table 3.8 Measurements Items for Organizational Commitment.....	128
Table 3.9 Measurements Items for Job Performance.....	129
Table 3.10 Rewording of Questionnaire Items based on Feedbacks from the Pre-test Respondents.....	131
Table 4.1 Participating Research Universities and Overall Response Rates.....	143
Table 4.2 Profiles of Respondents.....	146
Table 4.3 Skewness and Kurtosis Values for the Study Variables.....	150
Table 4.4 Loadings and Cross Loadings (Final Run).....	158
Table 4.5 Outer Loadings of Constructs (First Run).....	160
Table 4.6 Results of the Measurement Model (Final Run).....	162
Table 4.7 Discriminant Validity of Constructs.....	165
Table 4.8 Heterotrait-Monotrait Ratio of Correlations (HTMT) Criterion.....	166

Table 4.9	Mean Scores and Standard Deviation Scores for the Study Variables.	168
Table 4.10	Path Coefficients of Psychosocial Safety Climate, Job Demands and Job Resources on Work Engagement.....	173
Table 4.11	Path Coefficients of Psychosocial Safety Climate, Job Demands and Job Resources on Job Satisfaction	174
Table 4.12	Path Coefficients of Psychosocial Safety Climate, Job Demands and Job Resources on Organizational Commitment.....	175
Table 4.13	Path Coefficients of Psychosocial Safety Climate and Job Demands..	175
Table 4.14	Path Coefficients of Psychosocial Safety Climate and Job Resources.	176
Table 4.15	Mediating Path Coefficients Psychosocial Safety Climate on Work Engagement, Job Satisfaction and Organizational Commitment via Job Demands	179
Table 4.16	Mediating Path Coefficients Psychosocial Safety Climate on Work Engagement, Job Satisfaction and Organizational Commitment via Job Resources.....	179
Table 4.17	Path Coefficients of Work Engagement, Job Satisfaction and Organizational Commitment on Job Performances.....	181
Table 4.18	Effect size for the relationship between Psychosocial Safety Climate, Job Demands, Job Resources and Work Engagement	182
Table 4.19	Effect size for the relationship between Psychosocial Safety Climate, Job Demands, Job Resources and Job Satisfaction.....	183
Table 4.20	Effect size for the relationship between Psychosocial Safety Climate, Job Demands, Job Resources and Organizational Commitment	183
Table 4.21	Effect size for the relationship between Psychosocial Safety Climate and Job Demands	184

Table 4.22	Effect size for the relationship between Psychosocial Safety Climate and Job Resources	184
Table 4.23	Effect size for the relationship between Work Engagement, Job Satisfaction, Organizational Commitment and Job Performance.....	185
Table 4.24	Cross-Validated Redundancy for the Endogenous Variables	186
Table 4.25	q^2 Effect size for the relationship between Psychosocial Safety Climate, Job Demands, Job Resources and Work Engagement.....	187
Table 4.26	q^2 Effect size for the relationship between Psychosocial Safety Climate, Job Demands, Job Resources and Job Satisfaction	187
Table 4.27	q^2 Effect size for the relationship between Psychosocial Safety Climate, Job Demands, Job Resources and Organizational Commitment.....	188
Table 4.28	q^2 Effect size for the relationship between Work Engagement, Job Satisfaction, Organizational Commitment and Job Performance.....	188
Table 4.29	PLS Predict.....	189
Table 4.30	Summary of Hypotheses Testing.....	190

LIST OF FIGURES

	Page
Figure 1.1 Adapted from QS World University Rankings (2018-2022)	5
Figure 1.2 Adapted from QS Asia University Rankings (2018-2022)	6
Figure 1.3 Overall citation impact of RU from the year of 2013 to 2017	7
Figure 2.1 Conservation of Resources (COR) Theory.....	67
Figure 2.2 The Job Demands-Resources Model of Work-related Outcome.....	70
Figure 2.3 Research Framework	72
Figure 4.1 Measurement Model Framework	157
Figure 4.2 Structure Model of the Research Model with Path Coefficients	171
Figure 4.3 Structure Model of the Research Model with t-value	172

LIST OF ABBREVIATIONS

COR	Conservation of Resources Theory
JDR	Job Demands-Resources Theory
RUs	Research Universities
KPI	Key Performance Index
JD	Job Demands
JR	Job Resources
OC	Organizational Commitment
WE	Work Engagement
JS	Job Satisfaction
PSC	Psychosocial Safety Climate
JP	Job Performance

LIST OF APPENDICES

APPENDIX A	QUESTIONNAIRE
APPENDIX B	STUDENT VERIFICATION LETTER
APPENDIX C	SAMPLE EMAIL – REQUEST FOR DATA COLLECTION APPROVAL
APPENDIX D	SAMPLE RESPONDENT FOR DATA COLLECTION
APPENDIX E	DESCRIPTIVE STATISTICS OF DEMOGRAPHIC VARIABLES
APPENDIX F	MISSING DATA
APPENDIX G	COOK’S DISTANCE VALUE
APPENDIX H	SKEWNESS AND KURTOSIS
APPENDIX I	HARMAN’S SINGLE FACTOR TEST
APPENDIX J	PATH COEFFICIENT (INITIAL STAGE)
APPENDIX K	PATH COEFFICIENT (DELETE OC4, JP6 AND JP7_FINAL)
APPENDIX L	2ND STAGES
APPENDIX M	T-VALUE
APPENDIX N	CONSTRUCT CROSSVALIDATED REDUNDANCY K =10
APPENDIX O	CONSTRUCT CROSSVALIDATED REDUNDANCY K =10
APPENDIX P	JD AS MEDIATOR
APPENDIX Q	JR AS MEDIATOR
APPENDIX R	AVE
APPENDIX S	DIRECT RELATIONSHIP
APPENDIX T	INDIRECT RELATIONSHIP
APPENDIX U	CONSTRUCT CROSSVALIDATED REDUNDANCY

APPENDIX V	TOKEN APPRECIATION
APPENDIX W	LIST OF PUBLICATIONS
APPENDIX X	LIST OF ACTIVITIES

**IKLIM KESELAMATAN PSIKOSOSIAL DAN HASIL BERKAITAN KERJA
DALAM KALANGAN**

PENSYARAH UNIVERSITI PENYELIDIKAN DI MALAYSIA

ABSTRAK

Berdasarkan Teori Penukaran Sumber dan Teori Permintaan Kerja-Sumber, kajian ini bertujuan untuk menyiasat hubungan antara iklim keselamatan psikososial dan hasil yang berkaitan dengan kerja (seperti penglibatan kerja, kepuasan kerja, dan komitmen organisasi). Kajian ini juga berhasrat untuk meneroka bagaimana permintaan pekerjaan dan sumber pekerjaan menjadi pengantara hubungan antara iklim keselamatan psikososial dan hasil yang berkaitan dengan kerja (dari segi penglibatan kerja, kepuasan kerja dan komitmen organisasi). Hipotesis telah diuji pada sampel 484 ahli akademik dari universiti penyelidikan Malaysia. Data yang dikumpul dianalisis menggunakan perisian SmartPLS. Keputusan mendedahkan bahawa iklim keselamatan psikososial mempengaruhi hasil yang berkaitan dengan kerja. Kedua-dua tuntutan pekerjaan dan sumber pekerjaan didapati menjadi pengantara sebahagiannya hubungan antara iklim keselamatan psikososial dan hasil yang berkaitan dengan kerja. Tambahan pula, permintaan kerja didapati mempunyai hubungan negatif yang signifikan dengan kepuasan kerja dan komitmen organisasi, manakala sumber kerja memberi kesan positif kepada penglibatan kerja, kepuasan kerja dan komitmen organisasi. Oleh itu, kajian ini menyokong pendapat bahawa iklim keselamatan psikososial memberi kesan kepada hasil yang berkaitan dengan kerja melalui permintaan pekerjaan dan sumber pekerjaan. Penemuan ini menyerlahkan kepentingan penglibatan strategi organisasi dan pengurusan untuk meningkatkan hasil berkaitan kerja. Selain itu, implikasi dan cadangan untuk hala tuju penyelidikan masa hadapan telah dibentangkan.

**PSYCHOSOCIAL SAFETY CLIMATE AND WORK-RELATED
OUTCOMES AMONG ACADEMICIANS IN MALAYSIAN RESEARCH
UNIVERSITIES**

ABSTRACT

Drawing on the Conservation of Resources Theory and Job Demands-Resources Theory, this study intends to investigate the relationship between psychosocial safety climate and work-related outcomes (such as work engagement, job satisfaction, and organizational commitment). This study also intends to explore how job demands and job resources mediate the relationship between psychosocial safety climate and work-related outcomes (in terms of work engagement, job satisfaction, and organizational commitment). The hypotheses were tested on a sample of 484 academicians from Malaysian research universities. Data collected were analyzed using the SmartPLS software. Results revealed that psychosocial safety climate influences work-related outcomes. Both job demands and job resources were found to mediate partially the relationship between psychosocial safety climate and work-related outcomes. Furthermore, job demands were found to have significant negative relationship with job satisfaction and organizational commitment, while job resources impacted positively on work engagement, job satisfaction, and organizational commitment. Hence, this study supports the contention that psychosocial safety climate impacts on work-related outcomes via job demands and job resources. These findings highlighted the importance of engaging organizational and management strategies to enhance work-related outcomes. In addition, implications and recommendations for future research directions were presented.

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter begins with the background of the study and the problem statement. This is followed by research objectives and research questions. It then reveals the significance of the study. Finally, it provides the definition of key terms, together with the organization of the thesis.

1.2 Background of the Study

Academics are the core asset of a university. This study intends to examine the relationship between psychosocial safety climate, work-related outcomes (namely work engagement, organizational commitment, and job satisfaction), and job performance among academics in research universities (RUs) in Malaysia. The five RUs selected were Universiti Malaya (UM), Universiti Kebangsaan Malaysia (UKM), Universiti Putra Malaysia (UPM), Universiti Sains Malaysia (USM), and Universiti Teknologi Malaysia (UTM).

In 2006, four public universities (Universiti Malaya, Universiti Kebangsaan Malaysia, Universiti Sains Malaysia and Universiti Putra Malaysia) were selected by the Ministry of Higher Education (MOHE) as RUs, from a list of 20 public universities. However, in 2010, Universiti Teknologi Malaysia was included in the list of RUs (MOHE, 2019). These five RUs were given the autonomy in administrative matters, human resources, financial and academic management, and student intake. Apart from that, these five RUs were given additional funding to research, develop, and commercialize research (MOHE, 2019), with the aim of accomplishing excellence among local universities of higher learning.

In the recent 2021 Budget announced by the finance minister, Tengku Datuk Seri Zafrul Tengku Abdul Aziz, a total of RM14.4 billion will be allocated for local universities (New Straits Time, 2020). This is in line with Budget 2020, where the former Finance Minister, Mr. Lim Guan Eng, announced that RM400 million would be allocated for the development of public universities. This massive increase in the research and development grants will provide opportunities for Malaysian public universities, particularly the RUs to compete globally. In other words, the increased budget will enhance RUs' research capabilities and provide more opportunities for RUs to innovate and commercialize the programs. It is hoped that these moves will put Malaysian public universities, in particular the RUs, on par with foreign universities in future (The Star, 27 October 2017).

The recent World University Rankings 2021 published by the Times Higher Education (THE) revealed that UM managed to climb the international university ranking ladder, from the top 350 to the 301 - 350 band (THE, 30 Nov 2020). USM, UKM, and UTM maintained their position in the rankings, that is, within the 601–800 band. The ranking for UPM improved from the 801 – 1000 band to the 601 – 800.

Malaysian RUs, notably UM, showed significant development in the year 2021 (The Star Online, 28 July 2020). All Malaysian RUs made it into the Top 200, with UM breaking into the Top 100 for the first time and attained 59th ranking. Other RUs managed to improve their rankings as well, including UPM, which rose to 132nd place; UKM, 141st place; USM, 142nd place; and UTM, 187th place. However, in the 2022 QS World University Ranking, Malaysian RUs were degraded in comparison to Year 2021 (QS Ranking, 10 Oct 2021), despite the fact that all Malaysian RUs remain in the Top 200. UPM was ranked 143rd, UKM was 144th, USM was 147th, and UTM was 191st.

The Vice-Chancellor of UM, Datuk Abdul Rahim Hashim, said that UM will continue to establish stronger academic fundamentals through intensifying international research collaboration and enhancing academic-industry partnerships. He added that the success was due to the commitment of all UM academicians, who vowed to achieve the goals set in UM's strategic plan, and the continuous support from the Ministry of Education. This reflects the academicians' commitment to the university is an important indicator of university success. The success of an organization is highly dependent on its employees. This study proposes that employees' work-related attitudes and behaviors will have a significant impact on organizational performance. In the context of the university, academicians' performance will be reflected by the ranking of the university. Thus, this study focuses on the RUs' academician work-related outcomes, namely work engagement, job satisfaction, and organizational commitment.

THE Global Rankings editorial director Phil Baty commented, "*Malaysia is one of the leading emerging university nations in Asia. It has one of the world's fastest growth rates in research paper outputs (albeit from a low base), the Doctor of Philosophy (Ph.D.), training capacity has increased, and the wealth needed to invest in the higher education sector. If Malaysia takes advantage of these characteristics, it may continue to improve in the ranking in the years to come*" (BERNAMA, 6th September 2017). Phil Baty commented that Malaysian universities has long been tipped as Asia's leading emerging universities and the recent THE World University Rankings indicated that Malaysian universities have improved its position in global ranking. To further improve its global ranking, Phil Baty urges Malaysia to maintain its investment in universities (BERNAMA, 6th September 2017). Malaysia's budget for 2018 and 2019 demonstrated the support of the Malaysian government to RUs. For

example, the enormous increase in the research and development grants provide opportunities for Malaysian public universities, particularly RUs to compete at the global level. Hence, this study intends to examine psychosocial safety climate and work-related outcomes in the five Malaysian RUs, namely UM, UKM, UPM, USM, and UTM.

The Deputy Minister of Higher Education, Datuk Mansor Othman congratulated all RUs and at the same time mentioned that Malaysia is one of the countries that showed significant improvement for the 2021 QS World University Rankings. UM Vice-Chancellor Datuk Abdul Rahim Hashim stated that the result showed that UM is a high-quality research and educational institution (NST, 17 June 2020). He further mentioned that UM's top priority now will be focusing on strengthening teaching, research, community, and industry engagement to the highest quality. Furthermore, he added that a good organizational climate is important in the university to make a good impact with good quality. This study proposes that psychosocial safety climate (PSC) is an important organizational climate in the university because PSC predicts the levels of psychosocial risk concerning workplace demands and resources as well as employees' health and work-related outcomes. The researcher has compiled the information of QS World University Ranking from the year 2018 until 2022 and put them in a line graph. The plot provides a clearer picture of Malaysian RUs' ranking performance throughout the years (see Figure 1.1 below). Figure 1.1 demonstrates that all five Malaysian RUs' rankings in QS World University Ranking have improved from 2018 to 2021. However, the ranking has dropped for the year 2022, in particular, UPM's ranking.

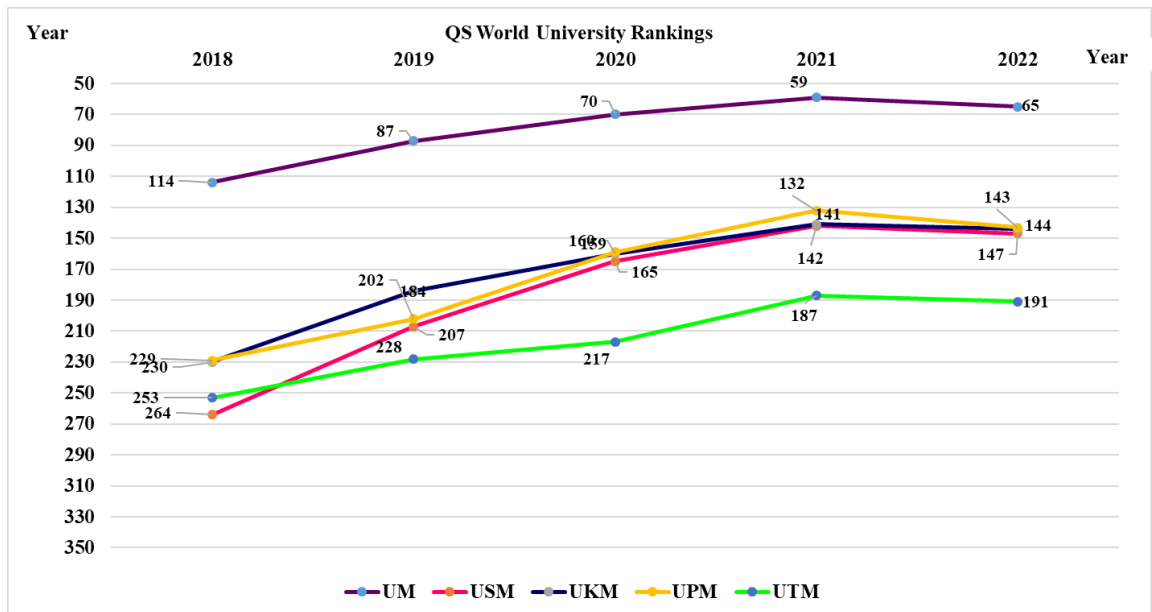


Figure 1.1 Adapted from QS World University Rankings (2018-2022)

Besides compiling the information of QS World University Ranking, the researcher also took the initiatives to compile the QS Asia University Rankings for Malaysian RUs from the year 2017 to 2021. The line graph (Figure 1.2) provides a clear picture of the Malaysian RUs' ranking throughout the years. Figure 1.2 shows that the rankings of Malaysian RUs in Asia University Rankings and all the five RUs have improved throughout the years.

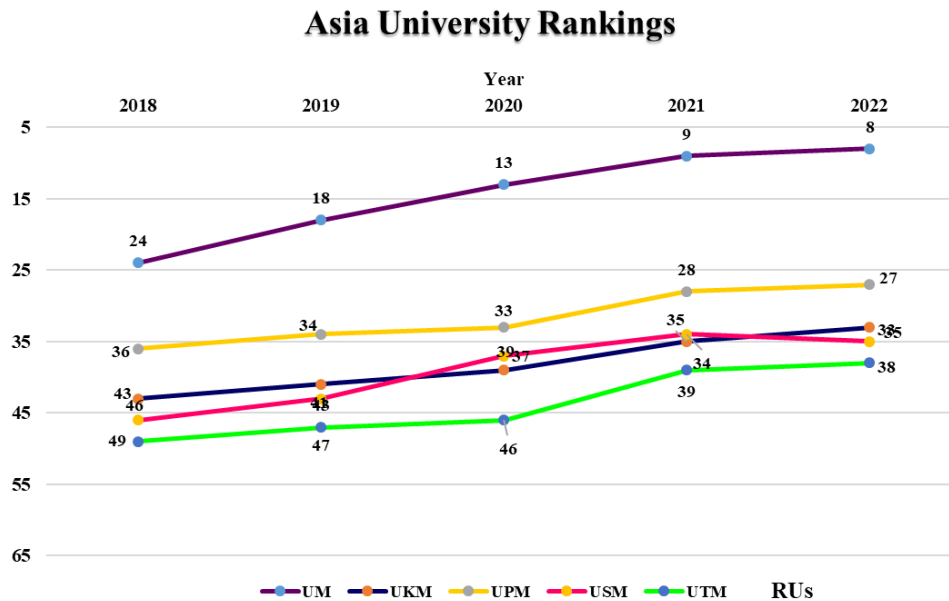


Figure 1.2 Adapted from *QS Asia University Rankings (2018-2022)*

Figure 1.2 demonstrates that Malaysia's RUs are performing well (The Star Online, 25 November 2020). All Malaysian RUs are listed in the top 50 of the latest 2022 edition of the QS University Rankings Asia (see Figure 1.2). UM again topped the list by positioning itself at the eighth place, followed by UPM (27th place), UKM (33rd place), USM (35th place), and UTM (38th place).

Recently, The Star (18 September 2018) reported on the overall citation impact of Malaysian RUs. Professor Graham Kendall, the pro-Vice Chancellor of the University of Nottingham Malaysia, commented that UM is considered the best research university in Malaysia with the highest citation impact over the years. The citation impact is calculated using Scival, based on how many papers were written and how often an academician's paper is cited. The researcher compiled the above information into a bar graph to provide a clearer picture. Figure 1.3 shows the overall citation impact of RUs for the past five years (2013 – 2017), which reveals that RU

academicians are working very hard to publish in top journals and to improve the number of citations.

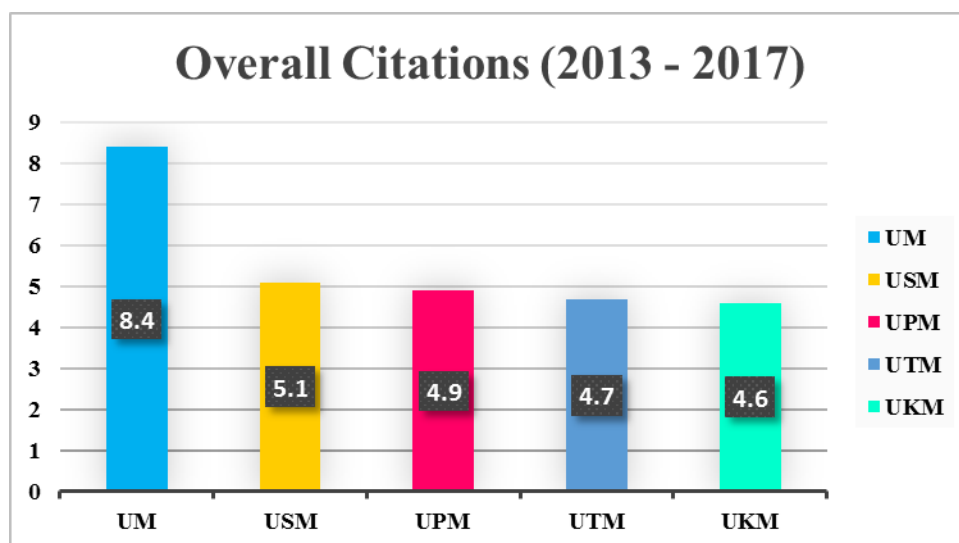


Figure 1.3 Overall citation impact of RU from the year of 2013 to 2017

Source: Adapted from The Star Newspaper (18 September 2018)

Figures 1.1, 1.2, and 1.3 demonstrated that all Malaysian RUs are making great effort to improve their global university ranking. So what can RUs do to improve their global ranking and position? To achieve a better ranking, Malaysian RUs are aware of the fact that they must continue to strive in their research productivity and to improve the research impact indicators (Sani, 2018). One of the practical ways is to monitor the performance of academicians through the Key Performance Indicator (KPI). The KPI of academicians include teaching, research, supervision, publication and consultancy (Masron, Ahmad & Rahim, 2012). Today, the academicians' workload has increased exponentially (Basarudin, Yeon, Yaacob & Rahman, 2016). The requirement to fulfil all KPIs during the appraisal is very challenging in view of the recent increase in academicians' workload and responsibilities. It is not uncommon to see that academicians, particularly those in the RU, face excessive demands when carrying out

the various subsidiary tasks, besides the academic responsibilities that are primarily expected of them.

Malaysian RUs are striving very hard to improve the R&D function, which is the primary contributor that boosts the RUs' university ranking by QS and the Times Higher Education for the past few years (Rahman, 2016). The academicians' commitment to the university has helped the RUs to achieve this. With great effort, RUs can improve graduates' quality and skills, although academicians may face other challenges, such as research integrity, communication skills, and relationship with the industry (Rahman, 2016). Thomson Reuters, through the article "The World's Most Influential Scientific Minds" published between the year 2014 and 2015, has affirmed the quality of publication of the RUs (The Star Online, 30 September 2016).

This study proposes employees who are engaged, satisfied, and committed to their work and the goals and values of their organization are more productive than those who are not. Engaged, satisfied, and committed employees are the indication of success for an organization because this type of employees are more likely to feel good and happy to come to work and hence contribute towards the success of their organizations. Therefore, it is imperative for the universities, particularly the RUs, to understand their employees' attitudes and behaviors, such as work engagement, job satisfaction, and organizational commitment. This research suggests that when academicians are engaged, they will contribute their physical, cognitive, and emotional energies in work, and they are willing to go the extra mile to enhance the organization's performance (Bakker & Demerouti, 2008; Pham-Thai, McMurray, Muenjohn & Muchiri, 2018). University should take academicians' job satisfaction into account. The satisfaction level of academicians has a direct influence on their job performance, as suggested by Saba (2011) as well as Amzt and Idris (2011). Satisfied employees

may eventually improve the productivity and reputation of the university (Saba, 2011). Besides, Sadeghi and Pihie (2013) further explained that with higher level of job satisfaction, academicians are more likely to perform well and enhance their quality of teaching and research. It is also supported by recent research carried out by Oswald (2015) that happy employees are more productive. The commitment that academicians have towards their university is a crucial work attitude. Commitment relates positively to job performance (Bakker et al., 2008; Chong, Lau & Wong, 2011; Khan & Rashid, 2012; Mustapha, 2013). Research also suggests that committed academicians are likely to be more engaged with the university (Aktouf, 1992; Geldenhuys, Laba & Venter, 2014). Therefore, the university needs to identify factors that affect how their employees feel about their jobs, that is, their level of work engagement, job satisfaction, and organizational commitment. With these information, the university management is better equipped to create positive organizational outcomes.

Today, Malaysian RUs are among the top 1% in the world (out of 26,000 universities worldwide). The recent Times Higher Education (THE) University Global Impact Rankings (2019) reported that USM is ranked 49th in the world and 1st in Malaysia. The former USM Vice-Chancellor Professor Datuk Dr. Asma Ismail thanked the entire university community as they played a pivotal role in the university's achievement. For Malaysian RUs to remain competitive and relevant, the universities need to identify the organizational climate in which the academicians work. Positive working environment can help to heighten the academicians' performance (Bakker & Demerouti, 2014; Noordin & Jusoff, 2009). In addition, a healthy working environment can enhance the university's overall performance too. The present study proposes that psychosocial safety climate can influence the employees' job satisfaction, work engagement, and organizational commitment.

To further improve and integrate institutional rating systems, Malaysia Research Assessment Instrument (MyRA) for universities was introduced. The universities must achieve the targets set by Malaysia Research Assessment (MyRA) in order to maintain the RU status. This means that RUs require a higher standard of performance among the academicians, if they want to achieve MyRA's expectation. Local researchers such as Yunus and Pang (2015) as well as Hassana and Jazli (2015) commented that academicians are required to demonstrate excellent performance in the following areas: (a) teaching and learning, (b) post-graduate supervision, (c) research and innovation, (d) publication and writing, (e) academic recognition, community services, and nation-building, (f) consultancy and industrial linkages, and (g) administrative roles or contribution to the university. Hassana and Jazli (2015) reported that in order to fulfill the university management's expectations, academicians, in general, are overloaded with the amount of work set by MyRA as well as the burden of documentation.

Bajunid (2011) mentioned that most of the universities, specifically RUs must focus on higher-level research and publications in journals indexed by Social Sciences Citation Index (SSCI), Institute for Scientific Information (ISI), and SCOPUS. This is because those journal banks are internationally recognized, and they are the main scientific evaluation tools for the publications. To accomplish the MyRA indicators, these 5 RUs have been directed to boost their research and development activities (Ramli et al., 2013). Furthermore, the expectation of the RUs to meet the standards set by MyRA indicates an increased workload and job stress for academicians in general. The increasing workload and job stress among Rus' academicians indicate that it is necessary to examine the academicians' job demands and job resources. This is because job demands are primarily responsible for health impairment and they are

predictors for job stress, while job resources lead primarily to increased employees' motivation and attachment to the organization and they are predictors for employee organizational commitment. This is supported by local researchers that the competition and expectation of achieving MyRA and a better global ranking have affected academicians' satisfaction as well as physical and mental health (Ahsan et al., 2009; Hassana & Jazli, 2015). Therefore, this study intends to examine how job demands and job resources mediate the relationship between psychosocial safety climate and academicians' work-related outcomes, namely, work engagement, job satisfaction, and organizational commitment.

1.3 Problem Statement

The success of an organization is highly dependent on its employees. Academicians are the most valuable resources for the university. Academicians' attitudes and behaviors are vital as they will be reflected in their performance at the workplace. Furthermore, academicians' performance is crucial since it determines the survival of the education sector (Hettiararchchi & Jayarathna, 2014; Mustapha & Zakaria, 2013). Employee's work engagement, job satisfaction, and organizational commitment will affect the employee's performance and productivity (Chong, Lau & Wong, 2011; Khan & Rashid, 2012). Hence this study focuses on academicians' work-related attitudes and behaviors, that is, whether work engagement, job satisfaction, and organizational commitment influences the job performance of academicians.

The level of occupational stress among academicians is found to increase in the Malaysian RUs (Ismail & Noor, 2016). This is detrimental to the RUs' objective of achieving a better QS World University Ranking. In order to achieve the above goal, Malaysian RUs must fulfill the following criteria: (a) academic reputation, (b)

employee reputation, (c) faculty and student ratio, (d) international research network, (e) citations per paper and paper per faculty, (f) staff with a Ph.D., (g) international faculty and international students, and (h) inbound exchange and outbound exchange students (QS World University Rankings, 2018). With intense competition among the RUs, it is not surprising that the academicians are required to accomplish more tasks in an increasingly demanding environment. Apart from teaching, academicians are bogged down with diverse roles, such as research, publications, consultation, and administration (Ismail & Noor, 2016; Yee, 2018). With increasing job demands, academicians may feel physically, mentally, and emotionally exhausted, which impact adversely on their work-related outcomes (that is, work engagement, organizational commitment, and job satisfaction).

In AIA Vitality Survey on Malaysia's Healthiest Workplace, it was reported that Malaysian employees are overworked and sleep-deprived, with 53% suffering from at least one dimension of work-related stress, 56% getting less than seven hours of sleep in 24 hours, 90% with no healthy diet, and 64% are physically inactive (Ram, 2019). Malaysian employees work an average of 15 hours more than their contracted hours each week, surpassing Singapore, Hong Kong, and Australia. Malaysia has one of the highest productivity loss percentages, that is, a productivity loss of 67 days a year). This is echoed by Ismail and Noor (2016), who reported that the prevalence of stress among academicians in the RUs is relatively high. A total of 52.9% of RUs' academicians suffer from anxiety, while 35.4% of them experience depression. Other local researchers also reported that academicians with the RUs experienced much stress (Raman, Peng & Chi, 2021; Teoh & Kee, 2020; Gan & Kee, 2020). As a result, academicians are exposed to a variety of stressors that contribute to the development of burnout-like symptoms, in which academic personnel experience both physical and

psychological symptoms that impact negatively on their job performance (Unterbrink et al., 2012). These statistics reflect that job demands in education are high and challenging.

Furthermore, throughout the data gathering process for this study, the researcher discovered that Malaysian RUs lacked policies, practices, and procedures to protect their academicians from burnout. One of UPM's academicians claimed that overworked employees tend to burnout easily. Therefore, RU policymakers may be unaware of the importance of ensuring academicians' psychological health and well-being. A UKM academician also requested the researcher to notify him/her of the study's findings. The academician was curious to know if the remedies proposed in this study are truly beneficial in improving the academicians' work-related outcomes. PSC has been identified as a strategy that might serve as the foundation for a proper job design, thereby fostering additional job resources that can help to reduce the negative consequences of job demand. With the inclusion of PSC, it is hoped that the Malaysian RU academicians are psychologically healthier in future.

The excessive work demand in university workplaces need to introduce some buffers that can increase the physical and psychological health strains amongst academicians. The consequences of such health impairments manifest into strain-related effects such as burnout and emotional exhaustion, which lead to reduced engagement, commitment, satisfaction, and performance among employees. This study also proposes that job resources act as a mechanism to boost work-related outcomes. Therefore, an increase in job resources will energize employees towards organizational goals and stimulate personal growth (Demerouti et al., 2001). In addition, it can buffer the negative effect of job demands on employees' well-being (Bakker, Demerouti, & Euwema, 2005).

This study argues that it is important for an organization to pay particular attention to employee attitude. Employees' work-related attitudes will affect employee job performance as well as organizational performance (Riketta, 2008). According to Park, Henkin, and Egley (2005), academician commitment is the main factor determining the achievement of the university's vision and mission. Committed academicians are willing to put more effort into their teaching quality and their job performance (Xiao & Wilkins, 2015). Past research has demonstrated that absenteeism is high among employees with low level of job satisfaction and organizational commitment (Cohen, 1991; Farrell & Stamm, 1988; Mathieu & Kohler, 1990; Sagie, 1998). Hence, academicians' job satisfaction, as well as their level of commitment, are important. When they are satisfied and committed to their organizations, they are more likely to provide quality teaching and demonstrate better performance (Amazt & Idris, 2011; Dhanapal, Subramaniam, MohdAlwie & Vashu, 2013; Malik & Singh, 2016; Mustafa & Ghee, 2013).

It is crucial to study work engagement, job satisfaction, and organizational commitment among academicians in RUs as these work-related outcomes may affect the academicians' performance, which in turn reflects the university's performance. Thus, job performance will be the endogenous variable of work-related outcomes in this study. This study proposes that PSC may predict change in employee work-related outcomes (work engagement, job satisfaction, and organizational commitment) through its relationship with job demands and job resources.

The academicians consistently show work engagement, job satisfaction, and organizational commitment that can benefit the RU through commitment and dedication, advocacy, discretionary effort, using talents to the fullest, and supporting RU's organization's goals and values. Engaged, committed, and satisfied academicians

feel a sense of attachment towards their organization, investing themselves in their role and the organization as a whole.

In addition, engaged, committed, and satisfied academicians are more likely to stay with the RU, perform 20 percent better than their colleagues, and act as business advocates. This study proposes that PSC can enhance academicians' work-related outcomes, enhancing bottom-line profit and enabling RU's agility and efficiency in driving change initiatives. In other words, a good PSC in place may positively impact academicians' health and well-being, which in turn evokes increased academicians' support for the RU.

This research focuses on the psychosocial safety climate (PSC), a leading indicator of a better working environment by managing expectations and resources to cope with job demands. A better job design by PSC, where PSC could minimize the negative impact of job demands (e.g., Yulita et al., 2014). This research aims to examine if PSC influences academicians' work-related outcomes such as work engagement, job satisfaction, and organizational commitment.

Using the job demands-resources framework, this study hypothesized that PSC as an upstream organizational resource primarily influenced by Research University (RU) top management would precede the work context (for example, job demands and job resources) and would, in turn, predict academicians' work-related outcomes such as work engagement job satisfaction, and organizational commitment.

1.4 Research Objectives

The research objectives of the present research are as follows:

1. To examine the relationship between psychosocial safety climate (PSC), job demands, job resources, and work-related outcomes (work engagement, job satisfaction, and organizational commitment).
2. To examine the relationship between psychological safety climate (PSC), job demands, and job resources.
3. To examine the mediating role of job demands on the relationship between psychosocial safety climate (PSC) and work-related outcomes (work engagement, job satisfaction, and organizational commitment).
4. To examine the mediating role of job resources on the relationship between psychological safety climate (PSC) and work-related outcomes (work engagement, job satisfaction, and organizational commitment).
5. To examine the relationship between work-related outcomes (work engagement, job satisfaction, and organizational commitment) and job performance.

1.5 Research Questions

The research questions of the present study are as follows:

1. Do psychosocial safety climate (PSC), job demands, and job resources have a relationship with work-related outcomes (work engagement, job satisfaction, and organizational commitment)?
2. Does psychological safety climate (PSC) have a relationship with job demands and job resources?
3. Does job demands mediate the relationship between psychosocial safety climate (PSC) and work-related outcomes (work engagement, job satisfaction, and organizational commitment)?

4. Does job resources mediate the relationship between psychological safety climate (PSC) and work-related outcomes (work engagement, job satisfaction, and organizational commitment)?
5. Do work-related outcomes (work engagement, job satisfaction, and organizational commitment) have a relationship with job performance?

1.6 The Significance of the Study

This study discusses the theoretical and practical significance of the relationship between PSC and work-related outcomes. This study will add to the current knowledge of PSC and its potential work-related outcomes. This study will also add to the current knowledge of job demands and job resources, where both are selected as potential mediators between PSC, work-related outcomes (work engagement, job satisfaction, and organizational commitment), and job performance. This study theorizes that both job demands and job resources play a significant role in explaining the relationship between PSC and work-related outcomes. Thus, the present study seeks a deeper understanding of PSC as a positive influencer on work-related outcomes through both job demands and resources

1.6.1 Theoretical Significance

To investigate the relationship between PSC and its work-related outcomes, and incorporating job demands and job resources as potential mediators, this study draws on and seeks to integrate both Conservation of Resources (COR) theory and the Job Demands-Resources model (JDR). This means that this study will contribute to existing literature through the application of the Conservation of Resources (COR) theory to examine the relationship between PSC, job demands and job resources among the academicians working in RUs. In this study, PSC acts as an antecedent for

job demands and job resources. It can increase the level of the psychological safety of employees. In line with the COR theory (Hobfoll, 2001), it managed to pin-point the significance of resources in protecting employees from negative work environment. In other words, while the workloads (job demands) of academicians increases, PSC may help to increase the academicians' job resources.

Moreover, PSC can be considered as a type of job resources originating from the management (Dollard & McTernan, 2011). By providing a healthy and safe workplace, the management demonstrated its support to employees. According to Westman et al. (2005), resources can reduce the effect of job demands. Thus, COR theory can be applied in this study. When academicians work in high PSC workplaces, the level of motivation of academicians will increase, which will help them to manage job demands. In this way, the management demonstrates their willingness to increase the necessary resources to support the employees when the need arises, thereby increasing the available job resources (Garrick et al., 2014). In other words, if employees feel that they are working in a high PSC working environment, they do not need to worry that they will lose their resources. In addition, employees will feel that their well-being and safety are being protected by an organization (Zadow et al., 2017). In this study, the researcher will explain how PSC can initiate its function through the COR theory.

This study expands the JD-R model (Bakker & Demerouti, 2007, 2008), melds the safety climate and work stress literature, and builds a theoretical model of workplace PSC within the Malaysian RU context. This study conceived of PSC in terms of organizational policies, practices, and procedures about academicians' psychological health and safety in Malaysian RU.

The Job-Demands Resources theory (JD-R theory) is a basic model to explain the important relationship between employee well-being and work performance (Bakker & Demerouti, 2007). This theory had been tested in the Western context (Bakker, Demerouti & Verbeke, 2004), but has limited study in Asian countries. JD-R theory integrates the job demands and job resources and produces two processes: the health erosion process and the motivational process (Bakker & Demerouti, 2007; Hakanen et al., 2008). JD-R theory explains how the working situation affects the employees and influences the working environment (Bakker & Demerouti, 2017). In this theory, job resources can mitigate the effect of job demands (Bakker & Demerouti, 2018). According to Bakker and Demerouti (2018), motivation has a positive influence on job performance. Hence, the present study will extend the JD-R model of work-related outcomes (work engagement, job satisfaction, and organizational commitment) to literature related to RUs' academician. By doing this, this study engages both COR and JD-R theories, which results in a theoretical contribution of the research model.

This study's findings provide some insights into the reasons for the experience of high levels of work pressure and emotional demands, which are known predictors of psychological distress (Dollard, Skinner, Tuckey & Bailey, 2007). The findings of this study can serve as a guideline and a point of reference for Malaysian RU in improving PSC in their university. The evidence of mediation of this study may reflect how PSC affects academicians' psychological health problems. For example, when top management failed to value academicians' well-being, this would be evident in increased demands, perhaps because of a lack of attentiveness to work scheduling and workload adjustments, which could lead to the potential erosion of health among academicians.

1.6.2 Practical Significance

This research should benefit the management of RUs and policymakers by encouraging them to minimize job demands and increase job resources in the workplace of RUs. As a result, this research is expected to provide insights to Malaysian RUs on how PSC, as a job resource, creates a better working environment to boost academicians' work engagement, job satisfaction, and organizational commitment. It enables academicians to stay focus on their publications, teaching quality and job performance. PSC can be a guideline for the university's policymaker to provide a healthy and safe workplace for employees. As mentioned, PSC is a resource to support the employees in the workplace. Thus, PSC can help the university policymakers to gain more comprehensive insights into the academicians' psychological health and provide better resources to support the academicians. This support will allow academicians to feel safe when they voice out their opinions and suggestions. As a result, the findings obtained can be beneficial for the universities top management to enhance organizations' human resources management initiatives for organizational growth. It might be a win-win situation for universities and academicians. When an organization can provide high PSC, it can increase employees' performance (Dollard & Bakker, 2010; Idris et al., 2011) and reduce the turnover rate.

This study focuses on the effects of PSC on job demands, job resources, and work-related outcomes. It will supply information to the universities' management by providing insight into the importance of PSC in universities. This study should benefit the university management by encouraging them to reduce the job demands and increase the job resources in the academicians' working environment. This research is expected to provide an overall picture of how PSC could influence work-related outcomes among academicians in RU. The development of PSC is significant for

universities and they should adapt their policies to incorporate PSC as a powerful element and a practical solution to enhance organizational effectiveness (Idris & Dollard, 2011).

Important information can be gathered from this study on reducing academicians' job demands, increasing job resources, and boosting work-related outcomes. Through this study, the university management can consider implementing suitable policies at RUs to benefit both parties. Universities should encourage the implementation of PSC in their human resource management policy. It will be significant to the management and the university because PSC is able to increase academicians' work-related outcomes. This study can be a guideline for universities to realize the needs of the academicians. Hence, PSC is coherent with the COR and the JD-R theory. This research provides the knowledge related to PSC, which can help to improve academicians' performance and productivity. In this way, it enhances the contribution of the management and at the same time, enable them to manage their employees effectively.

1.7 Scope of the Study

This study is conducted in the Malaysian research universities. Respondents are the academicians working in the Malaysian research universities. Empirical data collected from the academicians presently serving in higher education sector are believed to enhance the representativeness of the study sample. These respondents are those who have worked in their present organizations for at least one year and they must be a Malaysian.

1.8 Definition of Key Terms

The operational definition of the key terms is as follows:

Psychosocial Safety Climate (PSC)

Policies, practices, and procedures for protecting the employees' psychological health and safety (Hall, Dollard & Coward, 2010)

Job Demands

The physical, psychological, social, or organizational aspects of the job that require sustained effort or skill (Bakker & Demerouti, 2006).

Job Resources

Physical, psychological, social, or organizational aspects of the job that are functional in achieving work goals (Bakker & Demerouti, 2006).

Work Engagement

Employee's positive, fulfilling, and work-related state of mind (Schaufeli et al., 2002).

Job Satisfaction

Employee's reaction or feeling of fulfillment that they derive from their job. (Macdonald & MacIntyre, 1997).

Organizational Commitment

Employee's emotional attachment to identification with and involvement in the organization (Allen & Meyer, 1990). The study focuses on the affective commitment dimension. Affective commitment refers to academicians' ability to fulfill their job requirements.

Job performance

The behaviors recognized by the formal rewards systems and a part of the requirements are described in the job description (Williams & Anderson, 1991). The study focuses on the task performance dimension only. It refers to employees' abilities to fulfill their job requirements.

Research University (RUs)

RUs refer to public institutions recognized by the Cabinet on 11 October 2006 as an excellent hub for education and research (MOHE, 2015). In 2012, the five public universities selected by the Ministry of Higher Education (MOHE) as RU were Universiti Malaya (UM), Universiti Kebangsaan Malaysia (UKM), Universiti Putra Malaysia (UPM), Universiti Sains Malaysia (USM) and Universiti Teknologi Malaysia (UTM). The present study focuses on these five RU in Malaysia.

1.9 Organization of the Thesis

The organization of the thesis is as follows:

Chapter 1 outlines the research background, research problem, research objectives, research questions, the significance of the research, the scope of the study,

and the definition of key terms. Chapter 2 reviews the literature on PSC, job demands, job resources, work engagement, job satisfaction, organizational commitment and job performance. The reviews included discussions on relationships between psychosocial safety climate, job demand, job resources, work outcomes (job satisfaction, organizational commitment) and job performance. Furthermore, it discusses the role of job demands and job resources as a potential mediator between PSC and work outcomes. It also presents the theoretical framework. Chapter 3 describes the methodology of the study, the research hypotheses and measurements. Moreover, this chapter depicts the research design, the sampling design, the questionnaire design and the statistical methods. Chapter 4 presents the data analyses and the findings. This section also provides the results of data analyses and the results of the hypotheses testing. Lastly, Chapter 5 provides the summary of the whole study, discusses the finding of data analyses, and explains the theoretical and practical implications of the study.