

INFLUENCE OF WORK-FAMILY CONFLICT,  
JOB DEMANDS AND RESILIENCE  
ON JOB BURNOUT AMONG EMPLOYEES  
IN HEALTHCARE INDUSTRY

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BY

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## DECLARATION

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- (2) No portion of this FYP has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
- (3) Equal contribution has been made by each group member in completing the FYP.
- (4) The word count of this research report is 13402 words.

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## LIST OF ABBREVIATIONS

COR	Conservation of Resources
DV	Dependent Variable
EMT	Emergency Medical Technicians
ETD	The Department of Emergency and Trauma
HCW	Health Care Workers
IV	Independent Variable
MMA	Malaysia Medical Association
MOH	Ministry of Health
SPSS	Statistical Package for Social Science
WHO	World Health Organization

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## PREFACE

This research project is submitted for the degree of Bachelor of Business Administration (Hons) at Universiti Tunku Abdul Rahman (UTAR). The duration of this research took an approximate of 28 weeks. The topic of the research is “Influence of Work-Family Conflict, Job Demands And Resilience On Job Burnout Among Employees In Healthcare Industry”. The research’s dependent variable is job burnout among employees in healthcare industry and the independent variables are work-family conflict, job demands and resilience.

The job burnout has become rampant especially among employees in the healthcare industry. The increase in job burnout arose due to work-family conflict, higher demands of the job as well as lower resilience. Hence, this study is conducted for the purpose of investigating the impact of work-family conflict, job demands and resilience on the job burnout among employees in healthcare industry.

Besides, the healthcare industry employee job burnout is much more to be concerned about especially due to the rise in Covid-19 cases in Malaysia as the healthcare workers are affected by safety issues and insufficient healthcare workforce. This study is also useful to provide future recommendations, hence presenting a greater understanding to the readers regarding the relationship between the independent variables and the job burnout among employees in healthcare industry.

## ABSTRACT

The purpose of this research is to determine the impact of work-family conflict, job demands and resilience on the job burnout among employees in healthcare industry. This study is also used to validate whether the job burnout among employees in healthcare industry are affected by those three independent variables.

The research is carried out by distributing 120 online questionnaires to respondents from the targeted locations involving Penang, Kedah, Perak and Selangor. The data retrieved from the from the online surveys will be processed with the aid of Microsoft Excel and Statistical Package for Social Science (SPSS) in order to produce accurate results for the purpose of analysis and interpretation. In this case, the data will be analysed based on reliability test, descriptive analysis, Pearson Correlation and many more.

Lastly, work-family conflict, job demands and resilience significantly influences the job burnout among employees in healthcare industry, wherein in the increase in either one of the independent variables will increase the job burnout among employees in healthcare industry. There are a few studies which are consistent with the results, thus it is further elaborated in one of the chapters.



# CHAPTER 1: RESEARCH OVERVIEW

## 1.0 Research Background

In our modern society, people worldwide are getting more conscious and care about their health, which had created a trend where people would vigorously search for ways to enhance and better their health-conscious lifestyle. The consumer who participates in a healthier lifestyle would be concerned about what food they are consuming, and they would not mind spending extra money on health supplements, searching for the best healthcare services available in the market to help them stay healthy.

As the consumer is getting greater awareness for better healthcare services, it had brought a drastic change to the healthcare industry. The betterment of the people's quality of life and medical technology advancement had contributed to an increased life span and chronic diseases (Han et al., 2015). The triumph of the public health and medical advancement had caused a trend of an ageing population, and according to the United Nations (2019), there were 703 million older persons that age more than 65 years old in 2019, and Asia and Southeast Asia has the world's largest population for the elderly. The World Health Organization [WHO] (2018) stated that by 2020, the population of people aged around 60 and above would outnumber children younger than five. The elderly population tends to have an increased risk of getting diseases like chronic obstructive pulmonary disease, diabetes, dementia, cataracts and refractive error, back and neck pain and osteoarthritis, hearing loss and depression (World Health Organization, 2018). The Malaysian Health at a Glance (2018) stated that Malaysia is becoming an ageing society, with the number of people aged 65 and above increasing from 5.8% to 6.0% in 2016. Consequently, the demand for healthcare now is slowly but surely rising.

The increased demand for healthcare services had boosted the healthcare industry to grow. Moreover, the healthcare industry had shifted from a reasonably stable

environment into a more dynamic and challenging setting (Othman & Nasurdin, 2011). Undoubtedly, the ceaseless shifting of the healthcare industry's environment and the intensification of the work condition becoming more ultimatum had brought much pressure to hospitals (Portoghese, Rosa, Gabriele & Campagna, 2014). However, the growing and expanding healthcare industry and the increasing demand for healthcare services had caused a significant problem for healthcare workers, such as job burnout.

**Number of persons aged 65 years or over by geographic region, 2019 and 2050**

Region	Number of persons aged 65 or over in 2019 (millions)	Number of persons aged 65 or over in 2050 (millions)	Percentage change between 2019 and 2050
<b>World</b>	<b>702.9</b>	<b>1548.9</b>	<b>120</b>
Sub-Saharan Africa	31.9	101.4	218
Northern Africa and Western Asia	29.4	95.8	226
Central and Southern Asia	119.0	328.1	176
Eastern and South-Eastern Asia	260.6	572.5	120
Latin America and the Caribbean	56.4	144.6	156
Australia and New Zealand	4.8	8.8	84
Oceania, excluding Australia and New Zealand	0.5	1.5	190
Europe and Northern America	200.4	296.2	48

Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Population Prospects 2019*.  
\*Excluding Australia and New Zealand.

Figure 1. 0 Table of Number of persons aged 65 years or over by geographic region, 2019 and 2050. Adapted from United Nations. (2019).

Percentage of Ageing Population, 2012-2016

States	2012	2013	2014	2015	2016	*AAR	Trend
<b>Malaysia</b>	<b>5.3</b>	<b>5.5</b>	<b>5.6</b>	<b>5.8</b>	<b>6.0</b>	<b>2.5%</b>	
Johor	5.5	5.7	5.9	6.3	6.5	3.4%	
Kedah	6.3	6.5	6.6	6.9	7.2	2.7%	
Kelantan	5.7	5.8	6.0	6.0	6.1	1.4%	
Melaka	6.5	6.7	6.9	7.3	7.6	3.2%	
Negeri Sembilan	6.0	6.3	6.5	6.8	7.0	3.1%	
Pahang	5.4	5.5	5.8	6.2	6.5	3.8%	
Perak	8.1	8.4	8.7	9.2	9.6	3.5%	
Perlis	7.3	7.3	7.4	8.1	8.3	2.6%	
Pulau Pinang	6.9	7.2	7.5	7.6	7.8	2.5%	
Sabah	3.0	3.1	3.2	3.1	3.1	0.7%	
Sarawak	5.9	6.0	6.2	6.5	6.7	2.6%	
Selangor	3.8	4.1	4.3	4.4	4.6	3.9%	
Terengganu	5.0	5.1	5.2	5.2	5.3	1.2%	
W.P Kuala Lumpur	5.0	5.2	5.5	5.9	6.2	4.4%	
W.P Labuan	2.6	2.7	2.9	3.3	3.5	6.1%	
W.P Putrajaya	0.7	0.7	0.8	0.9	1.2	11.4%	

\*AAR : Average annual rate of change for last 5 years  
Source of data : DOSM

*Figure 1. 1* Table of Percentage of Ageing Population in Malaysia, 2012-2016. Adapted from Ministry of Health (2018). Malaysia Healthcare Performance Unit, Malaysian Health at a Glance. Ministry of Health: Putrajaya.

In the healthcare industry, healthcare workers must have peak performance during their working hours, where a small mistake will lead to several consequences (Platis, Reklitis & Zimeras, 2015). This is because the healthcare sector is a "high-hazard industry" where the healthcare professional's actions and decisions could lead to severe injury or even to the patient's death (McNulty, Donnelly & Lorio, 2009). Generally, healthcare professionals have trained to prioritise others' needs before their interest and spend every working day exposed to the emotional strain of servicing the unwell or dying people and taking care of those who need intense physical care and emotional support. This mental strain, conjugated with other stress factors innate in the healthcare work environment, makes healthcare workers particularly unguarded to job burnout (Mahendran, Panatik, Rajab & Nordin, 2019). The growing rate of job stress and

burnout has become a world issue in the healthcare industry (Lu, Barriball, Zhang & While, 2012).

Burnout among healthcare workers has now been recognised as a momentous public health concern (Jha, Iliff, Chaoui, Defossez, Bombaugh & Miller, 2018), and Holdren, Paul and Coustasse (2015) also stated that burnout is one of the main issues that faced by nurses. Besides, an estimation of over 50% of practising medicine will encounter burnout (Shanafelt, Hasan, Dyrbye, Sinsky, Satele, Sloan & West, 2015). Job burnout appears when an individual becomes psychologically exhausted from exorbitant demands, stressors, and conflict (Maslach & Jackson, 1981; Maslach, 1982). This means job burnout is a common condition resulting from persistent stress caused by high job demand (Denerouti, Bakker, Nachreiner & Schaufeli, 2001; Halbesleben & Buckley, 2004) and when an individual is exposed to prolonged stress can lead to burnout (Maslach, 1982). Another factor that will elicit job burnout is when excessive demands are given to a person without offering them the requisite resources to complete the job (Lee & Ashford, 1996).

The modern concept of burnout is seen as a recent phenomenon related to the challenges of modern work (Angerer, 2003). Burnout could be defined as a specific kind of occupational stress among human service professionals, thus demanding and emotionally charged relationships between caregivers and recipients (Westman & Bakker, 2008). Job burnout can result in various physical health issues, social issues, mental health problems, and work challenges (Maslach & Jackson, 1981; Maslach, 1982; Neveu, 2007). A report by the WHO (2019) noted that burnout had been enclosed in the 11th Revision of the International Classification of Diseases (ICD-11) as an occupational phenomenon that describes burnout as a syndrome conceptualised caused by persistent workplace stress that not been well managed. Moreover, burnout is also accompanying by various consequences in the healthcare delivery and physician health (Terry & Woo, 2020), and exemplifies the consequences are reduced patient safety, medical errors, and more insufficient patient care worsens mental health of healthcare professionals, and intensify ideas of resigning and turnover (Shanafelt et al., 2012;

Lambden et al., 2018; Papathanasiou, 2015; Salyers et al., 2017; Tawfik et al., 2018). Besides, Job burnout will also affect the effectiveness of the work, organisational satisfaction and morale levels (Shanafelt et al., 2012; Weng et al., 2011; Wong & Laschinger, 2015).

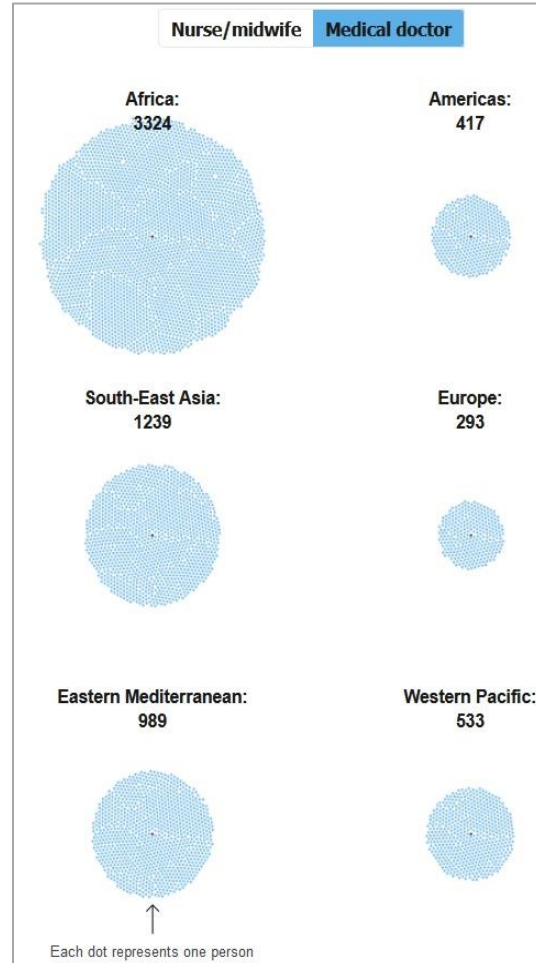
The World Health Organization (2021) reported that eighteen million more health workers needed to attain universal health coverage by the year 2030 in low and lower-middle-income countries. In addition, Ghislieri, Gatti & Cortese (2017) stated in their research that job burnout causes the shortage of nurses worldwide and establishes an enormous gap between the needed and the available nurses to supply the demand of the healthcare services. Furthermore, the Association of American Medical Colleges (2019) predicted that by 2032 there would be a deficiency of 49,900 to 121,900 physicians in the United States under the effect of burnout.

Both practitioner and social commentators had determined burnout as a significant social problem long before this issue became a focus of researchers' systematic study (Maslach, Schaufeli & Leiter, 2001). Therefore, job burnout among healthcare workers has appeared to be a more straightforward problem that requires active attention from society because job burnout will elicit a shortage of healthcare workers worldwide, creating a significant problem for the healthcare industry.

In short, the healthcare worker that continuously provides services and cares to their patient will cause prolonged stress that can be emotionally debilitating and poses the risk of burnout (Maslach & Jackson, 1981). The job burnout among the healthcare worker had caused the shortage of healthcare worker in the healthcare industry, and the shortage of the healthcare worker worsen the job burnout of the current healthcare worker as they are required to have extended work hours to cope with the demand of the healthcare services.



*Figure 1.2* Number of people for every single nurse or midwife in the world. Adapted from World Health Organization (2020). World Health Statistics 2020

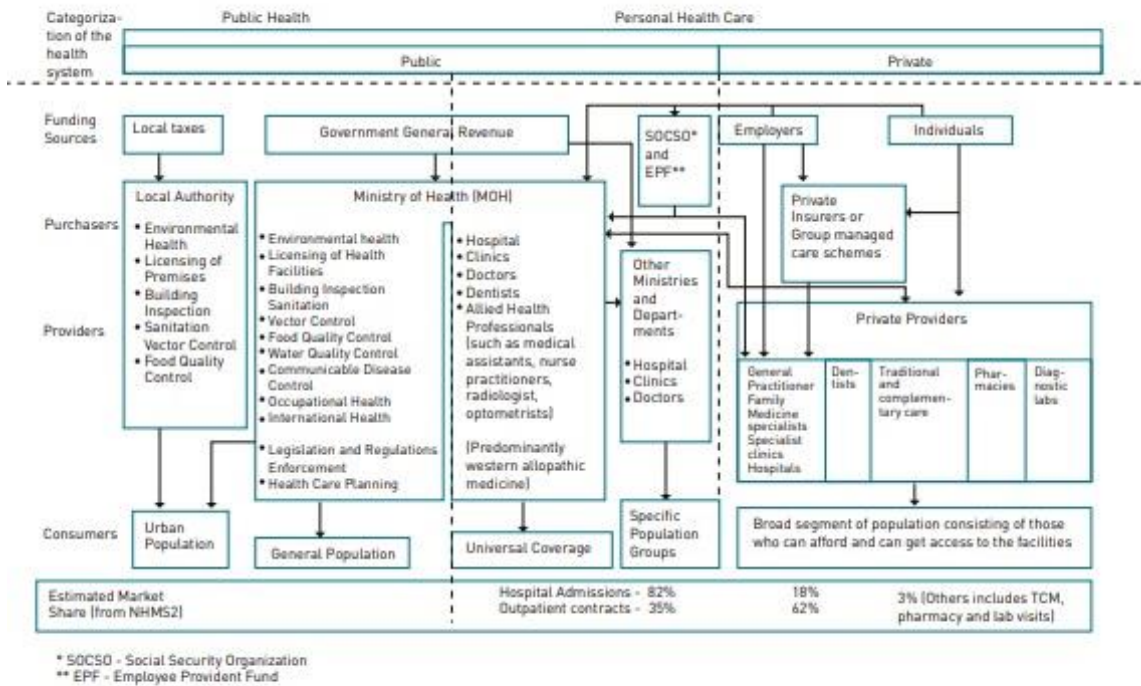


*Figure 1.3* Number of people for every single medical doctor in the world. Adapted from World Health Organization (2020). World Health Statistics 2020

Malaysia's healthcare industry uses a two-tier health system, public and private healthcare (Aniza, Aidalina, Nirmalini, Inggit & Ajeng, 2009; Nur & Anuar, 2020). The public healthcare services are provided by the Ministry of Health (MOH) Malaysia, the fund and resources used to operate the public healthcare sector are provided by the country's tax revenue, and the public health sector can serve 28 million population of Malaysia (Aniza et al., 2009). The private sector runs private healthcare, and the services are mainly used by the wealthy in Malaysia (Emilia & Noor, 2007) because the prices that the private healthcare sector charges are higher than the public healthcare

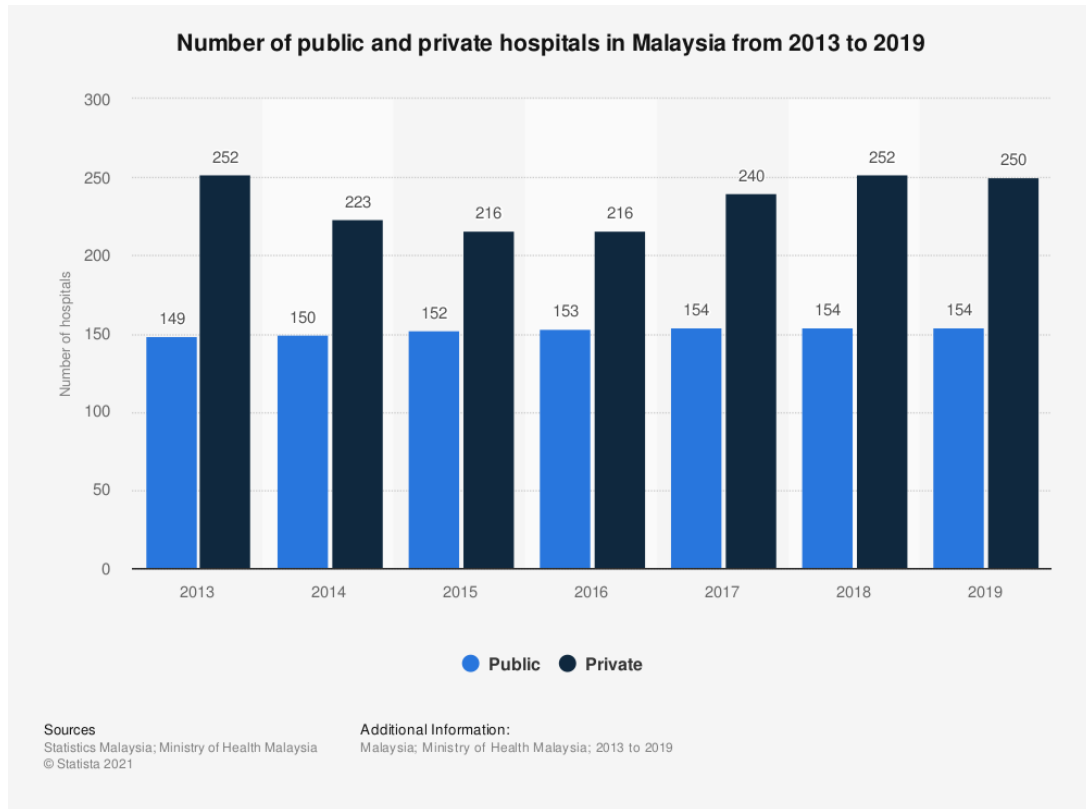
sector (Permarupan et al., 2020). Furthermore, the benefits that private healthcare can provide compared to public healthcare are that private healthcare provides better quality of services and is associated with shorter service time (Permarupan, Al Mamun, Samy, Saufi & Hayat, 2020). Around 26% of Malaysia's overall health service is provided by the private sector (Permarupan, Al Mamun & Saufi, 2013).

### Schematic overview of the Malaysian health system



Source: Hussein, RH, Asia Pacific Region Country Health Financing Profiles: Malaysia, Institute for Health Systems Research

Figure 1.4 The schematic overview of Malaysia health system

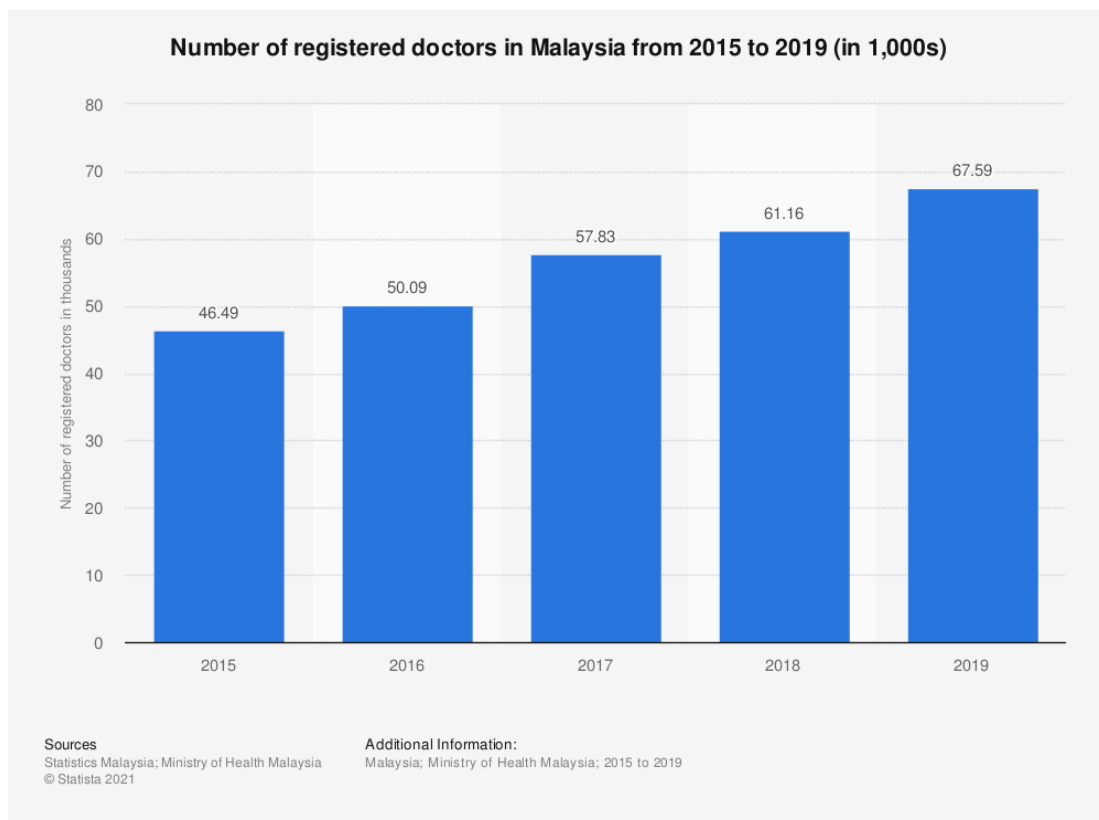


*Figure 1.5* The number of public and private hospital in Malaysia from 2013-2019.  
 Note. Adapted from Malaysia Statistic Yearbook 2019, table 4.13/4.14

During the unveiling of the 2021 Budget, Malaysia's government has taken measures to boost the healthcare sector by proposing a significant allocation of RM31.94 billion, an increase of 4.3% in the overall allocation for the Ministry of Health (MOH). As a result, there is an increase in the healthcare budget, but the year-on-year percentage of 4.3% is the lowest increase in three years (International Trade Administration, 2020). According to a press statement from the Malaysia Health Coalition (2020), the health budget of 2021 is insufficient during the Covid-19 pandemic. Because the 2021 budget show a wide-ranging cut of almost all healthcare services, including pharmacy and supplies, psychiatric and mental health, respiratory and general medicine, anaesthesia, and intensive care shows cuts range from 9-14%, while radiotherapy and oncology, cardiothoracic, pharmacy, and nephrology shows cuts range from 58-78% (International Trade Administration, 2020).

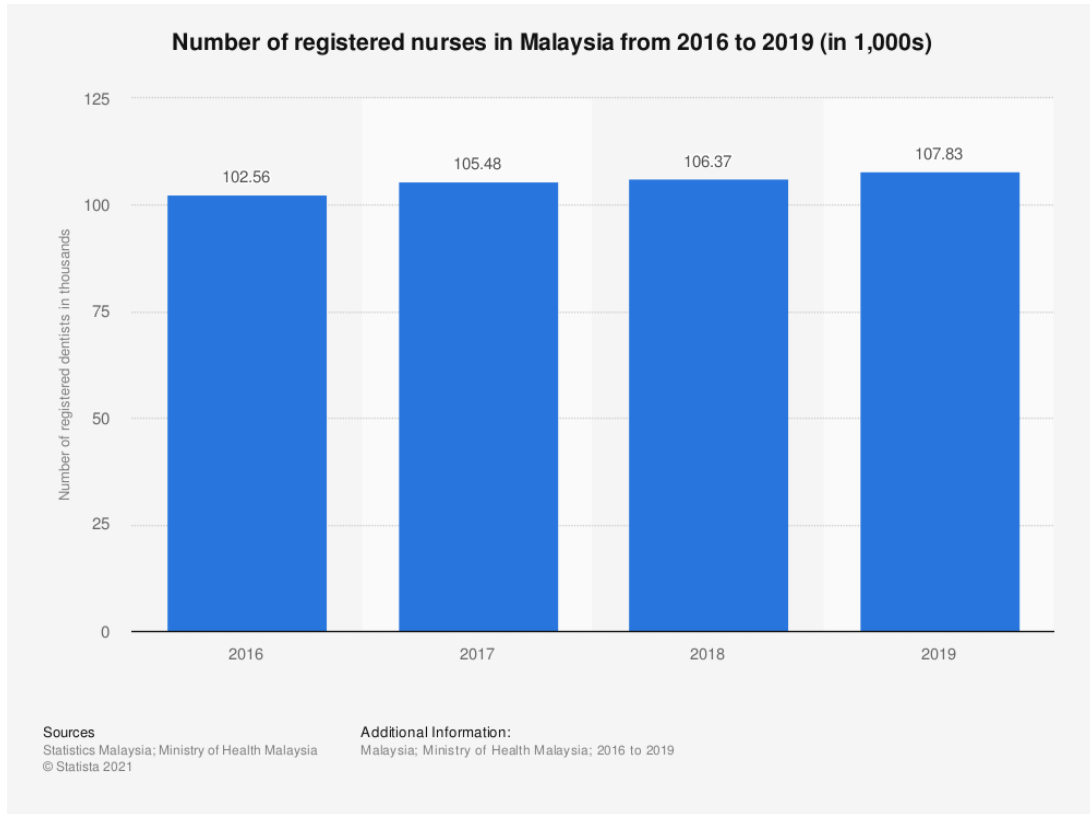


Despite all these economic growths in Malaysia's healthcare industry, many recent theoretical developments have revealed that job burnout among healthcare workers in Malaysia's healthcare industry increases. Some research stated that Malaysia's healthcare industry faces a shortage of healthcare professionals at around 25% due to job burnout (Goh & Marimuthu, 2015; Long, Kowang, Ping & Muthuveloo, 2014; Aigbogun, Yassin & Shoukat, 2013). Additionally, burnout is a critical problem for the healthcare staff, and it has only worsened during the Covid-19 pandemic (Lu, Zhang, Klazinga & Kringos, 2020). As a result, job burnout among healthcare workers in Malaysia's healthcare industry persists as a significant issue that needs to be resolved.



*Figure 1.6* The number of registered doctors in Malaysia from 2015 to 2019 (in 1,000s).

*Note.* Adapted from Malaysia Statistics Yearbook 2019, table 4.11



*Figure 1. 7* The number of registered nurses in Malaysia from 2016 to 2019 (in 1,000s)

Source: Malaysia Statistic Yearbook 2019, table 4.11

## 1.1 Research Problem

The healthcare industry is one of the most challenging industries all over the world. This is because working as a healthcare worker requires exposing themselves to various high-risk illnesses (World Health Organization, 2017). In addition, most healthcare workers' responsibility is to take care of the patients for long hours; therefore, it would be stressful and even threaten their safety.

One of the significant problems in Malaysia's healthcare industry is job burnout among healthcare workers. The shortage of workers has worsened the problem of job burnout in Malaysia's healthcare industry. Due to the shortage of workers, the currently

available healthcare workers tend to have long working hours and limited break time (Abd Razak, Omar & Yunus, 2010). The labour shortage remains an essential issue in the global healthcare industry (Kirk, 2017). The primary cause of Malaysia's healthcare provider's inability to provide high-quality healthcare service is the shortage of healthcare workers (Abd Razak et al., 2010), as the intention to resign was high among healthcare professionals (Roslan, AM & Azahadi, 2014).

The Department of Emergency and Trauma (ETD) is one of the departments that are constantly suffering a shortage of healthcare professionals because the figure of patient visits had exceeded the "Level of Care", which ranges from 5.7% to 95.6% (Nur & Anuar, 2020). A news article from Berita Harian (2019) states that the shortage of emergency specialists ranges from 75.6% to 79.5%, medical personnel between 41.2% to 64.6%, and assistant medical staff between 2.6% to 33.9% and trained nurses between 41.2% to 67.1%. The deficiency of medical professionals will consequently cause an unrealistic workload that results in a lot of stress to the healthcare workers to meet the patients' demands (Nur & Anuar, 2020).

A news article from CNA reported that a doctor is involved in an accident after being on-call for 36 hours; the doctor later shares that this accident stricken him, and he was always anxious about involving in another accident after working long shifts. An overworked and exhausted doctor who gets involved in an accident post-call is not unusual because most are forced to tolerate long hours at work (Kanyakumari, 2019). Besides, in the same news article, the president of the Malaysian Medical Association's (MMA) N. Ganabaskaran stated that there is a pressing problem that doctors are gravely overworked, as there has been an increase in hospitals and number of beds in those hospitals, which lead to the number of patients attended to by a doctor increased within a stipulated time. With the shortage of doctors to stand in and cope with the demands, the current medical professional is stretched and forced to do more calls and have longer shifts to meet the demand (Kanyakumari, 2019). The formal Deputy Health Minister Lee Boon Chye addressed the shortage of healthcare professionals a month

before this accident occur as he has submitted a request to the government for 10,675 additional posts in clinics and hospitals nationwide (Kanyakumari, 2019).

Several interviews with the doctors that work in the public hospital and clinics state that being short-staffed is an understatement for the current situation, and the entire body of doctors are suffering from the heavy workload. Another medical officer share that the current ratio of patient to nurses have far exceeded the recommendation by the World Health Organization, and a lot of support staff and nurses having to do extra shifts due to lack of personnel, which had worsen the burnout among medical staff and not to mention compromised medical care (Kanyakumari, 2019).

A healthcare worker has long been considered to be depressed and to have a greater level of psychological stress than other employees from a different industry (Piko, 2006). Besides, burnout is linked with many problems such as physical exhaustion, insomnia, increased use of alcohol and drugs, and marital and family problem (Maskach & Jackson, 1981). For example, the Star (2012) reported that a trainee was found dead in a bathroom at Kajang Hospital; a used syringe was found next to the deceased. The police believed that the victim was using drugs to repel fatigue, as the victim had been working on call for five consecutive days without taking off for an average of 60 hours. In another news reported by CNA on May 9, 2017; a paediatrician named Nurul Huda Ahmad passed away in a traffic accident in Kuala Terengganu after being on call at the Kota Baru hospital for nearly thirty-three hours (Kanyakumari, 2019).

Healthcare workers mainly dealing with suicidal ideation, violent behaviour, verbal and physical threatening, and exposed to global health pandemics, such as Covid-19, H1N1 and Ebola, are likely to face psychological stress and risk for burnout (Abram & Jacobowitz, 2021). Before the Covid-19 pandemic, the shortage of healthcare workers caused by job burnout had been an everlasting problem in Malaysia. However, this problem had been magnified when the Covid-19 pandemic strikes the world. Malaysia's health director-general Tan Sri Dr Noor Hisham Abdullah, stated that many healthcare

workers face sleepless nights as Malaysia battles the Covid-19 pandemic. Besides, many healthcare workers had suffered from mental and physical exhaustion because of long working hours with little to no breaks (The Straits Times, 2020). This had shown that the shortage of medical professionals had caused the currently available medical professional to have longer working shifts with a bit of break during the pandemic, worsening job burnout among the healthcare workers.

	MoH	Non-MoH	Private	Total	Profession: Population <sup>d</sup>
Doctors <sup>a</sup>	48,478 <sup>1</sup>	3,651 <sup>2</sup>	15,457 <sup>3</sup>	67,586	1 : 482
• Medical officers & Specialists	36,556	3,651	15,457	55,664	
• House Officers	11,922	n.a	n.a	11,922	
Dentists <sup>4</sup>	6,349	738	3,714	10,801	1 : 3,017
Pharmacists <sup>5</sup>	12,840	713	5,385	18,938	1 : 1,720
• Annual Certificate	8,995	278	5,086	14,359	
• Fully Registration (new)	1,755	435	n.a	2,190	
• Provisionally Registration	2,090	n.a	299	2,389	
Nurses	65,819 <sup>1</sup>	5,959 <sup>8</sup>	35,970 <sup>8</sup>	107,748	1 : 302
Community Nurses	22,985 <sup>1</sup>	198 <sup>8</sup>	327 <sup>8</sup>	23,510	1 : 1,386
Assistant Medical Officers	15,452 <sup>1</sup>	234 <sup>7</sup>	3,522 <sup>7</sup>	19,208	1 : 1,696
Pharmacy Assistants	4,228 <sup>1</sup>	468 <sup>5</sup>	1,714 <sup>5</sup>	6,410	1 : 5,083
Dental Therapists <sup>1,b</sup>	2,812	n.a	n.a	2,812	1 : 3,512 <sup>e</sup>
Dental Technologists <sup>1</sup>	960	n.a	n.a	960	1 : 33,939
Dental Surgery Assistants <sup>1</sup>	4,202	n.a	n.a	4,202	1 : 7,754

Figure 1. 8 The Health Human Resources 2019.

Note. Adapted from Ministry of Health Malaysia: Health Facts 2020

	MoH	Non-MoH	Private	Total	Profession: Population <sup>d</sup>
Optometrists <sup>6</sup>	291	60	1,414	1,765	1 : 18,460
Opticians <sup>6</sup>	n.a	n.a	2,451	2,451	1 : 13,293
Environmental Health Officers <sup>1</sup>	217	n.a	n.a	217	1 : 150,145
Assistant Environmental Health Officers <sup>1</sup>	5,010	n.a	n.a	5,010	1 : 6,503
Medical Laboratory Technologists <sup>1</sup>	6,460	n.a	n.a	6,460	1 : 5,044
Radiographers (Diagnostic & Therapists) <sup>1</sup>	2,919	n.a	n.a	2,919	1 : 11,162
Occupational Therapists <sup>1</sup>	1,213	n.a	n.a	1,213	1 : 26,860
Physiotherapists <sup>1</sup>	1,425	n.a	n.a	1,425	1 : 22,864
Traditional & Complementary Medicine Practitioners <sup>9,c</sup>	n.a	n.a	16,185	16,185	1 : 2,013

*Figure 1. 9 The Health Human Resources 2019.*

*Note.* Adapted from Ministry of Health Malaysia: Health Facts 2020

The healthcare environment is regarded as one of the most demanding work environments (Koinis et al., 2015; Maslach & Leiter, 2016). Job demand is frequently related to a higher level of burnout, while job resources commonly are viewed as an essential aspect of work that can reduce burnout (Bakker & Demerouti, 2007). There are several pieces of research have confirmed that high job demand will result in job burnout (Hakanen, Bakker & Schaufeli, 2006; Schaufeli & Bakker, 2004); high job

demand could hinder healthcare worker from performing their duty at their best ability and will cause stress to them (Harun, Mahmood & Som, 2020). Besides, high job demand will become job stressors if the demands need high effort from an individual (Nahrgang, Morgeson & Hojmann, 2011). This is because exorbitant job demand would cause the individual to feel fatigued and exhausted (Sawang, 2012). Furthermore, job demand would result in burnout if the resources needed to complete the job are unavailable (Demerouti, Bakker, Nachreiner & Schaufeli, 2001).

Moreover, numerous research claimed that work-family conflict is attendant with burnout when an individual is unable to deal with dual roles on the job and at home (Burke & Greenglass, 2001; Etzion & Bailyn, 1994; Allen, Herst, Bruck & Sutton, 2000; Adam, King & King, 1996; Montgomery, Panagopolou & Benos, 2006). One of the most common effects of the work-family conflict is burnout (Bakker, Schaufeli, Leiter & Taris, 2008; Aryeel, 1993); the reason that an individual will suffer from burnout due to work-family conflict is because of issues or conflicts with their partner, as well as not spending enough time at home and increased demand and responsibilities at work (Rubab, 2017). Besides, the work-family conflict will aggravate the shortage of healthcare workers by discouraging individuals from pursuing careers in the healthcare industry or increasing current healthcare workers' chances of leaving the industry (Hammer, Bauer & Grandey, 2003; Weinhold & Gurtner, 2014).

Solution for job burnout is not always obvious and easily obtained, which caused ambiguity and frustration (Maslach & Jackson, 1981; Maslach, Schaufeli & Leiter, 2001). However, Strumpfer (2003) found that resilient are likely to recuperate, and a previous study shows that resilience was a protective factor in regulating and preventing burnout (Lee, Lee, Kim, Shin, Yoon & Kim, 2019). This shows that resilience is the antipode of job burnout and individual who possess higher levels of resilience will experience less burnout when compared to other (Neek & Zadeh, 2016). Furthermore, research done by Kutluturkan, Sozeri, Uysal and Bay (2016) stated that there is a significant negative correlation between resiliency and burnout.

## **1.2 Research Objectives**

### **1.2.1 General Objective**

This research aims to discover the impact of job demands, work-family conflict, and resilience on employees' job burnout in Malaysia's healthcare industry.

### **1.2.2 Specific Objective**

1. To determine the impact of job demands on job burnout among employees in the healthcare industry.
2. To determine the impact of work-family conflict on job burnout among employees in the healthcare industry.
3. To determine the impact of resilience on job burnout among employees in the healthcare industry.

## **1.3 Research Question**

In this research, several research questions were developed to study the impact of job demand on employees' burnout in the healthcare industry. The main questions that will be probed for this research are as listed:

1. What is the impact of job demands on job burnout among employees in the healthcare industry?
2. What is the impact of work-family conflict on job burnout among employees in the healthcare industry?
3. What is the impact of resilience on job burnout among employees in the healthcare industry?



## **1.4 Hypothesis of the Study**

On the basis of the research's question, numerous hypotheses had been created to facilitate the research objectives. The hypothesis that been developed are stated as follows:

### **Hypotheses I**

H1: Job demands significantly influence job burnout among employees in the healthcare industry.

### **Hypotheses II**

H2: Work-family conflict significantly influences job burnout among employees in the healthcare industry.

### **Hypotheses III**

H3: Resilience significantly influences job burnout among employees in the healthcare industry.

## **1.5 Significant of Study**

Many factors will lead to job burnout among healthcare workers, and this research aims to provide details about the impact of job demands, work-family conflict and resilience on employees' job burnout in Malaysia's healthcare industry. This study will focus on public and private healthcare institutions in Pulau Pinang, Kedah, Perak and Selangor.

Job burnout among healthcare workers is a persistent problem requiring attention from the public because job burnout will influence healthcare workers well-being and result

in disengagement, poor judgment, and distress (Atefi, Abdullah & Wong, 2016). This research can provide better insight and information about the degrees of job burnout on the currently available healthcare worker, as the previous study only focused on the job burnout of nurses in Malaysia's healthcare industry, and there is a limited study that discusses the job burnout of other healthcare workers in Malaysia's healthcare industry.

Despite many kinds of research investigating the job burnout of healthcare workers, the impact of job demand, work-family conflict, and resilience on the job burnout of healthcare workers in Malaysia has rarely been studied directly. There is minimal research that discusses job burnout among healthcare workers in Malaysia, where work values and culture are different, and a previous study mainly investigates nurses' job burnout in Malaysia and neglects other healthcare workers like doctors. Besides, researching in Malaysia, a Southeast Asia country, can help further validate concepts within a different cultural setting (Othman & Nasurdin, 2011). Furthermore, most research that discusses the relationship between work-family conflict and burnout are commonly found in Western countries and societies that involved different occupations which caused the research of this field are limited in the Asian country, and Abd Razak, Omar and Yunus (2010) urged that more non-western setting research is needed. Moreover, Demerouti and Bakker (2011) urged further analysis about varying potential impacts of job demands on job burnout across different occupations.

This research project hopes that the Ministry of Health Malaysia can use the information and data obtained from the study to discover the factors and degrees of job burnout among healthcare workers. The Ministry of Health Malaysia can use the information from this research to better understand the current situation and develop plans to reduce the job burnout of healthcare workers in Malaysia.

The solution to job burnout is not always obvious and easily obtained, which add ambiguity and frustration to this problem (Maslach & Jackson, 1981). However, achieving the solution to job burnout requires future research on burnout (Maslach,

Schaufeli & Leiter, 2001). Therefore, this research hopes to provide relevant information on the solution to the burnout problem in the world.

In order to fill the gaps addressed above, this study intends to discover the impact of job demand, work-family conflict, and resilience on employees' job burnout in Malaysia's healthcare industry.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.0 Underlying Theory**

#### **2.0.1 Job Demand-Resources Model (JD-R Model)**

The JD-R model is a stress model that responds to the imbalance between demands and resources of the employees. It was proposing two sets of conditions which are job demands and resources. The first set of working conditions is job demands which include physical or emotional effort aspects such as high work pressure and unfavourable working environment. Job demands may lead to negative impacts as the demands require a high effort of the employees (Bakker & Demerouti, 2007; Demerouti et al., 2001).

Job resources are the second set of working conditions. It will assist employees in dealing with working pressures and may motivate them. Physical and psychological components of the job are an example of job resources that assist employees in achieving goals and reducing job demands. (Bakker & Demerouti, 2007; Demerouti et al., 2001).

Based on the research of (Mayerl et al., 2016), job and personal resources were significant in JD-R Model. The research result has shown that job, and personal resources can be considered as indicators that were negatively related to job demands, health problems, mental strain, and job burnout. The high job demands and poor job resources were predicted from JD-R Model (Bakker, Demerouti & Euwema, 2005).

In this model, the employees were striving to maintain a high-performance level to achieve the objectives or goals. It may lead to mental energy loss and job

burnout through the high demand environment, and it was required a mental effort. Therefore, the demands exceeded the individual energy budget and causing adverse effects such as anxiety, exhaustion, and job burnout (Mayerl et al., 2016).

Furthermore, the study of Adil & Baig (2018) investigated that the JD-R Model has a significant impact on job burnout and employee's well-being from the pharmaceutical organisations of Karachi in Pakistan. There is a high unemployment rate in the job market in Karachi and causing the employee to need to stay on the job (Meyer & Allen, 1991). Therefore, the high demand of workload, time pressure and work-life imbalance create job burnout among the employees. The high job demands and insufficient resources may lead to the employees have high intention to leave the job (Hu, Schaufeli, & Taris, 2011).

## **2.0.2 The Conservations of Resources Theory Model**

The Conservation of Resources (COR) model is a comprehensive stress model that incorporates several stress theories. A broader stress model may provide a useful structure for potential work-family conflict studies, according to Hobfoll (2001). Several stress theories are included in the Conservation of Resources (COR) model. Individuals, according to the Conservation of Resources (COR) model, aim to obtain as well as retain resources. Besides, stress is a response to a situation in which there is a possibility of resource loss, actual resource loss, or lack of anticipated resource benefit. Objects, environments, personal characteristics, and energy are all examples of resources. In addition, one of the most influential ideas used to explain human stress and well-being is the conservation of resources theory. (Debus & Unger, 2017).

Moreover, the Conservation of Resources (COR) models describes both intra and inter role stress outcomes. Based on Hagger (2015), employees who are

experiencing work-family conflict, for example, may begin to believe or realise that they are unable to perform the job effectively. As a result, the employees will be compelled to devote more time to their work position for fear of losing their job status. According to the Conservation of Resources (COR) model, inter-role conflict causes tension or stress when resources are lost, especially when balancing both work and family responsibilities. Howard (2019) stated that these potential or real resource losses result in a negative state of being, such as frustration, depression, anxiety, or physiological stress. Therefore, to substitute or protect the threatened resources, some form of action, such as planning to quit the job is required. If this form of action is not adopted, resources may be limited to the point where burnout occurs (Hagger, 2015).

## **2.1 Review of Variables**

Literature review focuses on the influence of work-family conflict, job demands and resilience on job burnout among employees in the healthcare industry and how the independent variables (work-family conflict, job demands, and resilience) affects the dependent variable by referring to past and current studies.

### **2.1.1 Dependent Variable**

The dependent variable [DV] is addressed with the independent variables measured. The dependent variable is expected to change depending on the independent experimental manipulation.

#### **2.1.1.1 Job Burnout among Employees in Healthcare Industry**

Job burnout is the key dependent variable in the present research. Different scholars have defined the employee burnout concept from different perspectives. Therefore, a few key definitions and concepts have been discussed in this study.

Based on Maslach et al. (1996), burnout was first identified among those who are working in the human services and health care industries. Moreover, burnout was described as "a psychological syndrome of emotional fatigue, depersonalisation and decline in personal achievement" by Maslach and Goldberg (1998) based on a multi-dimensional model. Later on, Maslach, Schaufeli and Leiter (2001) proposed a new concept of burnout which is "a psychological illness in reaction to persistent interpersonal stressors on the job." The 3-burnout syndrome is breakdown into emotional exhaustion, depersonalisation, and reduced personal accomplishment (Freudenberger, 1974; Maslach, Jackson & Leiter, 2017). According to Maslach and Leiter (2017), emotional exhaustion could be defined as fatigue, energy loss, wear out, debilitation and depletion. Depersonalisation was defined as manners that are inappropriate towards irritability, withdrawal, and clients. Reduced personal achievement was characterised as inefficacy which was explained as a decline in productivity, poor morale, and inability to cope. Starting with emotional exhaustion or an individual's emotional strain and physical depletion from his or her job, these three domains exist on a continuum.

On the other hand, individuals suffering from emotional fatigue are apathetic and uninterested in their employment, and they are unable to become emotionally involved in circumstances that happen during the workday. Many physicians may have encountered phrases like "The cardiac arrest patient's family is in the waiting room." Providers are unable to care for the outcomes of these patients because the human aspect has been removed. Health professionals believe that no matter how much effort they put in, it is never enough and that there is still more work to be done until they grow dissatisfied with a job they once enjoyed, unaware of the impact they are having on others'

lives (Freudenberger, 1974; Maslach, Jackson & Leiter, 2017). The relation of a lack of emotional engagement in healthcare to poor clinical decision-making and medical errors; professional groups, healthcare systems is significant, and thus educational institutions should all have a powerful desire to support the well-being of the staffs they have hired, educated, and served (Bridgeman, Bridgeman & Barone, 2018).

Based on (Duarte et al., 2020) study, more than half of the health care workers experienced burnout during COVID-19. The unexpected COVID-19 pandemic is likely to have an impact on the worldwide health care workers well being physically and psychologically. During the previous research (Cruz et al., 2019), it was reported that the burnout rate among health care workers in the emergencies is relatively high. Thus, it is inevitable during the pandemic situation as well. The health care workers (HCW) burden has been increased during the COVID-19 pandemic as they are facing high workloads every day. As in Malaysia, a sudden flood of patients coupled with a lack of staff to cope with the situation during the early stages of the pandemic has led to exhaustion (Zakaria et al., 2021). Furthermore, some individuals who were under investigation omitted their overseas travel records from the HCW.

Furthermore, the health care worker's stress level has risen due to daily changes in COVID management guidelines. Uncertainty about the recommendations, as well as the apprehension of nosocomial COVID infection, exacerbated work-related anxiety. Research by (Zakaria et al., 2021) indicated that nurses had the highest burnout rate compared to physicians. According to Abdo et al. (2016), this may be attributable to stress caused by patients' families and coping with physical and mental abuse. Nurses were also subjected to pressure from patients and relatives. Thus, a lack of help from hospital management also leads to nurse burnout.



## **2.2.2 Independent Variables**

Independent variables [IVs] are also referred to as controlled variables that affect the dependent variable in terms of value or differences by holding other variables in a constant manner. The independent variables do not depend on each other.

### **2.2.2.1 Work-family Conflict**

This study operationalised work-family conflict based on the definition provided by Netemeyer et al., (1996); they defined work-family conflict as a form of inter-role conflict in which the job's overall needs, time commitment, and strain interfere with fulfilling family responsibilities. Moreover, from a work-family perspective, conflict illustrates the degree to which role duties from work and family domains are incompatible in which participation in the work-family role is made more difficult (Netemeyer et al., 1996). As a result, the responsibilities of one role makes the performance of another role difficult. Besides, work-family conflict tends to occur when the requirements of work interfere with family responsibilities, demands and expectations, according to Buonocorea, Russob and Ferrara (2015).

On the other hand, other researchers (i.e., Greenhaus & Beutell, 1985) suggested three categories of work-family conflict, namely, time-based, strain-based, and behaviour-based conflicts. Time-based conflict occurs when an individual's time commitment to one position makes it impossible for him or her to participate in another role. On the contrary, role produced strain is the second type of work-family conflict. Workplace stressors have been shown to cause strain symptoms such as tension, anxiety, exhaustion, sadness, and irritability (Brief, Schuler & Van Sell, 1981). In behaviour-based conflict, an

effective behaviour in one position is wrongly extended to the other role, lowering one's efficacy in that role (Cullen & Hammer, 2007).

In addition, there is sufficient evidence that work-family conflict is directly related to consequences such as the desire to leave the organisation or company and seek for another job. Work-family conflict is still one of the main issues around the world, as proposed by Thompson (2019). Therefore, the issue of work-family conflict will affect a wide spectrum of generations regardless of age, gender, income, education level, race or family background. In other words, nearly all individuals are facing work-family conflict that somehow influences job burnout.

According to the study where specifically focused on female healthcare workers experienced various types of conflict in the household, especially with husbands or children (Li et al, 2019). Different types of jobs have conflicts that vary depending on the workload, and it is crucial for employees to balance the amount of workload together with multiple roles. Based on this study, healthcare employees, such as nurses, are also directly involved in work-family conflict, and it indicates that the overall function of the healthcare industry depends on the well-being of the nurse. Nursing professions are known for its service professions which require a very high degree involving emotional labour where the nurses are expected to deliver emotions that consist of caring, understanding and showing empathy to both patients and their loved ones (Bartram, Casimir, & Thanacoody, 2009).

Recent study in 2020 stated that the family members of the Emergency Medical Technicians (EMT) live in a situation where the family members are not sure about the work schedule of the working family member and are rarely sure of when he or she will return home from work. (Beyramijam et al., 2020). Quite many studies were conducted on work-family conflict among healthcare

workers and professionals such as doctors, nurses, and physicians (Li et al., 2019).

#### **2.2.2.2 Job Demands**

Based on a research by Rodell & Judge (2009), job demands can be categorized as hindrance demands and challenge demands, both forms of job demands are viewed as the stressors that can affect the well-being and behavior of employees. Hindrance job demands are hurdles to personal progress or demands that interfere with or hinder one's ability to achieve valued goals. Examples of hindrance stressors are hassles, role conflict, role ambiguity, as well as red tape. On the other hand, challenge demands are described as meaningful and challenging work experiences that provide opportunities for personal improvement. Examples of challenge demands include time urgency, workload, job complexity, and job responsibility. Although job demands are not necessarily negative, it may become job stressors when achieving those demands that require high effort and is somehow related with high costs which bring out negative reactions such as anxiety, depression or even burnout (Rodell & Judge, 2009; Schaufeli & Bakker, 2004). In any sort of job, the employee is confronted with responsibilities and things that must be completed.

Job demands are referring to the aspects of work context that may lead to job burnout due to the overburden of the employees' personal capacities (van den Broeck et al., 2010). The most common issue connected with job demand is workload. Workload was affected by the difficulty of work, working hours and amount of work. It can be referring to the quantitative aspect of job demands (de Jonge et al., 2008). The prolonged exposure of the employees with the overloaded job demands will lead to the wear out of their personal energy and feel exhausted. To protect their energy level, employees might decrease their work tempo and reduce their punctuality and lead to the result of low

performance. In the study of Hakanen, Schaufeli, & Ahola (2008), job demands have a positive relationship with job burnout.

Based on (Rizo-Baeza et al., 2018) study, they explored that the nurses in Mexico were experiencing high levels of burnout due to the high demands on their job requests. There were 69 out of 185 nurses (37.3%) that were studied experienced high emotional exhaustion, 70 (37.8%) had low performance and 65 (35.1%) facing high depersonalisation. They were working for over 8 hours per day with a high workload. This study showed that job demands have a significant relationship with job burnout.

In addition, job demands are generally found to be the factor of job burnout. Workload will lead to emotional exhaustion and mental health problems for the healthcare workers. Especially for the front-line workers, they were facing long-term stressors due to the pandemic Covid-19. It could impact their well-being and lead to burnout due to job demands. Their workload was increasing due to the increase in Covid-19 patients and the lack of healthcare workers. They need to face the stress of the death because the Covid-19 patient was increasing over days and stress from fear of being infected. This working environment may lead to the critical condition that causes them to have a high workload, high job demands and an increase in the job challenges (Abdullah et al., 2020). During Covid-19, there was a surging job demand of healthcare workers such as doctors and nurses to monitor, evaluate and provide treatment for the Covid-19 patient. The studies and research above were indicated that the job demand of the employees in the healthcare industry was high, and it may lead to job burnout.

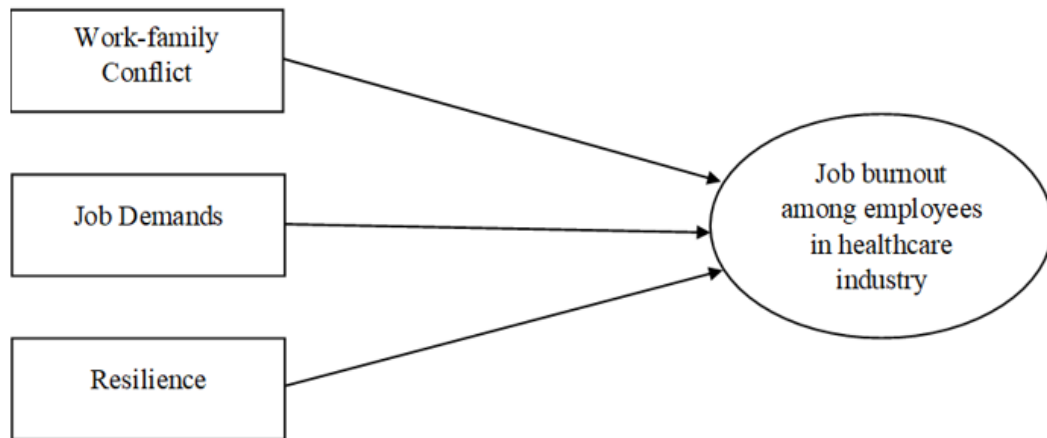
### **2.2.2.3 Resilience**

Resilience has increasingly become a subject of research in the behavioural and medical sciences over the last decade. The ability to bounce back or recover from stress, adapt to harsh conditions, avoid becoming ill despite considerable adversity, and function above the norm in spite of stress or adversity were described as resilience (Smith et al., 2008). Smith et al (2008) developed the Brief Resilience Scale, which was found to have good reliability and validity in their study. According to Agnes (2007), this measure evaluates the resilience construct by understanding an individual's ability to deal with environmental obstacles and recover from stressful circumstances. It is being recommended among other measures as it is used to compare among other resilience measures based on psychiatric properties (Windle et al., 2011).

Besides, several researchers point out that the level of an individual's resilience will affect burnout (Garcia & Calvo, 2012; Nedrow et al., 2013). For example, if the level of an individual's resilience is high, then the individual is less likely to get affected by workplace stressors and less susceptible to job-related burnout. Resilience plays an important and positive role when it comes to job burnout. Employees with high levels of resilience can influence their work behaviour, job performance and job burnout symptoms positively (Boudrias et al., 2012).

Based on the data from previous health crises, it shows that the front-line healthcare workers are facing increased risk of depression, anxiety, burnout, PTSD, and the psychological impact for them is long-lasting (e.g., Ho et al., 2005; Wu et al., 2008). Multiple research show that nurses that working in high-stress areas suffer high levels of burnout Perkin et al., 1997 Cohen et al., 2006; Epp K, 2006; Poncet et al., 2007; Embracio et al., 2007; Mealer et al., 2012; Czaja et al., 2012). Connor (2006) stated that resilience helps individuals mitigate moral distress and burnout.

## 2.3 Proposed Theoretical and Conceptual Framework



*Figure 2. 1* Influence of work-family conflict, job demands and resilience on job burnout among employees in health care industry.

Figure above shows that three independent variables will affect the dependent variable, which is job burnout among employees in the healthcare industry. The three independent variables are work-family conflict, job demands, and resilience that would affect the job burnout among employees in the healthcare industry.

## 2.4 Hypotheses Development

In this section, throughout the research, three hypotheses developed were formed in order to deduce if the independent variables exert a consequential impact on the dependent variable.

### **2.4.1 Job Demands**

According to Yulianti and Rohmawati (2020), job demands have a profound influence on burnout which demonstrate a substantial association between job demands and job burnout among healthcare professionals in the healthcare industry. Employees who are involved in caring occupations such as healthcare workers are considered to be highly susceptible to burnout because the healthcare workers are regularly facing with demanding patients, who sometimes would not show any appreciation for the care that they receive from the healthcare workers (Fagerlind, Stahl & Smith, 2018).

Besides, based on the theory of stress, people perceive stressful circumstances like job demands as either potentially difficult or threatening to their well-being. Challenges are often regarded as stressful demands that have the potential to lead to mastery, personal development, or even future benefits (De Jong et al., 2020). Demands such as heavy workload, strict deadlines and high levels of job accountability are examples of challenges that are faced currently by employees. Next, employees are more likely to see these expectations as opportunities to learn, accomplish, and show the kind of competence that is rewarded (Brown Mahoney, Van der Heijden and Xu, 2019). Despite there were inconsistent results between certain challenge demands and burnout were reported in some studies; however, a large majority of the studies have indicated that workload and time pressure lead to greater job burnout (Brown et al., 2019; Demerouti & Bakker, 2011).

On the other hand, hindrance job demands refer to long term exposure to high work uncertainty, for instance, the perceived danger of losing the current job, role ambiguity or role conflict. These demands are either are unrelated to opportunities for personal development and incentives or may even obstruct them and are likely to have a negative impact on long-term job results (Kim & Beehr, 2018). As mentioned earlier, hindrance demands, such as role conflict

and role ambiguity, were found to increase job burnout (Crawford, LePine, & Rich, 2010). Job demands tend to have a negative relationship with individuals' willingness to participate in work of work-related pressure and burnout. Hence, below is the proposed hypothesis for this research.

H1: Job demands significantly influence job burnout among employees in the healthcare industry.

#### **2.4.2 Work-family Conflict**

Medical profession is known for its extreme and long hours of service. Healthcare workers often complain regarding the heavy workload, a lack of autonomy, and a lack of job control. Furthermore, physician often reports that residency coincides with the family-founding life cycle, resulting in high work-family conflict levels (Bernburg et al., 2016). Young physicians are more likely to have young children and, as a result, will face greater family or parental responsibilities and later resulting in higher work-family conflict as well. This has been found to be closely connected to the demands of the healthcare worker's job. It was also found that a higher workload, the number of working hours per day, an inflexible work schedule can all contribute to employees experiencing a conflict between their work and family roles (Mache et al., 2015).

Basinska and Dåderman (2016) also mentioned because of an employee with too much to do can neglect certain aspects of work or family life, a high workload is linked to a certain degree of insecurity such as worry and anxiety. This study mentioned that healthcare workers have a higher workload which can lead to unnecessary absorption and difficulties detaching oneself from work. For instance, if a healthcare worker such as a nurse has too much work to do with his or her patients, they will have to draw on additional support in the form of emotional energy (Fettro & Nomaguchi, 2019).



Based on Vickovic and Morrow (2020), they claimed that there be a substantial association between work-family conflict and job burnout among healthcare professionals in the healthcare industry. In this study, it was mentioned that work-family conflict is one of the potential mediators between job burnout. In addition, according to Ahmad (2008), the contradiction between family and work domains and burnout is widespread among employees in front line services. Healthcare employees who cannot manage both work and family responsibilities effectively experience heightened burnout. As such, the following hypothesis is proposed:

H2: Work-family conflict significantly influences job burnout among employees in the healthcare industry.

### **2.4.3 Resilience**

A study proposed that resilient people are better suited to imagine and react to challenges because their frame through which they see the world is different (Louise, Lunthita & Terri, 2017). The study also proposed that resilience is something that is essential to healthcare because it has an inverse relationship with burnout. Rajkumar (2021) also proposed that a resilient organisation is one in which employees are assisted at all three levels, which are individual, team and organisation, in the main elements of foresight, coping, and recovery, such that safety is promoted at the organisational level through predicting failures and restoring health conditions after failures (Rangachari & Woods, 2020). Clinical handover is regarded as a top priority for patient safety because it disrupts the quality of treatment and, therefore, could be more vulnerable to errors that result in patient harm. When contemplating the elements of foresight, coping and rehabilitation in clinical handover at all three levels. An example of

foresight at the person level would be a clinician contacting their replacement before the shift changes (Rajkumar, 2021).

In normal circumstances, psychological safety is described as the fear of losing one's job or license if one asks a question, reports a mistake, or proposes a new idea (Aase et al., 2020). For instance, as workers tend to believe that they will be protected, they are more likely to feel mentally secure and encouraged to raise safety issues with supervisors, which allows patient safety to flourish patient safety to improve everyday practice for all patients. Another study by Bozdog & Ergun (2020) stated that both confidence and psychological protection are necessary for healthcare workers to make trade-offs and share safety issues of management, who can fix the root causes of errors and avoid recurrence. Hence, the latter is necessary for resilience to progress from individual to organisational levels. Similarly, the research has highlighted the value of employees' confidence and psychological protection as pre-requisite for organisational resilience (Auger et al., 2020).

Resilience is one of the components that are particularly related to the job burnout; however, resilient employees are able to successfully manage stress so that it is not overwhelming or detrimental (Carneiro et al., 2019). Therefore, this indicates that resilience negatively affects job burnout among employees. By this, the hypothesis below is proposed.

H3: Resilience significantly influences job burnout among employees in the healthcare industry.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.0 Research Design**

The research method applied in exploring the influence of job demands, work-family conflict, and resilience on healthcare industry employees' job burnout is **quantitative research**. The reason why this method is chosen is this research was carried out among respondents whereby they were being assigned with fixed alternative questions on the employees' job burnout in the healthcare industry corresponding with the independent variables.

### **3.1 Sampling Design**

#### **3.1.1 Target Population**

In this research, the target population was the healthcare employees in the healthcare industry who serve the public and private hospitals located in Penang, Kedah, Perak and Selangor respectively. According to previous studies, only public sectors were mainly focused on the research. Hence, four states which are Penang, Kedah, Perak and Selangor, were chosen as we are currently staying in our hometown. It was more convenient, cost-saving and efficient to reach out to the respondents.

Table 3.1:

*Healthcare Employees Target Population in public and private healthcare professions in four states.*

States	Public sectors	Private sectors
<b>Penang</b>	8,839	6,340
<b>Kedah</b>	11,024	2,425
<b>Perak</b>	14,181	3,834
<b>Selangor</b>	23,923	16,272
	57,967	28,871
<b>Total</b>	<b>86,838</b>	

Source: Adapted from Ministry of Health (2020).

### 3.1.2 Sampling Frame and Sampling Location

Sampling frame refers to all the targeted specific respondents list in the population. However, the sampling frame is not applicable in this research as the medical doctors and nurses name list is not available. The scope of the study included medical doctors and nurses who work in public and private hospitals in Penang, Kedah, Perak and Selangor.

### 3.1.3 Sampling Elements

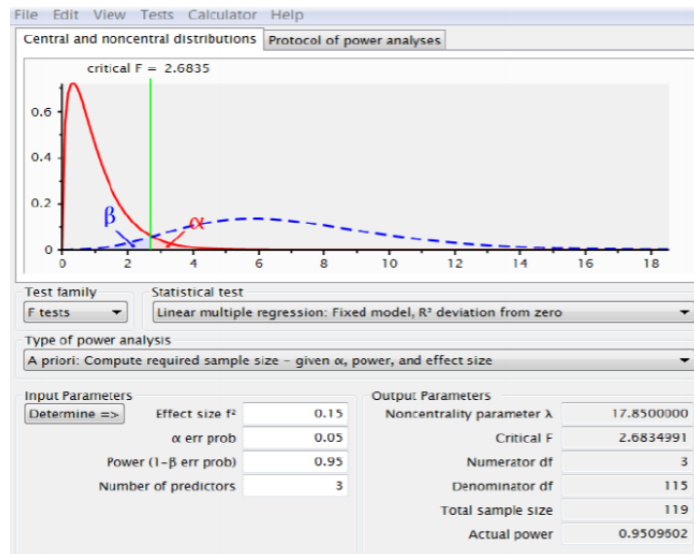
Sampling elements refer to the Ministry of Health (2020), respondents that were taking part in our research are the healthcare professions such as **medical doctors and nurses** who work in public and private hospitals located in Penang, Kedah, Perak and Selangor.

### 3.1.4 Sampling Technique

Non-probability sampling design is used in this research. This is because the population that was being chosen is unknown. Samples were selected by using the basis of personal judgement and convenience. Thus, the **snowball sampling method** in non-probability sampling was used as a respondent who is prepared to share and provide feedback would need to know how the opinion given will be used discreetly. The researchers will get in touch with one or some of the respondents from acquaintances working in the hospitals for the purpose of the research. The respondents then shared the survey with their colleagues to obtain more responses. This had ensured them to provide honest feedback anonymously via the google form link.

### 3.1.5 Sampling Size

Selection of sample is important to represent the whole population in this study due to time and resources constraints. At least **119** respondents is required in this research as the sample size to represent the whole population according to G-power test result.



*Figure 3.0. Result of sample size from G-power test*

F<sup>2</sup> value = 0.15

Alpha = 0.05

Power = 0.95

Number of predictors = 3

## **3.2 Data Collection Methods**

In this study, the primary data collection method was applied as data was mainly collected through online surveys in order to obtain reliable and relevant data. By answering the hypothesis, the result will be applied to depict the question on research.

### **3.2.1 Primary Data**

Primary data defines the information obtained from the first-hand experience. It was used to conduct a specific research purpose. In primary data collection, the respondents had provided more relevant information and data to the topic that was being researched while answering the survey.

In this research, surveys had been conducted to collect the primary source by distributing the online questionnaires to the target population in the selected area. The duration of collecting the responses was four months, from April 2021 to July 2021, and 120 responses were collected within the period of time by distributing google form links through emails and WhatsApp. The respondents were from different private hospitals, such as Ipoh Specialist Centre Sdn. Bhd., Hospital Fatimah, Kinta Medical Centre, Perak Community Specialist Hospital, Columbia Asia Hospital in Bukit Rimau, Manipal Hospitals Klang, Subang Jaya Medical Centre (SJMC). The public hospitals include Hospital Seri

Manjung, Hospital Kulim, Cyberjaya Hospital, Ampang Hospital, Banting Hospital, Gleneagles Hospital Penang, Pantai Hospital Penang, Penang Adventist Penang, Penang General Hospital and Hospital Bukit Mertajam were approached for this study.

### **3.3 Questionnaire Design**

The questionnaire was designed to collect data from the sample of this study. The questions used in the questionnaire are fixed alternative questions because it is specific and straightforward. Limited options were provided to the respondents, which ease in getting direct feedback from them.

The conducting research brief description and purpose were attached on the cover page of the survey questionnaire as questionnaire layout. The main language used in questionnaire surveys was English because it is an international language and is easily used to communicate with different ethnicities of respondents.

Moreover, the questionnaire was divided into five sections which were Section A to Section E. Section A was about respondents' demographic profile, which consisted of 5 questions. The elements are gender, ethnic group, healthcare profession and so on. This helped in identifying healthcare workers information and the differences between male and female, healthcare professions and working organisations pertaining to employees' job burnout.

On the other hand, Section B to Section D was about independent variables in this research proposal which are job demands, work-family conflict, and resilience pertaining to employees' job burnout in the healthcare industry. The purpose of these sections was to identify how job demands, work-family conflict, and resilience will affect the employees' job burnout in the healthcare industry. Except for job burnout that was measured with frequency scale range from never to every day, other key constructs

in the questionnaires are measured with a five-point Likert Scale was used to measure the variables. Furthermore, Section E was about the dependent variable pertaining to the healthcare industry employees' job burnout.

The online questionnaire was distributed to the respective respondents through google form to meet the minimum sample size requirement of 119. Targeted respondents were given sufficient time to complete the questionnaire to ensure that the feedback obtained is accurate after giving enough time of thoughts. Thus, the responses collected will be more valid and reliable.

### 3.4 Pilot Test

A small initial study used in the search to test the proposed research before completing the full research. This test was used to test the validity and the reliability as well as the error that might be incurred in designing the questionnaires. The pilot study was carried out among 30 healthcare professionals. The reliability of each construct was reported as in Table 3.2. The Cronbach alpha's value of 0.7 and above is considered as good reliability (Sekaran & Bougie, 2013).

Table 3.2:  
*Summary of Reliability Test Result for Pilot Test*

<b>Construction Measurement</b>	<b>Cronbach's Alpha</b>	<b>Strength of Reliability</b>
<b>Job Demand</b>	0.725	Strong
<b>Work-Family Conflict</b>	0.924	Very strong
<b>Resilience</b>	0.700	Strong
<b>Job Burnout</b>	0.755	Strong



From the pilot test result of table 3.2, it showed that the Cronbach's alpha value for all variables is equal or higher than 0.70. this shows that all variables have shown that they are reliable.

## 3.5 Constructs Measurement

### 3.5.1 Origin of Constructs

Table 3.3:

*Origin of Construct shows the existing questions which were adopted from the existing authors.*

Variables	Item	Number of variables	Sources employed or adopted
Independent Variables	Work-family Conflict	5	Netemeyer, Boles, and McMurrian (1996).
Independent Variables	Job demands	8	Rodell and Judge (2009)
Independent Variables	Resilience	6	Smith, Dalen, Wiggins, Tooley, Christopher, and Bernard (2008)
Dependent Variable	Job burnout	22	Maslach and Jackson (1981)

Work-family conflict was measured with five items adapted from Netemeyer et al. (1996). Sample items included "The demands of my work interfere with my home and family life".

Job demands contained eight items, which was adopted from Jessica and Judge (2009). Four items indicated hindrance demands, such as role conflict, role ambiguity, perceived levels of red tape, and hassles). A sample item includes "I have received conflicting requests from two or more people. Another four items measure the challenges demands, such as time pressure, complexity of job,

workload, and job responsibility. An example includes "I have experienced severe time pressure in my work."

Resilience was measured with a brief resilience scale (BRS) developed by Smith et al. (2008), consist of six items. The sample item is "I tend to bounce back quickly after hard times". The above three variables were measured with a five-point Likert scale: Strongly disagree (1) to strongly agree (5).

Job burnout was measured using 22 items from Maslach Burnout Inventory for human service professionals (Maslach & Jackson, 1981) with scale range from never (0) to every day (6). Job burnout consists of three dimensions, namely emotional exhaustion (9 items), depersonalisation (5 items), and personal accomplishment (8 items). High mean in emotional exhaustion and depersonalisation and lower mean scores for personal accomplishment represent a higher level of job burnout. Sample items include: "I feel emotionally drained from my work" for emotional exhaustion, "I feel I treat some recipients as if they were impersonal "object"" for depersonalisation, and "I can easily understand how my recipients feel about things" for personal accomplishment. Items for personal accomplishment will be reversed scored.

### **3.5.2 Scale of Measurement**

The scale of measurement was used to define and categorise the different types of variables or numbers in the research (Stevens, 1946). The levels of scale measurement were divided into non-metric and metric. Nominal and ordinal scale is under the non-metric scales while interval and ratio scale is under the metric scale. This research used three kinds of scales of measurement, and each scale of measurement that is used are explained below.

### 3.5.2.1 Nominal Scale

The nominal scale is defined as the categorical data and numbers that are simply used as identifiers or names that represent a nominal scale of measurement (Brown, 2011). For example, gender. Besides, the nominal scale does not have to require any quantitative value, ranking or ordering of values, distance and unique origin for the questions.

Example of questionnaire in Section A:

1. Gender:

Male

Female

### 3.5.2.2 Ordinal Scale

An ordinal scale is a measurement representing an ordered series of relationships or rank order (Brown, 2011). Besides, the value of the interval between rankings is not explained on an ordinal scale. In other words, an ordinal scale does not have any distance between rankings and also does not have a unique origin.

Example of questionnaire in Section A:

1. Age:

20 years old and below

21 to 30 years old

31 to 40 years old

41 to 50 years old

51 years old and above

### 3.5.2.3 Interval Scale

Interval scales are numerical scales that do not have a true zero point. It can also be called arbitrary origin. It has no unique origin. This is because in an interval scale, zero does not represent the absolute lowest value. Besides, the distance between the rankings is not the true distance. Interval scale is carried out by using the Likert scale in order to measure affective variables in the questionnaire. Respondents chose their answers based on their feelings toward the questions. Based on the Section B, C and D, the questionnaire was divided into five scales which included Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4) and Strongly Agree (5). While for Section E, it has six frequencies which are Never (0), Few times a year (1), Once a month (2), A few times per month (3), Once a week (4), A few times per week (5) and Everyday (6).

Level of agreement:

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

Section	No	Questions	1	2	3	4	5
<b>B</b>	<b>1</b>	My job has required me to work very hard.					
<b>C</b>	<b>1</b>	The demands of my work interfere with my home and family life.					
<b>D</b>	<b>1</b>	I tend to bounce back quickly after hard times.					

Frequency:

0 - Never

1 - Few times a year

2 - Once a month

3 - A few times per month

4- Once a week

5 - A few times per week

6 – Everyday

Section	No	Questions	0	1	2	3	4	5	6
<b>E</b>	<b>1</b>	I feel emotionally drained from my work.							

### 3.6 Data Processing

In this process, the raw data will be converted to meaningful information. The objective is to ensure the data that is collected is organised and ready to be used for preference for other researchers. The researchers have to check, edit code and transcript the data obtained in this process. (Kveder & Galico, 2008). Then, the data will be analysed to test the hypothesis.

### **3.6.1 Data Checking**

The researchers will be required to perform a data checking after the data is collected. This is to ensure that the final data is accurate and refined (Marco Di Zio, 2016). The purpose of this step is to find out the errors in the questionnaire. Any of the grammar or spelling errors, incomplete questionnaires will lead to inaccurate or unreliable responses.

### **3.6.2 Data Editing**

After the data is checked, this step will proceed. The purpose of this step is to adjust and correct all the missing data inconsistent data in detail (Sekaran & Bougie, 2009). This is to ensure that any of the respondents provide an incomplete response. Based on the answer pattern, the researchers will have to edit the data to come out with more consistent and accurate data.

### **3.6.3 Data Coding**

After the data is checked, this step will proceed. The objective of this step is to summarize the data that is collected, remove the unused data and transform it into meaningful data (ReadingCraze, 2014). During this process, the SPSS software will be used, and the respondent's responses will be key into it. The SPSS software will analyze the data once the responses have been tabulated and catalogued into it.

### **3.6.4 Data Transforming**

The data transforming will be the final procedure to transfer the coded data into the computer to run the reliability test by using SPSS software. The data that is transcribed will be used by the researchers for pre-analysis data and to test the research hypothesis.

## **3.7 Data Analysis**

For the data analysis of the research project, data obtained ought to be run through SPSS software to analyse and the credibility of the research result to provide credibility to the research. This step is to define, summarise, restate and evaluate the data. This software is to code and analyse the data collected from respondents through the questionnaire and then identify the relationship between the variables.

### **3.7.1 Descriptive Analysis**

Descriptive analysis converts and summarises the preliminary information collected into furnished statistics for empirical study (Zikmund, Babin, Carr & Griffin, 2010). This analysis helps to simplify preliminary information and allows the researcher to have a better understanding of the data. It can convert the documentation into various types of charts to categorise the demographic characteristics of the respondents. The questionnaire that consists in section A will be asked about personal background, including gender, age group, ethnic group, education level, marital status, number of children, healthcare profession, working period, number of years working in the healthcare industry and sector of an organisation that respondent works in.

### **3.7.2 Scale Measurement**

### 3.7.2.1 Reliability Test

It is important to ensure the questions are zero defects before conducting the survey. To get a consistent result, the reliability of questions is required to be tested. The Cronbach's Alpha model will be used to examine the degree of reliability for this research project. The table below shows the level of measurement on the standard on reliability.

Table 3.4:

*Coefficient Alpha*

<b>Level of reliability</b>	<b>Ranges of coefficient alpha, <math>\alpha</math></b>
Poor	Less than 0.60
Fair	0.60 - 0.70
Good	0.70 - 0.80
Excellent	0.80 - 0.95

Source: Adapted from Sekaran & Bougie (2013).

### 3.7.3 Inferential Analysis

Inferential analysis is the analysing process of the relation between both dependent and independent variables. In this research project, Pearson Correlation Coefficient and Multiple Regression Analysis are adapted to analyse the association degree of both variables (Canale & Tuzet, 2007).

#### 3.7.3.1 Pearson Correlation Coefficient

Pearson correlation coefficient is about evaluating the existence and measure the power or strength of a linear correlation between the DV and IVs. (Adler & Parmryd, 2010). Range from -1 to 1 is the value of the Pearson correlation



coefficient measure. It is concluded in a way that strong positive relationships actually exist between two variables where the value tends to be closer to positive 1. On the other hand, a strong negative relationship exists if the value tends to be closer towards negative 1 (-1) proposed by Sensuse, Cahyaningsih & Wibowo (2015).

Table 3.5:

*The Interpretation of the Strength of Correlation Results Schober.*

<b>Coefficient of Range</b>	<b>Strength of Association</b>
<b>0 – ±0.2</b>	<b>Very low</b>
<b>±0.2 – ±0.4</b>	<b>Low</b>
<b>±0.4 – ±0.6</b>	<b>Moderate</b>
<b>±0.6 – ±0.8</b>	<b>High moderate</b>
<b>±0.8 – ±0.9</b>	<b>High</b>
<b>±0.9 – ±1.0</b>	<b>Very high</b>

Adapted from P & Boer. C (2018)

### 3.7.3.2 Multiple Regression Analysis

#### Multiple Linear Regression Model

$$Y = \beta_1 + \beta_2 \text{WFC} + \beta_3 \text{JD} + \beta_4 \text{R} + \mu \hat{i}$$

Where,

Y= Job Burnout

WFC= Work-Family Conflict

JD= Job Demand

R= Resilience

In this research, there is one DV and three IVs used in the multiple regression models. Objective of this model is to investigate the correlation between the DV and multiple IVs. The DV is job burnout, while the other three IVs are work-family conflict, job demands and resilience.

### **3.8 Chapter Summary**

Chapter 3 discusses and concludes the research methodologies, which consist of questionnaire design, data process and research design. Next, few tests will be conducted to validate the relationship between DV and IVs. In chapter 4, the outcome of the results will be explained and interpreted.

# CHAPTER 4: DATA ANALYSIS

## 4.0 Descriptive Analysis

This section will explain the demographic data that has been collected for the research.

### 4.0.1 Respondent Demographic Profile

#### 4.0.1.1 Gender of Respondents

Table 4.1:  
*Respondent's Gender*

Gender	Frequency	Percentage (%)	Cumulative Percentage (%)
Female	63	52.5	52.5
Male	57	47.5	100

Gender:  
120 responses

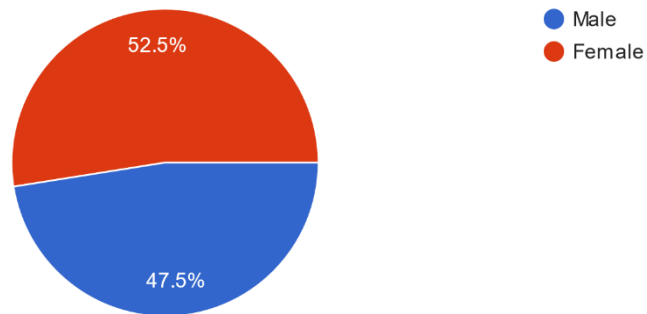


Figure 4.1. Statistic of Respondent's Gender

Table 4.1 and Figure 4.1 show the respondent's gender, which had taken the survey. There are 57 male respondents and 63 female respondents, equivalent to 47.5% of respondents, are male, and 52.5% are female. Therefore, the majority of respondents that participate in this research are female.

#### 4.0.1.2 Age of Respondents

Table 4.2:  
*Respondent's Age*

Age	Frequency	Percentage (%)	Cumulative Percentage (%)
21 to 30 years old	25	20.8	20.8
31 to 40 years old	43	35.8	56.7
41 to 50 years old	38	31.7	88.3
51 years old and above	14	11.7	100.0

Age:  
120 responses

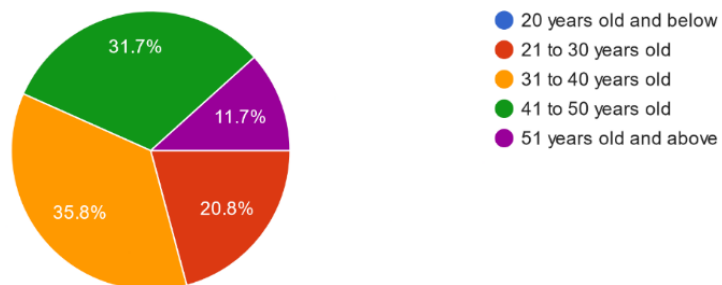


Figure 4.2. Statistic of Respondent's Age

Derived from table and figure above presents that shown 25 (20.8%) of respondents are in the age of 21 - 30 years old, 43 (35.8%) of respondents are

age between 31 to 40 years old, 38 (31.7%) of respondents are aged between 41 to 50 years old, and only 14 (11.7%) of respondents ages above 51 years old.

#### 4.0.1.3 Ethnic Group of Respondents

Table 4.3:  
*Respondent's Ethnic Group*

Ethnic Group	Frequency	Percentage (%)	Cumulative Percentage (%)
Malay	41	34.2	34.2
Chinese	58	48.3	82.5
Indian	21	17.5	100.0

Ethnic group:  
120 responses

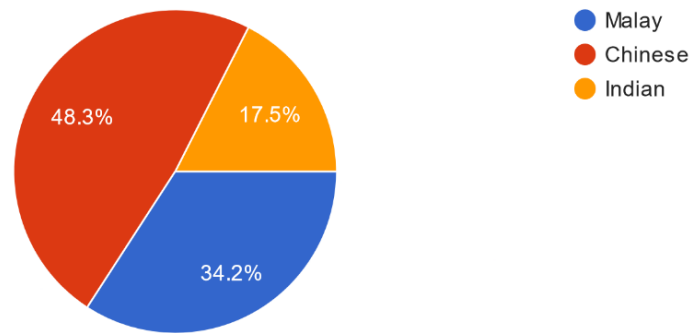


Figure 4.3. Statistic of Respondent's Ethnic Group

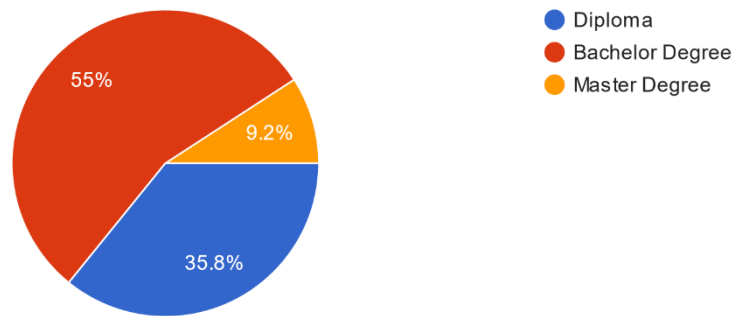
According to table and figure above described the ethnicity of the respondents. The greater part of respondents is Chinese with 58 (48.3%) responses, followed by Malays with 41 (34.2%) respondents. Furthermore, only 21 (17.5%) respondents are from the Indian ethnic group.

#### 4.0.1.4 Education Level

Table 4.4:  
*Respondent's Qualification*

Qualification	Frequency	Percentage (%)	Cumulative Percentage (%)
Diploma	43	35.8	35.8
Bachelor Degree	66	55.0	90.8
Master Degree	11	9.2	100.0

Highest education completed:  
120 responses



*Figure 4.4. Statistic of Respondent's Qualification*

According to table and figure above show the respondent's qualifications that participate in the survey. There are 66 (55%) respondents with the qualification of Bachelor's Degree, followed by Diploma which consists of 43 (35.8%) respondents, and there are only 11 (9.2%) respondents obtain a Master's Degree.

#### 4.0.1.5 Marital Status

Table 4.5:  
*Respondent's Marital Status*

Marital Status	Frequency	Percentage (%)	Cumulative Percentage (%)
Single	40	33.3	33.3
Married	80	66.7	100.0

Marital Status

120 responses

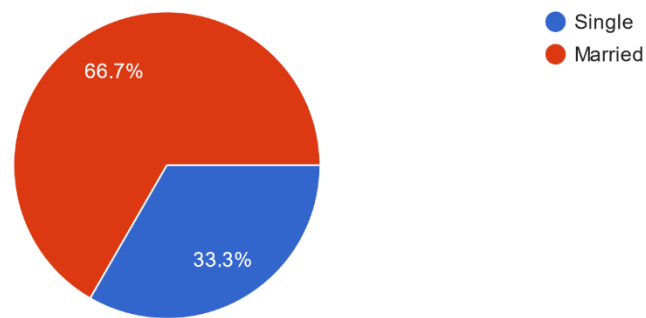


Figure 4.5. Statistics of Respondent's Marital Status

Derived from the table and figure above, it presents the marital status of the respondents that participated in the survey. 80 (66.7%) of the respondents are married, while only 40 (33.3%) remain single. Therefore, the majority of respondents that participate in this research are married.

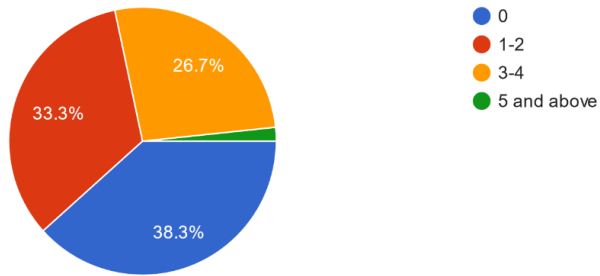
#### 4.0.1.6 Number of Children

Table 4.6:  
*Number of Children Respondents Have in Their Family*

Number of Children	Frequency	Percentage (%)	Cumulative Percentage (%)
0	46	38.3	38.3
1-2	40	33.3	71.7

3-4	32	26.7	98.3
5 and above	2	1.7	100.0

Number of Children:  
120 responses



*Figure 4.6. Statistic of Number of Children Respondents Have in Their Family*

Derived from the table and figure above presents the number of children the respondents have in their families. 46 (38.3%) of respondents do not have a child in their family. 40 (33.3%) of respondents have 1 to 2 children in their family, and 32 (26.7%) of respondents have 3 to 4 children in their family. Lastly, only 2 (1.7%) respondents' have more than five children in their family

#### 4.0.1.7 Types of Organization Respondent Work In

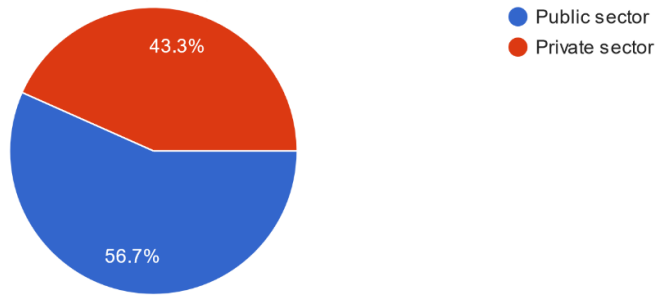
Table 4.7:

*The Organization That Respondent Work In*

Type of Hospital	Frequency	Percentage (%)	Cumulative Percentage (%)
Public sector	68	56.7	56.7
Private sector	52	43.3	100.0



The organization that you work for:  
120 responses



*Figure 4.7. Statistic of The Organization That Respondent Work In*

Based on table and figure above describes the type of organisation that the respondents work in now. 68 (56.7%) of respondents claim that they work in the public sector, and 52 (43.3%) of respondents work in the private sector.

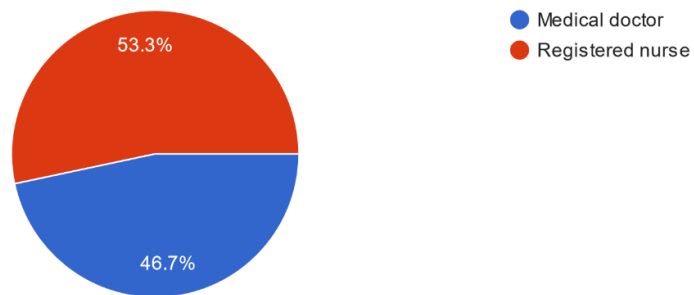
#### 4.0.1.8 Healthcare Profession

Table 4.8:  
*Respondent's Profession*

Profession	Frequency	Percentage (%)	Cumulative Percentage (%)
Medical doctor	56	46.7	46.7
Registered nurse	64	53.3	100.0

What is your healthcare profession?

120 responses



*Figure 4.8. Statistic of Respondent's Profession*

Table 4.8 shows the respondent's profession; 64 (53.3%) respondents are registered nurses, while only 56 (46.7%) are medical doctors. 4.1.1.9 Working hours per day.

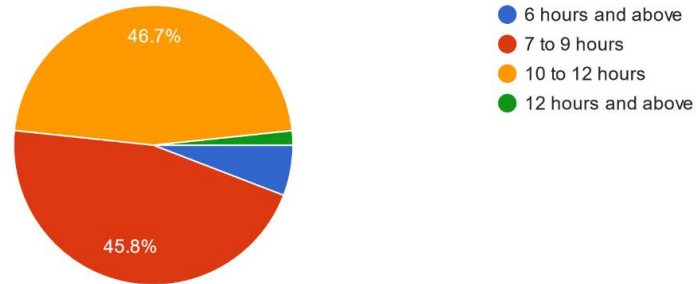
#### 4.0.1.9 Working Hours Per Day

Table 4.9:

*Respondent's Working Hours Per Day*

Working hours per day	Frequency	Percentage (%)	Cumulative Percentage (%)
6 hours and above	7	5.8	5.8
7 to 9 hours	55	45.8	51.7
10 to 12 hours	56	46.7	98.3
12 hours and above	2	1.7	100.0

Working hours per day:  
120 responses



*Figure 4.9. Statistic of Respondent's Working Per Day*

Based on table and figure above shows the working hours per day of the respondents. 56 (46.7%) respondents work around 10 to 12 hours per day, and 55 (45.8%) respondents work around 7 to 9 hours per day. Besides, only 7 (5.8%) respondents work 6 hours and above per day, while only 2 (1.7%) respondents work more than 12 hours per day.

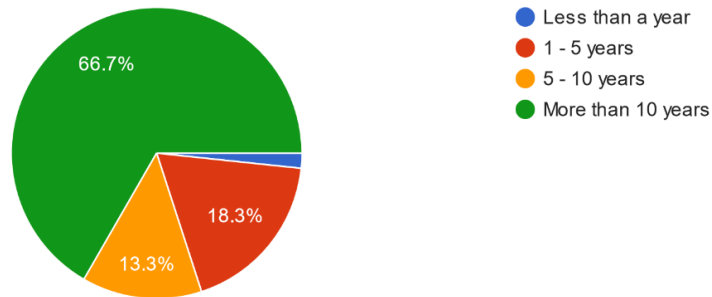
#### 4.0.1.10 Working Experience of Respondents

Table 4.10:

*Respondent's Working Experiences*

Working Experiences	Frequency	Percentage (%)	Cumulative Percentage (%)
Less than a year	2	1.7	1.7
1 – 5 years	22	18.3	20.0
5 – 10 years	16	13.3	33.3
More than 10 years	80	66.7	100.0

Number of years working in the healthcare industry:  
120 responses



*Figure 4.10. Statistic of Respondent's Working Experiences*

Table 4.10 shows the working experience of respondents that participate in this research. There 80 (66.7%) respondents who have work in the healthcare industry for over ten years, and 22 (18.3%) respondents worked in the healthcare industry for 1 to 5 years. Moreover, 16 (13.3%) respondents worked in the healthcare industry for 5 to 10 years. Lastly, only 2 (1.7%) respondents have less than a year of working experience.

#### 4.0.1.11 States

Table 4.11:  
*Respondent's States*

State	Frequency	Percentage (%)	Cumulative Percentage (%)
Penang	31	25.8	25.8
Kedah	35	29.2	20.0
Perak	17	14.2	33.3
Selangor	37	30.8	100.0

Which state are you working at?

120 responses

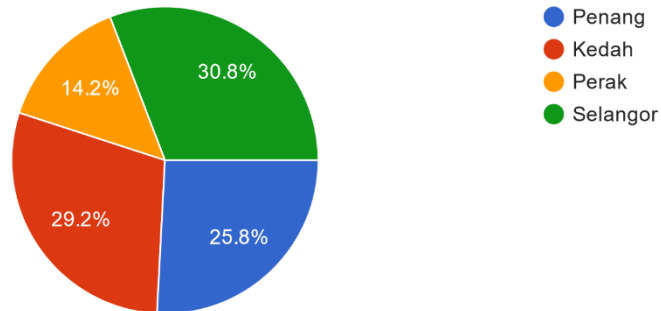


Figure 4.11. Statistic of Respondent's States

Table 4.11 shows the states that the respondents from, there are 37 (30.8%) respondents are from Selangor state, and 35 (29.2%) respondents are from Kedah state. Besides, there are 31 (25.8%) respondents are from Pulau Pinang (Penang) state, and lastly, only 17(14.2%) respondents are from Perak states.

## 4.0.2 Central Tendencies Measurement of Constructs

### 4.0.2.1 Job Demands

Table 4.12:

*Descriptive Statistics of Job Demands*

Job Demands (JD)	Statement	Mean	Standard Deviation	N	Ranking (Mean)
JD1	My job has required me to work very hard.	4.0000	0.77784	120	2
JD2	I have experienced severe time pressure in my work.	3.7583	0.84013	120	4

JD3	I've felt the weight of the amount of responsibility I have at work.	3.8000	0.87544	120	3
JD4	My job has required me to use a number of complex or high-level skills.	4.0833	0.78412	120	1
JD5	I have had to go through a lot of red tape to get my job done.	3.0583	0.72525	120	5
JD6	I have not fully understand what is being expected from me.	2.5333	0.80891	120	8
JD7	I have received conflicting requests from two or more people.	2.8500	0.74077	120	7
JD8	I have had many hassles to go through to get projects/assignments done.	2.9250	0.79030	120	6

Based on the table 4.12, the statement with the highest mean was JD4 followed by JD1, JD3, JD2, JD5, JD8, JD7 and lastly statement JD6 has the lowest mean of 2.5333.

Standard deviation of JD3 was the highest with a value of 0.87544 followed by JD2, JD6, JD8, JD4, JD1, JD7 and statement JD5 showed a lowest standard deviation of 0.72525.

#### 4.0.2.2 Work-family Conflict

Table 4.13:  
*Descriptive Statistics of Work-family Conflict*

Work-family Conflict (WFC)	Statement	Mean	Standard Deviation	N	Ranking (Mean)
WFC1	The demands of my work interfere with my home and family life.	3.4833	1.07675	120	2
WFC2	The amount of time my job takes up makes it difficult to fulfil family responsibilities.	3.4000	1.10309	120	3
WFC3	Things I want to do at home do not get done because of the demands my job puts on me.	3.3583	1.07528	120	5
WFC4	My job produces strain that makes it difficult to fulfill my family duties.	3.3917	1.05556	120	4
WFC5	I have had to make changes on my family activities plan due to my duty at work.	3.7917	0.99491	120	1

From the statement of table 4.13 above, WFC5 has the highest mean of 3.7917, followed by WFC1, WFC2, WFC4, and WFC3 showed the lowest mean of 3.3583.

The standard deviation for statement WFC2 was the highest with 1.10309, followed by WFC1, WFC3, WFC4. Statement WFC5 had the lowest standard deviation of 0.99491.

#### 4.0.2.3 Resilience

Table 4.14:

*Descriptive Statistics of Resilience*

Resilience (R)	Statement	Mean	Standard Deviation	N	Ranking (Mean)
R1	I tend to bounce back quickly after hard times.	3.1417	0.82295	120	1
R2	I have a hard time making it through stressful events.	3.0333	0.91609	120	2
R3	It does not take me long to recover from a stressful event.	3.0167	0.90733	120	3
R4	It is hard for me to snap back or recover quickly when something wrong happens.	2.9667	0.84945	120	4
R5	I tend to take long time to get over set-backs in my life.	3.0333	0.90687	120	2
R6	I have not fully understand what is being expected from me.	2.9000	0.69088	120	5

Table 4.14 above shows that the statement with the highest mean value was R1 (3.1417). Besides, the ranking according to the mean value would be R1, R2, R5, R3, R4, R6. Statement R6 showed the lowest mean value of 2.9000. The standard deviation for statement R2 was 0.91609, followed by R3, R5, R4, R1 and statement R6 had the lowest standard deviation of 0.69088.

#### 4.0.2.4 Job Burnout Among Employees in Healthcare Industry



Table 4.15:

*Descriptive Statistics of Job Burnout among Employees in Healthcare Industry*

Job Burnout (JB)	Statement	Mean	Standard Deviation	N	Ranking (Mean)
JB1	I feel emotionally drained from my work.	2.8583	1.47981	120	13
JB2	I feel used up at the end of the workday.	3.4000	1.68234	120	4
JB3	I feel fatigued when I get up in the morning and have to face another day on the job.	3.2000	1.68832	120	7
JB4	Working with people all day is really a strain for me.	2.6833	1.50061	120	17
JB5	I feel burned out from my work.	3.0583	1.83475	120	10
JB6	I feel frustrated by my job.	2.7000	1.92986	120	16
JB7	I feel I'm working too hard on my job.	3.4417	1.72863	120	2
JB8	Working with people directly puts too much stress on me.	2.7250	1.68015	120	15
JB9	I feel like I'm at the end of my rope.	1.1417	1.47981	120	22
JB10	I feel I treat some recipients as if they were impersonal "object".	2.9667	2.06586	120	11
JB11	I've become more callous (unkind) toward people since I took this job.	1.7500	1.59437	120	21

JB12	I worry that this job is hardening me emotionally.	1.7583	1.69525	120	20
JB13	I don't really care what happens to some recipients.	2.4417	1.79071	120	18
JB14	I feel recipients blame me for some of their problems. Note: Recipients: People for whom you have provided the service, care or treatment. (e.g., patients)	1.9833	1.44352	120	19
JB15	I can easily understand how my recipients feel about things.	2.9167	1.64793	120	12
JB16	I deal very effectively with the problems of my recipients.	3.3750	1.50105	120	5
JB17	I feel I'm positively influencing other people's lives through my work.	3.2083	1.54428	120	6
JB18	I feel very energetic.	3.1167	1.69122	120	9
JB19	I can easily create a relaxed atmosphere with my recipients.	3.4083	1.56375	120	3
JB20	I feel exhilarated after working closely with my recipients.	2.7750	1.60599	120	14
JB21	I have accomplished many worthwhile things in this job.	3.1750	1.49319	120	8
JB22	In my work, I deal with emotional problems very calmly.	3.4583	1.54428	120	1

Table 4.15 showed that the statement JB22 had the highest mean value of 3.4583 followed by JB7, JB19, JB2, JB16, JB17, JB3, JB21, JB18, JB5, JB10, JB15, JB1, JB20, JB8, JB6, JB4, JB13, JB14, JB12, JB11. Besides, the statement JB9 showed the lowest mean value of 1.1417.

The standard deviation for statement JB10 showed the highest value of 2.06586 followed by JB6, JB5, JB13, JB7, JB12, JB18, JB3, JB2, JB8, JB15, JB20, JB11, JB19, JB17, JB22, JB16, JB4, JB21, JB1, JB9 and statement JB14 showed a lowest standard deviation value of 1.4352.

## 4.1 Scale Measurement

### 4.1.1 Reliability Test

Table 4.16:  
*Reliability Test Result For The Comprehensive Research.*

Variable	Cronbach's Alpha	Items	Number of responses
Job Demand	0.709	8	120
Work-family Conflict	0.894	5	120
Resilience	0.789	6	120
Job Burnout	0.832	22	120

*Source:* Result generated and adopted from SPSS software.

Table 4.16 described the result of the reliability test for the research. Based on table 4.16, the Work-family conflict variable (0.894) has the highest Cronbach's Alpha value, followed by Job burnout variable (0.832), the Job demand variable (0.709), and the Job Burnout variable (0.832). The reliability test result that is obtained shows that all the variables included in this research have a good

reliability level which the Cronbach's Alpha value is between 0.70 to 0.80 (Sekaran & Bougie, 2013).

## 4.2 Inferential Analysis

Hypothesis testing was examined via multiple regression analysis. Pearson correlation analysis was carried out before the multiple regression analysis to scrutinise the linear association between two variables.

### 4.2.1 Pearson Correlation Coefficient Analysis

Table 4.17:

*The Interpretation of the Strength of Correlation Results Schober.*

<b>Coefficient of Range</b>	<b>Strength of Association</b>
0 – ±0.2	Very low
±0.2 – ±0.4	Low
±0.4 – ±0.6	Moderate
±0.6 – ±0.8	High moderate
±0.8 – ±0.9	High
±0.9 – ±1.0	Very high

*Note.* Adapted from P & Boer. C (2018)

#### 4.2.1.1 Correlation between Job Demand and Job Burnout

Table 4.18:

*The Result of Pearson Correlation Coefficient Analysis between Job Demand and Job Burnout*

Correlations		Job Burnout
Job Demand	Pearson Correlation	0.489**
	Significant (2-tailed)	0.000
	N	120

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 4.18 shows a significant positive relationship exist between job demand and job burnout ( $r = 0.485$ ,  $p < 0.05$ ). The p-value (0.000) is smaller than the alpha value (0.05). The correlation coefficient of 0.489 shows that when job demands are high, job burnout will also increase. The strength of this relationship is moderate and significant as the correlation coefficient value of 0.489 falls within  $\pm 0.40$  to  $\pm 0.60$ .

#### 4.2.1.2 Correlation between Work-family Conflict and Job Burnout

Table 4.19:

*The Result of Pearson Correlation Coefficient Analysis between Work-Family Conflict and Job Burnout*

Correlations		Job Burnout
Work-family Conflict	Pearson Correlation	0.475**
	Significant (2-tailed)	0.000
	N	120

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 4.19 shows a significant positive relationship exist between work-family conflict and job burnout ( $r = 0.475$ ,  $p < 0.05$ ). The p-value (0.000) is smaller than the alpha value (0.05). The correlation coefficient of 0.475 shows that when work-family conflict is high, job burnout will also increase. The strength of this relationship is moderate and significant as the correlation coefficient value of 0.475 falls within  $\pm 0.40$  to  $\pm 0.60$ .

#### 4.2.1.3 Correlation between Resilience and Job Burnout

Table 4.20:

*The Result of Pearson Correlation Coefficient Analysis Between Resilience and Job Burnout*

		Correlations
		Job Burnout
Resilience	Pearson Correlation	0.513**
	Significant (2-tailed)	0.000
N		120

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 4.20 shows a significant positive relationship exist between resilience and job burnout ( $r = 0.513$ ,  $p < 0.05$ ). The p-value (0.000) is smaller than the alpha value (0.05). The correlation coefficient of 0.513 shows that when resilience is high, job burnout will also increase. The strength of this relationship is moderate and significant as the correlation coefficient value of 0.513 falls within  $\pm 0.40$  to  $\pm 0.60$ .

## 4.2.2 Multiple Linear Regression Analysis

This section presents the results of multiple regression analysis in examining the influence of the independent variables on job burnout.

Table 4.21:

*Statistics of Model Fit*

<b>Model Summary</b>									
<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>	<b>Change Statistics</b>				
					<b>R Square Change</b>	<b>F Change</b>	<b>df1</b>	<b>df2</b>	<b>Sig. F Change</b>
<b>1</b>	.622	.387	.371	.61555	.387	24.416	3	116	.000

*Source:* Result generated and adopted from SPSS software.

Table 4.22:

*Statistics of ANOVA*

<b>ANOVA</b>						
<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>1</b>	Regression	27.754	3	9.251	24.416	<0.000
	Residual	43.953	116	.379		
	Total	71.706	119			

*Source:* Result generated and adopted from SPSS software.

Table 4.23:

*Statistics of Multiple Regression of Job Demand, Work-family Conflict, Resilience*

<b>Coefficients</b>					
<b>Model</b>	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		

<b>1</b>	<b>(Constant)</b>	<b>-.537</b>	<b>.434</b>		<b>-</b>	<b>.218</b>
					<b>1.234</b>	
	Job Demand	.443	.146	.260	3.047	.003
	Work-family Conflict	.226	.072	.259	3.134	.002
	Resilience	.348	.116	.266	2.993	.003

*Source:* Result generated and adopted from SPSS software.

In Table 4.22, the p-value (0.000) was smaller compared to the significance level of 0.05, which shows that the F-statistic is significant. Therefore, this proposed model is sufficient to define for the dependent variable (job burnout) in relation to independent variables (job demand, work-family conflict, resilience). Thus, the IVs are important to explain the variance of job burnout.

Moreover, the R-square value is 0.387 reveals that the IVs (job demand, work-family conflict, and resilience) of the model explained a 38.7% variation of the DV (job burnout) in this study. The remaining 61.3% of the variation cannot be explained through this model, which shows that there are other factors that can be used to explain job burnout.

### Hypothesis

H1: Job demands significantly influence job burnout among employees in the healthcare industry.

H2: Work-family conflict significantly influences job burnout among employees in the healthcare industry.

H3: Resilience significantly influences job burnout among employees in the healthcare industry.



Based on the result above, it indicates that the three independent variables (job burnout, work-family conflict and resilience) have a positive relationship towards the dependent variable (job burnout). Job demand ( $\beta=0.443$ ,  $p=0.003$ ), work-family conflict ( $\beta=0.226$ ,  $p=0.002$ ) and resilience ( $\beta=0.348$ ,  $p=0.003$ ) have a positive and significant influence on job burnout in view of the fact that the p-value is smaller than alpha value (0.05). Consequently, H1, H2, H3 are supported.

By referring to the result of table 4.23, researchers can figure out the below equation: Job Burnout = 0.537 + 0.443 (Job Demand) + 0.226 (Work-family Conflict) + 0.348 (Resilience)

Table 4.23 above shows the contribution of each independent variable to the dependent variable. Among the independent variables, job demand has the strongest variable impact on job burnout as the beta value is 0.443. The second strongest contributor is resilience, with a beta value of 0.348. The ranking is then followed by work-family conflict with a beta value of 0.226. Job demand is the strongest contributor. It has the greatest influence on job burnout. Thus, as the job demand increase, job burnout will also increase. As for work-family conflict, it has the least impact on job burnout compared to other variables.

# CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

## 5.0 Summary of Statistical Analysis

### 5.0.1 Central Tendency

Table 5.1:  
*Summary of Central Tendency Measurement*

Variables	Mean	Standard Deviation
Job Demand	27.0083	3.64495
Work-family Conflict	17.425	4.45078
Resilience	18.0917	3.56688
Job Burnout	61.5417	17.07763

Source: Result generated and adopted from SPSS software.

### 5.0.3 Inferential Analysis

Table 5.2:  
*Reliability Test Result for the Comprehensive Research.*

No.	Variable	Cronbach's Alpha	Reliability
1	Job Demand	0.709	High
2	Work-family Conflict	0.894	High
3	Resilience	0.789	High
4	Job Burnout	0.832	High

Source: Result generated and adopted from SPSS software.

The relationship between the three independent variables and employee performance is positive, where resilience has the highest significant value (0.513), followed by job demand (0.489) and lastly, work-family conflict (0.475). The strength of these three relationships is moderate as the correlation coefficient value of all three variables falls within the range of  $\pm 0.40$  to  $\pm 0.60$ .

### 5.0.3.2 Multiple Linear Regression Analysis and Linear Regression Analysis

Table 5.3:

*Summary of the Result of Hypotheses Testing*

No.	Hypothesis	Result
1	Job demand has a significant influence on health industry employees job burnout.	p=0.002 p<0.05 Accepted
2	Work-family conflict has a significant influence on health industry employees job burnout.	p=0.003 p<0.05 Accepted
3	Resilience has a significant influence on health industry employees job burnout.	p=0.003 p<0.05 Accepted

Source: Result generated and adopted from SPSS software.

## **5.1 Discussion of Major Findings**

### **5.1.1 Job Demand and Job Burnout**

H1: Job demand has a significant influence on healthcare industry employee job burnout.

The result showed that job demand has a significant influence on healthcare industry employee job burnout. This finding is consistent with Yulianti and Rohmawati (2020), job demands have a profound influence on burnout which demonstrate a substantial association job demands and job burnout among healthcare professionals in the healthcare industry. Therefore, the findings of Fahgerlind, Stahl & Smith (2018) are consistent with this study and show job demand has a significant influence on healthcare industry employee job burnout.

### **5.1.2 Work-family Conflict and Job Burnout**

H1: Work-family conflict has a significant influence on healthcare industry employee job burnout.

The result showed that work-family conflict has a significant influence on healthcare industry employee job burnout. The findings of Vickovic and Morrow (2020) are consistent with this study as the findings stated that there be a substantial association between work-family conflict and job burnout among healthcare professionals in the healthcare industry. The result that was obtained in this research is also indeed consistent with the results that were attained by a researcher in a previous study conducted by Ahmad (2008), whereby it is verified that work-family conflict has a significant influence on healthcare industry employee job burnout.

### **5.1.3 Resilience and Job Burnout**

H1: Resilience has a significant influence on healthcare industry employee job burnout.

The result shows that resilience has a significant influence on job burnout among the employees in the healthcare industry. Based on the result in this study, it shows a positive relationship which means high resilience, high job burnout. The reasonable explanation is that most respondents work for long hours in the healthcare industry. According to the respondent's demographic profile, the majority of respondents worked for 7 to 9 hours or above, which long working hours caused job burnout. It is assumed that before the pandemic, they are a healthcare worker with high resilient until the Covid-19 pandemic situation getting worse, which job burnout increase to them. Additionally, the healthcare workers might be over-resilient which affect them to be overly persistent with unattainable goals. This will give the healthcare workers a phenomenon "false hope phenomenon" as the healthcare workers do not see an end to this pandemic situation. This will lead to the healthcare workers being overconfident, over-optimism which they will spend enormous energy on it.

## **5.2 Implication of the Research**

In this research, we have successfully studied the influence of work-family conflict, job demands and resilience on job burnout among employees in the healthcare industry. The independent variables in this study have been confirmed to have a substantial relationship with the job burnout among employees in the healthcare industry.

### **5.2.1 Theoretical Implication**

This study provides additional insight on the implications of job demand, work-family conflict, and resilience on job stress among the healthcare employees in Malaysia context by applying Job Demand-Resources (JD-R) Model (Bakker & Demerouti, 2006) and Conservation of Resources (COR) Model (Hobfoll, 2001).

This study demonstrated that high job demand would become job stressors that can result in high job stress. High job demands need high effort from an individual (Nahrgang, Morgeson & Hojmann, 2011). The purpose of the JD-R Model is to respond to the imbalance between demands and resources of the employees. The healthcare employees were having high job demand work and a lack of resources during Covid-19. They need to increase their working hours because of a high and an increasing number of Covid-19 infected patients and also insufficient healthcare workforce. This situation may lead to high job stress because they need to confront a large number of patients with long working hours in a long period. This study confirms that high job demand will become job stressors that can result in high job stress. High job demands need high effort from an individual (Nahrgang, Morgeson & Hojmann, 2011). This is because exorbitant job demand would cause the individual to feel fatigued and exhausted (Sawang, 2012). Therefore, the statement further supports the argument in JD-R Model, which expresses effort from an individual and resources will significantly have affected the job demands. Therefore, the job demands of the healthcare workers will be high as the resources are low.

The results also further support the assumptions in COR model as stress is a response to a situation in which there is a possibility of resource loss, actual resource loss, or lack of anticipated resource benefit. People will aim to well retain resources COR model is one of the most influential theories used to

explain human stress and also healthcare workers well-being. The COR model provides a useful structure for the potential influence of both job demands and work-family conflict on job stress.

### **5.2.2 Managerial Implication**

In this research, work-family conflict, job demands and resilience were found to significantly influence job burnout among employees in the healthcare industry. There are several practical implications of this study. First, the Ministry of Health (MOH) can try to increase funding to the hospitals. The Ministry of Health is urged to increase funding to have sufficient resources to provide in the public and private sector of hospitals. Therefore, the public and private hospitals are able to have the funds to buy the equipment and improve the process and management in the hospital in order to reduce the job demands of the doctors and nurses.

Next, the management of the hospital can try to hire more healthcare workers to cope with the demand, especially for the essential departments such as emergency, Intensive Care Unit (ICU), etc. Besides, the management can also try to reduce the rules, procedures, and red tapes due to the results show that most of the healthcare workers were agreed that their job was required them to work very hard.

Moreover, the hospital administrator can distribute the relevant doctors or nurses to the relevant department in order to reduce their workload. The management of the hospital can also organise a work-family life balance program to reduce their job burnout. They can create a family-friendly work environment by offering childcare and after-school program for the children of the healthcare workers. Therefore, the work-family conflict will be avoided as

their children were taking care of by the hospital management during their working hours.

### **5.3 Limitation of the Study**

Firstly, this study has a limited sample size. Due to the pandemic and restriction guidelines from the government, it is difficult to visit the hospital in person to distribute the survey and provide a detailed explanation of the purpose of this research. Thus, it was challenging to collect responses from the respondents in a short period of time as the survey was collected through a google form.

Next, healthcare workers found it time-consuming to participate in this survey due to the busy schedule in this pandemic situation. The chances to get the targeted respondent was decreased due to the healthcare workers were fatigue after the long working hours. By exposing the long working hour of the working environment, it will be causing them to ignore the survey and not willing to involved. Therefore, the survey will not be able to reach the targeted number of participants.

Furthermore, respondents were facing language barriers during research participation which led to some misunderstanding and vague information received. Respondents were unable to fully understand the questions provided in the questionnaire, which result in difficulty in answering the questionnaire.



## **5.4 Recommendation**

The sample size needs to be improved in future research in order to allow future researchers to get a more accurate result in their future research. Therefore, future researchers should include more hospitals in a different geographic area in order to cover more healthcare employees.

Moreover, future researchers should obtain the consent of the hospital. They need to be fully aware of the current situation that outsiders are not allowed to visit the hospital without authorised reason. However, it would be better if the hospital management department could assist in any research related to their employees as it would come in handy to enhance the well-being of healthcare workers. Generally, research is carried out to identify and solve the problems that lie in between for a better working environment. Healthcare workers' demands are high, and most of them are facing burnout issues due to rising COVID-19 cases. The cooperation of hospitals in assisting research would lead to an improved working environment and enhance employees' psychological well-being.

Lastly, the questionnaires are encouraged to be created in bilingual, which are in English and Malay versions for the convenience of the healthcare workers to answering the questionnaires and enhance the process of collecting responses. As respondents were facing language barriers in understanding and answering the questions in English, researchers in the future are encouraged to include the Bahasa questionnaire so it would lead to a better understanding in answering the questionnaires.

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## APPENDICES

		<b>Statistics</b>							
		JD1	JD2	JD3	JD4	JD5	JD6	JD7	JD8
N	Valid	120	120	120	120	120	120	120	120
	Missing	0	0	0	0	0	0	0	0
Mean		4.0000	3.7583	3.8000	4.0833	3.0583	2.5333	2.8500	2.9250
Std. Error of Mean		.07101	.07669	.07992	.07158	.06621	.07384	.06762	.07214
Median		4.0521 <sup>a</sup>	3.7802 <sup>a</sup>	3.8444 <sup>a</sup>	4.1500 <sup>a</sup>	3.0638 <sup>a</sup>	2.5294 <sup>a</sup>	2.7961 <sup>a</sup>	2.8788 <sup>a</sup>
Mode		4.00	4.00	4.00	4.00	3.00	3.00	3.00	3.00
Std. Deviation		.77784	.84013	.87544	.78412	.72525	.80891	.74077	.79030
Variance		.605	.706	.766	.615	.526	.654	.549	.625
Skewness		-.981	-.467	-.819	-1.105	.045	.278	.626	.446
Std. Error of Skewness		.221	.221	.221	.221	.221	.221	.221	.221
Kurtosis		2.427	.220	1.233	2.715	.030	.983	.944	1.187
Std. Error of Kurtosis		.438	.438	.438	.438	.438	.438	.438	.438
Range		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Minimum		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Maximum		5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Sum		480.00	451.00	456.00	490.00	367.00	304.00	342.00	351.00

a. Calculated from grouped data.

### *Appendix 1.1: Job Demand statistics*

		<b>Statistics</b>				
		WFC1	WFC2	WFC3	WFC4	WFC5
N	Valid	120	120	120	120	120
	Missing	0	0	0	0	0
Mean		3.4833	3.4000	3.3583	3.3917	3.7917
Std. Error of Mean		.09829	.10070	.09816	.09636	.09082
Median		3.6081 <sup>a</sup>	3.4571 <sup>a</sup>	3.4366 <sup>a</sup>	3.4868 <sup>a</sup>	3.8800 <sup>a</sup>
Mode		4.00	4.00	4.00	4.00	4.00
Std. Deviation		1.07675	1.10309	1.07528	1.05556	.99491
Variance		1.159	1.217	1.156	1.114	.990
Skewness		-.531	-.238	-.264	-.407	-.610
Std. Error of Skewness		.221	.221	.221	.221	.221

Kurtosis	- .657	- .870	- .987	- .729	- .177
Std. Error of Kurtosis	.438	.438	.438	.438	.438
Range	4.00	4.00	4.00	4.00	4.00
Minimum	1.00	1.00	1.00	1.00	1.00
Maximum	5.00	5.00	5.00	5.00	5.00
Sum	418.00	408.00	403.00	407.00	455.00
a. Calculated from grouped data.					

*Appendix 1.1: Work-family conflict statistics*

		<b>Statistics</b>					
		R1	R2	R3	R4	R5	R6
N	Valid	120	120	120	120	120	120
	Missing	0	0	0	0	0	0
Mean		3.1417	3.0333	3.0167	2.9667	3.0333	2.9000
Std. Error of Mean		.07512	.08363	.08283	.07754	.08279	.06307
Median		3.1319 <sup>a</sup>	3.0244 <sup>a</sup>	3.0125 <sup>a</sup>	2.9759 <sup>a</sup>	3.0247 <sup>a</sup>	2.9072 <sup>a</sup>
Mode		3.00	3.00	3.00	3.00	3.00	3.00
Std. Deviation		.82295	.91609	.90733	.84945	.90687	.69088
Variance		.677	.839	.823	.722	.822	.477
Skewness		.190	.067	.035	-.103	.071	-.333
Std. Error of Skewness		.221	.221	.221	.221	.221	.221
Kurtosis		.280	-.034	-.396	-.422	-.248	.237
Std. Error of Kurtosis		.438	.438	.438	.438	.438	.438
Range		4.00	4.00	4.00	4.00	4.00	3.00
Minimum		1.00	1.00	1.00	1.00	1.00	1.00
Maximum		5.00	5.00	5.00	5.00	5.00	4.00
Sum		377.00	364.00	362.00	356.00	364.00	348.00
a. Calculated from grouped data.							

*Appendix 1.2: Resilience statistics*

	JB1		JB2		JB3		JB4		JB5		JB6		JB7		JB8		JB9		JB10		Statistic
N	Valid	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		2.8683	3.400	3.2000	2.6833	3.0583	2.7000	3.4417	2.7250	3.4417	2.7250	3.4417	2.7250	3.4417	2.7250	3.4417	2.7250	3.4417	2.7250	3.4417	2.9687
Std. Error of Mean		.13509	.1536	.15412	.13669	.16749	.17617	.15780	.15338	.15780	.15338	.15780	.15338	.15780	.15338	.15780	.15338	.15780	.15338	.15780	.13509
Median		3.0000 <sup>a</sup>	3.415 <sup>a</sup>	3.3542 <sup>a</sup>	2.7188 <sup>a</sup>	2.9500 <sup>a</sup>	2.5135 <sup>a</sup>	3.4314 <sup>a</sup>	2.7391 <sup>a</sup>	3.4314 <sup>a</sup>	2.7391 <sup>a</sup>	3.4314 <sup>a</sup>	2.7391 <sup>a</sup>	3.4314 <sup>a</sup>	2.7391 <sup>a</sup>	3.4314 <sup>a</sup>	2.7391 <sup>a</sup>	3.4314 <sup>a</sup>	2.7391 <sup>a</sup>	3.4314 <sup>a</sup>	3.0000 <sup>a</sup>
Mode		4.00	3.0	4.00	3.00	1.00 <sup>a</sup>	1.00	3.00	3.00	1.00	1.00	3.00	3.00	1.00	1.00	3.00	3.00	1.00	1.00	3.00	3.00
Std. Deviation		1.47981	1.6823	1.68832	1.50081	1.83475	1.82986	1.72863	1.68015	1.83475	1.82986	1.72863	1.68015	1.83475	1.82986	1.72863	1.68015	1.83475	1.82986	1.72863	2.06586
Variance		2.190	2.830	2.850	2.252	3.366	3.724	2.988	2.823	3.366	3.724	2.988	2.823	3.366	3.724	2.988	2.823	3.366	3.724	2.988	4.268
Skewness		.042	-.115	-.118	.011	.087	.238	-.094	.152	.087	.238	-.094	.152	.087	.238	-.094	.152	.087	.238	-.094	.010
Std. Error of Skewness		.221	.221	.221	.221	.221	.221	.221	.221	.221	.221	.221	.221	.221	.221	.221	.221	.221	.221	.221	.221
Kurtosis		-1.019	-.787	-1.076	-.227	-1.163	-1.153	-.925	-.778	-1.163	-1.153	-.925	-.778	-1.163	-1.153	-.925	-.778	-1.163	-1.153	-.925	-1.271
Std. Error of Kurtosis		.438	.438	.438	.438	.438	.438	.438	.438	.438	.438	.438	.438	.438	.438	.438	.438	.438	.438	.438	.438
Range		6.00	6.0	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Minimum		.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Maximum		6.00	6.0	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Sum		343.00	408.0	384.00	322.00	367.00	324.00	413.00	327.00	367.00	324.00	413.00	327.00	367.00	324.00	413.00	327.00	367.00	324.00	413.00	356.00

a. Calculated from grouped data.

b. Multiple modes exist. The smallest value is shown

	JB11	JB12	JB13	JB14	JB15	JB16	JB17	JB18	JB19	JB20	JB21	JB22
120	120	120	120	120	120	120	120	120	120	120	120	120
0	0	0	0	0	0	0	0	0	0	0	0	0
1.7500	1.7583	2.4417	1.9833	2.9167	3.3750	3.2083	3.1167	3.4083	2.7750	3.1750	3.4583	3.4583
.14555	.15475	.16347	.13177	.15044	.13703	.14097	.15439	.14275	.14661	.13631	.14097	.14097
1.5283*	1.4348*	2.3269*	1.8333*	2.8269*	3.3000*	2.9355*	3.0408*	3.2745*	2.6821*	3.0702*	3.4643*	3.4643*
.00	.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	4.00
1.59437	1.89525	1.79071	1.44352	1.64793	1.50105	1.54428	1.89122	1.56375	1.80598	1.49319	1.54428	1.54428
2.542	2.874	3.207	2.084	2.716	2.253	2.385	2.880	2.445	2.579	2.230	2.385	2.385
.786	.766	.383	.660	.307	.139	.465	.090	.220	.535	.234	-.039	-.039
.221	.221	.221	.221	.221	.221	.221	.221	.221	.221	.221	.221	.221
.048	-.352	-.640	.121	-.642	-.553	-.858	-.767	-.967	-.291	-.431	-.633	-.633
.438	.438	.438	.438	.438	.438	.438	.438	.438	.438	.438	.438	.438
6.00	6.00	6.00	6.00	6.00	6.00	5.00	6.00	6.00	6.00	6.00	6.00	6.00
.00	.00	.00	.00	.00	.00	1.00	.00	.00	.00	.00	.00	.00
6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
210.00	211.00	283.00	238.00	350.00	405.00	385.00	374.00	408.00	333.00	381.00	415.00	415.00

Appendix I.3: Job Burnout statistics



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### **Survey Questionnaire**

#### **Influence of Job Demands, Work-Family Conflict and Resilience on Job Burnout among Employees in Healthcare Industry**

Dear respondents,

We are the Bachelor of Business Administration (Hons) students from Universiti Tunku Abdul Rahman (UTAR), currently we are conducting a final year project regarding to the influence of job demands, work-family conflict and resilience on job burnout among healthcare employees. Your participation to answer this questionnaire is much appreciated to help us complete for the study. We appreciate your time in completing the survey. All the information provided will be treated as confidential and private. The survey is solely for academic purposes.

Thank you very much for your time and participation. If you have any question or inquiry, kindly to contact our group members.

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*Appendix 1.4: Survey Questionnaire*



**Guidelines for completing this survey:**

1. There are **FIVE** section in this questionnaire. Please answer **ALL** the questions in Section A, B, C, D and E.
2. Completion of this questionnaire will take you around 15 minutes.
3. The information gather will be treated as private and **CONFIDENTIAL**.

Personal Data Protection Statement

Please be informed that accordance with the Personal Data Protection Act 2010 (PDPA) which came into force on 15 November 2013, Universiti Tunku Abdul Rahman (UTAR) is hereby bound to make notice and require consult in relation to collection, recording, storage, usage and retention of personal information.

Acknowledgement of Notice

I have been notified by you and I hereby understood, consented and agreed per UTAR notice.

I disagree, my personal data will not be processed.

## **Section A: Demographic Profile**

Please select the most appropriate option for each of the following:

1. Gender:

- Male
- Female

7. The organization that you work for:

- Public sector
- Private sector

2. Age:

- 20 years old and below
- 21 to 30 years old
- 31 to 40 years old
- 41 to 50 years old
- 51 years old and above

8. What is your healthcare profession?

- Medical doctor
- Registered nurse
- Medical assistant
- Pharmacist
- Others. Please specify: \_\_\_\_\_

3. Ethnic group:

- Malay
- Chinese
- Indian
- Other

9. Working hours per day:

- 6 hours and above
- 7 to 9 hours
- 10 to 12 hours
- 12 hours and above

4. Highest Education completed:

- Diploma
- Bachelor Degree
- Master Degree
- Doctor of Philosophy (PhD)
- Other

10. Number of years working in the healthcare industry:

- Less than a year
- 1 – 5 years
- 5 – 10 years
- More than 10 years

5. Marital Status:

- Single
- Married
- Other

11. Which state are you from?

- Penang
- Kedah
- Perak
- Selangor

6. Number of Children:

- 0
- 1-2
- 3-4
- 5 and above

**Section B: Job demands**

**Based on your opinion, please select the most appropriate option that best indicate your agreement level about the following statements.**

**Level of agreement**

**1 - Strongly disagree**

**2 - Disagree**

**3 - Neutral**

**4 - Agree**

**5- Strongly Agree**

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	My job has required me to work very hard.	1	2	3	4	5
2.	I have experienced severe time pressure in my work.	1	2	3	4	5
3.	I've felt the weight of the amount of responsibility I have at work.	1	2	3	4	5
4.	My job has required me to use a number of complex or high-level skills.	1	2	3	4	5
5.	I have had to go through a lot of red tape to get my job done.	1	2	3	4	5
6.	I have not fully understood what is being expected from me.	1	2	3	4	5
7.	I have received conflicting requests from two or more people.	1	2	3	4	5
8.	I have had many hassles to go through to get projects/assignments done.	1	2	3	4	5

### **Section C: Work-Family Conflict**

**Based on your opinion, please select the most appropriate option that best indicate your agreement level about the following statements.**

**Level of agreement**

**1 - Strongly disagree**

**2 - Disagree**

**3 - Neutral**

**4 - Agree**

**5- Strongly Agree**

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	The demands of my work interfere with my home and family life.	1	2	3	4	5
2.	The amount of time my job takes up makes it difficult to fulfill family responsibilities.	1	2	3	4	5
3.	Things I want to do at home do not get done because of the demands my job puts on me.	1	2	3	4	5
4.	My job produces strain that makes it difficult to fulfill my family duties.	1	2	3	4	5
5.	I have had to make changes on my family activities plan due to my duty at work.	1	2	3	4	5

## **Section D: Resilience**

**Based on your opinion, please select the most appropriate option that best indicate your agreement level about the following statements.**

**Level of agreement**

- 1 - Strongly disagree**
- 2 - Disagree**
- 3 - Neutral**
- 4 - Agree**
- 5- Strongly Agree**

*Resilience: One's ability to bounce back or recover from adversity. Resilience is a positive response to stress in which the individual experiences growth and development despite challenges.*

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I tend to bounce back quickly after hard times.	1	2	3	4	5
2.	I have a hard time making it through stressful events.	1	2	3	4	5
3.	It does not take me long to recover from a stressful event.	1	2	3	4	5
4.	It is hard for me to snap back or recover quickly when something wrong happens.	1	2	3	4	5
5.	I usually come through difficult times with little trouble.	1	2	3	4	5
6.	I tend to take a long time to get over set-backs in my life.	1	2	3	4	5

## Section E: Job Burnout

Based on your opinion, please select the most appropriate option for each questions or statement.

### Frequency

**0 - Never**

**1 - Few times a year**

**2 - Once a month**

**3 - A few times per month**

**4 - Once a week**

**5 - A few times per week**

**6 - Everyday**

No.	Questions	Never	Few times a year	Once a month	A few times per month	Once a week	A few times per week	Everyday
1.	I feel emotionally drained from my work.	0	1	2	3	4	5	6
2.	I feel used up at the end of the workday.	0	1	2	3	4	5	6
3.	I feel fatigued when I get up in the morning and have to face another day on the job.	0	1	2	3	4	5	6
4.	Working with people all day is really a strain for me.	0	1	2	3	4	5	6
5.	I feel burned out from my work.	0	1	2	3	4	5	6
6.	I feel frustrated by my job.	0	1	2	3	4	5	6
7.	I feel I'm working too hard on my job.	0	1	2	3	4	5	6
8.	Working with people directly puts too much stress on me.	0	1	2	3	4	5	6
9.	I feel like I'm at the end of my rope.	0	1	2	3	4	5	6

10.	I feel I treat some recipients as if they were impersonal “object”.	0	1	2	3	4	5	6
11.	I’ve become more callous (unkind) toward people since I took this job.	0	1	2	3	4	5	6
12.	I worry that this job is hardening me emotionally.	0	1	2	3	4	5	6
13.	I don’t really care what happens to some recipients.	0	1	2	3	4	5	6
14.	I feel recipients blame me for some of their problems.  <i>Note: Recipients: People for whom you have provided the service, care or treatment. (e.g., patients)</i>	0	1	2	3	4	5	6
15.	I can easily understand how my recipients feel about things.	0	1	2	3	4	5	6
16.	I deal very effectively with the problems of my recipients.	0	1	2	3	4	5	6
17.	I feel I’m positively influencing other people’s lives through my work.	0	1	2	3	4	5	6
18.	I feel very energetic.	0	1	2	3	4	5	6
19.	I can easily create a relaxed atmosphere with my recipients.	0	1	2	3	4	5	6
20.	I feel exhilarated after working closely with my recipients.	0	1	2	3	4	5	6
21.	I have accomplished many worthwhile things in this job.	0	1	2	3	4	5	6
22.	In my work, I deal with emotional problems very calmly.	0	1	2	3	4	5	6

*Thank you for your participation.*