

MEDIATING EFFECT OF JOB STRESS ON JOB
SATISFACTION AMONG LECTURERS

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MEDIATING EFFECT OF JOB STRESS ON JOB SATISFACTION AMONG
LECTURERS

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ABSTRACT

Job stress is a critical disease caused by conditions in the workplace that negatively affect an individual's performance and overall well-being of his body and mind. This project paper examines the mediating effect of job stress on job satisfaction among lecturers. The objective is to determine the level and relationship job stress on job satisfaction among lecturers. Besides that, data were gathered through questionnaires and was being analyzed using Statistical Package for Social Science (SPSS) version 16 and Smart PLS. Throughout the bootstrapping result on direct relationship between variables stated that time pressure and interruption only have the direct relationship to job satisfaction, but not on workload. The bootstrapping result also shows that time pressure and interruption do not have the direct relationship to job satisfaction but workloads have the direct relationship. The workload has a mediating effect of job stress on job satisfaction. For the recommendation, future researcher may investigate this study and target for a bigger population. As a conclusion, the results of this project paper were shown that there is a significant relationship between job stress and the job satisfaction.

ABSTRAK

Tekanan kerja adalah penyakit kritikal disebabkan oleh keadaan di tempat kerja yang memberikan kesan negatif terhadap prestasi individu dan kesejahteraan keseluruhan badan dan fikiran. Kertas projek mengkaji kesan pengantara tekanan kerja terhadap kepuasan kerja di kalangan pensyarah. Faktor-faktor yang menyumbang kepada tekanan kerja di dalam kertas projek ini termasuk beban kerja, tekanan masa dan gangguan. Tujuannya adalah untuk mengetahui aras hubungan tekanan kerja utama kepada kepuasan kerja di kalangan pensyarah. Data dikumpulkan melalui soal selidik dan dianalisis dengan menggunakan Pakej Statistik untuk Sains Sosial (SPSS) versi 16 dan Smart PLS. Terdapat hubungan langsung antara pembolehubah di antara tekanan masa dan gangguan kepada kepuasan kerja tetapi tidak untuk beban kerja . Bagi tekanan masa dan gangguan pula tidak mempunyai hubungan langsung kepada kepuasan kerja tetapi beban kerja mempunyai hubungan langsung. Beban kerja mempunyai kesan pengantara tekanan kerja terhadap kepuasan kerja tetapi tidak bagi tekanan masa dan gangguan. Untuk cadangan, penyelidik masa depan boleh melakukan penyiasatan bagi populasi yang lebih besar. Kesimpulannya, keputusan kertas projek ini telah menunjukkan bahawa terdapat hubungan yang signifikan di antara tekanan kerja dan kepuasan kerja.

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CHAPTER 1

INTRODUCTION

This chapter outlines the background of the study, problem statement, research questions, research objectives and significance of the study. Next, the scope and limitations of the study and organization of the project paper will be discussed. At the last part in this chapter, a brief description of the purpose of the remaining chapters is presented.

1.1 Background of the Study

Today, human lifestyle is very complex and high in challenges compared to the previous lifestyle which was stress less. People nowadays are dealing with daily stress which led by their work. Work is an important aspect in people's life and behaviour. Dealing with job stress is not simply a matter of eliminating the source of harm and sometimes it could cause another hazards. Some of the stresses lead to the negative effects but some of the stresses affect people in a good way.

Stress can occur in any type of job. There are also many types of stress for instance managerial stress, stress and burnout, technical stress, mental stress and many others. Houndmont, Cox, and Griffiths, (2010) job stress can be defined as pressures and demands put on employees by the organisation. Most organizations often give a lot of impacts on employees health (Bhagat, Krishnan, Nelson, Leonard, Ford, and Billing, 2010). Stress can affect people in many ways. Positive stress motivates the employees to a better performance and productivity in developing their career. Meanwhile on the

other hand, unmanageable stress can affect the employees. It could lead to social disorder, physiological and psychological disorder.

This has been proven by Bhagat et al. (2010) who found that the job stress can create a physical disorder, for example heart disease, high blood pressure, heartburn, cancer, asthma, insomnia and persistent fatigue. Other than that, stress also can attack people from the psychological aspect. Among the psychological effects are dissatisfaction, lack of concentration and depression.

Malhi (2008) reported that there are two types of major stresses. First one is eustress. The definition of eustress is mild or constructive stress which actually improves the personal productivity (Malhi, 2008). For instance, producing quality work and improve their performance. Clearly, eustress is a good stress. If there is a good stress, there must be a bad stress. This bad stress is called distress. Distress can be referred as a persistent stress which results in physiological strain (Malhi, 2008). The examples of distress are having a major illness, being fired at work and filing for divorce. This is the second type of the major stress. It brings the negative effects to the human beings.

Naturally, job stress is the main cause to a bigger problem which not only in a person's professional but also in his personal life. A high level of stress may influence the individual to make incorrect and unwise decisions. These reckless choices could lead to negative consequences in the productivity of a group thus increase the cost to an organization.

The job stress at the workplace brings a lot of awful consequences to the employees. This topic is interesting to be studied because of the increasing number of depression, burnout, and mental disorder cases among the workers. Supported by The Star (2014), NIOSH's chairman indicated that the number of employees who suffer depression and mental problem due to the stress at the workplace is growing each year and because of that they implement the mental health care policy for their employees.

There are two issues that each and every organization should manage to control. They are stress and job satisfaction of their employees. At a glance, these two problems seem not related with each other. But if we look at these matters in depth then we can found that one affects the other and if both issues are well managed by the company, it might lead to positive outcomes for the employees and organization itself (George, 2010).

Job satisfaction considered as an adaptable cause for stress. There are several theories in 1920 to 1950 that support the proposition of an employee's satisfaction affects his output of work. George (2010) also believed that there is a cause and consequence connection between satisfaction and productivity. George (2010) indicated that job satisfaction is directly affects the mental health of the employees and if the organizations' concern is high and stable productivity, they should manage their employees' satisfaction.

The employees that have a very good satisfaction may give something positive and healthy to the company in return. Researcher has found that the factors that affect job satisfaction provide the managers with necessary and meaningful information to make smart decisions regarding interventions to

boost the employees' satisfaction. There are many proofs that show the real issues in each organization have always been the employees' satisfaction and retention (George, 2010).

Job stress is the main result of job satisfaction. Jex and Yankelevich (2008), stated that working environment can be a factor to the job stress. Examples of work environment is workload, role conflict, interruptions. In addition, Mohd Awang Idris, Maureen, Dollard, Anthony, and Winefield, (2010) reported that a few investigations have been carried out to see the effects of job stress and low performance has taken its place as the most affected aspect rather than psychological strain.

Every profession in this world faces stress. Even teachers cannot run away from stress. Jumardin, Bahri, Gani and Jasruddin (2014) indicated that the educator is one of the main components in the education system at all levels, including at the university. The roles, duties, and responsibilities of a teacher are crucial in realizing the goals of national education. There are some goals of national education. First, it aims at educating the nation's life. Second, it aspires to improve the quality of human beings including the quality of faith, morals, mastery of the science, technology, and the arts. A university requires the professional lecturers in order to accomplish the functions, roles, and strategic positions. Lecturer is the most important component in helping the students so that they become human beings who are intelligent, innovative, competitive, and possess good morals.

Therefore, education has been identified as one of the stressful jobs (Ahsan, Abdullah et al., 2009). Stress for educators may come as an unpleasant feeling such as anger, nervousness, and disappointment. Some factors such as increasing working hours, changes on schedule, insufficient knowledge, unfamiliar with using technology make the lecturers suffer stress. In this case, along with technological development, the universities also have changed significantly. Learning more about educational technologies, facing tight deadlines of their researches, using methods of new technological instruments in their area of study and additional long hours for training purposes are definitely the factors of stress for lecturers in the last decade. These situations can pressure the university academic staff and therefore affect their satisfaction and even their physical or mental health.

Jumardin et al. (2014) stated that the professional lecturers are always expected to be able to adjust to the development of science and technology. In relation to this matter, each lecturer must always develop his competence by improving knowledge and skills through experience, either in the form of training or continuing his study. Jumardin et al. (2014) also pointed that there are some problems that are still unresolved. Qualification and competence alone are inadequate. There is a lack of reading interest, work ethic and commitment among the lecturers. The involvement of lecturers in applied research is still low. Besides that, there is a lack of scientific publications. Until then, the lecturers will not be able to cope and implement a process of learning.

1.2 Problem Statement

According to Sekaran and Bougie (2010), the problem statement is the condition where a gap occurs between the actual and the desired ideal states. Studies on occupational conditions revealed that job performance is very much attached with job satisfaction of an employee. However job satisfaction can be destroyed by the level of job stress. Education environment is determined as a stressful place and education is identified as a highly stressful job (Ahsan, Abdullah et al., 2009). Nevertheless the negative effects of education environment have been neglected in many studies on education performance, although the academicians are required to possess high performance in education.

Goleman (1995) stated that a person who is unable to control his stress in the workplace will face a decline in his job satisfaction level. Stress will cause failure and affect work quality. Minh-Quang (2013), reported that the demographic, work time and institutional factors have a correlation to the job satisfaction. The results of this study proved that the lecturers were found dissatisfied to the terms and regulations in their institutions. A few studies have been done to measure the lecturers' satisfaction level in higher education of the developed countries; but unfortunately, the findings from the developing countries (Jordan, Malaysia) are lacking and there is a gap which needs to be filled (Ssesanga and Garrett, 2005; Eyupoglu and Saner, 2009; Hean and Garrett, 2001). Hence, this study identifies and discusses factors, considerations or aspects of university academic's job which contribute most to their satisfaction.

There are a number of aspects related to the potential factors for causing stress among the lecturers at the universities. Several factors include the teaching and learning processes themselves. Other than that, the lecturers are also responsible to evaluate the students. Dunham (1992), complex tasks such as evaluating the student will stimulate the workload and apparently become distressed. However, when distress is countered with a positive pressure, it will make someone more powerful and skillful in handling daily stress (Muhammad et al., 2007). On the other hand, the negative pressures will cause uncontrolled emotions, resulting in high pressure on the lecturers (Mokhtar, 1998; Nor Hartini, 2010).

Based on an interview session on 25th February 2015 with an Assistant Registrar at a public university, it was reported that the increasing corporated social responsibilities and teaching workload of lecturers has led to rising dissatisfaction among the lecturers. The Assistant Registrar also hoped that this issue can be overcome to provide a better and conducive working environment in order to enhance and improve the staff's job satisfaction especially the academic staff.

In fact, the lecturers themselves somehow can influence the students' lives as well as reflect the reputation of the university. Thus, the increasing educational level in the community may be achieved. The mental and interpersonal capabilities of the academicians obviously have positive impacts on the culture and society. Therefore, being a lecturer, one should have the qualification and wisdom in order to deliver the knowledge to the students. However, there are several reasons that lead a number of lecturers

applying for another profession and that reasons are indirectly influenced by their satisfaction towards their job (Minh-Quang, 2013).

This statement is supported by Huda, Rusli, Naing, Tengku, Winn and Rampal (2004) who did a study and discovered a number of lecturers who have intention to leave the institution and dissatisfied with their decision in choosing a profession in the educational world. Due to several reasons, the increasing numbers of job dissatisfaction resulted in low performance thus affects daily tasks which is still beyond the acceptable standard.

However, to be an academician needs a lot of consideration because one may have huge impact on attitude, behaviour and morale to the students. The students always observe their lecturers and thus making their lecturers as their role model. A study by Khoe Yao Tung (2002) stated that lecturers give direct impact on the knowledge development of the students.

In another research, Joo, Athirah, and Muhammad (2007) have found that the lecturers in IPBA (International Language Teacher Training Institute) only have moderate level of job satisfaction. Nowadays, the effective teaching methods have become even more challenging. Furthermore, the learning and teaching processes need a conducive atmosphere to achieve a better interaction between the lecturers and students. Hence, both of them satisfied with their target in the class. The majority of the lecturers may be committed to their job if improvements are to be made to the overall learning systems. Consequently, they may get higher satisfaction on teaching. Otherwise, the lecturers will be dissatisfied with their job, and resulting in a negative attitude towards delivery of work.

A study conducted by Steven (2005) stated that the lecturers' job satisfaction in England also affected by the salary given. The more satisfaction elements provided by the institutions such as the actual work itself, relationships with colleagues and higher administration staff, the less likely they will leave the institutions. In other study also conducted by Steven (2005) pointed out that having negative relationship among English academicians significantly affected their satisfaction level and thus the decision to leave UK Higher Education is made.

There are several cases where the lecturers seek another job opportunity due to less satisfaction towards their work itself. In the end, lack of job satisfaction among the academicians encouraged their intention to leave the teaching profession. Therefore, to overcome the academicians' job dissatisfaction as far as it is concerned, higher institution should pay more attention to retain their lecturers and increase the number of lecturers in Institut Pengajian Tinggi Awam (IPTA). However, the lecturers need to have the basic exposition to the teaching methods, have skills in representing the knowledge and know how to entertain the student in a best way to accomplish the national education motto.

The universities are the entities established as the centres for higher education. Universities in the modern world are expected to seek and cultivate new knowledge, provide the right kind of leadership and strive to promote equality and social justice. In achieving the mission and goals of the university, enhancing job satisfaction among the lecturers should be consistently a critical agenda. Compromising with the lecturers' job satisfaction will help the institutions to find alternative solutions in order to retain academic talents as well as attracting new best brains into the academic line (Noraani Mustapha and Wee Yu Ghee, 2013).

This project paper proposes to examine the mediation effect of job stress on job satisfaction among lecturers with regard to the independent variable factors such as workload, time pressure and interruption in one of public universities in Malaysia.

1.3 Research Question

Based on the problem statements that have been discuss above, researcher focus on the following question:-

- a) What are the levels of stress and job satisfaction?
- b) Is there any direct relationship between workload, time pressure, interruption and job satisfaction?
- c) Is there any direct relationship between workload, time pressure, interruption and job stress?
- d) Is there any direct relationship between job stress and job satisfaction?
- e) Is a significant mediating effect of job stress on the relationship between workload, time pressure, interruption and job satisfaction?

1.4 Research Objectives

The main purpose of this research was to identify whether there exists any significant mediating effect of job stress on job satisfaction among lecturers.

This study addressed the following objective:-

- a) To identify the levels of job stress and job satisfaction.
- b) To determine the direct relationship between workload, time pressure and interruption on job satisfaction.
- c) To determine the direct relationship between workload, time pressure and interruption on job stress.
- d) To determine the direct relationship between job stress and job satisfaction.
- e) To investigate the mediating effect of job stress on the relationship between workload, time pressure, interruption and job satisfaction.

1.5 Significance of the Study

Regardless of the role of lecturers becoming more complex and challenging, this study has aimed to examine the mediation effect of job stress on job satisfaction among lecturers. In addition the relationship between these two factors also will be identified.

This project paper contributes knowledge to the researcher and future researchers. Besides having some similarities in the subject of interest with the previous studies, the present study is emphasizing on a different aspect by focusing on different variables. The variables selected are the workload, time pressure and interruption.

Other than that, the significance of this project paper gives the employers an information regarding the factors that contribute to job stress among their employees. This project paper provides the administration of the higher learning institutions a better understanding on the need of its academicians and thus facilitates the best environment for them.

Another significance is for the employees. Based on this project paper, it found out the factors and implications of the job stress. The employees should know how to manage or reduce that stress in the future. As we know, stress brings many bad effects to the employees' health. So, it is very important for the employees to be aware of and deal with the stress wisely.

1.6 Scope of the study

This project paper is conducted to identify the mediation consequence of job stress o job satisfaction. The targeted respondent of this project paper is lecturers in one public university at Kelantan. In order to get the data, researcher used questionnaire.

1.7 Organization of the Thesis

This project paper includes five chapters. The Chapter 1 presents an introduction and covers about the background of the study, background of the problem, problem statement, research questions, research objectives significance of study, and definition of key terms. Chapter 2 covers about the literature review and describe the overview of the mediating effect of job stress on job satisfaction among lecturers. The Chapter 3 discussed about the research framework, hypothesis or propositions development, research design, and operational definition. Continue with measurement of variables, data collection, sampling, data collection procedures and techniques of data analysis. Chapter 4 is all about the findings and Chapter 5 is represents the discussion and recommendations.

1.8 Conclusion

Chapter one covers about the background of the study, background of the problem, problem statement, research questions, research objectives and significance of study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The review for this chapter is relatively related with the mediating effects of job stress on job satisfaction among lecturers in universities. Many researchers have stated different definitions for job stress and its factors and interacted correlations between different mediating effect of job stress and job satisfaction. This section will also look at and try to understand the mechanism in which they affect each other. Most researchers concluded that job stress was pointedly correlated to the job satisfaction. The current study therefore tries to determine if the same phenomena could have been the cause of job satisfaction among lecturers.

2.2 Job stress

Job stress refers to conflict between job demands on employee leads to harmful physical and emotional responses (Adaramola, 2012). There are several research reported on the causes, levels and also effects of job stress depending on factors such as the working environment (Adaramola, 2012). Job stress can have mediating effects onto human beings. What is mediating effect? Mediating effect can be referred as a third variable intervenes between two related constructs (Hair et al., 2014).

According to Cameron and Nerina (2009) stated that job stress can also bring moderating effects on satisfaction. High level of stress adversely affects physical health, work performance and psychological well-being. Stress is an

emotion that occurs in response to external effects and affects employee's health (Nabirye, Brown, Pryor, and Maples, 2011). Stress is intangible and it shows symptoms like a weight gain or loss, frequency headaches, fatigue, and low productivity (Nabirye et al., 2011). Another research also demonstrated that job stress will lead to job dissatisfaction (Suedfeld 1997; Branscombe, Schmitt and Harvey 1999, Cameron and Nerina 2009).

According to Ejue (2013), job stressors are related to strains and mental and not to forget physical ill-health among employees. This could due to frustration at the workplace. For instance, lecturers at the universities are actively involved in a research and at the same time they have to implement their research findings to improve teaching and solve social problems through community service (Obanya, 2002). So, in carrying out this triple mandate, lecturer might expose themselves to stressful work conditions if things are not being handled properly.

Most researchers believe that stress is a risk to good health. The signs of stress like a tension and conflict can be found in organizations as commonly as they are found in individuals (American Institute of Stress, 2008). Stress has its own characteristics that can be seen in various ways. In fact, stress and conflict can create several massive damages. The organizations have to spend a lot of money every year in dealing with some of the negative effects of job stress and this could be very costly (American Institute of Stress, 2008).

According to Malhi (2008), nowadays everyone lives under a certain amount of stress. Stress is a condition that occurs through adverse external influences and affects the physical and psychological health (Hanes, 2002).

High level of stress will have an effect on the individual's physical health, psychological well-being and work performance. Among the symptoms of job stress are gained or lose weight, being irascible, suffered sleeplessness, frequency headaches, strained relationships, fatigue, and low productivity (Hanes, 2002).

According to Rajarajeswari (2010) the job stress is an unavoidable part of organizational life, and educational organizations are no exception. The negative effects of job stress affect the performance of the employees. There are studies that indicate that numerous factors constitute to occupational stress in job. Other researchers stated that job stress occurs when the magnitude of the source of stress exceeds the individual's capacity to resist. For instance, workload is one major factor of stress because it roots a person to feel the pressure when he believes that he is unable to cope with the large workload. In the previous year, there are few studies that focused on the effects of job stress to people and employees. Job stress can produce numerous negative outcomes such as job dissatisfaction and job burnout (Yanan, Tianhong, and Quanquan, 2014).

Many researchers believe that job-related stress have a correlation with job satisfaction. According to Savery (2001), identified job stress may reduce the level of job satisfaction among individual based on environment conditions such as workload, time pressure and conflicting duties. Some researches have been done to a few public accounting firms and found that the effect of stress is not only resulted in emotional aspect of the individual but also costly to the organizations (Fisher 2001). Many of the researches

have been carried out to observe the relationship between job satisfaction and job stress and the result showed that the employees' satisfaction and stress are significantly related to job satisfaction.

According to Mohd Awang Idris, Maureen, Dollard, Anthony, Winefield (2010) job stress is an emotion and sometimes it is just like an unspoken voice in the one's head. In working environment job stress can be defined as an emotional issue, not a physical pressure.

2.3 Theory of Job Stress or Underpinning Theory

A lot of theories of stress have been proposed by the past researchers. It has been made to interpret and define stress. The first theory on stress was highlighted by Freud (1978) and reported that individual or employees that faced with stress may lead to energy reduction. This theory is called cognitive approach. It explains how the stress is created when the individual believed that he is not capable of meeting the demands of a certain situation and indirectly turned to pressure and become a harmful threat to one's health.

Furthermore, Aldwin (1994) has indicated that stress refers to the experience created as a result of the interaction between the individual and work environment. The interaction between these two components may lead to psychological and physiological tension to the individual. In different research, Selye (1964) reported that stress can be interpreted as the non-specific reaction of the body to any demand placed on it. The individual that recognised the meaning of positive stress may clear about the stress which not only cause degeneration and malfunctions, but can also act as a productive factor.

In different theory by Karasek (1979), he outlined a theoretical model which has the basic several factors that affect stress:

- a) The work where the employee or individual is entitled to put into effect in itself.
- b) The independence and the margins of control or limits, the initiative taken by the employee or individual have in the job.
- c) Social relationships with their peer and subordinates.

It will not generate stress if only one of the factors exists. If all of those three factors mentioned above were merged together, it will definitely affect the employee or individual. According to Warr (1990), each of Karasek's work aspects must occur at a suitable analogy so as not to create stress. Warr (1990) also stated that the abilities and experiences, satisfactory remuneration, working duties that are interesting and varied, precise roles, physical safety, tangible targets, social recognition and the potential for interpersonal communication can be the significant reasons of stress.

Siegrist (1996) stated that what has the employees invested in and what they get back in return must be balance to make them satisfied with their job. For instance, social recognition. The employees who get financial remuneration from the job, high potential to upgrade their working position, expectation satisfaction and security may fulfill their needs for social recognition. This is corresponding with Siegrist's statement saying that in order for the employees to satisfy, they should be rewarded as much as what they have done for their work.

In another research by Maslow (1954), he revealed a hierarchy of various needs of the individual. Initially this theory has physiological needs, security needs, social needs, self-esteem needs and actualization needs. The individual may be satisfied if the levels in the Maslow's hierarchy were achieved. Halpern (1999) reported that there are some cases where the employees left their career or organization because of the job dissatisfaction. This situation became an issue because it costs the company to recruit, select and train new employees.

Researchers have investigated and studied job satisfaction in a variety of professions and scopes. For example, customer service workers (Carless, 2004), student support personnel (Brewer and Clippard, 2002), youth development organizations (Petty, Brewer, and Brown, 2005) and management of healthcare workforce (Labiris, Gitona, Drosou, and Niaks, 2008).

The job satisfaction theory by Alderfer (1972) shared the same belief as Maslow's theory. Maslow's theory stated that if the individual cannot satisfy his needs on a higher level, then individual will return to the needs of a lower level that are already been achieved. Through Alderfer's ERG theory of existence, relatedness, and growth, he sorted the needs into three categories such as Existence (Maslow's physical and safety needs), Relatedness (Maslow's social needs) and Growth (Maslow's estimation and self-realisation needs).

2.4 Factors that contribute to the job stress

During the last years, there has been more interest in understanding the circumstances. However, providing an absolute list of stressors and their particular consequences are virtually unattainable, especially if we consider that stressor outcomes depend on the consideration that each employee makes under different state of affairs. In this section, the study briefly explains some of the most significant factors assumed to have impacts on job stress.

2.4.1 Workload

According to Savage and Torgler (2012), workload can be defined as the number of tasks that should be done by an individual and it has been identified as a stressor which can be divided into two ways. First is when the employees are assigned with too many tasks and second is when one does not feel that he possesses the required skills, abilities, and knowledge to manage the job. Work by itself is not harmful. However, the workload might have resulted in very big problem.

Furthermore, workload effect could have resulted in higher tension, exhaustion, and propensity to quit, as well as lower commitment to the organization and psychological health. According to Jex and Yankelevich (2008), work environment can be stressor to the job stress. Examples of work environment are workload and also role ambiguity. It is also has the potential to have an effect on the employees' well-being at their workplace. Supported by Kar and Suar (2014), stated that workload is a task difficulty, confusion, rapid decision making, and cognitive overload that can contribute to job stress.

Kinman and Jones (2005) stated that one's reactions to these unfavourable working conditions are called strain. Other than that job stress also categorized as an interaction between both job stressors and responses which is individual strain.

Other than that, according to Chan, Lai, Ko and Boey (2000) a study of job stress among professionals found that teachers and nurses were most likely to experience excessive workload and that this factor has the potential to trigger stress. It can be concluded that the influence of globalisation at the workplace has resulted in increased organizational demands upon the workers. As a consequence, there is a high potential for them to be adversely affected.

According to Mohd Awang Idris et al. (2010), he expressed that heavy workload allow effects like a dissatisfaction, nervousness, lack of self-esteem, a sense of warning, high blood pressure become a threat. With the high level of work demand, one started to feel the pressure of responsibilities, not enough resources to perform the task well and not enough time to finished required work. Those who experienced this kind of pressure will have a hard time to cope with the job demands and their personal capacity. It can be seen clearly that extra workload is one of the vital variables that need to be tested that may predict certain features of job stress.

Mohd Awang Idris et al. (2010) also mentioned that the combination of deadlines and workload can make work more stressful. The workers faced job stress when there are too many tasks given to them. Some of the employers set a very short submission date or dateline and the employees

cannot cope with that. In other words, the employers should know the limits and avoid to burden the workers by giving a very complicated and crucial tasks that need to be done in a very limited time.

2.4.2 Time Pressure

According to Savage and Torgler (2012) time pressure is directly related to the amount of time that have been given to the employees to complete a task, as the perceived stress level increases. Time pressure plays a major influence in task performance in both stress and auditing and psychology studies (Chu and Spires, 2001; Kelly and McGrath, 1985; Walczyk and Griffith-Ross, 2006).

Heponiemi, Elovainio, Kouvonen, Noro, Finne-Soveri, and Sinervo, (2012) stated that the healthcare workers from top management have showed to be suffered high level of stress compared to the workers in general work. One of the factors why the workers suffered from high stress in health care is because of time pressure. According to Gelsema, van der Doef, Maes, Janssen, Akerboom and Verhoeven (2006), Thompson, Dalglish, Bucknall, Estabrooks, Hutchinson, Fraser, de Vos, Binnekade, Barrett and Saunders (2008) time pressure occurs when the employees have insufficient time for completing required tasks.

Victor, Haines, Alain Marchand, Emilie Genin and Vincent Rousseau (2012) also found that the time pressure is an increasingly competitive work environment and it is a reason for extended working hours. Time pressure also can directly have an impact on the strain producing stressor. This factor is triggered by several different factors at the workplace. Time pressure is

considered as a variable that determines the length of exposure to workplace stressors and the longer working hours may expose the workers to other factors of job stress.

Victor et al. (2012) has highlighted the two factors of time pressure. Firstly, time pressure can happen because of job ambiguity. By working 70 hours a week may expose that employees to 70 hours of role ambiguity. Secondly, it happened because of job demand.

Sonnentag, Arbeus, Mahn, and Fritz (2014), stated that time pressure specifically may intensify the relationship between exhaustion and decreased job satisfaction. When exhausted employees face time pressure, they will start to believe that they will not be able to meet the demands of their jobs and they will worry even more, resulting in a strong decrease in psychological detachment. However, when time pressure is low, work demands appear to be manageable and the employees will disconnect from work easily and will think less about working during their off day. In this situation, the relationship between exhaustion and decrease in psychological detachment should be weaker.

Mohd Awang Idris et al. (2010) agreed that the time pressure (the deadline that has been given by the organization) is the most common stressor. In the Malaysian perspective, whether they are stressed or not, they do not care at all. The important thing is they finished their tasks and submitted the report to their employer without having sufficient time to report on factual issues. Finally, the actual problem happened and cannot be solved.

2.4.3 Interruptions

Interruptions can be referred as the interferences that occur during the tasks being performed (Forster and Lavie, 2008). According to Baethge and Rigotti (2013), the workflow interruptions occur everyday in most of the professions. The interruptions refer to secondary tasks. For example, requests for assistance, which occurs within the primary task. Based on past findings, the occurrence of interruptions is negatively related to satisfaction. It also stated that the own performance positively related to forgetting of intentions and the experience of irritation.

Bing, Jason, and Charlotte (2013) claimed that interruption is a common phenomena at workplaces. Interruption also refers to intrusion which can be disruptive for the workers because they displace time required to complete the tasks. However, from a human resources perspective, intrusions are associated with strain over limit that displaced time through the depletion of self-regulatory and cognitive resources. The examples of intrusion are like an emotional exhaustion, physical complaints and anxiety.

According to Mohd Awang Idris et al. (2010) interruptions and organizational factors were identified as the main factors to the job stress. Examples of interruption are jokes from peers, phone calls, email, social networking and others. If the employees perceived negatively, they become stressed. Supported by Bing, Jason, and Charlotte (2013), stated that examples of the interruption are e-mail, phone calls, and colleague at the workplace. This situations occurred when the organizations seek to increase

the employees' performance, it becomes essential to share information quickly and constantly.

Erlandsson, Bjorkelund, Lissner, and Hakansson, (2010) declared that interruption is a minor event caused by an unexpected thing. For example, a computer break-down. The unexpected incidents and a daily life that full of interruptions that interfere may influence of employees (Forster and Lavie, 2008). For example, when a person at work is interrupted when there is a phone call or a question from a colleague.

According to Erlandsson and Eklund (2003) the interruptions by colleagues at workplace caused delays of schedules that already been planned by the employees. Furthermore, there are studies that showed the employees who experienced lack of time, distress and inflexibility, they will be too sensitive because lots of interruptions arose in their daily job. The phenomenon of daily stressors can be more objective assessment of to what extent such disturbing interruptions occur. We also can conclude that the perception of disturbing interruptions may be even more relevant to subjective health than objective assessments of interruptions. Accordingly, it shows on subjective perceptions of disturbing interruptions in daily of an occupations (Erlandsson and Eklund 2003).

A study by Erlandsson et al. (2010) has found that the disturbing interruptions related to the daily stressor can be considered as minor. Minor daily stressors can be defined as slight disturbances that occur in daily life of the employees at the workplace (Jacobs, Myin-Germeys, Derom, Delespaul, Van Os and Nicolson, 2007). The minor daily stressors is believed as

interruption during the full 24 hours per day, the whole week, and others. For example, children, spouse, housework and family.

Cole et al. (2002) investigated the relationships between stressors at workplace and outside work, and found that the daily minor stressors outside work had a high correlation to job stress. It seems related to include outside stressor factors in the concept of minor daily stressors.

2.5 Job satisfaction

Various definitions are being used to interpret the meaning of job satisfaction. Employees' job satisfaction is crucial and considered as an important factor in improving organizations' performance and competitiveness. According to Noraani Mustapha and Wee Yu Ghee (2013) the job satisfaction can be defined as how the workers feel about their job. Rinehart and Short (1993) stated that job satisfaction can cause an employee to feel satisfied with their job while job satisfaction can be referred as a combination of psychological and environment factors.

Academics' sense of job satisfaction has been linked with their motivation (Barnabé and Burns, 1994), well-being (Vansteenkiste et al., 2007), and commitment to teaching (Feather and Rauter, 2004). It is because academics constitute the greatest cost and human capital resource of a school (Perie and Baker, 1997). Improving academics' sense of job satisfaction can help to reduce costs associated with high levels of academician stress that include absenteeism and illness (Billingsley and Cross, 1992).

Past researchers have proved that academicians are generally satisfied with certain aspects of their job such as their teaching work. Dissatisfaction can happen a few elements overshadowed the performance of their job (e.g., working conditions, interpersonal relations, salary (Crossman & Harris, 2006). In addition, (Klassen and Chiu, 2010) found that both job stress and teaching efficacy contributed to job satisfaction.

Academic staff's job satisfaction influences job performance, motivation, morale, and ultimately students' performance. Hall, Pearson, and Carroll (1992) in their study on the area found that teachers or academic staff who plan to leave the teaching profession can be distinguished from those who plan to stay by observing the pattern of their work. Their attitudes, perceptions, and reactions can show their intention. Borg and Riding's (1991) did a study on primary teachers revealed that job satisfaction and stress are related.

The factor of satisfaction is not limited to salary, but also includes other factors such as when the company takes, treats and values their input into consideration. Job satisfaction is important to enhance the happiness and comfortable of workers (Okpara, Squillace, Erundu, 2005). Job satisfaction is also the main reason why employee still working with the present organization.

The study on job satisfaction was initiated by Frederick Herzberg in the late 1950s (Herzberg, 1959 cited by Knight and Westbrook, 1999). Herzberg's theory was based on two scopes of job satisfaction, which are motivators and hygiene. This theory is known as Herzberg's Two-factor Theory of Job Satisfaction. This theory stated that only job content-related factors such as achievement, responsibility, and work itself may lead to satisfaction. But the statement is opposed by Oshagbemi (1997) saying job context also related to the factors that lead to job dissatisfaction.

Researches on job satisfaction among employees are well documented. For example, Dole (2001) reported that gender factor was found to be a significant moderating variable influencing to the job satisfaction. However, education level and position of employees were positively associated with satisfaction (Dole, 2001). In other study, Kavanaugh, Duffy, and Lilly (2006) reported that professional experience as demographic variables is an important factor that related to job satisfaction.

2.5.1 Job Satisfaction and Job Stress

According to Ismail, Yeo, Ajis, and Dollah (2009) the physiological job stress acts as an important element of job satisfaction. Most of the academicians recognised their levels of occupational stress during their tasks performance. When the physiological stress is high, it may reduce the job satisfaction among the workers. According to Nor Liyana, MohdBokti and Mansor Abu Talib (2009) they found that job stress is highly associated with a few job satisfaction factors. Those factors are regards to pay, fringe benefits, contingent rewards, promotions and many others.

In another study by Yanan, Lu, Tianhong, and Quanquan (2014) they believed that job dissatisfaction and job burnout have been identified as a major factors associated to the job stress. The job dissatisfaction that occurred may affect the performance of a civil servant.

2.6 Literature of Malaysian Studies

In this section, some Malaysians' studies will be reviewed to have a closer look at the environments, factors that influence job stress, and the relationship between different stressors and demographic variables from Malaysians' point of view.

Muhammad Jamal (2007) studied the relationship between some stress factors namely time pressure, workload and competitiveness, and their impact on job performance, employee satisfaction and health problems. The samples are employees and managers working in a multinational corporation operating in Malaysia (N= 325) and Pakistan (N=305). The factors of time pressure, workload and competitiveness found to be significantly correlated with job satisfaction, performance and health problems in both countries.

In different study regarding the connection between job satisfaction, job stress, and health problems have been conducted by Muhammad Jamal (2008). According to Muhammad Jamal, he found that both countries have strong correlations between the stress factors and burnout, employees' dissatisfaction, and physical problems. Generally, 90 percent of the comparison supports the linear relationship between the dependent and independent variables of stress.

Zamberi and Salim (2009) investigated the stress factors through a questionnaire distributed among Malaysian entrepreneurs to construct a coping mechanism for work pressure. The sample is entrepreneurs in Malaysia representing different business sectors. The study found that workload and conflict in business are the most considerable factors as stressors.

Ahsan, Abdullah, Fie, and Syed (2009), stated that there is a significant correlation between factors. Job ambiguity and workload are among the most significant factors that increase stress. The results that have been found also indicated that there are significant correlations between job stress caused by these factors and job satisfaction.

CHAPTER 3

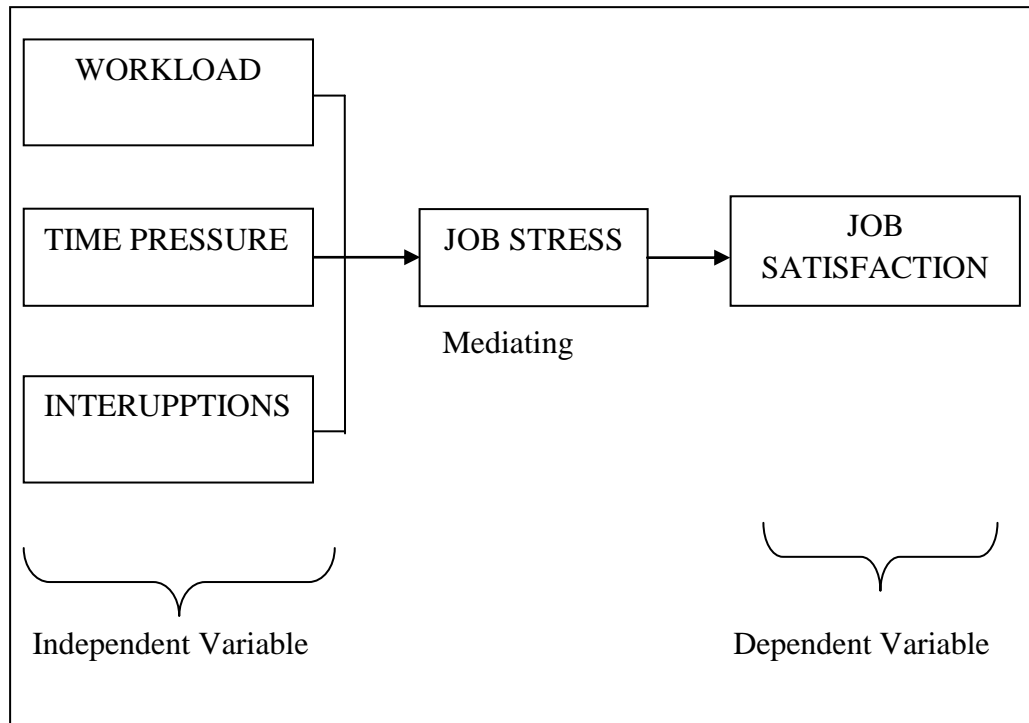
METHODOLOGY

This chapter discussed the research framework, hypothesis or proportions development, research design, operational definition, measurement of variables, data collection, sampling data collection procedures and techniques of data analysis. The main purposes of this research are to investigate the mediating effect of job stress on job satisfaction among lecturers.

3.1 Research Framework

According to Sekaran and Bougie (2010), the research framework is the foundation on which the entire project paper is based dependent variable and independent variable. The dependent variable is job satisfaction and independent variable is workload, time pressure and interruptions. The mediating is job stress. The relationship among various factors discussed in this framework for this project paper as shown by Figure 3.1.

Figure 3.1
Research Framework, “Mediating effect of Job Stress on Job Satisfaction among Lecturers.



The researcher develops a linkage between mediating of job stress on job satisfaction. The independent variable of this project paper is workload, time pressures and interruptions. While the dependent variable of this project paper is the job satisfaction. This theoretical framework has a direct and indirect relationship. The direct relationship is between workload, time pressure, interruption and job stress and workload, time pressure, interruption and job satisfaction. The indirect relationship is the mediating effect of job stress on the relationship between workload, time pressure, interruption and job satisfaction.

3.2 Hypothesis

Sekaran and Bougie (2010), defined the hypothesis as a tentative, statement, which predicts what we expect to find in the empirical data. Hypothesis testing use in this project paper to examined the variance in the mediating effect of job stress on job satisfaction. A number of hypotheses are developed as below:

3.2.1 HYPOTHESIS 1

Workload can be defined as pressure that related to the increasing number of tasks that need to be done by an individual (Savage and Torgler, 2012). Several studies have highlighted the consequences of high workload. Ortqvist and Wincent (2006); Newton and Teo (2014), who had conducted a meta-analysis of 295 studies stated that workload is extremely related with higher tension job stress, exhaustion, depersonalization, and propensity to quit, as well as lower commitment to the organization and psychological health.

H1 There is relationship between workload and job stress.

3.2.2 HYPOTHESIS 2

Savage and Torgler (2012) time pressure is directly related to the amount of time that have been given to the employees to complete a task, as the perceived stress level increased. If time pressure goes beyond a certain level, it has negative effects on performance and leads to the job stress (Durham, Locke, Poon, and McLeod, 2000; Hoëge, 2009 and Baethge and Rigotti 2013). Time pressure also a factor of job stress because of a lot of interruptions at the workplace (Baethge and Rigotti 2013). In other research by (Van Der Doef and Maes, 1999), time pressure has no directly relationship to job stress if the individual have an ability to control their work activities.

H2 There is relationship between time pressure and job stress.

3.2.3 HYPOTHESIS 3

Interruptions can be referred as the interference that occurred during the tasks being performed (Forster and Lavie, 2008). Baethge and Rigotti (2013) a lot of interruptions can trigger stress and cause employees to spend a lot of time to accomplish their works. In other words, interruption has no positive relationship with job stress if the task is not complicated (Monk, Boehm-Davis, and Trafton 2004). The task plays a role in term of to influence the level of job stress among the workers.

H3 There is relationship between interruptions and job stress.

3.2.4 HYPOTHESIS 4

De Cuyper, and De Witte (2006) workload is negatively correlated with job satisfaction. In contrast, Chimanikire, Mutandwa, Gadzirayi, Muzondo and Mutandwa (2007) and Santhapparaj and Alam (2005) workload is significant to job satisfaction especially the academicians. Amzat and Idris (2012) found that the relationship between workload and job satisfaction is not consistent and this happened probably due to the different socio-economic situational circumstances.

H4 There is relationship between workload and job satisfaction.

3.2.5 HYPOTHESIS 5

Sonntag, Arbus, Mahn, and Fritz (2014) time pressure specifically has significant relationship with the level of job satisfaction. The individual may face time pressure because of the job demands at their workplace (Spurgeon, Harrington and Cooper, 1997).

H5 There is relationship between time pressure and job satisfaction.

3.2.6 HYPOTHESIS 6

There are some researchers who believed that there are positive relationships between interruption and job satisfaction (Bing Jason, and Charlotte, 2013). In contrast, there are also a few opinions stated that interruption has no correlation relationship with job satisfaction (Baethge and Rigotti, 2013). Most of past researchers stated that there are positive relationships between interruption and job satisfaction.

H6 There is relationship between interruption and job satisfaction.

3.2.7 HYPOTHESIS 7

The job expectations of a university's academic staff seem to be growing exponentially leading to a combination of increased job related job stress for the academic staff, and decreasing levels of job satisfaction. Savery (2001) job stress has a direct relationship with job satisfaction. Supported by (George, 2010), also indicated that job stress have a positive relationship between job satisfaction. George (2010) stated that job stress have many negative impact and results to the low job satisfaction.

H7 There is relationship between job stress and job satisfaction.

3.2.8 HYPOTHESIS 8

Job satisfaction refers to the important indicator of how employees feel about their jobs and a predictor of work behaviors such as organizational citizenship, absenteeism and turnover (Noraani Mustapha and Wee Yu Ghee, 2013). High level of stress adversely affects one's physical health, work performance and psychological well-being. Stress can be referred to mentally or emotionally occurrence in response to adverse external influences and capable of affecting physical and psychological health (Nabirye, Brown, Pryor, and Maples, 2011). According to Khan and Ali (2013), they discovered that job stress significantly mediates the relationship between job satisfaction.

H8.1 There are mediating effect of job stress on the relationship between workload and job satisfaction.

H8.2 There are mediating effect of job stress on the relationship between time pressure and job satisfaction.

H8.3 There are mediating effect of job stress on the relationship between interruption and job satisfaction.

3.3 Research Design

Sekaran and Bougie (2010) stated that research design is to design the research and can be gathered and examined to attain to a solution. This research used cross-sectional studies. It is also called as one-shot which means that the data can be done through only one data collection in a period of time in order to answer a research question. In other words, research design is a market plan or model for conduction a formal investigation (Sekaran and Bougie, 2010). It is a specification of methods and procedures for acquiring the information needed to solve any problems. It is also a strategy for a study and the plan by which the strategy is to be carried out and it specifies the methods and procedures for the collection, measurement and analysis of data. Quantitative research design was used to examine the mediation effect of job stress on job satisfaction among lecturers.

3.4 Operational Definition

Table 3.1
Operational Definition

Variable	Operationalization of Definition	Items	Sources
Mediating	Job stress refers when conflict between job demands on employee leads to harmful physical and emotional responses.	Job Stress	Adaramola, (2012)
Independent Variables	Workload can be defined as an increasing the numbers of task.	Workload	Savage and Torgler, (2012)

Table 3.1 (Continued)

Variable	Operationalization of Definition	Items	Sources
Independent variables	Time pressure is indicated that time pressure is directly related to the amount of time that has been given to the employees to complete a task.	Time Pressure	Savage and Torgler, (2012)
Independent Variables	Interruption can be refer to the interfere that occur during the occupation being performed.	Interruption	Forster and Lavie, (2008)
Dependent Variable	Job satisfaction refers to how employees feel about their jobs.	Job Satisfaction	Noraani Mustapha and Wee Yu Ghee (2013)

3.5 Measurement of Variables or Instrumentation

The questionnaire was one of the main tools for collecting data from the respondents. The types and designs of questionnaires that were used depend on the studies that have been carried out. In this research, each variable measured by using questionnaires. This questionnaire consists of six sections.

Table 3.2
Measurement of Variables or Instrumentation

Sections	Sources	Measure	Type of Scale	No. of questions
Section A: Workload	Johnston et al. (1990), Rizzo et al. (1970), Firth et al. (2004) and Mazlina (2012)	<p>I am given enough time to do what is expected of me at my job</p> <p>It seems that I have more work at my job that I can handle</p> <p>My job requires me work very hard</p> <p>There isn't enough time during my regular workdays to do everything that is expected of me</p> <p>I am rushed in doing my job</p> <p>I am willing to work after office hours/weekends/public holidays</p> <p>There has been an increase in my workload in the past year</p> <p>The increased workload has negatively affected my family, religious and/or cultural responsibilities</p> <p>My responsibilities have increased, but my salary remains</p>	Likert Scale	9

Table 3.2 (Continued)

Sections	Sources	Measure	Type of Scale	No. of questions
Section B: Time Pressures	Kahn, Wolfe, Quinn, and Snoek, (1964), Mohd Kamel Idris (2011)	I satisfied with time during working. Insufficient time can create stress. I manage time wisely. I get any extra time from the top adopted by management. There is relationship between time pressure and job stress	Likert Scale	5
Section C: Interruptions	Robert F. Marsh, Shawn Blau, (2007)	Interruptions do not effect my completing assignments. I spent too much time prioritizing what to do. I have sufficient uninterrupted time to concentrate on work. I do not answer phones or look at e-mail while dedicating efforts toward a particular assignment. I have many items which are currently in phone messages that are unanswered.	Likert Scale	5
Section D: Employee Satisfaction	Ma Liang (2010)	The present job is one that I'm interested in. My present job can cultivate my strength and skills. The duty assigned is in the right amount. I'm satisfied with the overtime system. I will be able to get a sense of achievement from my present job. I am free to choose my own method of working.	Likert Scale	7

Table 3.2 (Continued)

Sections	Sources	Measure	Type of Scale	No. of questions
		My salary is suitable with my qualification.		
Section E: Job stress	Doraisamy, Ghana Sekaran (2007)	Sometimes i feel burnout. I easily feel annoy/irritate with my work station environment. I lost appetite due to working problems. My jobs are repetitive and boring. Tiredness due to work make me depress and feel lazy to work. I do not have strength to complete things i wish to do. I easily get tired at work.	Likert Scale	7
Section F: Personal Details		Gender Age Education Level Working Experience Cluster (Faculty) Grade Income	Nominal Scale	7

3.5.1 Measurement Scale

According to Robert, Brian and Sekaran (2001), they stated that scale can be referred to a tool or mechanism by which individuals are distinguished on how they differ from one to another on the variables of interest to the study. The scale or tool could be a gross one in the sense that it would only broadly categorise individuals on certain variables.

a) Nominal Scale

A nominal scale is to assign subjects to certain categories or groups. It is also usually being used for obtaining personal data, such as gender, marital status or the department where grouping of individuals (Robert, Brian and Sekaran, 2001). In the questionnaire, researcher used nominal scale at the last section which is section F. Section F includes gender, age, education level, working experience, faculty, grade and income.

b) Interval Scale

An interval scale can be refer to arithmetical operations that allow researcher to perform on the data collected from the respondents. The interval scale also allow researcher to measure the distance between any two points on the scale of item. In this project paper, the researcher used interval scale in the questionnaire for section A, B, C, D, and E. The researcher used seven-point of likert scale for each questions (Robert, Brian and Sekaran, 2001).

3.6 Data Collection

Data collection method that researcher used for this research is the primary and secondary sources collection method. Researcher used primary data in this project paper. According to Sekaran and Bougie (2010), they stated that the primary data refer to information that obtained first-hand by the researcher on the variables of interest for the specific purpose of the study. A set of questionnaires were distributed to all lecturers at specific public university. Questionnaire method was chosen because it is efficient data collection mechanism when the researcher knows exactly what is required and how to measure the variables of interest (Sekaran and Roger, 2009).

3.7 Sampling Techniques

According to Sekaran and Bougie (2010), sampling design and sampling size are very crucial. A proper sampling design and size helps the researcher to find the conclusions that would be generalized to the population of interest. The target populations in this research were all the lecturers in one public university. The sampling frame for this study includes lecturers in one public university in Kelantan and researcher used random sampling technique.

3.7.1 Populations and sample

Population can be referred to the entire group of people, the events and things that the researcher intent to investigate (Sekaran and Bougie 2010). The researcher selects all the total number of lecturers in one public university in Kelantan. The population for this project paper is 252. Since the total population is small, researcher decided to

select all 252 as respondents. For this study, the target population is 252 academicians in one public university which derived from 9 faculties. Unit of analysis is individual.

Table 3.3
Academics by Faculty List

Position	BM	FSKM	AD	IM	ACC	APB	ACIS	LAW	AM
Professor	3	2	1	2	5	4	1	2	3
Professor Madya	3	2	-	1	2	1	1	-	1
Professor Madya	1	1	2	-	-	-	-	-	-
DS54									
Pensyarah	24	22	23	20	30	28	2	3	3
Pensyarah Kanan	2	3	4	4	2	2	-	1	-
Pensyarah PTFT	9	5	8	7	2	9	1	-	-

Source: University Registry 20/Dec/2014

Table 3.4
Target Population

Faculty	Total Lecturers
Faculty of Business Management	42
Faculty of Science and Mathematics	35
Faculty of Art and Design	38
Faculty of Accountancy	41
Faculty of Information Management	34
Faculty of Law	6
Faculty of Administration Management	7
ACIS (Pengajian Islam Kontemporari)	5
APB (Akademi Pengajian Bahasa)	44
TOTAL	N=252

3.7.2 Sample size

A sample can be referred to subset of the population (Sekaran and Bougie 2010). Roscoe, (1975), sample size larger than 30 and less than 500 are considered appropriate to this project paper. According to Krejcie and Morgan (1970), they stated that if the total of population is 250 the sample size is 152. Since the total number of population is 252, researcher decided to select all of the respondents for the sample size. Researcher selects all total population to enhance the response rate. The questionnaires were distributed to all lecturers who were working at different faculties.

3.8 Data Collection Procedures

In this project paper, questionnaire survey is used as the main tool to collect the primary data from the respondent that targeted. Researcher distributed questionnaires to the respondents and collect it personally from the lecturers. Researcher also sought for permission from Human Resource Department to do the research. Approximately 252 sets of questionnaire are prepared for distribution. Respondents were given 15 minutes in completing the questionnaire. The questionnaires were distributed on 9th Mac 2015; approximately 247 sets of questionnaire are collected back personally.

3.9 Techniques of Data Analysis

The data obtained from the questionnaire then distributed to employees and analysed. Frequency counts and the percentages of the data were computed. The researcher used Statistical Package for the Social Science (SPSS) to interpret the data that collected.

According to Sekaran and Bougie (2010), stated that SPSS is a data management and analysis program designed to do statistical data analysis, including descriptive statistics such as plots, frequencies, charts, and lists, as well as sophisticated inferential and multivariate statistical procedures. Then, researcher can make the recommendation and finding based on data that have been analysed by the SPSS.

Researcher also used Partial Least Squares Structural Equation Modelling (PLS-SEM). According to Hair et al. (2014), stated that (PLS-SEM) refers to the statistical analysis that has been an essential tool for social science for more than a century. PLS-SEM also used to comprehend more complex relationships associated with current research directions in the social sciences, it is increasingly necessary to apply more sophisticated multivariate data analysis methods.

3.9.1 Descriptive Statistics

Descriptive statistics includes transformational of law data that would provide information to describe a set of factor in a situation. This can be completed through ordering and manipulation of the raw data collected. This also provides frequencies how frequently the phenomena occur, measures of central tendency and dispersion of the dependent and independent variable (Sekaran and Bougie, 2010).

3.9.2 Reliability Analysis

According to Sekaran and Bougie (2010), the reliability of the measures is an indication of the stability and consistency with the instrument measures the concept and helps to assess the goodness of measures. In research, even when validated measures are use; it is always a good thing to check for the interterm consistency reliability using the Cronbach's Alpha Reliability Coefficient of the independent and dependent variables. Cronbach's Alpha is the reliability coefficient that indicates how well the item in a set is positively

correlated to one another. The closest Cronbach's Alpha is to 1, the higher the internal consistency reliability. The Cronbach's value more than 0.8 is considered to be good.

3.9.3 Hypothesis Testing

Hypothesis testing is allocated to the symbol H_0 to the null hypothesis and the symbol H_1 , to the alternative hypothesis. The purpose of hypothesis is to determine which of the two hypotheses is correct. Statistically describing the relationship between two variables at a time requires bivariate analysis. A Pearson Correlation indicated the direction, strength and significant of the relationship entire variable in the study. Beyond knowing the means and standards deviation of the dependent and independent variable is related to another (Sekaran and Bougie, 2010).

3.9.4 PLS-SEM Bootstrapping

The concepts of bootstrapping for significant testing in Partial Least Squares Structural Equation Modelling (PLS-SEM) (Hair, Hult, Ringle and Sarstedt, 2014). According to Hair et al. (2014), it is indicated that PLS-SEM is a distribution-free multivariate data analysis technique and does not rely on distributional assumptions.

Instead, researchers rely on the bootstrapping procedure that provides bootstrap standard errors. These standard errors can, in turn, be used to approximate t values. Bootstrapping refers to the resampling approach. Bootstrapping also draws multiple random

samples with replacement from the data and uses these samples to estimate the path model. The random nature of bootstrapping procedure might cause random sign changes in the model estimates that researchers can correct them by using the construct-level or individual-level sign change options (Hair et al., 2014).

3.9.5 PLS-SEM Algorithm

Hair et al. (2014) stated that PLS-SEM Algorithm is the heart of the method. The algorithm estimates the scores of all latent variables in the model, which in turn serve for estimating all path model relationships based on the PLS path model and the indicator data available.

3.10 Conclusion

This chapter discuss on the theoretical framework and data collection measurement. The respondent for this project paper is lecturers in one public university in Kelantan. Next, this project paper used quantitative method and briefly explains the techniques of data analysis.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Introduction

This chapter consists of several main sections to present the results of data analysis. The section includes the reliability test, response rate, data recording process, data screening, outlier's analysis, demographic data, descriptive result, confirmatory factor analysis and hypothesis testing. Researcher uses Statistical Package for Social Science (SPSS) version 16 and Partial Least Squares Structural Equation Modelling (PLS-SEM) to analyse the data.

4.2 Reliability Result for Pilot Test

According to Sekaran and Bougie (2010), pilot studies are to gathering information from a limited number of occurrences. The purpose of pilot test is to test the reliability of the questionnaire that has been given to the respondents. A total of 100 respondents have been selected to run the pilot test for this project paper. The questionnaires that have been answered by the respondents were analysed to test the reliability of study's variables, a Statistical Package for Social Sciences (SPSS) version 16.0. According to Sekaran and Bougie (2010), indicated that the closer Cronbach Alpha to 1, the higher would be the consistency of reliability factor.

Table 4.1
Reliability (Pilot Test)

Section	Cronbach's Alpha	Number of items
Section A: Workload	0.810	9
Section B: Time Pressures	0.827	5
Section C: Interruption	0.793	5
Section D: Job Satisfaction	0.832	7
Section E: Job Stress	0.827	7

The highest Cronbach's Alpha for reliability is job satisfaction which was 0.832. The lowest Cronbach's Alpha for reliability is interruption which was 0.793. Overall result for reliability is above 0.7 and considered acceptable.

4.3 Response Rate

A total of 247 questionnaire received by the researcher at the end process of data collection. This indicates 98.02 response rates.

4.4 Data Recording Process

The process of inserting raw data from the questionnaires that have been received is the first step before the data is analyzed by SPSS 16 software and Smart PLS. Each data inputted by using the coding system based on the item category and the number of questions in the questionnaire. The coding refers to the Table 4.2.

Table 4.2
Code List

Code List	Description
W	Workload
TP	Time Pressure
I	Interruption
JS	Job Satisfaction
J.Stress	Job Stress

4.5 Data Screening

According to Allison (2002), stated that the data screening is ensures that once a given set of data is in hand, a verification procedure is followed that checks for the appropriateness of numerical codes for the values of each variable under study. Data screening defined as the process of inspecting data for errors and correcting them prior to doing data analysis (Allison, 2002). The screening may involve checking raw data, identifying outliers and dealing with missing data. In this project paper, no missing and input error have been found.

4.6 Detection of Outliers

According to Hair et al., (2014), stated that outlier is an extreme response to a certain question or to all questions. There have two methods to detect outliers. First method by observe the value of z-score. To check the omitted for univariate data, the z-score must not exceed 3.29. According to Tabachnick and Fidell (2007), stated that if the z-score greater than 3.29, then the figure omitted for univariate data. The results of the observations of data found no significant univariate z-score value exceeding 3.29. Second method by observe the Mahalanobis distance value. This project paper has no malalanobis distance and no outlier's issues found.

4.7 Demographic Data

Table 4.3 shows the overview profile of the participating respondents' demographic characteristics. Out of 247 respondents, 150 (60.7%) were female and 97 (39.3%) were male. Based on the finding it shows that female employees dominated male employees.

Respondents for this project paper also from varied of age. The highest respondent's age between 25-35 which was 103 (41.7%), age between 36-45 which was 90 (36.4%), followed by age above 45 which was 46 (18.6%) and less 25 which was 8 (3.2%).

The majority of the respondents are master's degree holder which is 194 (78.5%). The rest of the respondents are PhD holder 39 (15.8%), bachelor's degree holder 14 (5.7%).

In terms of working experience, the highest respondents have experience 1 to 5 years (46.6%). Followed by working experience between 6 to 10 years (34.0%), more than 10 years (12.6%) and less than 1 year (6.9%).

The majority of the respondents are from Faculty of Akademi Pengajian Bahasa (APB) which was 44, followed by Faculty of Accountancy which was 41. The finding also indicates that Faculty of Art and Design which was 38, Faculty of Business Management which was 37, Faculty of Sciences and Computer Mathematic (FSKM) which was 35, Faculty Information Management which was 34, Faculty of Administration Management which was 7, Faculty of Law which was 6 and Faculty of Akademi Pengajian Islam Kontemporari (ACIS) which was 5.

In terms of grade, majority of respondents grade DM45/46 which was 180, and the minority of the respondents grade DM41 which was 13.

Respondents which grade DM53/54 which was 36 and grade DM51/52 which was 18.

The majority of the respondents for income are range between RM2001 to RM4000 (55.5%). Followed by range of income more than RM4000 (38.5%). Range of income less than RM1800 (4.9%) and RM1801 to RM2000 (0.8%).

Table 4.3
Personal details of respondent

Item	Frequency	Percentage
Gender		
Male	97	39.3
Female	150	60.7
Age		
<25	8	3.2
25-35	103	41.7
36-45	90	36.4
>45	46	18.6
Education		
Bachelor's degree	14	5.7
Master's degree	194	78.5
PhD	39	15.8
Working experiences		
<1	17	6.9
1-5	115	46.6
6-10	84	34.0
>10	31	12.6
Faculty		
ACIS	5	2.0
Administration Management	7	2.8
LAW	6	2.4
APB	44	17.8
Accounting	41	16.6
Information Management	34	13.8
Art and Design	38	15.4
FSKM	35	14.2
Business Management	37	15.0

Table 4.3 (Continued)

Item	Frequency	Percentage
Grade		
DM41	13	5.3
DM45/46	180	72.9
DM51/52	18	7.3
DM53/54	36	14.6
Income		
>RM1800	12	4.9
RM1801-RM2000	2	0.8
RM2001-RM4000	137	55.5
>RM4001	96	38.9

4.8 Descriptive Result

Table 4.4
Mean and Standard Deviation of the Variables

Variables	Mean	Standard Deviation
Workload	4.88	0.04
Time Pressures	4.83	0.05
Interruptions	4.62	0.05
Job Satisfaction	4.86	0.05
Job Stress	4.76	0.04

Table above showed the results of mean and standard deviation for dependent variable (Job Satisfaction), independent variables (Workload, Time pressures, Interruptions) and mediating (Job Stress). All variables were (evaluated) based on a 7-point scale. The results showed that the mean (M) and standard deviation (SD) for “workload” (M=4.88, SD=0.04), “time pressure” (M=4.83, SD=0.04), “interruption” (M=4.617, SD=0.05), “job satisfaction” (M=4.86, SD=0.05) and “job stress” (M=4.76, SD=0.04). The results showed that (workload) had the highest mean which was 4.88 and (interruption) had highest standard deviation which was 0.05. The M=4.88 refers to the

calculation of the highest subgroup means and related univariate statistics for dependent variable within categories of one or more independent variables.

4.9 Confirmatory factor analysis

The validity of the method of analysis is used to determine the accuracy of the items used to measure a construct (Hair, Black, Babin and Anderson 2010). Analysis of factors affecting the validity of the analysis of all the costs of items under each construct. The first step is to ensure the load for each item exceeds 0.5 (Pallant, 2007;Hair et al., 2010). Second, make sure the value of the average variance extracted (AVE) exceeds 0.4 and CR, in excess of 0.71 (Hair et al. 2014). Table 4.5 shows the loading, weights, AVE and CR for each construct in this project paper.

Table 4.5
Construct Validity

Construct	Item	Scale	loading	Outer Weights	AVE	CR	Cronbach Alpha
Workload	6	Reflective			0.428	0.814	0.719
W4			0.702	0.288			
W5			0.823	0.355			
W6			0.620	0.259			
W7			0.570	0.339			
W8			0.660	0.306			
W9			0.506	0.244			
Time Pressures	3	Reflective			0.474	0.703	0.654
TP3			0.461	0.144			
TP4			0.987	0.908			
TP5			0.485	0.079			
Interruption	4	Reflective			0.440	0.754	0.608
I2			0.579	0.182			
I3			0.809	0.603			
I5			0.683	0.430			
Job Satisfaction	6	Reflective			0.460	0.834	0.763
JS1			0.562	0.204			
JS2			0.604	0.212			
JS3			0.720	0.230			
JS4			0.832	0.301			
JS5			0.641	0.246			
JS7			0.672	0.273			
Job Stress	5	Reflective			0.565	0.866	0.758
J.Stress3			0.754	0.325			
J.Stress4			0.785	0.361			
J.Stress5			0.664	0.102			
J.Stress6			0.763	0.181			
J.Stress7			0.784	0.339			

From table confirmatory factor analysis show above stated ten (10) question have been deleted because of the loading value is very low. The question that have been deleted shows in the Table 4.6.

Table 4.6
Item Deleted

Item	Question
W1	I am given enough time to do what is expected of me at my job
W2	It seems that I have more work at my job that I can handle
W3	My job requires that I work very hard
TP1	I satisfied with time during working.
TP2	Insufficient time can create a stress.
I1	Interruptions do not affect my completing assignments.
I4	I do not answer phones or look at e-mail while dedicating efforts toward a particular assignment.
JS6	I am free to choose my own method of working.
J.Stress1	Sometimes i feel burnout.
J.Stress2	I easily feel annoy/irritate with my work station environment.

4.10 Convergent Validity

Convergent validity can be defined as a measure correlates positively with alternative measures of the same construct (Hair, Ringle, and Sarstedt, 2011). To use convergent validity, the researcher should consider the outer loadings of the indicators, as well as the average variance extracted (AVE). A high outer loadings on a construct indicate that the associated indicators have much in common, which is captured by the construct. It is also called as an indicator reliability. At a minimum, all indicator have much in common which outer loadings should be 0.708 or higher. The rational behind this rule can be understood in the context of a square of a standardized indicator's outer loading, referred to as the community of an item. Indicators with very low outer loading below 0.40 should, however, always be eliminated from the scale (Hair, Ringle, and Sarstedt, 2011). Since the value of AVE and Composite Reliability (CR) above than 0.40, so it shows that the data do not have convergent validity problem.

4.11 Discriminant Validity

Discriminant validity can be referred to the construct which truly distinct from others constructs (Hair et al., 2014).The assessing discriminant validity is by examining the cross loading of the indicators. Specifically, an indicator's outer loading on the associated construct should be greater than all of its loadings on other constructs for example cross loadings. The discriminant validity's problem when the presence of cross loadings that exceed the indicators' outer loadings(Hair, Ringle, and Sardtedt, 2011).

Validity of differential see how it constructs something different with other constructs. This means a construct that is unique and it can not be represented by other constructs in the same theory (Sekaran and Bougie, 2010). There are two methods to determine the validity of the differentiation. First, by looking at the cost of a cross on each item (Hair et al. 2014). The second method for evaluating the validity of differentiation is through the technique Kriterion Fornell-Larcker. This technique involves the comparison of the AVE that has at source squares (\sqrt{AVE}) with a latent variable correlation (Fornell and Larcker 1982). \sqrt{AVE} for each construct value must be greater than the value of the correlation between different constructs (Fornell and Larcker 1982; Hair et al. 2014). This is based on the assumption that every construct of shared variance with the underlying item compared to other constructs. The research on the \sqrt{AVE} find its value is greater than 0.5 and this value is higher than the correlation with other constructs. This proved there is no problem for the construct validity of differentiation in this study. Based on the analytical results reliability and validity that have been done, all the items were valid and can be used to test each construct.

Table 4.7
Discriminant Validity

	JS	I	J. Stress	TP	W
JS	0.667				
I	0.482	0.663			
J.Stress	0.189	0.108	0.751		
TP	0.444	0.395	0.134	0.688	
W	0.212	0.190	0.312	0.274	0.654

Diagonals In Bold represents the average variance extracted while the other entries represent the squared correlations.

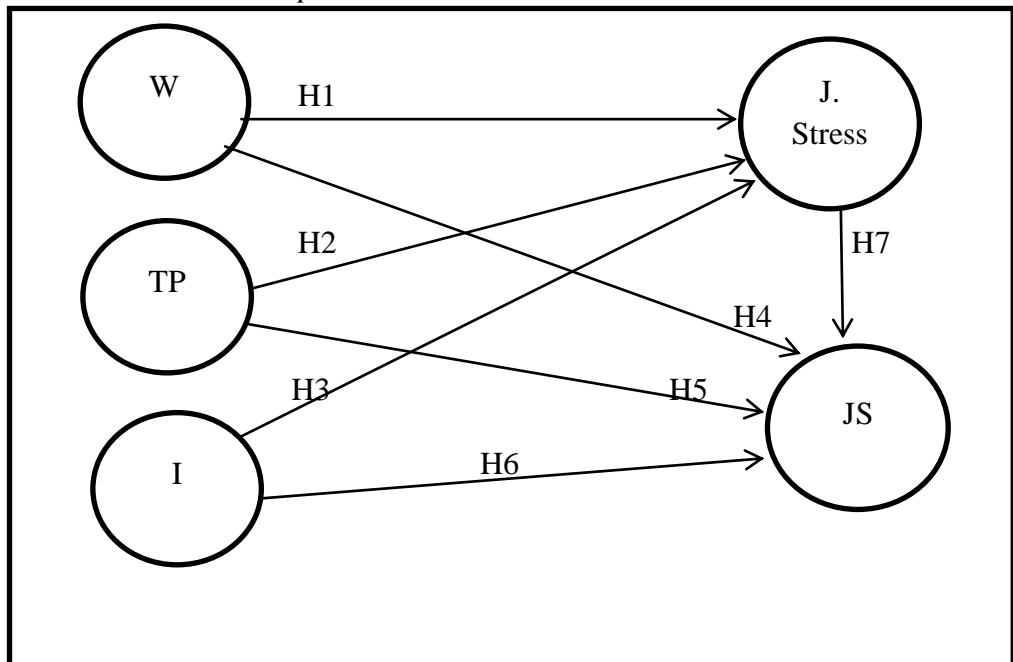
4.12 Hypothesis Testing

To test the hypothesis testing, researcher used the bootstrapping. According to Hair et al. (2014), indicated that (PLS-SEM) analysis results bootstrapping were done to identify a direct relationship between the variables of workload, time pressure, interruption, job satisfaction and job stress of lecturers demonstrated through the t-value in Table 4.7. This study found that only six (6) out of seven (7) shows a significant direct relationship exists in the analysis.

4.12.1 Structural Model

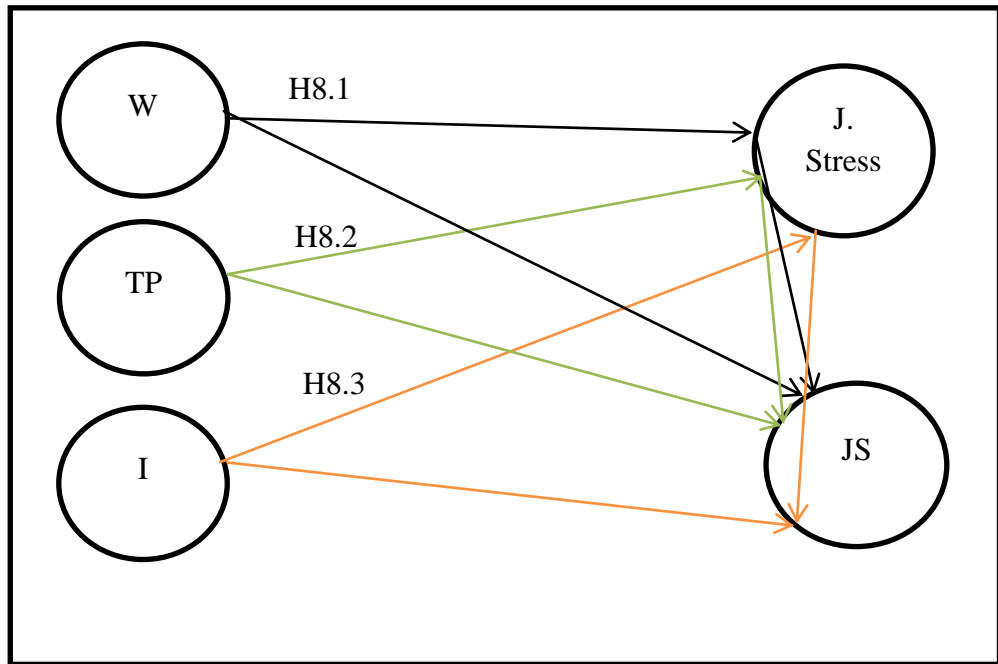
Diagram 4.1

The Direct Relationship between Variables



Refer to the Diagram 4.1 shows the direct relationship between variables. The independent variable is workload, time pressure and interruption. The mediating is job stress and the dependent variable is job satisfaction. H1 (between workload and job stress), H2 (between time pressure and job stress), H3 (between interruption and job stress), H4 (between workload and job satisfaction), H5 (between time pressure and job satisfaction), H6 (between interruption between job satisfaction and H7 (between job stress and job satisfaction)).

Diagram 4.2
The Indirect Relationship between Variables



Refer to the Diagram 4.2 shows the indirect relationship between variable. H8.1 (indirect relationship between workload, job stress and job satisfaction), H8.2 (indirect relationship between time pressure, job stress and job satisfaction) and H8.3 (indirect relationship between interruption, job stress and job satisfaction).

Table 4.8
Bootstrapping Result on Direct Relationship between Variables

Hypothesis	Relationship	Beta	Standard Error (SE)	Standard Deviation	t-Value	Result
H1	W -> J. Stress	0.334	0.061	0.092	***4.790	Significant
H2	TP -> J. Stress	0.021	0.062	0.082	0.632	Not Significant
H3	I -> J. Stress	0.026	0.085	0.110	0.435	Not Significant
H4	W -> JS	0.034	0.050	0.067	0.724	Not Significant
H5	TP -> JS	0.124	0.048	0.061	***5.846	Significant
H6	I -> JS	0.205	0.039	0.051	***9.046	Significant
H7	J. Stress -> JS	0.085	0.047	0.065	**2.190	Significant

***p<0.10 ** p<0.05 ***p<0.01**

A total of seven (7) hypotheses is formed and analyzed to know exactly that there is a form of direct relationship and interaction between variable and mediating in the study. Four (4) hypotheses proved to be accepted, when the test were being rejected. Schedule below is a summary decision hypothesis testing. According rule of thumb Hair et al. (2014) stated that used critical values for two-tailed tests derived from the normal distribution are 2.57, 1.96, and 1.65 for significance levels of 1%, 5% and 10%, respectively.

4.13 Mediation Effect Result

Mediation effect calculation we conducted Variance Accounted For (VAF) and Sobel Calculator Test.

a) Variance Accounted For (VAF)

According to Shrout & Bolger (2002) , stated that Variance Accounted For can be defined as the size of the indirect effect relative to the total effect. This value is normed between 0 and 1 (or 0% to 100%). Higher results indicate a stronger mediation. The used of the (VAF) is to know the significant result between direct and indirect effect. If the result is above 80% it is considered as a full mediation. If the result is between 20% to 80% it is considered as a partial mediation and if VAF value is under 20% it is considered as no mediation (Hair et al., 2014).

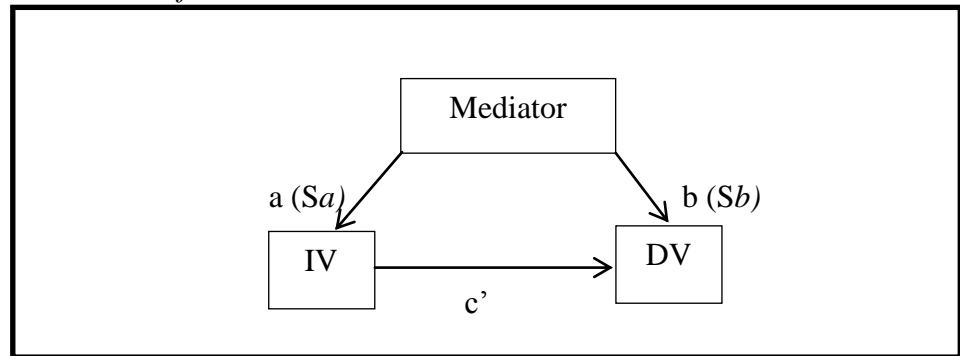
The formula that can be used to find (VAF) is :-

$$\text{VAF} = \frac{(\text{AB} \times \text{BC}) \text{ indirect effect}}{(\text{AB} \times \text{BC} + \text{AC}) \text{ total effect}}$$

b) Sobel Calculator Test

Sobel (1982), indicated that purpose of Sobel test is to test whether a mediator influenced an independent variable to a dependent variable. Formula for Sobel tests provided drawn from MacKinnon, Dwyer (1994); MacKinnon, Warsi, Dwyer (1995): $[z\text{-value} = \frac{a*b}{\text{SQRT}(b^2*s_a^2 + a^2*s_b^2)}]$. An illustration of mediation shows at Diagram 4.3.

Diagram 4.3
Illustration of Mediation



According to rule of thumb Sobel (1982), reported if z score above 1.96 (p-values, 0.05) and if z score above 2.58 (p-value 0.01).

Table 4.9
Mediation Effect Result for Indirect relationship between variables

Hypothesis	Interaction	AVF	SOBEL (Z score)	RESULT
H8.1	W>J.Stress>JS	93.54%	2.68	Full
			(p-value: 0.04)	Mediation
H8.2	TP>J.Stress>J	18.93%	0.671	No
	S			Mediation
H8.3	I>J.Stress>JS	9.53%	0.760	No
				Mediation

Table 4.9 stated that hypothesis 8.1 has a full mediation and proved by Avarage Variance For (AVF) which was 93.54% and Sobel Test (Z 2.68). The hypothesis 8.2 and hypothesis 8.3 show there is no mediation effect.

4.14 Conclusion

This chapter covered the results of the analyses. The analyses were carried out using the reliability, descriptive statistic, confirmatory factor analysis, bootstrapping and hypothesis testing. Based on the framework, there have eight (8) hypotheses, seven (7) direct relationship, one (1) indirect relationship. Hypothesis testing concludes that there are only four (4) hypothesis for direct relationship have been accepted. The hypothesis for indirect relationship shows job stress have a full mediation effects on the relationship between workload and job satisfaction.

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter represents the discussions, limitations and recommendations. At the end, conclusions are presented.

5.2 Discussion

This project paper meets the objectives that the researcher wants at the beginning of this study. The objectives are:

a) The level of job stress and job satisfaction.

Based on the result gathered from Chapter 4, it shows that the mean value is 4.76. It means the level of job stress is high. This is supported by Bashir and Ramay (2010) which they found that the job stress is emerging among employees. Stress can be defined as vigorous state in which a person is confronted with an opportunity, demand, or resource related to what the individual wishes and how the outcome is perceived (Bashir and Ramay, 2010). The highest mode value is 4.89 where most of the employees agreed that “My jobs are repetitive and boring”.

Table 4.4 is about job satisfaction, and it also shows a high mean value which is 4.86. A study has been carried out by Noordin and Jusoff (2009) and found out that job satisfaction is high among academicians. A positive and healthy university surrounding can indirectly boosts academic staff’s satisfaction towards their job and at the same time increases the productivity of the university (Noordin and Jusoff, 2009). The highest mode value for job satisfaction is 4.88 which is “The duty assigned is in the right amount”.

b) The direct relationship between workload, time pressure, interruption and job satisfaction.

Time pressure and interruption have a direct relationship towards job satisfactions. Based on the hypothesis testing result, it showed that there is a positive relationship between time pressure and interruption towards job satisfaction among lecturers in one of the public universities in Kelantan. This hypothesis is supported by Sonnentag, Arbeus, Mahn, and Fritz (2014), stated that time pressure specifically have positive relationship onto job satisfaction. Past researchers also reported that there is positive relationship between interruption and job satisfaction (Bing Jason, and Charlotte, 2013). Interruption happened in every workplace but it would not be a problem if the employees know how to manage their time and deal with their interruptions (Baethge and Rigotti, 2013).

On the other hand, workloads do not have a direct relationship towards job satisfaction. A study by De Cuyper, and De Witte (2006) proved that workload do not have a relationship on job satisfaction. This statement is also supported by other researcher, Amzat and Idris (2012) where they found that the relationship between workload and job satisfaction is not consistent and the reason why it happened is probably because of the different economy environments.

c) The direct relationship between workload, time pressure, interruption and job stress.

Based on Table 4.8 in Chapter 4, it can be concluded that workload has significant relationship towards job stress. The results for this project paper are similar to the previous studies carried out by Ortqvist and Wincent (2006), Newton and Teo (2014), which found that workload is related to job stress and the employees have the tendency to quit from the organization.

In contrast, this project paper does not find the interruption and time pressure have a significant relationship towards job stress. An analysis that can be retrieved from Chapter 4 in this project paper summarised that there is no direct relationship between interruptions, time pressure and job stress among the lecturers in one of the public universities in Kelantan. The findings by (Van Der DoefMaes, 1999) also discovered that time pressure has no directly relationship towards job stress if the individual have an ability to control their work activities. Another research done by Monk, Boehm-Davis and Trafton (2004) also found that the interruptions have no positive relationship towards job stress if the job task is not complicated to be done.

d) The direct relationship between job stress and job satisfaction.

The analyses in Chapter 4 supported that job stress has a significant relationship towards job satisfaction. The academicians who involved in job stress have a direct relationship towards job satisfaction. This finding is supported by Savery (2001); George (2010) who realized that job stress has a direct relationship towards job satisfaction. George (2010) stated that job stress resulted to the low job satisfaction.

Most of the past researchers agreed that job stress has a potential to reduce the level of job satisfaction. One of the researchers is Savery (2001), who identified the victims who experienced job stress also involved in low job satisfaction. Job stress may reduce due to several factors. Beauregard and Henry (2009) pointed out that a good remuneration package offered by the company and friendly working environment may reduce the level of stress and will improve the attitude of the employees. According to Noordin and Jusoff (2009), job satisfaction will also increase by a few factors. Based on their findings, they concluded that the salary, status and age can lead the academicians to their job satisfaction.

e) The mediating effects of job stress based on the relationships between workload, time pressure, interruption and job satisfaction.

Analyses in Chapter 4 stated that workload has a mediating effect towards job stress and job satisfaction. Past researchers also reported the same results that they discovered, which is job stress has a significant relationship towards job satisfaction (Khan and Ali, 2013). The high level of stress adversely affects one's work performance, physical health, and psychological well-being and stress can be referred to mentally or emotionally occurring in response to adverse external influences and capable of affecting physical and psychological health (Nabirye, Brown, Pryor, Maples, 2011).

5.3 Limitations

Firstly, the project paper sample is not a representative of the bigger population as it was chosen only from one institution of higher learning. The consequence is the respondents are not covered by all the lecturers in public universities because this project paper only emphasize on public university in Kelantan. The usage of a small population may not represent the general academic perception regarding the project paper that has been done.

Secondly, time constraint. The researcher has limited time to distribute the questionnaire and at the same time collects the entire questionnaires in order to analyses the data.

Thirdly, this project paper only cover three factors of independent variable that influences the job stress and job satisfaction among lecturers is considered. These factors namely are workload, time pressure and interruptions. However, there are other factors such as organizational commitment, university culture; rapid technology changing, personality and so on influences job satisfaction and job stress among lecturers which are not considered in this project paper.

Finally, researcher face difficulties in obtaining the cooperation among respondents. It is because of this project paper used the quantitative data which provide the participants a great chance to manipulate their answers.

5.4 Recommendations

Firstly, future researchers may investigate this study and target for a bigger population. For instance, select the respondent from all public universities in Malaysia. In order to get further exploration, future researchers may use different organization or institution to enhance a better result. Consequently, different institutions may obtain different impacts and outcomes.

Secondly, use the different technique of data collection. Future researchers may use observation or online survey in order to collect the data from the respondent. Researchers that have an intention to study this topic also may change the variables or may add on any variables in order to makes the study more interesting.

Thirdly, recommendation for institution or employer in dealing workload's problem is to give the knowledge to their employees in managing their time wisely. Supported by Wallace and Masters (2006), a good time management can reduce stress among employees. Employees may delegate and share work with others when it is appropriate and acceptable. Then, employees must also avoid attempting to do everything by themselves and keep workload under control.

5.5 Conclusion

As a conclusion, the purpose of this project paper is to investigate the relationship between mediating of job stress on job satisfaction. From hypothesis testing, it shows only workload that has mediating effects of job stress on job satisfaction. This investigation has provided an idea to the institution in order to implement the best way to reduce the level of job stress among lecturers. At the end, researcher suggests a few recommendations for future researcher to conduct this study.

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