

**EXAMINING THE RELATIONSHIP BETWEEN JOB DEMANDS, JOB  
RESOURCES AND WORK ENGAGEMENT AMONG ACADEMICS IN  
MALAYSIA**

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ACADEMICS IN MALAYSIA**

**By**

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Resource Management**

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## **Abstract**

This study examines the direct relationship between workload, work pressure, autonomy, social support and performance feedback and work engagement. A total of 380 questionnaire were personally distributed to respondents from three universities, namely Universiti Utara Malaysia, Universiti Malaysia Perlis dan Universiti Teknologi MARA after permission was granted by the university' management. Out of 380 questionnaire distributed, only 181 questionnaire were returned, representing a response rate of 47.63%. However, only 176 were usable for further analysis. Hypotheses for direct relationship was tested using multiple regression analyses. Results showed that only social support was positively related to work engagement. In the study, work pressure was hypothesized to be negatively related with work engagement, but the results show the opposite. Implications of the findings, potential limitations, and directions for future research are discussed.

**Keywords:** Work Engagement, Workload, Work Pressure, Autonomy, Social Support, Performance Feedback

## **Abstrak**

Kajian ini mengkaji hubungan langsung antara bebanan kerja, tekanan kerja, autonomi, sokongan sosial, maklumbalas prestasi dengan keterlibatan kerja Sebanyak 380 borang soal selidik telah diedarkan secara peribadi kepada responden di tiga buah universiti iaitu Universiti Utara Malaysia, Universiti Malaysia Perlis dan Universiti Teknologi MARA selepas mendapat kebenaran daripada pihak pengurusan universiti. Daripada 380 borang soal selidik yang diedarkan, 181 soal selidik telah diterima semula, dan hanya 176 soal selidik digunakan untuk analisis selanjutnya, dengan kadar maklumbalas sebanyak 47.63%. Hipotesis ke atas kesan langsung diuji menggunakan analisis regresi berganda. Dapatan kajian menunjukkan bahawa hanya sokongan sosial mempunyai hubungan yang positif dengan keterlibatan kerja. Dalam kajian ini, tekanan kerja dijangka mempunyai hubungan yang negatif dengan keterlibatan kerja, namun dapatan kajian menunjukkan yang sebaliknya.. Manakala. Implikasi dapatan kajian, limitasi kajian, dan cadangan bagi kajian susulan dibincangkan.

**Kata kunci:** Keterlibatan Kerja, Bebanan Kerja, Tekanan Kerja, Autonomi, Sokongan Sosial, Maklumbalas Prestasi

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# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Background of Study**

Generally, employees with high work engagement tend to protect the reputation and increase the public view of their organization with positive attitudes. They act as supporters to their organization and even promote and recommend their organization to outsiders as a good place to work and do business (CIPD, 2006). When employers stand side by side with employees to recognize, communicate and care for them, there is no doubt that employees would naturally feel engaged with the organization.

According to Saks (2006), an engaged employees tend to be more confident with their employers and are most likely to report positively about their organizations. Engaged workers are often defined as employees who have emotional and intellectual commitment to the organization (Baumruk, 2004; Richman, 2006; Shaw, 2005) or the amount of success presented by the employees in their work (Frank, Finnegan & Taylor, 2004).

Though having an engaged employees may bring many benefits to the organization, it is not an easy task to achieve it. Therefore, organizations need to find the best way to encourage their employees to be more engaged in their work.

## **1.2 Problem Statement**

Reviewing the literature has shown that studies on work engagement are substantial. However, studies on work engagement in the academic settings are still lacking. If there were studies conducted in the educational sector, they were more focus on the students and teachers (Babcock-Robertson & Strickland, 2010; Bakker & Bal, 2010; Basikin, 2007; Hakanen, Bakker & Schaufeli, 2006; Lorento-Prieto, Salanova-Soria, Martinez-Martinez, & Schaufeli, 2008; Salmela-Aro, Tolvanen & Nurmi, 2009). For example, Hakanen, Bakker and Schaufeli (2006) studied the teachers' working conditions and how they were related to teachers' well-being such as burnout and how work engagement influence over health problems and organizational commitment in Finland.

As argued by many authors, one of the most stressful jobs is teaching. Teaching has been associated with the high workload, low salary, big class sizes, high emotional demands, student misbehavior and low status (Burke & Greenglass, 1994; Carlson & Thompson, 1995; Hakanen, Bakker & Schaufeli, 2006; Konermann-van Hunsel, 2012; Kyriacou & Sutcliffe, 1978).

There is evidence showing how the academic workload and work pressure has been constantly rising due to the expansion of the higher education and this has been believed to contribute to the increase of stress level among the academicians (Metcalf, Rolfe & Weale, 2005; Singh & Bush, 1998). In Malaysia for example, every university is racing against time to be ranked as the best university in the world. In order to become a world

class university, thirteen performance indicators which are grouped into five main areas need to be followed and these include learning environment of teaching, volume, income and reputation of research, research influence through citations, information transfer and international outlook through staff, students and research. Thus, this leads to the increasing of competition between educational institutions in order to achieve excellent performance thus to attract investments, donations as well as an excellent student enrolment. Universities need to be competitive and constantly evolving developed in various aspects to maintain its position. In addition towards growth of university, lecturer's thoughts and teaching styles together with research need to change in line with the current development. All these requirements have imposed burden to the academics which might influenced the engagement toward work.

Several authors have agreed that job demands especially the workload can diminish levels of faculty commitment to the institution (Daly & Dee, 2006; Gilbert, 2000; Griffin, 1998). In a study conducted by Rothmann and Jordaan (2006) on 471 academic staff in South African higher education institution, workload was found negatively related to work engagement while autonomy and social support were positively related to work engagement. A study on work pressure also showed negative relationship with work engagement when tested on 274 teachers in Netherlands (Lorente, Salanova, Martinez & Schaufeli, 2008). In terms job resources, Nadim's (2013) study indicate that job resources (such as autonomy, social support) were positively related to work engagement. Since, studies involving job demands and job resources on work engagement among the academicians are limited, there is difficult to draw a conclusion on whether there was a

consistency or inconsistency in past research findings. Thus, the effect of job demands and job resources on the work engagement among the academicians in Malaysia is yet to be known. Thus, this study is conducted to investigate the influence of job demands, job resources and work engagement.

### **1.3 Research Questions**

Based on the problems discussed above, the central question for this study would be “*what factors are related to individual’s work engagement?*” Specifically,

1. do job demands such as workload and work pressure related to work engagement?
2. do job resources such as autonomy, social support and performance feedback related to work engagement?

### **1.4 Research Objectives**

To answer the research questions posted above, the following research objectives were formulated:

1. to examine the relationship between job demands such as workload and work pressure and work engagement;
2. to investigate the relationship between job resources such as autonomy, social support and performance feedback and work engagement.



## **1.5 Significance of Study**

The aim of this study is to examine how job demands and job resources related to work engagement among the academicians. It is hope that, the findings from this study may benefit both scholars and practitioners regarding ways of increasing work engagement among the academics. From the theoretical perspective, potential findings from this study may contribute to the current body of knowledge on work engagement. A literature search reveals limited empirical studies on the issues of work engagement among academics with most studies are focusing on the healthcare industry (Hakanen, Schaufeli, & Ahola, 2008; Lin, Oi-ling, Kan, & Xin-wen, 2009; Weigl, Hornung, Parker, Petru, Glaser & Angerer, 2010), telecommunications (Brummelhuis, Bakker, Hetland & Keulemans, 2012; Salanova & Schaufeli, 2008; van Doornen, Houtveen, Langelaan, Bakker, van Rhenen & Schaufeli, 2009), hotel industry (Burke, Koyuncu, Jing, & Fiksenbaum, 2009; Slåtten & Mehmetoglu, 2011) and the banking industry (Hassan & Ahmed, 2011; Koyuncu, Burke, & Fiksenbaum, 2006).

Apart from that, the findings from this study may also provide an effective contribution to the universities' management in Malaysian Public University on the method of how to enhance work engagement among the academics. This study will provide empirical evidence on the role of job demands, and job resources on work engagement. Thus, helping the universities' management to identify and focus on the most important and critical factors in achieving a more engaged academic staffs. This is a broader contribution that extends beyond the Malaysian context.

## **1.6 Scope of Study**

The main focus of this study is to examine factors that might relate to work engagement among the academics. Specifically, the study aims to identify whether factors like job demands (workload and work pressure) and job resources (autonomy, social support and performance feedback) have a direct relationship on work engagement. This cross-sectional study involved a survey of 176 academics from 3 public universities, namely Universiti Utara Malaysia, Universiti Malaysia Perlis and Universiti Teknologi MARA which located in Kedah and Perlis.

## **1.7 Definition of Key Terms**

**Work engagement:** Work engagement is referred to as “a positive, fulfilling work related state of mind that is characterized by vigor, dedication and absorption” (Schaufeli, Salanova, Gonzalellez-Roma & Bakker, 2002, p. 74)

**Job demands:** Job demands are the physical, psychological, social or organizational components that require cognitive and emotional exertion (Bakker & Demerouti, 2007).

**Job Resources:** Job resources are the physical, psychological, social or organizational components that function as work goals, reduce job demands or facilitate personal growth and development (Bakker & Demerouti, 2007).

## **1.8 Organization of Chapters**

This chapter is the first of five chapters in this research paper. Chapter 2 gives general review of the literature on work engagement. The concept of work engagement and how it can be measured are also presented. Discussion in Chapter 2 continues with past empirical findings on factors that might influence work engagement. The chapter concludes with the development of the research hypotheses.

Chapter 3 describes the method for the study, namely the research design and procedure. The chapter reports the selection of participants, sample types and size, and the development of questionnaire for the research. Chapter 3 ends with a brief description of the strategies and procedures that were used to analyze data collected from the survey.

Chapter 4 reports results of the study. There are reports of the descriptive statistical analysis, bivariate correlation analysis, and regressions analysis. The results are summarized in a number of tables to facilitate interpretation.

The final chapter, Chapter 5 discusses the interpretation of the research findings for the study. The findings are compared to those found in the past research reviewed in Chapter 2. The chapter ends with a discussion on limitations of the study, their implications for both researchers and practitioners, and some suggestions for future research.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter reviews past studies on work engagement and summarizes the findings of the literature that related to the factors that related to work engagement like job demands and job resources. The chapter begins with a discussion on the definitions and concept of work engagement and this followed with past empirical findings on work engagement. The discussions continue with the concept of job demands and job resources and past empirical findings on these two variables. This chapter ends with the development of the research hypotheses.

#### **2.2 Work Engagement**

Kahn (1990, p. 694) has defined the concept of work engagement as “the harnessing of organization members’ selves to their work role by which they employ and express themselves physically, cognitively and emotionally during role performances”. Schaufeli, Salanova, Gonzalez-Roma and Bakker (2002) regard work engagement as a persistent, positive, and affective-cognitive state of fulfillment in employees. Schaufeli and Bakker (2004) have proposed three components of work engagement and these include vigor, dedication and absorption. Vigor is referred to the high energy or mental resilience and the high work commitment, while dedication is the involvement of a person in their work. The third component, absorption, is the absolute concentration on one’s work with

difficulty detaching oneself from it. In other writing, Roberts and Davenport (2002) define work engagement as the involvement of a person in his or her job. They argued that individuals who are highly engaged in their jobs tend to identify themselves with the job and are motivated by the work itself. Compared to non-engaged workers, they are more hardworking, more productive and more likely to produce the results as what is expected. Engaged employees normally make good use of their skills and abilities, are challenging and stimulating, and have a sense of personal accomplishment.

Having similar views as Roberts and Davenport (2002), Kahn (1990) also argued that engaged employees are those who physically involved in their tasks, cognitively alert, and emotionally connected to others when performing their jobs.

Reviewing the literature shows that work engagement has been mostly analyzed within the framework of the job demands-resources model. The basic premise of this model is that employees may work in different work environments but the characteristics of these work environments can be classified into two broad categories. These are discussed next.

### **2.3 Job Demands**

In the literature, job demands have been defined as “those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort, and are therefore associated with certain physiological and/or psychological costs” (Demerouti, Bakker, Nachreiner & Schaufeli,

2001, p.501). Some examples of job demands include high work pressure, unfavorable physical environment, and emotionally demanding interactions with clients (Demerouti, Bakker, Nachreiner & Schaufelli, 2001; Bakker & Demerouti, 2007).

In other writing, Karasek and Theorell (1990) defined job demands as the task requirements or quantitative workloads involved with a particular job. These include the quantity and time pressures of the work such as how fast one must work, how hard one must work, whether there is enough time to complete the work, and whether there is an interception to the work.

Job demands also include situational factors such as ambiguity and conflict in role, stressful events, high workload and work pressure, pressure to make critical and immediate decisions, high responsibility, and having deadlines to meet (Rothmann, 2002; Schaufeli & Enzmann, 1998).

### **2.3.1 Previous Studies on Job Demands**

A study conducted in United Kingdom indicates that the majority of the workers surveyed were unhappy with the current work culture where they were required to work long hours with high workloads and at the same need to meet the production targets and deadlines (Townley, 2000). Maslach et al., (2001) found that heavy workload and time pressure were strongly related to exhaustion. In other studies, job demands such as high work pressure, emotional demands and role ambiguity have been found to be related to exhaustion and impaired health (Doi, 2005; Halbesleben & Buckley, 2004)

Although job demands are not necessarily negative, Meijman and Mulder (1998) argued that they may turn into job stressors when meeting those demands require high effort from which the employee has not adequately recovered. According to Conley and Wooseley (2000), work overload creates strain because of the pressure to do more work, high expectation of the superiors, huge and unbearable workload that interferes with work quality, and the feeling of not being able to finish a given task within a specified period of time.

## **2.4 Job Resources**

Job resources are those aspects (physical, psychological, social and/ or organizational) that reduce job demands, facilitate the achievement of work goals, and/ or stimulate individual growth (Demerouti et. al., 2001; Rothmann, 2002). According to Burkner and Richardsen (1993), job resources include social support that comes from the supervisor and coworkers, job enhancement opportunities in the form of increased control and autonomy, participation in decision making reinforcement contingencies. Also, it includes the performance feedback (Schaufeli & Salanova, 2007) as well as recognition, opportunities for advancement and rewards (Rothmann, 2002). Job resources fulfill basic human needs such as the needs for autonomy, relatedness and competence (Deci & Ryan, 1985; Ryan & Frederick, 1997).

In other writing, Karasek (1990) argued that autonomy is a working condition that has long been acknowledged as valuable resources for employee. Autonomy also represents the freedom individuals have in carrying out work, including freedom in scheduling work, decision making, and work methods (Hackman & Oldham, 1976; Morgeson & Humphrey, 2006). Research that utilized the Job Demand-Resources Model has previously classified autonomy as one of the job resources (Demerouti et. al., 2001; Schaufeli et. al., 2009).

Social support is also been regarded as one of the job resources components. It has been defined as the physical and emotional comfort given to an individual by his/her family, co-workers in times of need. Social support from colleagues and supervisors can be a starter that derived motivational process and, consequently to higher performance.

Apart from autonomy and social support, another component of job resources is the performance feedback given to employees. Aguinis (2012) defined performance feedback as information about employee's past behaviors with respect to established standards. The goals of performance feedback are to improve individual and team performance, as well as employee engagement, motivation and job satisfaction.

#### **2.4.1 Previous Studies on Job Resources**

In a study conducted by Bakker et al. (2006), a team-level work engagement was related to individual team members' engagement (vigor, dedication, and absorption). In other



words, workers who communicated their optimism, show positive attitudes and proactive behaviors to their colleagues have creating positive team climate. These research findings suggest that engaged workers influence their colleagues, and consequently, perform better as a team and lead to work engagement.

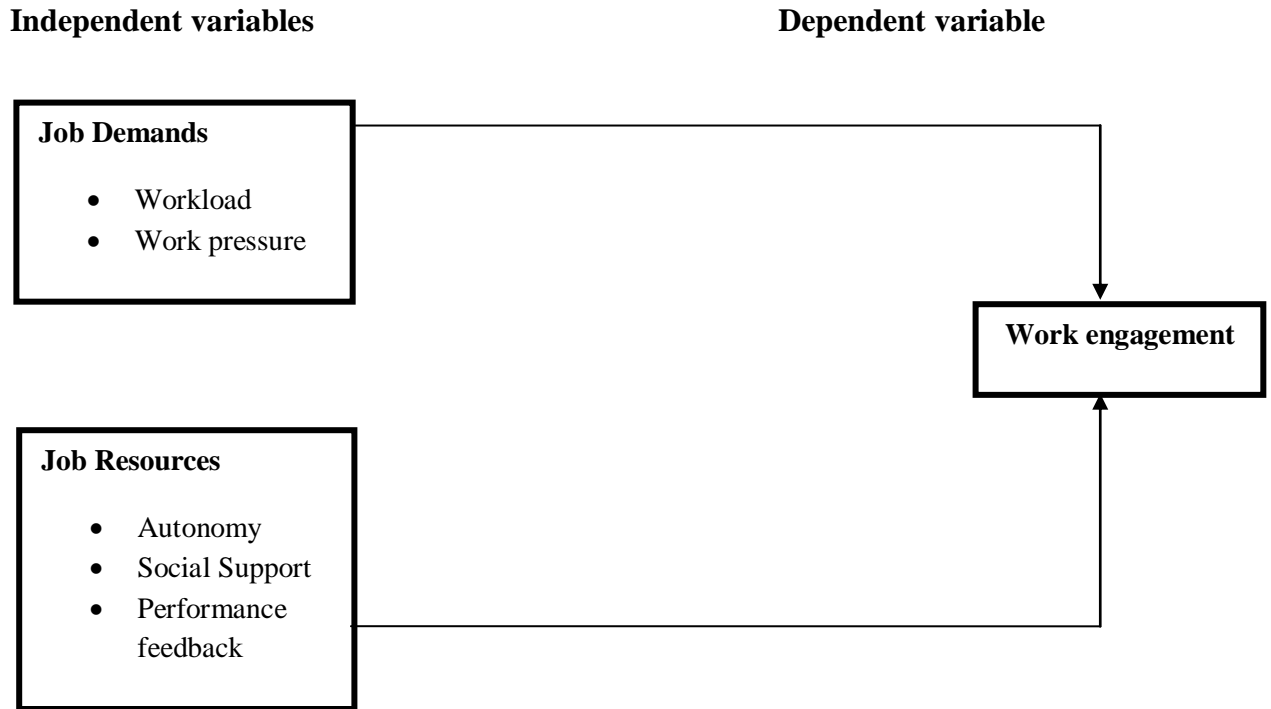
Bakker and Bal (2010) found a causal relationship between week-levels of work engagement and job resources, suggesting that job resources have motivational potential and enhance teachers' week-levels of work engagement. The study was conducted on six different teacher training colleges

In another study involving 163 employees in electrical engineering and electronic company, Xanthopoulou, Bakker, Demerouti and Schaufeli (2009) found that work engagement was positively related with autonomy, social support, and performance feedback.

## **2.5 Research Framework**

The research framework shown in Figure 2.1 is developed based on the discussion of literature on work engagement (Bakker & Demerouti, 2007; Bakker, Demerouti, Taris, Schaufeli & Schreurs, 2003; Demerouti, Bakker, Nachreiner & Schaufeli, 2001). The research framework for this study shows the relationship between job demands (workload, work pressure), job resources (autonomy, social support, feedback

performance), and work engagement. In this study, job demands and job resources are the independent variables, while work engagement is the dependent variable.



*Figure 2.1. Research framework*

## 2.6 Development of Hypotheses

### 2.6.1 Relationship between Job Demands and Work Engagement

In the literature, studies on similar job demand's dimensions have shown mixed results. In one study which involving of testing workload on work engagement among 714 Dutch employees have shown positive results (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2007). Similar results were also found in a study involving 329 information

communication technology (ICT) and management consultants (Hallberg, Johanson & Schaufeli, 2007).

However, when workload was tested on 169 hospital nurses, negative relationship was obtained (Tomic & Tomic, 2011). Negative relationship was also found by Hakanen, Bakker and Demerouti (2005) when workload was tested on 1919 Finnish dentists. Rothmann and Jordan (2006) also obtained negative relationship when workload was tested on 471 academic staff in South African higher education institutions.

Like workload, studies on work pressure have also shown mix results in the past. For example, when work pressure was tested on 587 Telecom managers in Dutch, positive relationship was found (Schaufeli, Taris & Van Rhenen, 2008). But, work pressure was negatively related to work engagement in a study involving 154 employees in German (Kuhnel, Sonnentag and Bledow, 2012) and 7869 service sector employees from eight European countries (Taipale, Selander, Anttila & Natti, 2011).

Though past studies have shown mixed result, in this study the proposed hypotheses are frame in a negative way:

H1a: Work load is negatively related to work engagement

H1b: Work pressure is negatively related to work engagement

### **2.6.2 Relationship between Job Resources and Work Engagement**

In the past, studies on job resources components like support from colleagues and supervisors, performance feedback, skill variety, autonomy, freedom in making decision, and learning opportunities have shown positive relationship with work engagement (Bakker & Demerouti, 2007, 2008; Korunka et. al., 2009; Schaufeli & Bakker, 2004).

For example, Schaufeli and Bakker (2004) have found positive relationship between three job resources (performance feedback, social support and supervisory coaching) and work engagement in their study among four different occupational groups. In a study on healthcare personnel, Mauno et. al (2007) found that job resources relate significantly to employee's work engagement. Positive relationship was also found in a study conducted by Llorens, Bakker, Schaufeli and Salanova, (2006) and Burkner et. al (2012). In a study involving school teachers, Hakanen et al. (2006) reported that each of the job resources components like job control, information, supervisory support, innovative climate, and social climate was positively associated with work engagement. Based on these discussions, three hypotheses were proposed:

H2a: Autonomy is positively related to work engagement

H2b: Social support is positively related to work engagement

H2c: Feedback performance is positively related to work engagement

## **2.7 Conclusions**

This chapter has presented the discussion on past and existing empirical works in the areas of work engagement, job demands, and job resources. The chapter has also presented the research framework and the research hypotheses tested in the study. The following chapter, Chapter 3 describes the method of the study.

## **CHAPTER 3**

### **METHOD**

#### **3.1 Introduction**

Chapter 3 describes the method for the study. In this chapter, the sample design, survey materials used in this study, procedure for collecting data and the research measures are described. The chapter ends with strategies for analyzing the data.

#### **3.2 Research Design**

Research design is the decisions regarding the purpose of the study, location of the study, the type of investigation, the extent to which it is manipulated and controlled by the researcher and the level at which the data will be analyzed (Sekaran & Bougie, 2009).

As for this study, a quantitative design is employed. A quantitative method allows for statistical analyses that will assure the gathered data are reliable and valid (Ghauri et al., 1995). As such, questionnaire is used a mean for data collection as it can assist in determining the relationship between job demands, job resources and work engagement.

Since respondents' opinion regarding job demands and job resource are important in capturing it influence on work engagement, individual has been taken to be the unit of analysis in this study. Therefore, it is suitable to use individual as a unit of analysis to test all the variables shown in the research framework.

Lastly, the study is cross-sectional, where the data was collected at one point of time. A cross-sectional design is simple, inexpensive and allows for the collection of data in a relatively short period.

### **3.3 Population and Sampling Design**

#### **3.3.1 Population**

The study population includes all academics from Universiti Utara Malaysia, Universiti Malaysia Perlis and Universiti Teknologi MARA, Perlis. Based on the statistics given through the university's official website, there are a total of 2568 academics currently working in these three universities. Table 3.1 shows the total number of academic staffs for each of the universities.

Table 3.1  
*Distributions of academics population for the three universities*

| <b>University</b>                  | <b>Total number of academics</b> |
|------------------------------------|----------------------------------|
| Universiti Utara Malaysia          | 1423                             |
| Universiti Malaysia Perlis         | 747                              |
| Universiti Teknologi MARA (Perlis) | 398                              |
| <b>TOTAL</b>                       | <b>2568</b>                      |

### **3.3.2 Sample Size**

Since it is not practical to collect data from the whole population, a sampling process needs to be done to determine the sampling size. Generally, sampling process involved three steps which are identifying the population, identifying sample size and choosing the sample. As mentioned earlier, the total population is 2568. Based on the sample size table by Krejcie and Morgan (1970), the sample size for this study is 335. This means 335 academic staffs is needed to represent the whole study population. This sample size fit with Roscoe's rule of thumb where a sample that is larger than 30 and less than 500 is appropriate for most research. However, the researcher has decided to distribute 380 questionnaires with the intention to receive high response rate.

### **3.3.3 Sampling Technique**

In this study, all the 380 respondents from these three universities are selected base on a systematic random sampling. According to Gay and Diehl (1996), systematic random sampling involves six steps. First, define the population. In this study, the population is 2568. Second, determine the desired sample size. The sample size for this study is 380. Third, obtain a list of the population. The list was obtained from the universities' official website under study. Fourth, determine the K by dividing population by the desired sample size. In this study, K is equal to  $(2568/380 = 6.76)$ . Fifth, determine the total respondent for each of the universities under study (refer Table 3.2). Sixth, researcher



will pick a random number from the list of academic staff for each university as the starting number. Then every 7<sup>th</sup> name is automatically in the sample.

Prior to distribution of the questionnaire, probability sampling was determined by following this formula:

Probability sampling of academic staff =  $NP / T \cdot NS$

(*NP = Total number of academic staff in each universities; T = Total number of academic staff in all universities; NS = The number of sample to be distributed*)

Table 3.2  
*Distribution of respondents for each university*

| University                         | Total number of academic staffs<br>(N = 2568) | Total respondents<br>(S = 380) | % of sampling | Systematic random |
|------------------------------------|---|--------------------------------|---------------|-------------------|
| Universiti Utara Malaysia          | 1423  | 211                            | 55            | 7 <sup>th</sup>   |
| Universiti Malaysia Perlis         | 747   | 110                            | 29            | 7 <sup>th</sup>   |
| Universiti Teknologi MARA (Perlis) | 398   | 59                             | 16            | 7 <sup>th</sup>   |
| <b>TOTAL</b>                       | <b>2568</b>                                   | <b>380</b>                     | <b>100</b>    |                   |

### 3.4 Operational Definitions and Measurements

#### 3.4.1 Work Engagement Measures

In this study, work engagement is the dependent variable and is operationalized as a positive, fulfilling, and work-related state of mind that is characterized by vigor, dedication and absorption (Schaufeli & Baker, 2003). As shown in Table 3.3, work engagement was measured by 17 items developed by Schaufeli and Baker (2003). Based on a five-point scale whereby, 1 = strongly disagree, and 5 = strongly agree, participants rated their degree of agreement with the work engagement statements.

Table 3.3  
*Work engagement items*

| Variable        | Operational definition   | Items  | Authors                  |
|-----------------|--|--|--------------------------|
| Work engagement | A positive, fulfilling, and work-related state of mind that is characterized by vigor, dedication and absorption | <ol style="list-style-type: none"><li>1. At my work, I feel that I am bursting with energy</li><li>2. I find the work that I do full of meaning and purpose</li><li>3. Time flies when I'm not working</li><li>4. At my job, I feel strong and vigorous</li><li>5. I am enthusiastic about my job</li><li>6. When I am working, I forget everything else around me</li><li>7. My job inspires me</li><li>8. When I get up in the morning, I feel like going to work</li><li>9. I feel happy when I am working intensely</li><li>10. I am proud of the work that I do</li><li>11. I am immersed in my work</li><li>12. I can continue working for very long periods at a time</li><li>13. To me, my job is challenging</li><li>14. I get carried away when I'm working</li><li>15. At my job, I am very resilient, mentally</li><li>16. It is difficult to detach myself from my job</li><li>17. At my work I always persevere, even when things do not go well</li></ol> | Schaufeli & Baker (2003) |

### 3.4.2 Job Demands Measures

Job demands are measured by workload and work pressure. Workload is operationalized as the total amount of time a faculty member devotes to activities like teaching, research, administration, and community services and other academic related tasks (Allen, 1996). Workload was measured by 10 items developed by Gillespie, et. al (2001) and Houston, Meyer & Paewai (2006).

Work pressure is operationalized as the degree to which an employee has to work fast and hard, has a great deal to do, and has too little time (Karasek & Theorell, 1990). Work pressure was measured by 5 items developed by Karasek and Theorell (1990). These items were rephrased to suit the scale used in this study and these changes are shown in Table 3.4.

Table 3.4  
*Original and adapted versions of work pressure items*

| Original version  | Adapted version                             |
|---|---|
| Does your job require you to work fast?                     | My work requires working very hard          |
| Does your job require you to work very hard?                | My work requires working fast               |
| Do you feel that your job requires too much input from you? | My work requires too much input from me     |
| Do you have enough time to complete your job?               | I have enough time to complete my job       |
| Does your job often make conflicting demands on you?        | My job often make conflicting demands on me |

In this study, participants rated their degree of agreement with the job demand statements based on five-point scale whereby, 1 = strongly disagree, and 5 = strongly agree. Table 3.5 shows the job demand items used in this study.

Table 3.5  
*Job demand items*

| Variable    | Dimensions        | Operational definition   | Items  | Authors  |
|-------------|-------------------|--|--|--|
| Job demands | Academic Workload | The total amount of time a faculty member devotes to activities like teaching, research, administration, and community services and other academic related tasks | <ol style="list-style-type: none"> <li>1. I do not have enough time to perform quality research</li> <li>2. The number of hours I am expected to teach has increased in recent years</li> <li>3. The amount of administration I am expected to do is manageable, given my other responsibilities</li> <li>4. My workload has increased over the past 12 months</li> <li>5. I often need to work after hours to meet my work requirements</li> <li>6. The amount of administration I am expected to do is reasonable</li> <li>7. The number of students I am expected to teach and / or supervise is reasonable</li> <li>8. I feel pressured to attract external research funding</li> <li>9. I believe the promotions procedures recognize the variety of work that staff do</li> <li>10. I believe that teaching and research achievements are considered equally by promotions committees</li> </ol> | Gillespie, Walsh, Winefield, Dua & Stough (2001); Houston, Meyer & Paewai (2006) |
|             | Work pressure     | the degree to which an employee has to work fast and hard, has a great deal to do, and has too little time   | <ol style="list-style-type: none"> <li>11. My work requires working very hard</li> <li>12. My work requires working fast</li> <li>13. My work requires too much input from me</li> <li>14. I have enough time to complete my job</li> <li>15. My job often make conflicting demands on me</li> </ol>   | Karasek & Theorell (1990)  |

### **3.4.3 Job Resources Measures**

In this study, job resources are measured by three components namely, autonomy, social support and feedback performance. Autonomy is the extent of freedom, independence, and discretion of an employee to plan his/her work pace and method (Karasek. 1985). Social support is operationalized as overall levels of helpful social interaction available on the job from co-workers and supervisors (Karasek & Theorell, 1990). Items to measure autonomy and social support were adopted from Karasek (1985). Minor changes have been made to the social support items where the word supervisor was replaced by the word Dean to suit the context of study.

Feedback performance is operationalized as the extent to which an employee knows his / her own job performance from the job itself, colleagues, supervisors, or customers (Sims, Szilagyi & Keller, 1976). In this study, feedback performance is measured by 4 items developed by Sims, Szilagyi, and Keller (1976). Minor changes were also made to the adapted items by replacing the word supervisor with the word Dean to suit the context of the study.

In this study, participants rated their degree of agreement with the job resources statements based on five-point scale whereby, 1 = strongly disagree, and 5 = strongly agree. Table 3.6 shows the job resources items used in this study.

Table 3.6  
*Job resources items*

| Variable      | Dimensions           | Operational definition   | Items   | Authors                        |
|---------------|----------------------|--|---|--------------------------------|
| Job resources | Autonomy             | The extent of freedom, independence, and discretion of an employee to plan his/her work pace and method                        | 1. My job allows me to make a lot of decision on my job<br>2. On my job, I have very little freedom to decide how I do my work<br>3. I have a lot of influence about what happens on my job   | Karasek (1985)                 |
|               | Social support       | Overall levels of helpful social interaction available on the job from co-workers and supervisors                              | 4. My Dean is concerned about the welfare of those under them<br>5. My Dean pays attention to what I am saying<br>6. My Dean is helpful in getting the job done<br>7. My Dean is successful in getting people to work together<br>8. People I work with are competent in doing their jobs<br>9. People I work with take a personal interest in me<br>10. People I work with are friendly<br>11. When needed, my colleagues will help me | Karasek (1985)                 |
|               | Feedback performance | The extent to which an employee knows his / her own job performance from the job itself, colleagues, supervisors, or customers | 12. I receive enough information from my Dean about my job performance<br>13. I receive enough feedback from my Dean on how well I am doing<br>14. There is enough opportunity in my job to find out on how I am doing<br>15. I know how well I am performing on my job   | Sims, Szilagyi & Keller (1976) |

### **3.5 Layout of the Questionnaire**

All questionnaires were prepared in English. Each participant in this survey received six-page questionnaire (with cover letter attached). The questionnaire used in this study is shown in Appendix A.

The six-page questionnaire consisted of four sections. Section 1 asked about the work engagement and there are 17 items. Section 2 asked about job demands while Section 3 asked about job resources. Both sections consist of 15 items.

The final section of the questionnaire, Section 4, is the demographic variables. A number of demographic variables such as gender, age, highest academic qualifications, total of basic salary received, number of years with the present organization and position were also measured for descriptive and control purposes. This information is necessary to show that the sample is representative and to ensure that generalizations to the wider population of firms and employees can be made.

### **3.6 Pilot Test**

Pilot test is a small scale of initial research process study conducted to evaluate the practicality, cost, time, adverse, events and size of the statistical variability (Hulley, 2007). Pilot test is conducted as way to predict the suitable sample size and to improve

the design of the current study. Apart from that it was also conducted to seek the validity and reliability of the questionnaire as to ensure the quality of the survey.

For this study, the pilot test was conducted in the middle of May 2014, involving 30 academics from Universiti Malaysia Perlis and Universiti Teknologi MARA. There were no changes required to the questionnaire. The internal consistency reliabilities (Cronbach's Alpha) of the research measures from the pilot study are reported in Table 3.7. As shown in Table 3.7, all variables have reliability values ranging from .37 to .87.

Table 3.7  
*The Cronbach's Alpha for each research measures from the pilot study (n = 30)*

| Variable             | No. of items | Cronbach's Alpha |
|----------------------|--------------|------------------|
| Work engagement      | 17           | 0.85             |
| Workload             | 10           | 0.63             |
| Work pressure        | 5            | 0.74             |
| Autonomy             | 3            | 0.37             |
| Social support       | 8            | 0.84             |
| Feedback performance | 4            | 0.87             |

### **3.7 Data Collection Procedure**

The actual data collection began after the questionnaire has been pilot tested. The distribution of the questionnaire was done through two approaches. First, the questionnaire was emailed to the respective respondents. They were given a week to complete the questionnaire. However, only 81 questionnaires were returned through



email. Due to a low response rate, the researcher then distribute personally to the respective respondents at the three universities. Through this approach, the researcher managed to get another 100 questionnaires. At the end of the survey period, a total of 181 questionnaires were collected.

### **3.8 Technique of Data Analysis**

#### **3.8.1 Descriptive Analysis**

Descriptive analysis is conducted to provide quick summary of the demographic characteristics of respondents for this study. This process is crucial to ensure that the respondents obtain in this study represent all the demographic characteristic of the population. In this study, the demographic characteristics of respondent such as age, gender, academic qualifications, marital status, monthly salary, current position and length of services were described using frequency and percentage.

#### **3.8.2 Correlation Analysis**

Correlation analysis is used to describe the strength and direction of the linear relationship between two variables (Pallant, 2010). In this study, Pearson correlation was conducted to test the relationship between job demands, job resources and work engagement. Pearson correlation coefficients ( $r$ ) can take values from -1 to +1. The positive and negative sign indicates whether there is a positive correlation (when one variable increases, the other variable also increases) or a negative correlation (when one

variable increases, the other variable decreases). On the other hand, a correlation of 0 indicates no relationship between the two variables, while a perfect correlation of 1 or -1 indicates that the value of one variable can be determined exactly the value of the other variable.

### **3.8.3 Regression Analysis**

According to Sekaran and Bougie (2009), multiple regressions could provide information about the model as a whole and the relative contribution of each of the variables that make up the model. In this study, multiple regressions is conducted to determine the relative contribution of each of the variable (workload, work pressure, autonomy, social support and performance) that make up the model.

## **3.9 Conclusions**

This chapter has explained the research method and strategy for the study. It described how the sample of organizations was obtained, the selection of the respondents, development of the questionnaire, the research materials, and the survey procedure. This chapter also briefly explains the adoption of several analyses such as correlation and regression analysis to test the research hypotheses. The results of the study are reported in Chapter 4.

## **CHAPTER 4**

### **FINDINGS**

#### **4.1 Introduction**

Chapter 4 reports results of the study and these include a report on response rate and the demographic characteristics of the participants. Next, data screening process and results of correlation analysis were reported. The chapter concludes with discussions on regression analysis.

#### **4.2 Response Rate**

A total of 380 questionnaires were distributed between May and October 2014. A week was given to each respondent to complete the questionnaire. At the end of one week, 181 questionnaires were returned, giving a return rate of 47.63%”. However, only data from 176 participants are usable for further analysis. Table 4.1 shows the distribution of returned survey.

Table 4.1  
*Respondents' response rate*

| University                         | Total survey distributed | Total survey received |
|------------------------------------|--------------------------|-----------------------|
| Universiti Utara Malaysia          | 211                      | 90                    |
| Universiti Malaysia Perlis         | 110                      | 58                    |
| Universiti Teknologi MARA (Perlis) | 59                       | 33                    |
| <b>Total</b>                       | <b>380</b>               | <b>181</b>            |

### 4.3 Demographic Characteristics of the Participants

Table 4.2 presents the detailed descriptive statistics of the participants' demographic characteristics. It is noted that 62.5% of the 176 participants in this survey were females. On average, the respondents were 41 years old. Out of 176 participants, 60.8% were married. With regards to highest academic qualification, majority of the respondents (75.6%) were holding a master degree. Majority of the participants (77.4%) received a salary above RM4000. Out of 176 participants, 56.8% had been with the university more than 7 years. Majority of the participants (55.7%) were lecturer and 42.6 % had been with the current position for more than 7 years. Lastly, most of the participants (48.3%) are from Universiti Utara Malaysia (UUM).

Table 4.2  
*Demographic characteristics of the participants (n=176)*

| <b>Descriptive</b>                             | <b>Frequencies</b> | <b>(%)</b> | <b>Mean</b> | <b>Std. Deviation</b> | <b>Median</b> | <b>Min.</b> | <b>Max.</b> |
|--|--------------------|------------|-------------|-----------------------|---------------|-------------|-------------|
| <b>Gender</b>                                  |                    |            |             |                       |               |             |             |
| Male   | 66                 | 37.5       |             |                       |               |             |             |
| Female   | 110                | 62.5       |             |                       |               |             |             |
| <b>Age</b>                                     |                    |            |             |                       |               |             |             |
| Total  | 176                | 100.0      | 41.20       | 9.17                  | 42.00         | 25          | 56          |
| <b>Marital Status</b>                          |                    |            |             |                       |               |             |             |
| Single   | 61                 | 34.7       |             |                       |               |             |             |
| Married  | 107                | 60.8       |             |                       |               |             |             |
| Divorce/<br>Separated                          | 8                  | 4.5        |             |                       |               |             |             |
| <b>Qualification</b>                           |                    |            |             |                       |               |             |             |
| Master   | 133                | 75.6       |             |                       |               |             |             |
| Doctoral                                       | 43                 | 24.4       |             |                       |               |             |             |
| <b>Salary</b>                                  |                    |            |             |                       |               |             |             |
| Below RM2,000                                  | 0                  | 0          |             |                       |               |             |             |
| RM2001- RM<br>3000                             | 7                  | 4.0        |             |                       |               |             |             |
| RM3001 –<br>RM4000                             | 33                 | 18.8       |             |                       |               |             |             |
| Above RM4000                                   | 136                | 77.3       |             |                       |               |             |             |
| <b>Years With<br/>Current<br/>Organization</b> |                    |            |             |                       |               |             |             |
| Less than a year                               | 5                  | 2.8        |             |                       |               |             |             |
| 1-3 Years                                      | 39                 | 22.2       |             |                       |               |             |             |
| 4-7 Years                                      | 32                 | 18.2       |             |                       |               |             |             |

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|                                    |     |      |
|------------------------------------|-----|------|
| More than 7 Years                  | 100 | 56.8 |
| <b>Current Position</b>            |     |      |
| Professor                          | 1   | 0.6  |
| Associate Professor                | 24  | 13.6 |
| Senior Lecturer                    | 53  | 30.1 |
| Lecturer                           | 98  | 55.7 |
| <b>Years with current position</b> |     |      |
| Less than a year                   | 5   | 2.8  |
| 1-3 Years                          | 53  | 30.1 |
| 4-7 Years                          | 43  | 24.4 |
| More than 7 Years                  | 75  | 42.6 |
| <b>University</b>                  |     |      |
| UUM                                | 85  | 48.3 |
| UniMAP                             | 58  | 33.0 |
| UiTM Perlis                        | 33  | 18.8 |

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#### **4.4 Data Screening**

Before conducting the primary analyses, the data were examined for data entry accuracy, outliers, and distributional properties. This is important so that the data are reliable, useful and valid for further analysis. In this study, data screening was conducted by examining basic descriptive statistics and frequency distributions to identify missing data, outliers, normality, linearity and homoscedasticity.

Descriptive data results showed that there was no missing data found from the 176 returned questionnaires. Ten cases were found to be outlier (12, 43, 61, 67, 105, 107, 124, 161, 171 and 175). However, all the cases were retained as the mean values of these cases were similar, and the values were not too different to the remaining distribution.

Normality test is conducted using histograms, skewness and kurtosis. The data appeared to have a normal distribution as the results show none of the variables had skewness greater than .45 or a kurtosis index greater than .56. Besides, all histograms used to check for normality showed that the scores have reasonably normally distributed, implying that data was approximated for all variables at a normal curve.

Lastly, the scatter plot diagrams indicates no evidence of nonlinear patterns for all variables tested in this study and a visual inspection of the distribution of residuals suggested an absence of heteroscedasticity for the variables.

#### **4.5 Reliability Test**

Reliability test is conducted to verify the consistency and accuracy of the questionnaire. The Cronbach's Alpha is used to measure the consistency and reliability of the instruments. In order to obtain high reliability values, some of the items are deleted as suggested by the analysis. Table 4.3 summarized the deleted items.

Table 4.3

*Deleted items after reliability analysis*

| Variables            | Deleted Items | Total num. of deleted items |
|----------------------|---------------|-----------------------------|
| Work engagement      | None          | 0                           |
| Workload             | None          | 0                           |
| Work pressure        | Question 4    | 1                           |
| Autonomy             | Question 1    | 1                           |
| Social support       | Question 5    | 1                           |
| Performance feedback | None          | 0                           |

Table 4.4 presents the internal consistency reliabilities (Cronbach's Alpha) of the research measures after some items are deleted. As shown in Table 4.4, the Cronbach's alpha for the overall job demands is .66 and the two components of job demands (workload and work pressure) have satisfactory reliability values ranging from .56 to .70. It is also noted that Cronbach's alpha for overall job resources is .89. For the three components job resources (autonomy, social support and performance feedback) the Cronbach's alpha has satisfactory reliability values ranging from .61 to .83.



Table 4.4  
*Reliability results after items deleted*

| Num. of Items | Variables               | Cronbach's Alpha |
|---------------|-------------------------|------------------|
| 17            | Work engagement         | .83              |
| 14            | Job demands (Overall)   | .66              |
| 10            | Workload                | .56              |
| 5             | Work pressure           | .70              |
| 13            | Job resources (Overall) | .89              |
| 3             | Autonomy                | .61              |
| 8             | Social support          | .82              |
| 4             | Performance feedback    | .83              |

#### 4.6 Correlations Analysis

Table 4.5 presents the means, standard deviations, and Pearson correlations of variables for the 176 participants who participated in the study. Overall, the job demands were positively related to work engagement ( $r = .43$ ,  $p < .05$ ). There were also significant positive relationships between two of the job demands component (workload and work pressure) and work engagement, with correlation coefficients of .30 and .43. These results imply that the higher the workload and work pressure, the higher the participants engaged with their work.

In terms of job resources, overall there were a significant positive relationship with work engagement ( $r = .31$ ,  $p < .05$ ). Table 4.5 also revealed significant positive relationship

between all the job resources component (autonomy, social support and performance feedback) and work engagement, with correlation coefficients between .20 and .32. These results imply that the more the participants received autonomy, social support and performance feedback, the more they engaged with their work.

Table 4.5  
*Descriptive statistics and correlations of variables*

| Variables                  | N   | Mean | Std Dev | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8 |
|----------------------------|-----|------|---------|-------|-------|-------|-------|-------|-------|-------|---|
| 1. Job demands - overall   | 176 | 3.53 | 0.36    |       |       |       |       |       |       |       |   |
| 2. Workload                | 176 | 3.50 | 0.37    | 0.89* |       |       |       |       |       |       |   |
| 3. Work pressure           | 176 | 3.61 | 0.58    | 0.69* | 0.28* |       |       |       |       |       |   |
| 4. Job resources - overall | 176 | 3.36 | 0.56    | 0.45* | 0.37* | 0.35* |       |       |       |       |   |
| 5. Autonomy                | 176 | 3.63 | 0.64    | 0.30* | 0.15* | 0.39* | 0.57* |       |       |       |   |
| 6. Social support          | 176 | 3.36 | 0.59    | 0.43* | 0.28* | 0.28* | 0.95* | 0.40* |       |       |   |
| 7. Performance feedback    | 176 | 3.24 | 0.71    | 0.38* | 0.31* | 0.31* | 0.92* | 0.42* | 0.80* |       |   |
| 8. Work engagement         | 176 | 3.82 | 0.36    | 0.43* | 0.30* | 0.43* | 0.31* | 0.20* | 0.32* | 0.25* |   |

Note: \*Correlation is significant at the 0.05 level (2-tailed); \*\*Correlation is significant at the 0.01 level (2-tailed)

#### **4.7 Multiple Regression Analysis**

To test hypotheses 1a, 1b, 2a, 2b and 2c, regression analysis was conducted. Results in Table 4.6 showed that 25% ( $R^2 = 0.25$ ,  $F = 11.11$   $p < .01$ ) of the variance in work engagement was significantly explained by workload, work pressure, autonomy, social support and performance feedback. In the model, only social support ( $\beta = .25$ ,  $p < .05$ ) was found to be the most significant predictor of work engagement. Therefore, hypothesis H2b was supported. The results demonstrate that academic tend be more engaged with their work when they received social support.

The results also revealed that work pressure also contribute to work engagement but in the opposite direction. It has been hypothesized work pressure would negatively related to work engagement among the academics, but the variable has been significantly positively related to work engagement.

Table 4.6

*Regression results of workload, work pressure, autonomy, social support and performance feedback on work engagement*

|                                  | <b>Dependent<br/>variable (work<br/>engagement)<br/>(Standardized<br/>Beta)</b> | <b>Significant (<i>p</i>)</b> | <b>Tolerance</b> | <b>VIF</b> |
|----------------------------------|---|-------------------------------|------------------|------------|
| <b>Independent<br/>variables</b> |   |                               |                  |            |
| Workload                         | .13   | .09                           | .81              | 1.24       |
| Work pressure                    | .37   | .000**                        | .78              | 1.28       |
| Autonomy                         | -.03  | .75                           | .74              | 1.36       |
| Social support                   | .25   | .03*                          | .33              | 3.06       |
| Performance<br>feedback          | -.09  | .41                           | .34              | 2.93       |
| F value                          |   | 11.11                         |                  |            |
| R <sup>2</sup>                   |   | 0.25                          |                  |            |
| Adjusted R <sup>2</sup>          |   | .22                           |                  |            |
| Durbin Watson                    |   | 1.86                          |                  |            |

*Note.* \**p* <0.05, \*\**p* <0.01

In conclusion, the analysis techniques used in this study such as multiple regressions has able to answer the research objectives and test the proposed hypotheses. Table 4.6 presents the summary of the hypotheses testing.

Table 4.7  
*Summary of hypotheses testing*

| <b>Hypotheses</b> | <b>Statement</b>  | <b>Findings</b> |
|-------------------|---|-----------------|
| <b>H1a</b>        | Work load is negatively related to work engagement            | Not Supported   |
| <b>H1b</b>        | Work pressure is negatively related to work engagement        | Not Supported   |
| <b>H2a</b>        | Autonomy is positively related to work engagement             | Not supported   |
| <b>H2b</b>        | Social support is positively related to work engagement       | Supported       |
| <b>H2c</b>        | Feedback performance is positively related to work engagement | Not Supported   |

## 4.8 Conclusions

This chapter described the demographic characteristics of the 176 participants and the results of correlation and regression analyses. The results indicate that only social support is significantly positively related to work engagement. The research implications, limitations and direction for future research are discussed in the next chapter, Chapter 5.

## **CHAPTER 5**

### **DISCUSSIONS, RECOMMENDATIONS AND CONCLUSIONS**

#### **5.1 Introduction**

In this chapter, findings of the study are discussed in light of the literature reviewed on intention to stay and the hypotheses developed in Chapter 2. The findings, as presented in Chapter 4, are discussed in the sections below. The discussion that follows is organized around the hypotheses presented in Chapter 2.

#### **5.2 Summary of Research**

The study was conducted with the aim to investigate the relationship between job demands, job resources and work engagement. Multiple regressions analysis were conducted to test hypotheses 1a, 1b, 2a, 2b, and 2c which is to test the direct relationship between the two components of job demands namely workload and work pressure, and three components of job resources namely, autonomy, social support and performance feedback. The findings revealed that only social support was positively related to work engagement. Even though the study hypothesized that work pressure is negatively related to work engagement, the findings show the opposite. In this study, work pressure was found significantly positively related to work engagement.

### **5.3 Relationship between Job Demands and Work Engagement**

In this study, both workload and work pressure were proposed to negatively related to work engagement. However, the current findings indicate that work pressure was significantly positively related to work engagement. These results support studies conducted by Schaufeli, Taris and Van Rhenen (2008) and Bakker, Van Emmerik and Euwema (2006).

Though in many instances exposing individuals to high work pressure will lead to feelings of exhaustion, and negative attitude (cynicism) and this might have negative impact on the employee work engagement, the current findings empirically showed that work pressure can also acted as a positive motivator to engaged with work. As argued by Steenland, Johnson, and Nowlin (1997), job demand can be considered as a good or a bad job stressor. Though it has been suggested that job demands may become stressors in situations that require high effort to sustain an expected performance level, and this might elicit negative responses such as burnout, it also can provide challenges in work.

### **5.4 Relationship between Job Resources and Work Engagement**

In this study, job resources were measured by autonomy, social support and performance feedback. The current findings indicate that only social support provided by the university's management tends to make the academics more engaged. These research findings were in line with previous studies conducted by Bakker, Hakanen, Demerouti and Xanthopoulou (2007), Hakanen, Bakker and Schaufeli (2006), Chung and Angeline



(2010) and Taipale, Selander, Anttila, and Natti (2011). One possible explanation for these results is that the social support, either physical or emotional, received by the academics from their university's management and colleagues may motivate them to be more engaged in their work. The support given might give positive perception to the academics on the kind of effort taken by the university's management in relation to academics' well being and personal growth and thus, make them more engage with the work.

## **5.5 Implications for Practice**

The current research findings have several implications for management of the universities. The study demonstrates that social support provided by the university was one of the factors that had a positive impact in enhancing academics' work engagement. Therefore, management of the universities need to continually support their academics especially one that related to teaching and learning if they would like to have highly engaged academics. The university's management can also continue giving support in terms of providing the academics with teaching and learning facilities, allowing the academics to attend training, conferences and seminars for professional development as a way to have more engaged academics.

Interestingly, the current findings also indicate that the academics tend to be more engaged when they are pressured with work. Therefore, the university's management need to ensure that their academics are constantly been given task that need to be completed within a limited time frame.

## **5.6 Limitations and Direction for Future Study**

There are limitations in the design of this study that might influence the interpretations and generalizations of the findings. These issues are discussed next.

The study was aimed at understanding the influence of job demand and job resources on academics' work engagement, but the study was conducted on selected public universities only. The present study does not include academicians from private universities and colleges. Thus, the findings only captured perceptions of academics from public universities regarding factors that might influence their work engagement. Therefore, there is a need for future research to extend the exploration of the influence of job demand and job resources on the academics from other types of higher education institutions which might offers greater understanding on the issues of work engagement. Private universities and colleges might have different kind of job demands and job resources that can lead to different findings.

The second limitation is related to kind of variables tested where only job demands (workload and work pressure), and job resources (autonomy, social support and performance feedback were taken for this study. Other factors that beyond the scope of this study such as leadership style, organizational culture, personal resources and personality trait was not included in this study. This provides another direction for future research.

In short, though there are limitations associated with the approach used here, the results of this study provide useful findings for both researchers and practitioners.

## **5.7 Conclusions**

The main aim of this study is to investigate the role of job demands such as workload and work pressure and job resources such as autonomy, social support and performance feedback on work engagement. Though the study hypothesized that both workload and work pressure were negatively related to work engagement, the current findings indicate that work pressure was positively related to work engagement. When autonomy, social support and performance feedback were tested against work engagement, only social support was found positively related to work engagement.

It is hoped that through the examination of job demands such as workload and work pressure, job resources like autonomy, social support, and performance feedback in predicting work engagement among the academics, a more complete understanding of the influence of these factors will be achieved.

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