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**THE RELATIONSHIP BETWEEN JOB DEMANDS, JOB
RESOURCES AND WORK ENGAGEMENT AMONG
ADMINISTRATIVE STAFFS IN PUBLIC UNIVERSITY.**



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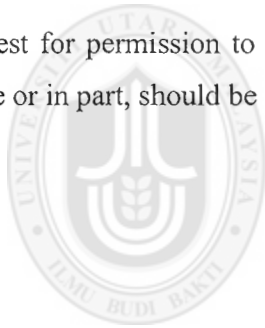
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ABSTRACT

Work engagement become very crucial in today's organization. There are quite number of organizations which are strive and implement work engagement in their workplace environment. Hence this study investigates the relationship between Job Demands (workload, work pressure), Job Resources (autonomy and supervisor support) and work engagement. A total of 200 questionnaires was personally distributed to respondents from 9 faculties of administrative staffs in Universiti Pendidikan Sultan Idris (UPSI) which in charge of students. Out of 200 questionnaires distributed, only 178 were returned, representing a response rate of 89.5%. Hypotheses for the relationship were tested using multiple regression analyses. Results showed that work pressure, autonomy and supervisor support was significantly positive related to work engagement. Implications of the findings, potential limitations, and directions for future research are discussed.

Keywords: Work Engagement, Workload, Work Pressure, Autonomy, Supervisor Support



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ABSTRAK

Keterlibatan kerja menjadi sangat penting dalam organisasi pada masa kini. Terdapat sebilangan besar organisasi yang berusaha dan melaksanakan keterlibatan bekerja dalam persekitaran tempat kerja mereka. Oleh itu kajian ini adalah untuk mengkaji hubungan antara Permintaan Kerja (bebanan kerja, tekanan kerja), Sumber Kerja (autonomi, sokongan penyelia) dan Keterlibatan kerja. Sebanyak 200 set soal selidik telah diedarkan secara peribadi kepada responden yang terdiri daripada staf pentadbiran dari 9 fakulti di Universiti Pendidikan Sultan Idris (UPSI) yang menguruskan para pelajar. Daripada 200 set soal selidik yang diedarkan, hanya 178 set sahaja yang dikembalikan. Hipotesis terhadap hubungan yang dikaji menggunakan analisis korelasi berganda. Keputusan menunjukkan tekanan kerja, autonomi dan sokongan penyelia adalah positif dengan keterlibatan kerja. Implikasi dapatan kajian, limitasi kajian, dan cadangan bagi kajian susulan dibincangkan dalam kajian ini.

Kata kunci: Keterlibatan Kerja, Bebanan Kerja, Tekanan Kerja, Autonomi, Sokongan Penyelia



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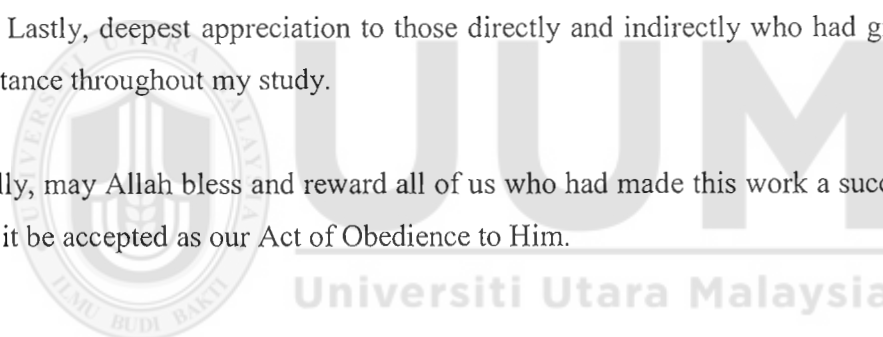


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CHAPTER 1

INTRODUCTION

1.0 Introduction of the study

In view of today's competing and dynamic climate of work demands, various organizations are facing with greater challenges in attracting and retaining talented employees, which are critical in determining an organization's performance and sustainable competitive advantage. Besides, it is also equally important for an organization to prepare an avenue that allows employees to unleash their full potential and be engaged in their work. (Ng, 2015).

Quite a number of researches in organizational behaviour have explained that enhancing human potential is very important in improving organizational performance (e.g. Luthans & Youssef, 2007; Bakker & Schaufeli, 2008). The increased attention on positive organizational behaviour, such as work engagement inspires scholars to continuously emphasize on theory building and perform relevant research in relation to this area.

1.1 Background of the study

The concept of work engagement becomes a fundamental area of concern among the leader and manager not only incorporate context but also in academic context. According to De Braine and Roodt (2011) dedicated employees normally are enthusiastic, full of inspiration and have a clear identification towards their work. This group of employees usually being highly engaged in their job tasks.

Work engagement becomes a key element which has been used to measure the company's vigour and direction towards superior performance. According to Narjis (2011) senior executive at multinational company manufacturing located at Kulim Hi Tech Park believe that investing in the engagement of their workforce to support the company business strategic and organizational objective can create a workforce that perform above and beyond their competitor's workforce. This believes has given much attention to the construct of the work engagement. Work engagement not only become a main focus to business entrepreneurs but it also grab an attention from academic researchers. Work engagement becomes a great concern of creating expectation for employee to be attached with their superiors, co-workers and the organization that they service (Mokaya & Kipyegon, 2014).

Joyner (2015) indicates employees who working in high engagement workplace will receive a clear expectation together with necessary support in order to achieve organizational goals'. In the other hand, it is also will help to identify the importance of work engagement and strive for effective person-job fit. Engage employees not only recognition rich but they also provide ample access to develop career growth and opportunities. Other than that, engage employee also has been given chances to "having a voice" or influence, set a meaningful of direction between daily tasks, strong two way communication flow and feedback and larger mission to achieve organizational goal.

All over the world has been acknowledging the importance of engagement in the workplace. It has been prove that organization performance fully depend on the loyalty of its employees. In fact, since today's modern business face with the

technological advancement and competition, engagement can be considered as a key factor that determines organizations' success. Nowadays organizations not only need to recruit and retain talented people, but they also need to ensure their talented workforces are physically and emotionally attach with their works. (Bakker & Leiter, 2010) Thus, for sustaining a competitive advantage, engaged employee can be considered as a cornerstone. (Macey et al., 2011).

According to Joyner (2015) the number of organizations to strive and implement high engagement workplace strategies and initiatives has been grown as the importance of creating high engagement workplaces environment becomes increasingly well quantified. Engagement not only can be characterized by positive interaction in the workplace, but it also can be identified by energy and involvement. (Tillott, Walsh & Moxham; 2013) The external environment creating a challenging set of workplace dynamics due to the interplay between the increasing of complexity and competitiveness of globalization, technology advancement, constraints of resources, climate concerns and a host of other issue which affecting workplace engagement.

Psychological construct of work engagement has been found to be different from organizational commitment, job involvement and job satisfaction. (Schaufeli, Leiter & Maslach, 2009) For example, engagement is focusing on the work itself while organizational commitment is focusing of the employee's loyalty towards the organization. (Storm & Rothmann, 2003) However work engagement is closely related to the term 'flow' that represents a state of optimal experience which can be characterized by a clear mind and body unison, complete control, distortion of time

and intrinsic enjoyment, effortless of attention and focused of concentration.
(Csikszentmihayli, 1990)

The phenomenon of work engagement has generated a great deal of attention in the management circle around the world which also affects Malaysia. The concept is gaining increasing significance among managers to ensure the productivity of their employees. However, this concept not only applies in corporate circles but also in academic. Based on Jose and Mampilly (2012), indicate that the concept of engage employee known as individual who is optimistic, give high effort on his job task, enthusiastic and willing to go an extra mile of contribution to sustain organizational success for a long term basis. These people play an important role to drive the organizational performance and competitive advantage. In the other hand, engagement become a core of organizational success and become a major concern for management around the world as it is a key element which causes an impact of organizational effectiveness, competitiveness and innovation. (Welch, 2011; Smith 2009)

According to Narjis (2011), for the benefit of the organization, an engaged employee is particular of business context and work with their counterparts to improve their job performance. In contrast, disengage employee actively less personal satisfaction, loyalty and be more stress compared to their colleague. Disengaged workers tends to have higher absenteeism, produce poorer quality output, drive customer away, and have negative influence on their colleagues (Gallup 2013). Obviously, organizations' performance suffers as a result of disengaged workers.

Ng (2015) indicates that it is not always true that employees who are encountered with long working hours and other demanding requirements in the job would experience burnout. In contrast, certain employees view that dealing with different job demands and working hard are something pleasurable or enjoyable (Nelson & Simmons, 2003; Bakker, 2009).

1.2 Problem statement

According to 2014 Trends in Global Employee Engagement Report, Engagement Data, Aon Hewitt Database, Global employee engagement increased slightly from 2012 to 2013, overall is 61% which involved Asia Pacific increased 3%. Except for continued low engagement levels in Japan which shows 34% of engagement level, there is an improvement in employee engagement which has been showed in Asia Pacific major markets. In order to see more aspects to improve, these results can break down further. The distribution of further examination of employees reveals that they can be categorized into several of engagement profiles. Referring the 61% of engage population, this report indicate that 22% are highly engaged and 39% are moderately engaged. Both engagement categories are valuable, however the worth ascending greater value to organizations are highly engaged employees.

Across the globe, the result showed that it has changes in the engagement divisions at the extreme ends from actively disengaged to highly engage and the other way round. Employee engagement across the global in all increasing regions show that in most cases, moderately engage actually decrease. From 2012 to 2013, the percentage of inactive employee endures relatively static. Asia Pacific engagement overall is up to 3 points with a 5 point uptick. It distributions show up to be the most influential.

From 2009- 2011, since the more serve economically directed engagement dynamics, the general pattern hold true but to a lesser degree. The slowing engagement growth in subsequent years was followed by the slowing growth of GDP. In 2010, the GDP growth was slowed from 4 percentage point's year over year (YoY) to 2 percentage points in 2012. However in 2011, engagement growth has also slowed from 2 percentage to just 1 percentage point growth in the most recent 2013 engagement levels.

The presented data was gathered from employees of the organizations which are volunteering in participating in Quantum Workplace's Best Places to Work survey. In term of employee engagement, these groups of organizations believe that they are the best. This set of data display a higher level of engagement compared to the average organization that we might see because the low engagement of organizations are unlikely to anticipate in this survey.

Top management need to hold and straighten out the core fundamental of engagement even though it made up many features. As the need to accomplish the challenging results not only in today's challenging atmosphere but also shifting workforce demographic, the growth of high engagement workplaces has arisen as a strategic response.

Organization has to arouse authentically concerned towards employees. Employees not only want to be involved in their job task and devoted to their colleagues, but they are also wants to feel passionate about the institution that they work. According

to Sukanlaya (2011), companies progressively observe the need to engage their employees in order to endure in a world of accelerated economic change and globalization. The above issues not only concern the corporate sector, but also the higher education institutions (HEIs), particularly the universities. No doubt, human resources would be a crucial factor to enable the universities to produce competent graduates and enhance the institutions' position internationally (Ng, 2015).

Therefore, it is important in considering the particular work- life viewpoint of administrative personnel in educational organizations because it consistently has been shown to be related to functional individual well-being related outcomes (Albrecht, 2012).

Through the researcher observation's as Assistant Registrar (AR) from 2014-2015 and interview 5 AR from other faculties, there have some symptom which can be related with employee disengagement. These symptoms also have been admitted by other AR from their department. The symptoms which can be related to employee disengagements listed as below:

I. There are lacks of learning process

Employees don't ask opportunity to learn different job, improve their skill in current job or prepare themselves for future position. They always give negative comments towards their job and often feel stress which makes them feel uncomfortable at workplace

II. Quality of work not achieve the standard set by department

Bad performer normally correlates with a scarcity of employee engagement. They are normally will produce low quality of work outcome. They always complaint and nothing is ever good for them. In the other hand, they are always missing the deadline or break their promises.

III. Trend of negative behaviour

There are few negative behaviour which reflect of disengage such as frequently absent, ineffective collaboration and lack of clarity on responsibilities. Constant absenteeism is typically associated with a lack of happiness, engagement or empowerment on the count of an employee. Normally they might choose not to show up to work if they aren't feeling engaged. In the other hand disengagement also cause of ineffective collaboration. Disengage employee feel difficult to work with others. This situation will drive them to unwilling having an initiative to contribute any idea in order to improve organization performance. They are also lack of clarity on responsibilities. In the other hand, they are also having trouble to take things into their own hand. Disengage employee normally will lose clarity and always be a recurring scenario. When new tasks come out, they always feel least excited. They never take responsibility for their action. Other than that they also always find for excuses.

From my point of view, in UPSI context workload and work stress become the indicators of these symptoms. While there is high workload and work pressure, they cannot allocate their time to undergo the training. This is the reason the administrative staffs in UPSI lack of learning process. Quality of work not achieve

the standard set by department become one of the reason administrative staffs disengage due to the high workload and high work pressure. When the administrative staffs face the work stress and at the same time there is a high workload that they need to complete with the stipulate time, quality of work that they produce normally will not meet the standard which has been set by department. In the other hand, UPSI also face the trend of negative behavior due to high workload and work pressure. When administrative staffs face with this situation, they will react with negative behavior to reflect their disengagement with work.

Agarwal (2014) indicates that work engagement grabs the concentration of business practitioners, academic researchers and governments. Even though studies on work engagement are substantial, most of the studies were focusing on corporate and public sector (Robertson & Cooper, 2010; Taipale, Selander, Anttila & Na`tti, 2011; Saks & Gruman, 2011; Brad, Tonette & Carlos, 2010; Dikkers, Jansen, De Lange, Vinkenburg, & Kooij, 2010; Karatepe, 2011; Hu, Schaufeli & Taris, 2013; Maha & Saoud, 2014; Anaza & Rutherford, 2012), manufacturing sector ((Ling, Norsiah & Mohammed, 2013), educational sector (Nurul et., al 2015; Manish, Anitha & Ritu, 2015), banking sector (Imas & Dhini, 2013; Piyali, Alka & Apsa, 2014).

However, not much attention has been given on this of work engagement among non-academic staffs in universities. If there were studies conducted in the educational sector, there were more focus on the teachers and lecturers (Adel, 2015; Lauring & Selmer, 2015; Timms & Brough, 2013; Manish, Anitha & Ritu, 2015). For example Lauring and Selmer (2015) studied about job engagement among expatriate academics in Singapore and how they were related with work outcomes such as physical engagement and emotional. In the other hand, Manish, Anitha and

Ritu (2015) studied how job resources influence work engagement among India academia and the effect of work engagement towards the interaction among job resources and perceived autonomy effect performance in service delivery.

In the past, studies on job demands, job resources and work engagement have shown a mix result when tested in various settings. While majority of studies have shown significant relationships and influence of job demands and job resources on work engagement (Cheng, Chang, Kuo and Cheung, 2014; Mark, 2010; Maha & Saoud, 2014; Ng & Tay, 2010; Qiao, Wilmar & Taris, 2013; Karatepe, 2011; Dikkers, Jansen, De Lange, Vinkenbunrg & Kooij, 2010; Taipale, Selander, Anttila & Natti, 2011; Narjis, 2011), there were few other studies have shown no effect between job demands and job resources towards work engagement (Saks & Gruman, 2010; Bakker, Demerouti & Schaufeli, 2003).

Since it is considered by supporting individual adherence and contentment, the emerging of relationship between individual and organization can be redefined. Thus, current study sought to extend the body of research on work engagement by investigating issues of work engagement among administrative staff in educational organization (Schohat and Vigoda-Gadot, 2010).

In order to prioritize and execute engagement building interferences focusing work performance and organizational outcomes, the understanding of theoretical and practical concept of engagement among administrative personnel in educational institution is needed. However the group setting of administrative staffs in education

sector was less attention. There is also less empirical study focusing administrative staffs in higher educational level.

As work engagement become a vital element effecting organizational effectiveness, this study will explore how work engagement will effect employee perception and attitudes. By using JD-R model, researcher will explain how job demand and job resources play a vital role in the development of engagement. The JD-R model produce work related outcome through two separate processes. This processes involving health impairment and motivational process. This model posits job characteristic which define in terms of job demands and resources. Up to this point, the JD-R model has been excessively explained a dimension of results such as employees' health and well-being, their demeanour and behaviour towards the task and amongst others. Therefore, the JD-R model may also be an important model to anticipate the organizations' productivity.

In conclusion, this study will stress on the relationship between job demands (workload and work pressure), job resources (supervisor support, autonomy) and work engagement.

1.3 Research questions

The purpose of this study is to find the relationship of independent variables which are job resources (organizational support, task autonomy) and job demand (work pressure, high workload, role ambiguity) with the dependent variable of work engagement (vigor, dedication and absorption). The questions that arise here are:

- I. Does job demand affect work engagement?
- II. Does a job resource affect work engagement?

1.4 Research objectives

The main objective of this study is to examine which among the independent variables contributing to work engagement among the administrative staff in University Pendidikan Sultan Idris (UPSI). Specifically the objectives of the study are listed as below:-

1. To examine the relationship between job demand and work engagement
2. To investigate the relationship between job resource and work engagement

1.5 Significance of the study

The objective of this paper is to contribute the engagement of managerial staffs within educational organizations. Since there is rarely studied, through their constantly performance has a critical impact on the quality of the whole organization performance.

The definition of work engagement understandable as a function of job and personal resources as most of the empirical studies done on its antecedents have revolved around the job demands-resources model. Concerning a theoretical context, by increasing knowledge of the promoting in health potential, work engagement has to extend the area of positive psychology. This can be done through job resources such as perceiving organizational support. Researcher hopes that potential finding from this study may contribute to the current body of knowledge on work engagement. A literature search reveals limited empirical studies of the issues of work engagement among administrative staffs in educational institution. Most of the studies were focusing on staffs in manufacturing industry (Najis, 2011; Rosmawati, 2011; Nurnajmi 2015), academic staffs in public university (Ng, 2015; Adel, 2015; Nur

Hafizah, 2015), accountants in accounts firm (Syahir, 2014), hospital staff in health industry (Badariah, 2013; Adiwayu, 2012), staffs in security industry (Aini, 2014; Shah Rizan, 2015).

From the practical field, work engagement can be enhance through many ways such as policies which focuses on the particular demands and encouragement of each person for example, Equal Employment Opportunity and Workplace Behaviour Policy. Through this policy, collaboration on business development and individual objectives may be done by employer. On the other hand, regularly gather the input from the workers especially on crucial initiatives which influence their role and work surroundings may enhance their work engagement may enhance their work engagement. Other than that, work engagement also can boost by activities which can make these employees feel that the institution is genuinely interested in them in order to bring full of enthusiasm and passion to their task.

Thus the finding of this study may provide an effective contribution to the universities' management especially in enhancing work engagement among administrative staffs. This study will provide empirical evidence on the role of job demands, job resources and work engagement. Since work engagement has become significant for organizations and practitioners because of its interconnection with performance and other positive indicators, this study may help university's management to identify and focus on the most critical factors in job demands (workload and work pressure) and job resources (autonomy and supervisory support) in achieving more engagement among administrative staffs in educational institution.

This is the broader contribution that extends beyond the academic context in Malaysia.

1.6 Scope of the study

UPSI is a Public Institution of Higher Education (IPTA) which creates a fruitful history of our nation's education. This institution expands from a status of collage until it becomes well-known educational university.

There are three critical time frames of UPSI expansion which are Sultan Idris Training College (SITC), InstitutPerguruan Sultan Idris (IPSI) and Universiti Pendidikan Sultan Idris (UPSI). In order to show appreciation towards Ahmarhum Sultan Idris Shah Contributions in the educational field, His Highness of name was the immortalized of this college.

The beginning of an era which had effect the thought and educational spheres among Malays can be seen at the beginning of the establishment of SITC. SITC developed rapidly. The number of well trained teachers has been increased over the year. In 1957 SITC changed its name to Maktab Perguruan Sultan Idris (MPSI). On 21st February 1987, the MPSI era was ended after its status as a collage has been upgraded to the institution which knows as Institut Perguruan Sultan Idris (UPSI). On 2nd May 1997, after the ten years into its existence, IPSI was officially upgraded into a university and known as Universiti Pendidikan Sultan Idris (UPSI). The total of first batch students UPSI was 350.

The main focus of this study is to investigate factors that might influence work engagement among administrative staffs at Universiti Pendidikan Sultan Idris (UPSI). The reason researcher chooses administrative staffs because this group of people is a backbone for the university. Specifically, the study aims to identify whether factor like job demands (workload and work pressure) and job resources (autonomy and supervisory support) have a direct relationship with work engagement.

For this study, which was cross- sectional, data were collected from nine faculties in UPSI which involving 251 administrative staffs.

1.7 Definition of Key Terms

Work engagement: Work engagement can be refer an individual psychological, emotional and behavioral state directed towards institutional result. (Shuck &Wollard, 2010).

Job demands: Job demands can be defined as job that need to maintain physical either separately with psychology or along with it has involved emotional demanding interactions or huge work stress which including physical, psychological social or organizational aspects. (Bakker & Demerouti, 2007).

Job resources: Job resources are referring to physical, social or organizational aspects of the job that are working in accomplish work related objective, reduce demand and the related cost and stimulate personal growth and development. (Bakker & Demerouti, 2007).

Workload: Workload is defined as the amount of work and responsibilities to be completed within the stipulated time. (Khuwaja, Qureshi, Andrades, Fatmi & Khuwaja, 2004).

Work pressure: Work pressure referring to job that required sustained physical separately or along with psychological which involving the aspects of physical, psychological, social or organization (Sulea et.,al 2012).

1.8 Organization of the study

This study comprises of five major chapters that will be deliberated widely. The first chapter covers the whole intention of doing this study such as problem statement, research questions, research objectives, significance as well as scope and limitations of the this study. Subsequently, Chapter 2 highlights the review of related literatures, discussion of previous literature for variables studied, and literature associated in supporting conceptual framework for this study. Meanwhile Chapter 3 underlines the methods and procedures that are applied in this research for collecting and analyzing the data. Then, Chapter 4 will discuss the matter of data analyzing and defining research findings of study. Lastly, the final chapter will illustrate the discussions, findings limitations, conclusions, and recommendations for further research in this subject area.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter reviews the related literature on work engagement, job resources and job demands as a fundamental of theoretical framework which needs to be tested in this research.

2.1 Work Engagement

Work engagement is understood as a beneficial and completion, affective motivational state of work associated. Work engagement can be interpreted as sharing a conceptual similarity with work attitudes that are central in discussions relating to job quality (Taipale et.,al 2011).

According to Shuck & Wollard (2010) work engagement can be refer as an individual psychological, emotional and behavioural state directed towards institutional result. Albrecht (2010) mentioned that engagement not only reflects an authentic enthusiasm for the purpose to concentrate an effort towards fulfillment of organizational goals but it also consider as a positive of work related of psychological state.

Accordingly, job engagement can be seen as an active employee which has been provided with a full of personal resources and it also known as a motivational concept. (Christian et al., 2011).

Tillott, Walsh & Moxham (2013) founds that employee that engage with their work will focus on organization performance. Therefore it can be characterize by positive interplay in the workplace, energy and involvement (Ghadi et al 2010). Therefore engagement is view as a crucial concept for improvement for hiring and staff retention

Schaufeli and Salanova (2011) argued that such perfectly inverse relationship of the two concepts (i.e. burnout and work engagement) is not feasible. This is because individuals who are not suffering from burnout do not necessarily means that they are engaged in the works. In the similar vein, individuals who are not engaged in the work may not necessarily be experiencing burnout. (Schaufeli & Salanova, 2011).

Thought there are many definitions of work engagement have been put forward in the literature, this study adopted the definition given by Albrecht (2010) mentioned that engagement not only reflects an authentic enthusiasm for the purpose to concentrate an effort towards fulfillment of organizational goals but it also consider as a positive of work related of psychological state.

2.2 Employee Engagement versus Work Engagement

According to Kahn (1990), engagement refers to utilization of the members' of the management themselves to their work roles. In other words, when occupying and accomplishing organizational role, engagement will present in psychological. In short, we can conclude that people that engage with their role will utilize themselves in physical, emotion and cognitive. Since the organizational success has been well

predicted and understood by the study of the importance of engagement, it is very vital to know the differences between employee engagement and work engagement.

Macey and Schneider (2008) have defined that employee engagement is a combination of trait and behaviour aspect with circumstantial aspects such as organizational situation. In the other hand, Albrecht (2010) has coined employee engagement as “a positive work-related psychological state characterized by a genuine willingness to contribute to organizational success”. This definition was aligned with Farndale and Murrer (2015). They define that employee who is engage towards the organization will held a positive attitude and it is a value to performance outcomes (Harter et al., 2002; Rich et al., 2010).

Referring to all definitions, we can conclude that employee engagement is the employee themselves who are display a deep of emotional connection towards organizational outcome. They fell attach and responsible to the organization success. However when employee engagement relate with job or workplace, it become work engagement. This statement has been clarified with definition given by Saks (2006). He defined that employee engagement should include in the task as well as organization. He explained that engagement is not an attitude but the extent to which individuals are conscientiously absorbed in their jobs and in their roles as member of organization. In addition, employee’s engagement to the job also depends on the job characteristics.

Accordingly, work engagement also can be seen as motivational concept that characterizes the engage employee of their personal resources towards the task corresponded with work role (Christian et al., 2011).

2.3 Dimension of Work Engagement

Work engagement has a multi-dimensional construct. Schaufeli et al. (2002) introduced the concept of engagement which aims to discover the positive, emotional and motivational state of mind distinguished by vigour, dedication and absorption. These definitions reflect that work engagement entails three major components, which are behavioural-energetic (vigor), emotional (dedication) and cognitive (absorption) (Schaufeli & Bakker, 2010).

According to Schaufeli et al. (2002), vigour can be refers to be ambitious and struggle even in challenging situations. Vigour has the characteristic of full energy and mental endurance while completing their task, the enthusiastic to devote the effort in work, and perseverance even when facing any challenges (Schaufeli et al., 2002, p.74). In other words, vigour can be determined as full of energy and endurance and the enthusiasm to devote the effort in work.

Schaufeli (2012) also mentioned that dedication is connected to the experience of essential work and dedication in work authorization that an individual's self-esteem in his work and discover its content encouraging. Dedication means strong involvement at work and employees experience a sense of importance, excitement, encouragement, self-esteem and challenge (Schaufeli et al., 2002, p.74). It accompanied by feelings of enthusiasm and significance which refers to a strong

involvement in individual work. This includes the affective dimension as well (Schaufeli et al., 2002).

Schaufeli et al., (2002) has been identified third dimension of work engagement as absorption. Absorption is once an individual get pleasure in work which involving personal immersion, they will fully focused on their work and completing it with a happy emotion. While they are concentrating in their work, they not realize that time run so fast. In the other hand, engage employee also is very hard to detach themselves from work.(Schaufeli et al., 2002, p.74).

Work engagement has been defined by Schaufeli and Bakker (2010, p. 22) as “the psychological state that accompanies the behavioural investment of personal energy”. It describes how workers feel their work as exciting and aggressive. Other than that, there is also something that they really wish to concentrate their time and exertion. This situation is known as vigour component. Dedication is refer to hunt down important and essential while performing their work while absorption is referring to something that they are fascinating and give their fully concentration in doing things (Bakker et al., 2011).

In order to form the culture of engagement in workplace as a first-concern for organization, encouragement positive consequences of work engagement is a must. Even though there are a lot of written studies on work engagement, there is a less of empirical study regarding the engagement of managerial staffs at the educational institution. Since managerial staffs have a big impact of the voice, behaviour and characteristic to the entire institution, more attention needs to be given in order to

stress the importance of engagement among them. The quality of the relationship between faculties, students and the public highly depends on their daily performance (Scott, 1978 as referenced in Johnsrud and Rosser, 1999).

Karatepe (2011) indicate that employee who is engage in their work. Other than that, they are also very dedicated and full of energy while performing their work. In addition, these employees are fully engrossed in their work. Work engagement plays an important role especially in some of the important result which is related with successful and high performing organizations.

Other than organizational commitment, engage employee also gain a feelings of authorization, job involvement and job satisfaction. According to Antonison (2010) there are three dimensions of personal engagement which are cognitive, emotional, and physical.

According to (Fearon et.,al 2013) in order to get a better understanding of successful engagement, there are two common approaches that one's must know. The first point is based on psychological antecedents. It means that to become fully and efficiently engaged in workplace, the role of demand and resources volume to execute work goals is very important. This is because it brings a big impact to one's motivation and empowerment. Other than that, it's also play the role of meaningful work. Normally job demands, resources and capabilities research referred to second approach of work engagement (Xu and Thomas, 2011). Therefore it contribute to the level of engagement in understanding for "group" and "organization" (Bakker and Demerouti, 2007; Bakker et al., 2007; Mauno et al., 2007; Xanthopoulou et al., 2007)

Robertson and Cooper (2010) indicate that engagement is represent three fundamental concept which known as attachment, commitment and organizational citizenship. These concepts demonstrate in concentrating on the facets of engagement that are probably to be most straightforwardly involving employee well-being.

In short, engaged workers exhibit high energy and enthusiasm in their work (Bakker & Demerouti, 2008). In this study, researcher will highlight three dimension of work engagement which is vigour, absorption and dedication because in order to accentuate and enforce engagement among administrative staffs in academic setting, the understanding in theoretical and practical aspect is crucial. By understanding these two aspects not only target to improve employees' performance but also other outcomes such as faculties and public.

2.4 Previous studies on Work Engagement

In the past studies, various predictors have tested and been found to be related with work engagement. For example, work- family conflict and interpersonal conflict at work was found positively related to work engagement involving 600 full time employees in Western Canada (Ito, 2012), 350 employees in the Western part of Romania (Sulea et., al 2012).

As managerial staffs in educational institution rarely studied, this study highlighted empirical gap of the variable which has been studied. Apart from conflicts, several authors have also tested relationship of leadership and work engagement. For

example study conducted by Babcock-Roberson & Strickland (2010) found that there is a positive correlation between charismatic leadership and work engagement involving 102 undergraduate students enrolled in psychology course.

Reviewing the literature also has shown that demographic was significantly related with work engagement. According study conducted by Taipale, Selander, Antilla & Natti (2011) which involving 7869 employee from eight different countries with different sectors show that women seem to be more engaged in their work than men. In addition, age affects work engagement so that older employees are more engaged in their work than their younger colleagues.

Even though many studies in the past have showed positive relationship, there were also studies that show the opposite. For example study conducted by Dikkers, Jansen, De Lange, Vinkenburg & Kooij (2010), they found that there was negative relationship between high job demands and high job resources foresee an increase in engagement over time.

In the same study conducted by Dikkers et., al (2010), they also found that there was negative relationship between high job demands and high job resources. Compare to less proactive employee, this relationship be more strongly related to engagement over the time among the proactive employee. The study was involving 794 respondents of a large governmental organization in Netherlands.

In other study, Narjis (2011) examined the relationship between supervisor support and work engagement among 188 exempt staffs in a multi- national company

manufacturing unit at Kulim Hi Tech Park and they found that supervisor support was significantly negative to work engagement.

In the educational sector, there were more focus on teachers and lecturers (Daly & Dee, 2006; Nurul et. al, 2015; Adel, 2015; Hafizah, 2015). Referring to the job demands especially the workload, there are some authors believe that it can diminish the level of commitment towards the institution (Daly & Dee, 2006; Gilbert, 2000; Griffin, 1998). In a study involving 346 academic staffs of Public Universities in Jordan, Adel (2015) found that workload and work pressure were negatively related to work engagement while autonomy was positively related to work engagement.

In other study, Hafizah (2015) found that autonomy was negatively related to work engagement while work pressure and workload were positively related to work engagement when tested on 176 academics from 3 public universities, namely Universiti Utara Malaysia, Universiti Malaysia Perlis and Universiti Teknologi MARA which located in Kedah and Perlis.

The finding by Rothman & Jordaan (2006) towards 471 academic staff in South African higher education institution, there was positive relationship between autonomy and social support while negative relationship between workload and work engagement.

Since studies of job resources and job on work engagement among administrative staffs in public universities is rarely studied and poorly understood, thus the effect of job demands and job resources on the work engagement is yet to be known.

Based on the previous studies, we can find that various factors have been tested in the past to predict work engagement. However, these mix findings on work engagement have provide an avenue for future researchers to further examine other potential factors of studies to capture more comprehensive understanding regarding work engagement.

2.4.1 Job Demand

Job demands referring to the cognitive pressure factors which affect the way of employee manage their workload, unpredictable work tasks or work conflicts. In practice, work demands are measured by such indicators as work amount and tempo. Job demands, such as high work pressure, role ambiguity and emotionally demanding work tasks, challenge well-being at work by causing physical and mental health problems (Taipale et.,al 2011).

Bakker & Demerouti (2007) indicate that job demands such as workload and role conflict become some of the aspects in the work context that contributing to employees' personal capacities. By falls a parts employees' energy, job demands connected with psychological cost such as job strain and burnout. Therefore job demands can be seen as to evoke an energy decreasing process.

Job demands which involving some aspects of the job that requires to sustain by physically either along with psychological or separately such as high work stress from the aspect of physical, psychological, social or organization. Psychological aspect includes cognitive or emotional effort. Therefore it connected with some of

the psychological aspects or costs (Sulea et.,al 2012). Hence job demand may turn into job stressor when the employee meets the demand that require high effort from them but the employee may not sufficiently retrieve from these stressors (Meijman and Mulder, 1998).

Since the challenges will jeopardize employee accomplishment and satisfaction which helping them to meet their career objective and lead to appreciate the rewards, these demands may increase the strain accordingly. In order to balance up these consequences, management may require being more complex interference such as escalating one's capacity to handle stress by counterbalance the pressure of increased responsibility. (Jack and Celeste, 2012)

Ito and Brotheridge (2012) mentioned that challenging of job demand involving risk of failure due to responsibility was increase. Other than that, it also due to the certain issue to be executes which may concurrently increase strain. Balancing this effect may require more complex intervention such as increase one's capability to manage stress by offsetting the strain of increase responsibility. However this can result in discontent and may be resisted.

Normally job demands seen as detriment because in order to achieve the expectation, it is involving the investment of value resources which presume as gains. Therefore, employees need to spend extra resources to achieve the demands and preserve themselves from further depletion.

In this study, when involving high efforts to achieve the targeting performance level, it can be a stressor in that kind of situation. Van den Broeck, Baillien and De Witte (2011) indicate that when employee Disclosure to the low of job characteristic, they may spark the helplessness emotion. This may drive the employee to breach work related routine and presumption. The employees most probably will react to this situation by acting negatively to their fellow worker

2.4.1.1 Workload

Workload is defined as the amount of work and responsibilities to be completed within the stipulated time (Khuwaja, Qureshi, Andrades, Fatmi & Khuwaja, 2004). Generally, the work load can be categorized in two forms, namely quantitative and qualitative. (Glaser, Tatum, Nebeker, Sorenson & Aiello, 1999; Shaw & Weekley, 1985). In the form of quantitative work load is excessive amount of work that goes further away of the employees' capability in order to meet the demands in a particular time period (French & Caplan, 1973). While in qualitative terms, the work load means that go beyond the requirements of the work skills, capabilities and knowledge of an employee (Sauter & Murphy, 1995). Often excessive work can also lead to errors. If this occurs and persists, the employee will feel depressed, irritable or inflamed. (Kam, 2012)

Workload can be either work under load or work overload. Work under load exists as a possible stressor when an employee is receiving insufficient work or receiving tasks that do not use his or her talents. However, work overload is a far more common stressor in today's work setting. Employees have either excessive of work to accomplish in a limited time frame or they work too many hours on the job.

According to Conley & Wooseley (2000), work overload creates burden because of the pressure to do extra work, the increasing expectation of superiors, having a huge and unbearable workload that obstruct with work quality, and not to forget the feeling of unable to complete the given task within a particular time frame.

Reviewing the literature also has shown that workload was not significantly related with work engagement. For example study conducted by Nurul Aimi, Ho, Ng & Murali Sambasivan (2015) among teachers from three districts with the highest number of schools in Negeri Sembilan showed that there is a not significant relationship between workload and work engagement.

In other study conducted by De Braine & Roodt (2011) which involving 2429 employees from Information and Communications Technology (ICT) sector company in South Africa, they found there was negative relationship between workload and work engagement.

In the study conducted by Thammayantee (2015) which involving 342 IT professionals in 21 ICT organizations located in Thailand's ICT industry's four sub-sector showed that work-overload can affect turnover intention by creating the job satisfaction. Interpretatively, the negative assessment of IT professionals of their supervisor and organization will yield to the mismanagement of work overload and by extension affects job satisfaction which leads to the intention to leave the organization. Understandably, the perception of employees on supervisors and organizations' management of work overload does not impact on turnover intention

directly, but it affects their judgment of job satisfaction which then leads to the intention to leave the organization.

The result of the study conducted by Schaufeli, Bakker and Rhenen (2009) which involving 420 middle managers and executives of the Telecom Company found that there is a negative relationship between workload and work engagement.

There were also studies showed the opposite even though many studies in the past showed negative relationship between workload and work engagement. According to the study conducted by Amira (2014) which involving 144 workers of part time student from Universiti Utara Malaysia (UUM) found that there is a significant positive relationship between employee engagement and workload.

From my point of view, in education institution context, there is high workload among administrative staffs. This happened because they need to complete their job within the timeline that be given to them. There are few phase of work that administrative staffs need to follow the timeline. The first phase is processing application form. This phase must be complete before new student intake. The second phase is preparing class schedule and examination. Last but not least, the last phase is preparing student graduation. Thus all the workload must be complete within the required time frame. This situation definitely brings high workload to administrative staffs.

Based on these findings, the following research hypothesis was proposed:-

H1: Workload is positively related to work engagement

2.4.1.2 Work stress

According to Adiwayu (2012), work stress refers as disinclination to turn up to work and always feel pressure, whereby he/she feels that no effort is enough for them to be recognized etc. It is comply by the common physiological, psychological, and behavioural stress symptoms (Division of Human Resource, 2000).

Thammayantee (2015) defined stress as reactions and the response of employees to workplace and work environment. In another word, stress is defined as behavioural response to the relationship between personal demands of the employees and their occupational responsibilities (Chan, Lai, Ko & Boey, 2000).

Leka, Griffiths, dan Cox (2003) mentioned that work stress is the reaction people when their knowledge and skills do not match the demands of the task and challenge their ability to handle the problem. When an individual fails to meet the demands of the task entrusted to it, the pressure would exist (Bokti & Talib, 2010).

There are mix results when studied on work pressure. In the study conducted by Elfi (2011) which involving 157 of Royal Malaysian Customs (RMC) Selangor respondent show that there is a significant positive relationship between work stress and job satisfaction which also taking account of work engagement.

According to the study conducted by Yu (2014) which involving about 1300 nurses of various grades were selected randomly from six regional hospitals located in the northern states of peninsular Malaysia showed that this study specifically looked into which dimension of job demands had the stronger relationship with job stress

dimensions. The result showed that there is a significant positive relationship between job demand and work stress.

Similar findings were also found when work stress was tested by Schaufeli, Taris and Van Rhenen (2008) on 587 Telecom managers in Dutch. There is significant positive relationship between work stress and work engagement.

However, a part of these findings which showed positive relationship, there were also studies that show the opposite. According to the study conducted by Kuhnel, Sonnentag and Bledow (2012), in the study involving 154 employees from different industries of HR department in Germany, there is a negative relationship between work stress and work engagement.

In other study conducted by Taipale, Selander, Anttila and Natti (2011), the result also showed that there is a negative relationship between work stress and work engagement on 7869 service sector employees from eight European countries.

From my point of view, in education institution context, there is high work stress among administrative staffs because they ongoing and anticipate execution of task given. This happened because they are tied up with the time frame in order to perform their task. The situation is definitely producing the experience of strain to them.

Based on these findings, the following research hypothesis was proposed:-

H2: Work stress is positively related to work engagement

2.4.2 Job Resources

The motivational process of the Job Demand – Resource Model (JDR Model) suggests that employee work engagement initiate by job resources and embellish their performance accordingly. The aspects that can be link to job resources are physical, social or organizational. These aspects are advantageous in achieving work related objectives, decrease demand and the correlated cost and accelerate personal growth and betterment.

Bakker & Demerouti (2007) indicate that Job resources can activate as motivational process. The examples of job resources are autonomy and social support from colleague. This process enhance work engagement, organizational commitment and learning at work. In the other hand, job resources also help employee to diminish job demands and their health- impairing outcome, but it also function in achieving work goals.

Therefore, job resources are assume to play important role in order to stimulate employees' personal growth, development and learning. It is important to associates well-being with the experience of positive mood and emotion. Thus it can give direction and meaning to people's action. For example, supportive action from supervisor can encourage their subordinates to be more competent. Through supervisor attention and approachable behaviour, subordinates will voluntarily engage with the task and organization direction.

2.4.2.1 Supervisory Support

Supervisor support can be defined as a phase where the supervisor acknowledges employees' contributions and taking care of their welfare (Eisenberger et al. 2002). In other words, supervisor support also become as a part of social support at the workplace. (Adiwayu, 2012).

Adiwayu (2012) also mentioned that supportive behaviour of the supervisors can be seen by their friendliness, and approachable behaviour, and through the attention given towards the individuals and groups.

Nora (2011) mentioned that Supervisor act as an important role in engaging their subordinates. Wagner & Harter (2006) mentioned that the Immediate supervisor have a significant domination towards employee engagement. Supervisor role not only supervise their subordinates. They also carry out a function of the middle person between employee and organization which mean that they become a medium of information between these two parties. Supervisor will deliver the information that they received from top management and feedback from the employees. When this two ways communication running smoothly, management can easily built up engagement among the employees.

According to Aycan and Eskin (2005), supervisory support can be defined as the interpersonal relationships and social relationships that help individuals. In the other literature, Catsouphe, Kossek, and Sweet (2006) regard supervisory support in terms of curriculum or reinforcement arrange by a person who is upper level than them.

This curriculum not only make the employee feel that company members as their own family and friends but it also to free their working life from pressure.

Therefore, supervisor support indicate supervisor is observe as a person who is concern and willing to grant emotional and influential support in any time when is needed (Bacharach & Bamberger, 2007). Thus, high quality relationship with one's supervisor is useful to alleviate job stress from job demands. (Yu, 2014)

Kalliath and Beck (2001) discovered that supervisor who help the employees to overcome burnout, has increased employee intention to continue with present organization. Mudor & Tooksoon (2011) referred supervision as activities of the managers and their staff. As supervision has become essential and necessary activity to the organization, supervisors should be able to assist, review and monitor their staffs.

According to the study conducted by Nora (2011) which involving 340 local employee at the operation level at in Nichias FGS Sdn Bhd, a company located in the Northern state of Malaysia found that there is a significant positive relationship between supervisory and work engagement.

Another study conducted by Nadia (2015) which involving 224 lecturers from MSU and Politeknik Shah Alam found that there is a significant positive relationship between supervisor support and work engagement. The results show that both sectors agreed that the supervisor plays important roles in their engagement as the supervisor listens to them.

Despite of these studies, there is also a study conducted by Samzul (2012) which involving 125 operational staff in the hotel industry in Alor Setar, Kedah showed that there is a significant relationship between supervisor support and work engagement. Engage employee will be accountable to the organization and cause them to be more dedicated to the organization when they feel that organization provide them high level of support.

From my point of view, in educational institution context, supervisory support is very crucial because they are the one who bring the important impact on the manner, working style and working environment to the entire of institution. The quality of their daily performance gives high impact on quality of the relationship among faculties, students and public.

Based on these findings, the following research hypothesis was proposed:-

H3: There is a positive relationship between supervisory support and work engagement.

2.4.2.2 Autonomy

Hackman and Oldham (1980) defined autonomy can be seen as arrangement of job that individual can freely, independently and have a preference in planning and firmly decide the procedures and process flow to accomplish the task given. Employees who perceive high job autonomy will enhancing their performance due to they have a feeling that organization trust them to perform the task. Thus it will bring a high impact on their effectiveness and intrinsic motivation.(Yu, 2014)

According to Osman (2011), job autonomy refers to “the degree to which the job provides substantial freedom, independence, and discretion to the employee in scheduling the work and in determining the procedures to be used in carrying it out” (Hackman and Oldham, 1975, p. 162). When there is an accessibility of job autonomy in the organization, it will become a powerful indication to employee that their manager has a strong believe that they can perform the task given very well. It also can be a hint to the employee that the manager believes their personal skill and capability to perform the task. (Wang and Netemeyer, 2002).

High job autonomy perceived to be independence, liberality and supervise over one’s work whereby low job autonomy entail supervisory control and within the tightly supervision.

According to the finding by Hafizah (2015) which involving 380 academics from 3 universities namely Universiti Utara Malaysia (UUM), Universiti Malaysia Perlis (UNIMAP) and Universiti Teknologi Malaysia (UiTM) showed that there is a significant relationship between Autonomy and work engagement.

From my point of view, since the work requirement tie up tightly with time frame, the administrative staffs should be given freedom in performing their work including freedom in scheduling their work, decision making and work methods.

Based on these findings, the following research hypothesis was proposed:-

H4: There is a positive relationship between autonomy and work engagement.

2.5 Job Demands - Resources Model

Job Demands- Resources (JD- R) Model is used to explain the direct relationship between job demand, job resources and work engagement. This model was developed by Bakker and Demerouti (2007). This model investigate the consequences of job characteristic which are involving job demands and job resources on employees' impaired health and optimum work-related also known as burnout and work engagement. This model doesn't limit itself to particular job demands or job resources. It presumes that employees' health and fitness was affect by any demand and any resource. (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001).Therefore, the JD-R model could be a relevant model to foresee the organizational output.

The JD-R model was successfully explain how job demand and job resources influence an extent of effect such as, workers' health and fitness, their attitudes towards the task given and their behaviour, amongst others. (Van den Broeck, Baillien & De Witte, 2011).Adel (2015) indicates that job demands which include workload and work pressure can influence negatively on the work engagement. For example employees who working in high strain job which characterized by workload and work pressure experience the lower of work engagement.

In the literature, many studies have shown how job demands and job resources have a profound impact on work engagement. (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Van den Broeck, Baillien & De Witte, 2011; Adel, 2015). Research has discovered that job demands such as workload and work stress may lead to employee turnover and high level of absenteeism

On the other hand, job resources justify that if the organization can provide good job resources such as autonomy and supervisory support, they can boost their commitment to the organization. They also can increase their competency and decision making possibilities if organization can provide to them the relevant opportunities (Adel, 2015). Job resources influence strongly on work engagement among employee especially in educational institution. They tend to be more engage in their work if they get support from team mates and supervisors, performance feedback, variety of skill, autonomy, freedom in making decision, and learning opportunities.

Therefore, the combination of JD-R will support and balance the negative and positive of employee behaviour in working place.

2.6 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 stress), job resources (autonomy, supervisory support) and work engagement. In this study, job demands and job resources are the independent variables, while work engagement is the dependent variable.

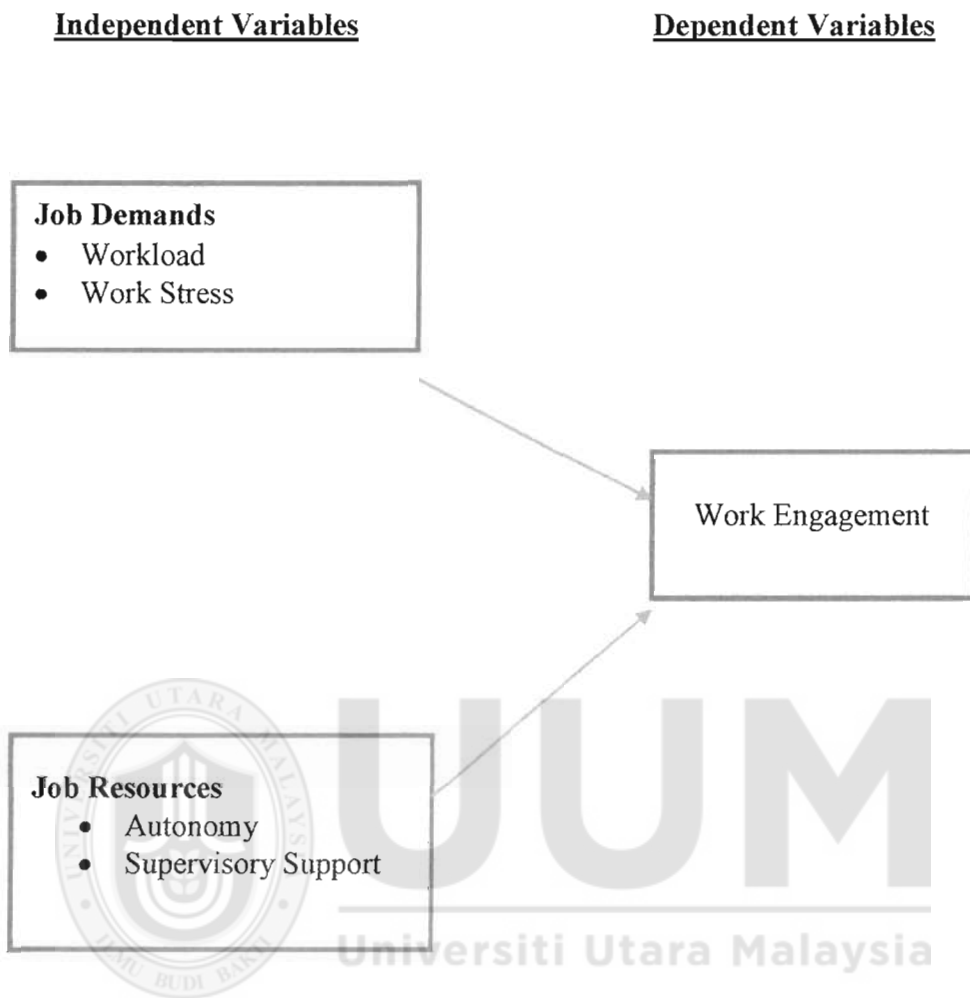


Figure 2.1 :*Research framework*

CHAPTER 3

METHODOLOGY

3.0 Introduction

This chapter describes the overview of this study. This chapter outlines such as the method for this study, research design, and population of the study, sampling size, source of data, unit of analysis and procedure of data collection.

3.1 Research Design

Research design specified the details in conducting the research or the fundamental procedures to gather the information needed in order to form up and clarify the research problem. In other words, research design becomes a framework or blueprint in conducting the research.

The purpose of this research is to examine the relationship between job demands (workload and work stress), job resources (autonomy and supervisory support) and work engagement. To examine the two variables, a quantitative method is used to gather the data. According to Mohd Majid (1994), using quantitative study allows researcher to examine the relationship between variables accurately. Quantitative methods enable to respond to the questions about the connection among measured variables with the objective to explain, foresee and direct the circumstances (Chua, 2012).

Cross-sectional study was employed for this study. Sekaran and Bougie (2010) stressed that data which obtain from cross-sectional study is less biased and more

accurate. Cross-sectional study is more applicable rather than longitudinal study because it allows data collection in a relatively short period.

The unit of analysis for this study is individual (administrative staffs). Primary data for this study was collected through distribution of questionnaire. The basis of understanding regarding work engagement is influenced by respondents' perceptions towards job demands and job resources. Hence it is most suitable to use individual as unit of analysis in order to examine all the variables shown in the research framework.

3.2 Population and Sampling Design

3.2.1 Population

According to Sekaran (2003), population was known as the whole group of people, events or things that attract the researcher's aspiration to investigate. The study population includes all administrative staffs which directly involve from the students' admission until graduation. Table shows the total number of administrative staffs from nine faculties in UPSI which involved directly from the admission of the student until the graduation. Reasons for choosing administrative staffs as the respondents of this study is due to the fact that these employees have a strong impact in the organization. Therefore the quality of their accomplishment contributes to the quality of connection with faculty, students and the public (Scott, 1978).

Table 3.1 : Headcount of Administrative Staff in UPSI by Faculties

Faculties	Total of Admin Staffs
Faculty Of Languages And Communication	16
Faculty Of Management And Economic	17
Faculty Of Education And Human Development	34
Faculty Of Art, Computing And Creative Industry	36
Faculty Of Science And Mathematic	49
Faculty of Sports And Coaching	21
Faculty of Music and Performing Art	30
Faculty of Human Science	17
Faculty of Technical Education and Vocational	31

3.2.2 Sampling Size

Based on Krejcie and Morgan (1970) table for determining sample size, at least 169 is needed to be regarded as cross section of the population for the sample size of 251. This sample size is align with Roscoe's rule of thumb which indicate that the sample size have to large than 30 and less than 500 is suitable for more research. However in this study, researcher distributes 200 set of questionnaire with the intention to receive high response rate. According to Adel (2015), in order to determine the sampling size, sampling process need to be done. Generally there are three steps which are involving in the sampling process. The steps including identify the population, sampling size and choose the sample.

3.2.3 Sampling Technique

In this study, all the 200 respondents are selected based on simple random sampling. By using this sampling, there is an equal chance of selecting of each unit from the population.

3.3 Operational Definitions and Measurements

In this study, there are several subsections of the operational definitions has been discussed. The discussion begins with the measurement adopted in this study followed by dependent variable and independent variable.

3.3.1 Work Engagement Measures

In this study, the dependent variable is work engagement which operationalized as a positive, fulfilling, and work related state of mind that is characterized by vigour, dedication and absorption (Schaufeli & Baker, 2003). Work engagement was measured by 16 items developed by Schaufeli and Baker (2003). According to Sekaran (2003) have reported that the instrument has adequate internal consistency (Cronbach alphas exceeding 0.6).

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 3.2: *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"> 1. At my work, I feel that I am bustling with energy 2. I find the work that I do full of meaning and purpose 3. Time flies when I'm not working 4. At my job, I feel strong and vigorous 5. I am enthusiastic about my job 6. When I am working, I forget everything else around me. 7. My job inspires me 8. When I get up in the morning, I feel like going to work. 9. I feel happy when I am working intensely 10. I am proud of the work that I do 11. I am immersed in my work 12. I can continue working for very long periods at a time 13. To me, my job is challenging 14. I get carried away when I'm working 15. At my job, I am very resilient, mentally 16. It is difficult to detach myself from my job 	Schaufeli & Baker (2003)

3.3.2 Job Demands Measures

In this study, job demands is an independent variable which is measured by workloads and work stress. Workload is operationalized as the amount of work and responsibilities to be completed within the stipulated time (Khuwaja, Qureshi, Andrades, Fatmi & Khuwaja, 2004). Workload was measured by 7 items developed by Karasek (1985).

Work stress which is the second component of job demands is operationalized as those physical, psychological, social or institution facets of the job that need to sustain physical either along with psychological or separately (Sulea et.,al 2012). Work pressure was measured by 5 items developed by Karasek (1985).

In this study, participants rated their degree of agreement with the workload and work stress statements based on five- point scale whereby, 1= strongly disagree, and 5= strongly agree.

Table 3.3: *Job demands items*

Variable	Components	Operational definition	Items	Authors
Job demands	Workload	the amount of work and responsibilities to be completed within the stipulated time	1. I do not have enough time to perform quality work 2. The number of hours I am expected to finish my work has increased in recent years 3. The amount of administration I am expected to do is manageable, given my other responsibilities 4. My workload has increased over the past 12 months 5. I often need to work after hours to meet my work requirements 6. The amount of administration I am expected to do is reasonable 7. The number of work I am expected	Karasek (1985)
	Work stress	physical, psychological, social or organizational aspects of the job that require sustained physical either along with psychological or separately		

to handle and / or
supervise is
reasonable

8. My work
requires working
very hard

9. My work
requires working
fast

10. My work
requires too much
input from me

11. I have enough
time to complete
my job

12. My job often
make conflicting
demands on me

3.3.3 Job Resources Measures

In this study, job resources which are second independent variable were measured by autonomy and supervisory support. Autonomy is function as the extent of freedom, independence, and consideration of an employee to plan his/ her work antecedent and technique (Karasek, 1985). Supervisory support is operationalized as the supervisor care and responsible for their employees' career which they will spend time together to discuss the matter thus taking into account actions to be taken for the sake of employees' development.

Table 3.4: *Job resources items*

Variable	Components	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	<ol style="list-style-type: none"> 1. My job allows me to make a lot of decision on my job. 2. On my job, I have very little freedom to decide how I do my job 3. I have a lot of influence about what happens on my job. 	Karasek (1985)
	Supervisory support	The supervisor care and responsible for their employees career which they will spend time together to discuss the matter, thus taking into account actions to be taken for the sake of employees' development	<ol style="list-style-type: none"> 1. My manager shows me how to improve my performance 2. My manager let me know how well I am performing 3. My manager utilizes a variety of methods to assist me with my development. 4. My manager has the skill to coach me effectively in my development. 5. My manager views developing staff as an important aspect of his/ her job. 	Yarnall (1998)

3.4 Questionnaire Design

All questionnaires were prepared in English. Each of the participants received 6 pages of questionnaire (with cover letter attached). The questionnaire which is used in this study is shown in Appendix A. The six page of questionnaire consist 4 sections. Section 1 asked about the work engagement and there are 16 items. Section 2 asked about job demands which consist 12 items while section3 asked about job resources which consist 8 items. The final section is the demographic variables.

Demographic variable is measure for descriptive and control purpose which include gender, age, year of service.

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.

3.5 Pilot Test

Hulley (2007) mentioned that 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. According to Syahir (2010), the purpose conducting pilot study is to check reliability of the questions among the respondents. On the other hand, conducting pilot test is a way to predict the suitable size and to improve the design of the current study.

The reliability of the data score will be criteria to evaluate the measurements. It can point out that the indicator of the measure's internal consistency is reliable when the different tests at measuring something collect on the same result. The estimates of internal consistency reliability (α) commonly used to measure reliability while there is no set acknowledge for reliability appropriate. According to Sekaran (2003) all variables are considered reliable as the Cronbach Alpha values are exceeding .60.

Table 3.4 presents the internal consistency reliabilities (Cronbach's Alpha) of the pilot study. The pilot test for this study was conducted in the middle of May which involving 20 administrative staff s from UPSI. According to table 3.4, the Cronbach

Alpha for work engagement was 0.879, job demands which consists two components (workload and work stress) was 0.674 and 0.576. While job resources which also consists two components (autonomy and supervisor support) was 0.655 and 0.861

Table 3.5 :Reliability

Variables	N of Items	Cronbach Alpha
		Value (α)
		Pilot Test ($n=20$)
Job Demand (JD)	12	
• Workload	7	0.674
• Work stress	5	0.576
Job Resource (JR)	8	
• Supervisor support	5	0.861
• Autonomy	3	0.655
Work Engagement (WE)	16	0.879

3.6 Data Collection Procedure

The actual data collection began after the questionnaire was pilot test. Written permission to conduct the study at Universiti Pendidikan Sultan Idris (UPSI) was first obtained from the head officer also known as senior assistant registrar.

For this study, researcher has personally administered and collected the complete questionnaire from each faculty. Personally administered the questionnaires not only permits researcher to provide necessary explanation to clarify doubts or to provide additional information to respondents, but it also provides high response rate and allows the researcher to collect data within the short period.

3.7 Technique of Data Analysis

The data collected was analyzed by using the Statistical Package for Social Science Program (SPSS) version 16.

3.7.1 Factor Analysis

According to Bryman and Bell (2011), factor analysis was employed in relation to multiple-indicator measures to determine whether groups of indicators tend to bunch together to form distinct clusters, referred to as factors. Factor analysis enables researcher to reduce the complexity of data and represent a lot of relationship in a simpler form. According to Sekaran and Bougie (2013), Factor analysis is use to confirm the extent of the concept that have been functionally defined, as well as signify which of the items are most suitable for each extent.

3.7.2 Correlation Analysis

According to Sekaran and Bougie (2013), Pearson correlation coefficient is applied to show the direction, strengthened significance of the relationships among all the variables that were measured at an interval or ratio. Correlation analysis was executed to inspect the relationship between independent and dependent variables understudied.

A correlation coefficient communicates two matters about the relationship between two variables; the direction of the relationship and its magnitude. The symbol of a correlation coefficient is r , and its range is from -1.00 to $+1.00$ (Sekaran and Bougie, 2013).

The closer the coefficient to 1, the stronger the relationship; and the closer it is to 0, the weaker the relationship (Bryman and Bell, 2011). If a Pearson's r correlation of 1, it means that, as one variable increases, the other variables increase by the same amount, however, if a Pearson's r correlation of -1 , it means that, as one variable increases, the other variable decreases.

Therefore, for the purpose to prescribe the solidity of the relationship between the variables in this research, researcher has chosen correlation technique to figure out the direction of the relationship and quantum of correlation between the dimensions of independent variables (job demands- resources and dependent variable (work engagement)). The interpretation of the strength of correlation according to Cohen (1988) as cited in Adel (2015) as illustrated in Table 3.5.

Table 3.6 :*Relationship between Variables and r Value*

Correlation Value, r	Strength of relationship
± 0.70 or higher	Very high relationship
± 0.50 to ± 0.69	High relationship
± 0.30 to ± 0.49	Moderate relationship
± 0.10 to ± 0.29	Low relationship

3.7.3 Regression Analysis

Sekaran and Bougie (2009) indicate that 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 have been conducted to determine the relative contribution of each of the variable (workload, work stress, autonomy, supervisory support) that makes up the model.

CHAPTER 4

RESULT AND FINDINGS

4.0 Introduction

This chapter analyzes all the data findings of this study by using statistical package for the social sciences (SPSS) version 16.0 for window. The report of the result for this study begins by presenting the response rate and demographic profile such as gender, age, marital status, educational level, employment status and employment level. The discussion continues with the report on factor analysis, correlation analysis and regression analysis.

4.1 Response Rate

Total 200 questionnaires were distributed to the administrative staffs in nine faculties at UPSI. This total number of the questionnaire is according to the table of sampling size which is developed by (Krejcie & Morgan (as cited in Sekaran & Bougie, 2010)). There were only 89.5% of the total number distributed questionnaire successful collected while the others not returned. The summary of respondents' rates has been shown in table 4.1.

Table 4.1 :*Respondent Rate*

Total Population	251
Total Questionnaire Distributed	200
Total Questionnaire Collected	178
Percentage	89.5%

4.2 Respondents Profile

The descriptive analysis has been run to examine the respondents profile by using 178 collected questionnaires. The respondents demographic were describing by frequency and percentage values. Table 4.2 indicated the detail of respondent profile.

Table 4.2 :*Demographic Variables*

Item	Category	Frequency	Percentage (%)
Gender	Male	73	41.0
	Female	105	59.0
	Total	178	100
Age of respondent	21-24	21	11.8
	25-34	100	56.2
	35-44	49	27.5
	45-54	8	4.5
	Total	178	100

Marital status	Single	56	31.5
	Married	122	68.5
	Total	178	100
Academic level	SPM	46	25.8
	Diploma	62	34.8
	Bachelor Degree	51	28.7
	Master Degree	16	9.0
	PhD	3	1.7
	Total	178	100
Employment Status	Contract	42	23.6
	Permanent	136	76.4
	Total	178	100
Employment Level	Officer	43	24.2
	Support Staff	135	75.8
	Total	178	100
Length of service in company	Lest than 2 years	31	17.4
		41	23.0
		64	36.0
		25	14.0
		17	9.6
		Total	178

Referring to the table of the demographic profile of this study, majority of the respondents is female which covered 59% while the male is 41%. The range of age between 25-34 represent the higher percentage in term of the age of respondents with 56.2% followed by the range of age between 35-44 with 27.5%, age between 21 – 24 is 11.8% and the lower percentage is the range of age between 45-54 with the percentage of 4.5%. In term of marital status married represent 68.5% while single is 31.5%.

According to the table, diploma holders represent 34.8%, followed by degree holder which is 28.7%. Respondent who possess SPM is 25.8%, while 9% of the respondents are master holder. Only 1.7% of respondents are PhD holder. Other than that, referring to the employment status, 76.4% are permanent while 23.6% of the respondents are contract staffs. 75.8% of the respondents are supporting staffs while 24.2% are officer.

Meanwhile for length of service in UPSI, 36% of the respondents served between 6 – 10 years, 23% has been served between 2 – 5 years, 14.1% of them served between 11 – 15 years, 17.4% of the respondents worked less than 2 years. 9.6% of the respondents served the company more between 16 – 20 years.

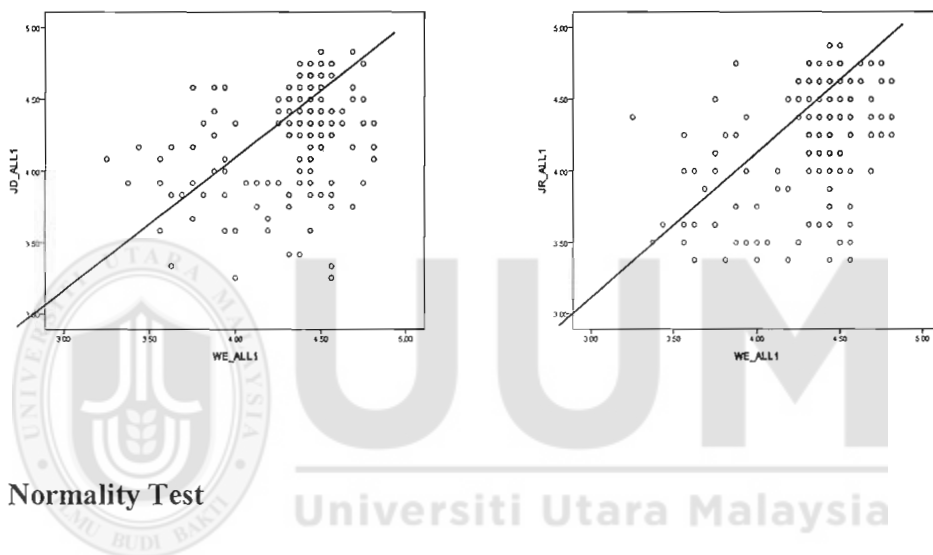
4.3 Data Screening

The purpose of using data screening is to identify the missing and invalid data. In the other hand, data screening is also to make sure the collected data are linear, normal and homogeneous. It is significant in the earlier steps as it affects the decision taken in the next steps. In order experiment the linearity, the researcher execute scatter plot

while for normality, researcher was experimented by quantify the values of Skewness and kurtosis to measures homogeneity.

4.3.1 Linearity Test

The scatter plot graphs showing the linearity pattern between dimensions and based on the diagram below, it shows that the scatter plots graphs are linear.



4.3.2 Normality Test

Normality test has been used in order to ensure that the data is well structured by the normal distributed, whereby Skewness and Kurtosis values are referred. According to Hair. Jr, et. al (as cited in Muhashamsani, 2015), the normal distribution of data Skewness and Kurtosis values for all variables were between -1.96 and 1.96 which is acceptable. Table 4.4 below, shows that the Skewness and Kurtosis values for all variables;

Table 4.3 :*Skewness and Kurtosis Values*

		Work Engagement	Job Demands	Job Resources
N	Valid	178	178	178
	Missing	0	0	0
Skewness		-1.444	-.804	-.622
Std. Error of Skewness		.182	.182	.182
Kurtosis		1.798	.275	-.410
Std. Error of Kurtosis		.362	.362	.362

4.3.3 Multivariate Outliers Test

The outlier in this multivariate model has been tested using the Mahalanobis distance values. The values of Mahalanobis distance has been shown in table 4.4. Table 4.4 indicated that there are no outliers because there were no cases with a Mahalanobis distance value equal or greater than 13.816 because the highest value is 9.22. To ensure that there is no outlier, casewise diagnostic been referred. Table 4.4 illustrates Mahalanobis Distance value.

Table 4.4 :*Mahalanobis Distance Value*

			Case Number	Value
Mahalanobis Distance	Highest	1	60	9.13699
		2	68	9.05650
		3	10	8.77507
		4	71	8.71923
		5	81	8.04591
	Lowest	1	140	.00413
		2	138	.00413
		3	105	.00413
		4	21	.00413
		5	174	.08104 ^a

4.3.4 Casewise Diagnostic

The purpose of casewise diagnostic is referring to the cases which have the most impact on regression estimates or in other words it is indicates that cases which are extreme outlier. 1 questionnaire were discarded from the analysis due to outlier. Table 4.5 shows that it has one case which is case number 52. However, the case has been discarded from this study.

Table 4.5 :*Casewise Diagnostic Value*

Case Number	Std. Residual	WE_ALL1	Predicted Value	Residual
52	-4.103	3.25	4.3460	-1.09603

Dependent Variable: WE_ALL1

4.4 Factor Analysis

Factor analysis was performed separately for each set of independent and dependent variables based on the study instruments. The idea find out the discriminant factors and the convergent of items bunched in particular dimensions (factors). Exploratory factor analysis (EFA) was used to ensure whether the survey questions loaded on the appropriate range for measurement of job demands, job resources and work engagement. In this study, researcher also used principal components analysis with a varimax rotation to identify the variables associated with a specific factor. For data reduction, those questions which not load significantly on any factor will be eliminated. According to Pallant (2011), the value of the correlation in component matrix is 0.3 or greater. In this study, value which less than 0.3 will be eliminated. Sekaran (2003) mentioned that value which less than 0.3 indicates that the items is measuring something different from the whole scale.

4.4.1 Prerequisite Test for Factor Analysis

In this study, validation process consists of two steps. The first step was included Kaiser-Meyer-Oikin (KMO), Bartlett, Anti-image correlation and the second step was inspecting the component matrix table and rotated component matrix table. The value for KMO measure of sampling adequacy should be greater than 0.6 and above to enable factor analysis can be carried out (Pallant, 2011). For the KMO measure of sampling adequacy, high value close to 1.0 normally specify that factor analysis may be practical with the data.

4.4.2 Factor Loading

To identify the total factors of factors loading the research refer to eigenvalues and cumulative eigenvalues. The Kaiser- Gutman rule indicates that only those factors whose eigenvalues are greater than 1.00 should be considered (Gutman, 1954; Kaiser, 1991; Nunnally & Bernstein, 1994). According to Polit & Beck, (2008), some advocate that the number of factors extracted should account for at least 60% of the total variance which is referred to cumulative eigen values. A factor is defined as a cluster of related behavior measures. Cross loading process a problem for defining factors since single items is shared by two or more factors and causes otherwise independent factor to recover. Tabachnick & Fidell (2001), define cross loading as an item with a loading 0.32 or greater (10% of item variance in common with the factor) on two or more factors.

4.5 Work Engagement Measurement

Based on KMO and Bartlett's Test in table 4.6, the KMO value for work engagement was 0.722 which was more than 0.60 and the Bartlett test shows significant and acceptable for factor analysis. Therefore, factor analysis was allowed to be executed.

Table 4.6 :KMO and Bartlett's test of work engagement

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.722
Bartlett's Test of Sphericity	615.965
Approx. Chi-Square	
Df	120
Sig.	.000

Varimax rotated principal components factor was conducted on the 16 items for the work engagement scale and revealed that the factor explained a total variance is 58.89%.

Some of the researchers have used the sum of the components as a measurement for work engagement in their study (e.g., De Lange, De Witte, & Notelaers, 2008; Wang & Hsieh, 2013) whereby these researchers had followed the recommendation of Sonnentag (2003) and Schaufeli, Bakker and Salanova (2006) in order to compute the overall work engagement factor score. Therefore, in this study researcher also followed the same recommendation. Referring to the table 4.7, factor analysis results

for work engagement indicates that all items were greater than 0.3. Therefore, all items were retained for further analysis.

Table 4.7: *Rotated component matrix of work engagement*

	Component				
	1	2	3	4	5
WORK ENGAGEMENT_1			.713		
WORK ENGAGEMENT_2			.773		
WORK ENGAGEMENT_3					.767
WORK ENGAGEMENT_4		.621			
WORK ENGAGEMENT_5				.621	
WORK ENGAGEMENT_6	.774				
WORK ENGAGEMENT_7		.480			
WORK ENGAGEMENT_8		.422			
WORK ENGAGEMENT_9				.769	
WORK ENGAGEMENT_10					.480
WORK ENGAGEMENT_11	.772				
WORK ENGAGEMENT_12	.626				
WORK ENGAGEMENT_13	.487				
WORK ENGAGEMENT_14	.769				
WORK ENGAGEMENT_15		.743			
WORK ENGAGEMENT_16	.544				

4.5.1 Job Demands Measurement

Based on KMO and Bartlett's Test in table 4.8, the KMO value for job demands was 0.838 which was more than 0.60 and the Bartlett test shows significant and acceptable for factor analysis. Therefore, factor analysis was allowed to be executed.

Table 4.8 :KMO and Bartlett's test of job demands

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.838
Bartlett's Test of Sphericity	Approx. Chi-Square
	455.698
	Df
	66
	Sig.
	.000

Referring to the table 4.9, factor analysis results for job demands indicates that all items were greater than 0.3. Therefore, all items were retained for further analysis. Varimax rotated principal components factor was conducted on the 12-items for the job demands scale and the items were divided into workload that contained seven (7) items and work pressure that contained five (5) items. Factor analysis results in table 4.11 shows that all items in the job demands were greater than 0.3 and could be retained for further analysis. Factor loading for seven (7) items of workload was between 0.553 and 0.714. Factor loading for five (5) items of work stress was between 0.499 and 0.711. Factor loading of 12 items which revealed that the factor explained a total variance of about 44.05%.

Table 4.9 :Rotated component matrix of job demands

	Component	
	1	2
WORDLOAD 1	.614	
WORDLOAD 2	.695	
WORDLOAD 4	.682	
WORDLOAD 5	.588	
WORKSTRESS 8	.643	
WORK STRESS9	.673	
WORK STRESS10	.562	
WORK STRESS11	.499	
WORK STRESS12	.711	
WORDLOAD 3		.553
WORDLOAD 6		.608
WORDLOAD 7		.714

4.5.2 Job Resources Measurement

Based on KMO and Bartlett's Test in table 4.10, the KMO value for job resources was 0.607 which was more than 0.60 and the Bartlett test shows significant and acceptable for factor analysis. Therefore, factor analysis was allowed to be executed.

Table 4.10 :*KMO and Bartlett's test of job resources*

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.607
Bartlett's Test of SphericityApprox. Chi-Square	318.965
Df	28
Sig.	.000

4.5.3 Job Resource

Referring to the table 4.11, factor analysis results for job demands indicates that all items were greater than 0.3. Therefore, all items were retained for further analysis. Varimax rotated principal components factor was conducted on the 8-items for the job resources scale and the items were divided into autonomy that contained three (3) items and supervisor support that contained five (5) items. Factor loading for three (3) items of autonomy was between 0.574 and 0.693. While factor loading for five (5) items of supervisor support were between 0.587 and 0.662. Factor loading of 6 items which revealed that the factor explained a total variance of about 50.81%.

Table 4.11 :*Rotated component matrix of work engagement*

	Component	
	1	2
AUTONOMY 1	.658	
AUTONOMY 2	.574	
AUTONOMY 3	.693	
SUPERVISOR SUPPORT 4	.662	
SUPERVISOR SUPPORT 5	.626	
SUPERVISOR SUPPORT 6		.638
SUPERVISOR SUPPORT 7		.674
SUPERVISOR SUPPORT 8		.587

4.6 Reliability Test

Table 4.12 below illustrates the Cronbach Alpha values for all variables which involved in this study after factor analysis was performed. The reliability value showed that only three factors are reliable for further analysis. According to Sekaran (2003) all variables are considered reliable as the Cronbach Alpha values are exceeding .60. However, due to Cronbach Alpha Value for workload was less than 0.6, this factor will be eliminated from this study.

Table 4.12: Cronbach Alpha Values After Factor Analysis

Variables	N of Items	Cronbach Alpha Value (α)
Job Demand (JD)	12	
• Workload		0.475
• Work Stress	3	0.817
	9	
Job Resource (JR)	8	
• Autonomy		0.708
• Supervisor support	5	0.608
	3	
Work Engagement (WE)	16	0.750

4.7 Rename Feature

Based on table 4.13 there are two (2) discriminant factors for Job Demands and Job Resources. All these two (2) factors were accepted in measuring Job Demands and Job Resources. Therefore all the factors been renaming according to what factor loaded on them.

Table 4.13: Rename of Factors for Factor Analysis

<i>Job Demands</i>	<i>Item</i>	<i>Rename</i>
<i>Factor 1</i>	<i>WORKLOAD 1</i>	<i>WORK PRESSURE</i>
	<i>WORKLOAD 2</i>	
	<i>WORKLOAD 4</i>	
	<i>WORKLOAD 5</i>	
	<i>WORKLOAD 8</i>	
	<i>WORK STRESS 9</i>	
	<i>WORKSTRESS10</i>	
	<i>WORKSTRESS11</i>	
	<i>WORKSTRESS12</i>	
<i>Job Resources</i>	<i>Item</i>	<i>Rename</i>
<i>Factor 1</i>	<i>AUTONOMY 1</i>	<i>AUTONOMY</i>
	<i>AUTONOMY 2</i>	
	<i>AUTONOMY 3</i>	
	<i>SUPERVISOR SUPPORT 4</i>	
	<i>SUPERVISOR SUPPORT 5</i>	
<i>Factor 2</i>	<i>SUPERVISOR SUPPORT 6</i>	<i>SUPERVISOR SUPPORT</i>
	<i>SUPERVISOR SUPPORT 7</i>	
	<i>SUPERVISOR SUPPORT 8</i>	

4.8 Correlations Analysis

Person correlation was conducted in order to find out the relationship between all variables in this study. According to Cohen (1988) there are 4 level of correlation

value for relationship between independent variable and dependent variable. Table 4.14 indicate the summary of Correlation Analysis for all variables understudied.

Table 4.14: *Summary of Correlation Analysis for All Variables*

Correlation Value, r	Strength of relationship
± 0.70 or higher	Very high relationship
± 0.50 to ± 0.69	High relationship
± 0.30 to ± 0.49	Moderate relationship
± 0.10 to ± 0.29	Low relationship

4.8.1 Interpretation of Results of Correlation Analysis

Table 4.15 shown that Work Pressure have a positive relationship with Work Engagement which is the correlation coefficient value is 0.423. This indicated that the relationship is moderate. Supervisor Support have a positive relationship with Work Engagement which is the correlation coefficient value is 0.343. This indicated that the relationship is moderate. Autonomy have a positive relationship with Work Engagement which is the correlation coefficient value is 0.381. This indicated that the relationship is moderate.

Table 4.15 :*Result of Correlation Analysis (n=177)*

		WP	A	SS	WE
WP	Person	1			
	Correlation				
A	Person	.535	1		

	Correlation	**			
	Sig (2-tailed)	.000			
SS	Person	.335	.205		
	Correlation	**	*	1	
	Sig (2-tailed)	.000	.006		
WE	Person	.423	.381	.343**	
	Correlation	*	**		1
	Sig (2-tailed)	.000	.000	.000	

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

*. Correlation is significant at the 0.05 level (2-tailed).

*WE = Average Work Engagement, *WP= Average Work Pressure, *SS = Average Supervisor Support, *A = Average Autonomy

4.9 Multiple Regression Analysis

4.9.1 Relationship between Job Demands, Job Resources and Work

Engagement

Table 4.16 is output summary of the multiple regression when all three independent variables which are work pressure, autonomy and supervisor support simultaneously influence dependent variable, work engagement. R-value indicates the correlation of the two variables that is 0.506 and R Square value (2) explains the variance, which is 0.256. It means that job demands and job resources explained 25.6% of the variance in work engagement.

The standard coefficient Beta (β) for work pressure is .0.237 with significant level is .004 follow by Supervisor Support ($\beta = -.221$ with significant level .002).

Nevertheless, there is an autonomy that had indicated positive relationship by Standard Coefficient Beta (β) = .0209 with significant level 0.008. It shows that autonomy had a positive relationship with work engagement.

Table 4.16: *Regression results of workload, work pressure, autonomy and supervisor support on work engagement*

Independent Variables	Dependent Variable	t	Sig	Tolerance	VIF
	Work Engagement (Std Beta)				
Work Pressure		2.94	0.004	.661	1.51
Supervisor Support		3.18	0.002	.887	1.13
Autonomy		2.69	0.008	.713	1.40
F value	19.797				
R2	.256				
Adjusted R Square	.243				
Durbin- Watson	1.490				

4.10 Hypothesis Testing

Table 4.17: *Summary of Hypothesis Testing*

HYPOTHESIS	RESULT
H1: Work stress is positively related to work engagement	Supported
H2: There is a positive relationship between	Supported

supervisory support and work engagement.

H3 : There is a positive relationship between autonomy Supported
and work engagement.

4.11 Conclusion

As conclusion, this chapter is dedicated to test the hypothesis which is constructed and presented in chapter 2. Other than that, this chapter also presented and discussed the findings and discussion of this research. All the tests were conducted by using SPSS version 16.0, and the results has been obtained using specific analytical methods such as Pearson Correlation and Multiple Regression Analysis. The next chapter will discuss the results, conclusion and recommendation for the future research.



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CHAPTER 5

DISCUSSION, RECOMMENDATIONS AND CONCLUSIONS

5.0 Introduction

In this chapter, it was begin with the discussion of the results which has been obtained in chapter four, followed by recommendation for future research, limitation of the study and conclusion. The discussion was based on the objective of the study as presented in chapter 1, which are:

1. To examine the relationship between job demand and work engagement
2. To investigate the relationship between job resource and work engagement

5.1 Summary of the Research

The main purpose of this study is to examine the relationship between job demands, job resources and work engagement. In order to test the hypotheses, multiple regressions was conducted to test direct relationship between components of job demands namely work pressure and two components of job resources namely autonomy and supervisor support and work engagement. From the result of the study, work pressure, autonomy and supervisor support were positively related to work engagement. Hence all hypotheses are supported.

5.2 Relationship between Job Demand and Work Engagement

5.2.1 Work Pressure

The finding revealed that work stress was positively related to work engagement. The result from the current study supports previous studies conducted by Hafizah (2015), Dikkers, Jansen, De Lange, Vinkenbunrg and Kooij (2010), Schaufeli, Taris and Van Rhenen (2008) and Bakker, Van Emmerik and Euwema (2006).

In the UPSI context, the result reveals that when then work pressure is increase, the work engagement will also increase. Referring to the demographic in UPSI, the number of female employees is high compare to male employees. When relate with the nature of working environment, female employees will try their best to complete the task given on the day itself because they don't want to face with the more work pressure if they extend the task longer. They also will try to push themselves harder to ensure that all tasks are complete in order to avoid their work pressure increase day by day. Referring to the demographic in UPSI, age between 25-34 is the dominant group. This number shows that even though administrative staffs in UPSI face with high workload, but they are still engaged with their wok because the range of this age of people is very enthusiastic and highly motivated. They try to perform as best as they could in order to develop themselves in their career.

Even though in many instances exposing individuals to high work pressure will lead to feelings of exhaustion, negative attitude such as cynicism and efficacy may turns into ineffectiveness. Indirectly it ensuing impact for their mental health including scaling down in their dedication and enthusiasm. This might have negative impact on the employee work engagement. However, referring to the current findings empirically showed that work pressure can also act as a positive motivator to engage

with work. Interestingly stress in the configuration of a challenge energizes them psychologically and physically. It is undeniable that it motivates the administrative staffs to learn new expertise and master their jobs. When they met the challenge, it bring them satisfactory feeling.

5.2.2 Workload

As argued by Steenland, et.al (as cited in Hafizah, 2015), job demand can be considered as a good or a bad job stressor. Even though it has been suggested that job demands most probably become stressors in situations which need high effort to maintain an anticipate performance level and this might elicit negative responses such as burnout, it also can provide challenges in work. Stress within individual comfort zone can help them to retain concentrate, energetic, and willing to face new challenges in the workplace.

However in the UPSI context, workload is not related to work engagement. This is because even though there is a high workload, it is still manageable for all administrative staffs. The nature of work in UPSI leads all the administrative staffs to complete the task within the time frame. Management will come out work schedule with time frame for each stage of work task such as student admission, course registration, class schedule, examination date, convocation date and others. Therefore they already have the big picture of the amount of workload, so that they can manage their workload and complete it with the stipulated time.

5.3 Relationship between Job Resources and Work Engagement

5.3.1 Autonomy

In this study, the finding revealed that autonomy was positively related to work engagement. The current research findings were in line with previous studies conducted by Bakker and Bal (2010), Chung and Tay (2010), Taipale, Selander, Anttila, and Natti (2011), Adel (2015) and Hafizah (2015).

In the UPSI context, the result reveals that when the autonomy is increase, the work engagement will also increase. This is because administrative staffs in UPSI have the feeling that organization is believe their ability and trust them to perform their task in order to provide the best outcome. Thus, because of this feeling, it brings a high impact on their effectiveness and motivation. Due to the daily task in UPSI was almost same year by year, the administrative staffs can freely and independently in planning their work and firmly decide the process flow in order to accomplish the task given.

Logically, individuals who are psychologically indebted will enhance well-being and increase intrinsic motivation or extrinsic motivation. Thus it will spread their optimism, positive attitudes and pro-active behaviours. Hence they force to return benefits that they received in material or non-material form to the one that benefited them.

5.3.2 Supervisory Support

In this study, the finding revealed that supervisory support was positively related to work engagement. The current research findings were in line with previous studies conducted by Bakker and Bal (2010), Adel (2015) and Hafizah (2015).

Referring to the working environment in UPSI, supervisor really committed with their role. They are easy to be approached by their subordinates. Other than that, they are also willing to guide their subordinate in any situation. Supervisor in UPSI not only approach their subordinate regarding work related but they also willing to grant emotional and influential support in any time when is needed.

There is no doubt that employee who perceive high level of support from supervisor tend to shape their views of organizational support as an employee's perceptions that their supervisor cares about their work life well-being. Indirectly supervisory support act as a motivating role in order to encourage the administrative staffs to be more engaged in their work. Hence through this finding, it proves that administrative staffs in UPSI perceived high supervisory support.

Taking a specific consideration of the role of managerial staffs, we can conclude that the level of their service extremely rely on the environment in the institution and their feeling at work.

5.4 Implication for Practice

The current findings have contributed to the current body of knowledge on work engagement. The findings from the current study have given empirical evidence on

the relationship between job demands, job resources and work engagement. In this study, work stress, autonomy and supervisor support were found positively related to work engagement. Though in the past, there are limited studies that focusing on job demands, job resources and work engagement among administrative staffs in public university in Malaysia.

The current findings also have several implications for university's management. The study demonstrates that supervisor support and autonomy had a positive impact in enhancing work engagement among administrative staffs. Therefore, management needs to provide continuous support to them in order to help them improve in term of their work performance.

Listed below are the activities that suggested by researcher which can be apply in UPSI:-

1. Apply group activity

Leader or manager should express a genuine interest towards subordinates and spending time in understanding their need. It is important to apply hand on leadership because through this activity, leader can figure out how their subordinates' experience in the workplace can be improved.

2. Dialogue session from time to time

Genuine relationship between employee, leader and management inspires trust and build comradely. It is important to make employee know the superior or management are concern of their need. Encouragement of promoting idea sharing, suggestion and improvement will make them feel

valued and heard. This kind of work environment and sense of comradery is critical to work engagement.

3. Frequently recognize and reward their hard work

In order to make employee engage to their job, they need to know that their effort is recognize by company. Regularly thanking them will convince that superior is aware of their hard work and provide fully support for them to boost their performance. This practice will make them believe that they are contributing to something worthwhile and be proud of the outcome from their efforts. Indirectly this practice also will help them to view the interconnection of direction between their activities and company favourable outcome.

Another interesting finding found in this study is they tend to be more engaged when they face with work stress. In academic circles, positive effect on work engagement is also correlated with productivity, positive work attitudes and extra-role behaviours. Therefore university's management have to provide them positive working environment by giving them more flexibility for them to carry out their work.

5.5 Limitation and Direction for Future Research

This research is restricting by several limitations in the design which 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 administrative staffs' work engagement, but the study was conducted only in UPSI. The present study does not include administrative staffs from other public

universities. Thus, the findings only captured perceptions of administrative staffs from UPSI 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 administrative staffs from others universities which might offers greater understanding on the issues of work engagement.

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

In summary, even though there are limitations associated with the approach used in this study, there is still providing useful findings for both researchers and practitioners.

5.6 Conclusions

The main concern of this study is to examine the role of job demands workload and work stress and job resources such as autonomy and supervisor support on work engagement. The results indicate that work stress, autonomy and supervisor support was positively related to work engagement.

It is hoped that through the examination of job demands such as work pressure, job resources like autonomy and supervisor support, work engagement among the administrative staffs in UPSI, a more complete understanding of the influence of these factors will be achieved.



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APPENDIX A

QUESTIONNAIRE UNIVERSITI UTARA MALAYSIA



Questionnaire / Borang Soal Selidik

Dear Sir and Madam / *Tuan dan Puan*

I'm a postgraduate student at University Utara Malaysia. Currently, I'm conducting a research in the area of work engagement in UPSI. The purpose of this study is to examine the relationship between job demands, job resources and work engagement.

You are kindly requested to complete the attached questionnaire as honestly as possible. The information being solicited from you is purely for academic purposes and it will be treated confidential. Your honest completion of this questionnaire will assist in generating information that will help administrative staffs in UPSI to improve on their work outcome. Results of the study will be applied in the thesis for the fulfilment of completing my Master's in Human Resource Management with Universiti Utara Malaysia.

Saya adalah seorang pelajar pasca siswazah di Universiti Utara Malaysia. Pada masa ini, saya sedang menjalankan penyelidikan berkaitan keterlibatan kerja di UPSI. Kajian ini bertujuan untuk mengkaji hubungan antara tuntutan kerja, sumber kerja dengan keterlibatan kerja. Anda dimohon untuk melengkapkan borang soal-selidik yang dilampirkan dengan sejujurnya. Maklumat yang anda berikan adalah semata-mata untuk tujuan akademik dan ia akan dianggap sulit. Kejujuran dalam melengkapkan borang soal selidik ini akan membantu dalam menjana maklumat yang mana akan membantu UPSI untuk meningkatkan hasil kerja. Keputusan kajian akan digunakan dalam tesis bagi memenuhi dan melengkapkan Sarjana Pengurusan Sumber Manusia yang saya jalani dengan Universiti Utara Malaysia.

This questionnaire consists of four sections as follows.

Borang soal selidik ini mengandungi 4 seksyen seperti berikut:

Section A –Work engagement / Keterlibatan kerja

Section B –Job demands / Tuntutan kerja

Section C –Job resources / Sumber kerja

Section D – Demographic profile / Profil demografi

Kindly return the completed questionnaire before 10th May 2016. Should you have any further inquiry, please contact me at 013-5880820

Sila kembalikan borang soal selidik yang telah dilengkapkan pada sebelum 10^{hb} May 2016. Sekiranya anda mempunyai sebarang pertanyaan, sila hubungi saya di 013-5880820.

Thank you for your support and cooperation.

Terima kasih atas kerjasama dan sokongan anda.

Nur Hidayah Binti Othman

College of Business

Universiti Utara Malaysia

Section A: Work Engagement / Keterlibatan Kerja

This section examines the work engagement. Please circle your level of agreement at the end of each statement

Bahagian ini mengkaji keterlibatan kerja. Sila bulatkan tahap persetujuan anda pada akhir setiap penyata.

Strongly Disagree / Sangat Tidak Setuju (1)	Disagree / Tidak Setuju (2)	Neither Agree nor Disagree / Antara Setuju dan Tidak Setuju (3)	Agree / Setuju (4)	Strongly Agree / Sangat Setuju (5)
--	--------------------------------	--	-----------------------	---------------------------------------

1	At my work, I feel that I am busting with energy / Di tempat kerja saya, saya merasakan bahawa saya penuh bertenaga	1	2	3	4	5
2	I find the work that I do full of meaning and purpose / Saya merasakan kerja yang saya lakukan penuh makna	1	2	3	4	5
3	Time flies when I'm working / Masa berlalu dengan cepat ketika saya sedang melakukan kerja	1	2	3	4	5
4	At my job, I feel strong and vigorous / Di tempat kerja, saya merasakan sungguh kuat dan bertenaga	1	2	3	4	5
5	I am enthusiastic about my job / Saya berasa semangat dengan kerja saya.	1	2	3	4	5
6	When I am working, I forget everything else around me / Ketika melakukan kerja, saya lupa perkara lain di sekeliling saya.	1	2	3	4	5
7	My job inspires me / Tugas saya memberikan inspirasi kepada saya.	1	2	3	4	5
8	When I get up in the morning, I feel like going to work. Apabila bangun pagi, saya berasa sungguh semangat untuk ke tempat kerja.	1	2	3	4	5
9	I feel happy when I am working intensely / Saya berasa gembira ketika saya bekerja dengan gigih.	1	2	3	4	5
10	I am proud of the work that I do / Saya bangga dengan kerja yang saya lakukan.	1	2	3	4	5
11	I am immersed in my work / Saya tenggelam dengan kerja saya.	1	2	3	4	5
12	I can continue working for very long periods at a time / Saya boleh terus bekerja untuk tempoh yang panjang pada satu-satu masa	1	2	3	4	5
13	To me, my job is challenging / Pada saya, kerja saya sangat mencabar	1	2	3	4	5
14	I get carried away when I'm working / Saya hanyut dengan kerja saya ketika bekerja.	1	2	3	4	5
15	At my job, I am very resilient, mentally / Di tempat kerja, mental saya kuat.	1	2	3	4	5
16	It is difficult to detach myself from my job / Adalah sukar untuk memisahkan saya dengan kerja	1	2	3	4	5

Section B: Job Demands / Tuntutan Kerja

This section examines the job demands. Please circle your level of agreement at the end of each statement.

Bahagian ini mengkaji tuntutan kerja. Sila bulatkan tahap persetujuan anda pada akhir setiap penyata.

Strongly Disagree / Sangat Tidak Setuju (1)	Disagree / Tidak Setuju (2)	Neither Agree nor Disagree / Antara Setuju dan Tidak Setuju (3)	Agree / Setuju (4)	Strongly Agree / Sangat Setuju (5)
--	--------------------------------	--	-----------------------	---------------------------------------

1	I do not have enough time to perform quality work / <i>Saya tidak mempunyai masa yang cukup untuk melakukan kerja dengan berkualiti</i>	1	2	3	4	5
2	The number of hours I am expected to finish my work has increased in recent years / <i>Jumlah jam yang saya jangka untuk menyelesaikan kerja saya telah meningkat sejak kebelakangan ini.</i>	1	2	3	4	5
3	The amount of administration I am expected to do is manageable, given my other responsibilities / <i>Jumlah kerja saya adalah terkawal walaupun mempunyai tanggungjawab lain.</i>	1	2	3	4	5
4	My workload has increased over the past 12 months / <i>Bebanan kerja saya bertambah sejak 12 bulan yang lalu.</i>	1	2	3	4	5
5	I often need to work after hours to meet my work requirements. / <i>Saya seringkali bekerja di luar waktu kerja untuk memenuhi tuntutan kerja.</i>	1	2	3	4	5
6	The amount of administration I am expected to do is reasonable / <i>Jumlah kerja yang saya jangka adalah munasabah.</i>	1	2	3	4	5
7	The number of work I am expected to handle and / or supervise is reasonable / <i>Jumlah kerja yang saya jangka untuk dikendalikan atau diselia adalah munasabah.</i>	1	2	3	4	5
8	My work requires working very hard / <i>Keja saya memerlukan usaha gigih.</i>	1	2	3	4	5
9	My work requires working fast / <i>Kerja saya perlu disiapkan dengan kadar segera.</i>	1	2	3	4	5
10	My work requires too much input from me / <i>Kerja saya memerlukan input yang banyak dari saya.</i>	1	2	3	4	5
11	I have enough time to complete my job / <i>Saya mempunyai masa yang cukup untuk menyiapkan tugas saya.</i>	1	2	3	4	5
12	My job often makes conflicting demands on me / <i>Tugas saya sering memberi tuntutan konflik kepada saya.</i>	1	2	3	4	5

Section C: Job Resources / Sumber Kerja

This section examines the job demands. Please circle your level of agreement at the end of each statement.

Bahagian ini mengkaji Sumber kerja. Sila bulatkan tahap persetujuan anda pada akhir setiap penyata.

Strongly Disagree / Sangat Tidak Setuju (1)	Disagree / Tidak Setuju (2)	Neither Agree nor Disagree / Antara Setuju dan Tidak Setuju (3)	Agree / Setuju (4)	Strongly Agree / Sangat Setuju (5)
--	--------------------------------	--	-----------------------	---------------------------------------

1	<i>My job allows me to make a lot of decision on my job. / Kerja saya membenarkan saya membuat keputusan.</i>	1	2	3	4	5
2	<i>On my job, I have very little freedom to decide how I do my job / Saya hanya mempunyai sedikit kebebasan dalam membuat keputusan terhadap kerja saya.</i>	1	2	3	4	5
3	<i>I have a lot of influence about what happens on my job. / Saya mempunyai pengaruh yang besar terhadap kerja saya.</i>	1	2	3	4	5
4	<i>My manager shows me how to improve my performance/ Pengurus saya menunjukkan cara untuk meningkatkan pencapaian saya.</i>	1	2	3	4	5
5	<i>My manager let me know how well I am performing/ Pengurus saya memberi maklum balas berkaitan tahap pencapaian kerja saya.</i>	1	2	3	4	5
6	<i>My manager utilizes a variety of methods to assist me with my development./ Pengurus saya menggunakan pelbagai cara untuk meningkatkan tahap pencapaian saya.</i>	1	2	3	4	5
7	<i>My manager has the skill to coach me effectively in my development. / Pengurus saya mempunyai kemahiran untuk melatih saya secara berkesan dalam pembangunan kerja saya.</i>	1	2	3	4	5
8	<i>My manager views developing staff as an important aspect of his/ her job. / Pengurus saya memandang pembangunan pekerja sebagai aspek yang penting dalam kerjanya.</i>	1	2	3	4	5

Section D: Demographic Profile

Please provide some information about yourself / *Sila berikan sedikit maklumat tentang diri anda.*

1. Gender / Jantina

- Male / *Lelaki*
 Female / *Perempuan*

2. Age / Umur

- 21 - 24 years / *tahun*
 25 - 34 years / *tahun*
 35 - 44 years / *tahun*
 45 - 54 years / *tahun*
 55 years and above / *tahun dan keatas*

3. Marital Status / Taraf Perkahwinan

- Single / *Bujang*
 Married / *Kahwin*
 Divorced / *Bercerai*
 Widow or widower / *Balu atau Duda*

4. Educational Level / Tahap Pendidikan

- PMR
 SPM
 Diploma
 Bachelor Degree
 Master Degree
 PhD

5. Employment Status / Status Pekerjaan

- Permanent / *Tetap*
 Contract / *Kontrak*

6. How long have you been in service with UPSI?

- Less than 2 years / *Kurang dari 2 tahun*
 2 – 5 years / *tahun*
 6 – 10 years / *tahun*
 11 – 15 years / *Itahun*
 16 – 20 years / *tahun*
 More than 20 years / *Lebih dari 20 tahun*

7. Employment Level / *Tahap Perkhidmatan*

- Officer / *Pegawai*
 Supporting Staff / *Staf Sokongan*



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Thank you for your kind cooperation / *Terima kasih diatas kerjasama anda.*

Work Engagement – Reliability Test (Pilot Study)

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded ^a	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.879	16

Item Statistics

	Mean	Std. Deviation	N
BERTENAGA	3.8500	.81273	20
BERMAKNA	4.2000	.52315	20
MASA BERLALU DENGAN CEPAT	4.2500	.91047	20
KUAT DAN BERTENAGA	3.9000	.64072	20
BERSEMANGAT	4.1000	.55251	20
LUPA PADA PERSEKITARAN	3.3500	.93330	20
TUGAS MEMBERI INSPIRASI	4.0000	.56195	20
SEMANGAT UNTUK KE TEMPAT KERJA	4.0000	.56195	20
GEMBIRA MELAKUKAN KERJA	4.1000	.64072	20
BANGGA DENGAN PEKERJAAN	4.2000	.61559	20

TENGGELAM DENGAN KERJA	3.0500	.99868	20
BEKERJA PADA TEMPOH YANG LAMA	3.6500	.87509	20
CABARAN	4.0500	.60481	20
HANYUT DENGAN KERJA	3.4000	1.04630	20
MENTALITI	4.0000	.56195	20
SUKAR DIPISAHKAN DENGAN KERJA	3.7000	.65695	20

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
BERTENAGA	57.9500	42.261	.636	.867
BERMAKNA	57.6000	44.568	.687	.868
MASA BERLALU DENGAN CEPAT	57.5500	40.682	.700	.863
KUAT DAN BERTENAGA	57.9000	44.411	.565	.870
BERSEMANGAT	57.7000	44.537	.651	.868
LUPA PADA PERSEKITARAN	58.4500	41.418	.612	.868
TUGAS MEMBERI INSPIRASI	57.8000	43.853	.735	.866
SEMANGAT UNTUK KE TEMPAT KERJA	57.8000	45.116	.558	.871
GEMBIRA MELAKUKAN KERJA	57.7000	44.116	.601	.869
BANGGA DENGAN PEKERJAAN	57.6000	43.832	.666	.867
TENGGELAM DENGAN KERJA	58.7500	46.618	.149	.893
BEKERJA PADA TEMPOH YANG LAMA	58.1500	45.292	.304	.883
CABARAN	57.7500	45.250	.495	.873
HANYUT DENGAN KERJA	58.4000	44.463	.293	.887
MENTALITI	57.8000	44.168	.691	.867

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
BERTENAGA	57.9500	42.261	.636	.867
BERMAKNA	57.6000	44.568	.687	.868
MASA BERLALU DENGAN CEPAT	57.5500	40.682	.700	.863
KUAT DAN BERTENAGA	57.9000	44.411	.565	.870
BERSEMANGAT	57.7000	44.537	.651	.868
LUPA PADA PERSEKITARAN	58.4500	41.418	.612	.868
TUGAS MEMBERI INSPIRASI	57.8000	43.853	.735	.866
SEMANGAT UNTUK KE TEMPAT KERJA	57.8000	45.116	.558	.871
GEMBIRA MELAKUKAN KERJA	57.7000	44.116	.601	.869
BANGGA DENGAN PEKERJAAN	57.6000	43.832	.666	.867
TENGGELOM DENGAN KERJA	58.7500	46.618	.149	.893
BEKERJA PADA TEMPOH YANG LAMA	58.1500	45.292	.304	.883
CABARAN	57.7500	45.250	.495	.873
HANYUT DENGAN KERJA	58.4000	44.463	.293	.887
MENTALITI	57.8000	44.168	.691	.867
SUKAR DIPISAHKAN DENGAN KERJA	58.1000	43.147	.703	.865

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
61.8000	49.642	7.04572	16

Workload– Reliability Test (Pilot Study)

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded ^a	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.674	7

Item Statistics

	Mean	Std. Deviation	N
TIDAK CUKUP MASA JANGKAMASA KERJA MENINGKAT	3.0500	1.19097	20
JUMLAH KERJA TERKAWAL	3.4500	.88704	20
BEBANAN KERJA BERTAMBAH	3.9500	.60481	20
SERING KERJA DILUAR WAKTU KERJA	3.6500	.87509	20
JANGKAAN JUMLAH KERJA MUNASABAH	3.5500	.75915	20
JANGKAAN KERJA DISELIA MUNASABAH	3.8500	.48936	20
JANGKAAN KERJA DISELIA MUNASABAH	3.8500	.58714	20

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
TIDAK CUKUP MASA JANGKAMASA KERJA MENINGKAT	22.3000	5.695	.624	.551
JUMLAH KERJA TERKAWAL	21.9000	7.884	.399	.635
BEBANAN KERJA BERTAMBAH	21.4000	9.621	.180	.685
SERING KERJA DILUAR WAKTU KERJA	21.7000	7.379	.529	.593
JANGKAAN JUMLAH KERJA MUNASABAH	21.8000	8.168	.441	.624
JANGKAAN KERJA DISELIA MUNASABAH	21.5000	9.526	.296	.664
	21.5000	9.526	.218	.677

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
25.3500	10.661	3.26505	7

Work Pressure– Reliability Test (Pilot Study)

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded ^a	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.576	5

Item Statistics

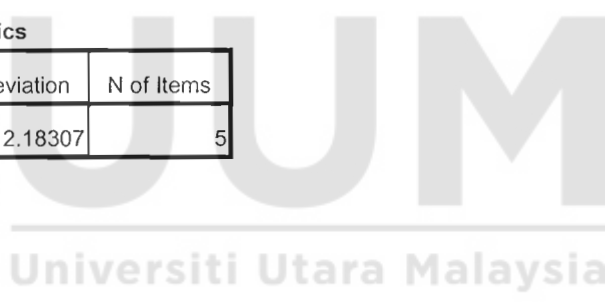
	Mean	Std. Deviation	N
MEMERLUKAN USAHA GIGIH	4.0000	.56195	20
KERJA DISIAPKAN SEGERA	3.8500	.58714	20
KERJA MEMERLUKAN BANYAK INPUT	4.1500	.48936	20
CUKUP MASA SELESAI TUGASAN	3.8000	.95145	20
TUGAS MEMBERI TUNTUTAN KONFLIK	2.8500	.87509	20

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
MEMERLUKAN USAHA GIGIH	14.6500	3.503	.450	.475
KERJA DISIAPKAN SEGERA	14.8000	3.853	.247	.563
KERJA MEMERLUKAN BANYAK INPUT	14.5000	4.053	.240	.566
CUKUP MASA SELESAI TUGASAN	14.8500	2.661	.387	.499
TUGAS MEMBERI TUNTUTAN KONFLIK	15.8000	2.800	.410	.474

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
18.6500	4.766	2.18307	5



Autonomy– Reliability Test (Pilot Study)

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded ^a	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.655	3

Item Statistics

	Mean	Std. Deviation	N
MEMBENARKAN BUAT KEPUTUSAN	3.7500	.71635	20
SEDIKIT KEBEBASAN BUAT KEPUTUSAN	3.4000	.82078	20
PENGARUH BESAR TERHADAP KERJA	3.6500	.67082	20

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
MEMBENARKAN BUAT KEPUTUSAN	7.0500	1.313	.657	.289

SEDIKIT KEBEBASAN BUAT KEPUTUSAN	7.4000	1.621	.292	.812
PENGARUH BESAR TERHADAP KERJA	7.1500	1.608	.498	.524

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
10.8000	2.905	1.70448	3



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Supervisor Support– Reliability Test (Pilot Study)

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded ^a	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.861	5

Item Statistics

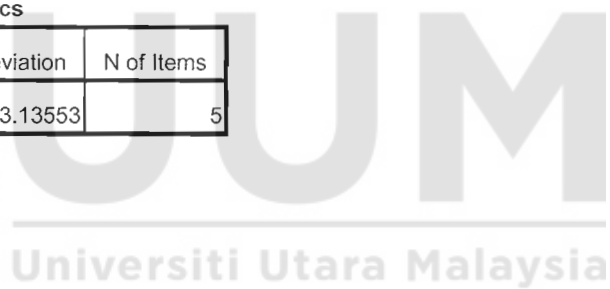
	Mean	Std. Deviation	N
MAKLUMBALAS TERHADAP TAHAP KERJA	3.7000	.86450	20
CARA MENINGKATKAN PRESTASI	3.6500	.81273	20
PENINGKATAN TAHAP PENCAPAIAN	3.6500	.81273	20
KEMAHIRAN MELATIH SECARA BERKESAN	3.5000	.76089	20
KEPENTINGAN PEMBANGUNAN PEKERJA	3.9000	.64072	20

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
MAKLUMBALAS TERHADAP TAHAP KERJA	14.7000	5.484	.889	.772
CARA MENINGKATKAN PRESTASI	14.7500	5.671	.904	.770
PENINGKATAN TAHAP PENCAPAIAN	14.7500	5.987	.801	.799
KEMAHIRAN MELATIH SECARA BERKESAN	14.9000	5.884	.912	.772
KEPENTINGAN PEMBANGUNAN PEKERJA	14.5000	9.526	-.027	.963

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
18.4000	9.832	3.13553	5



APPENDIX B2.1: FACTOR ANALYSIS OF WORK ENGAGEMENT

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.722
Bartlett's Test of Sphericity	Approx. Chi-Square
	615.965
	Df
	120
	Sig.
	.000

Communalities

	Initial	Extraction
WORK ENGAGEMENT_1	1.000	.704
WORK ENGAGEMENT_2	1.000	.656
WORK ENGAGEMENT_3	1.000	.610
WORK ENGAGEMENT_4	1.000	.485
WORK ENGAGEMENT_5	1.000	.591
WORK ENGAGEMENT_6	1.000	.659
WORK ENGAGEMENT_7	1.000	.543
WORK ENGAGEMENT_8	1.000	.377
WORK ENGAGEMENT_9	1.000	.622
WORK ENGAGEMENT_10	1.000	.599
WORK ENGAGEMENT_11	1.000	.654
WORK ENGAGEMENT_12	1.000	.591
WORK ENGAGEMENT_13	1.000	.476
WORK ENGAGEMENT_14	1.000	.618
WORK ENGAGEMENT_15	1.000	.665
WORK ENGAGEMENT_16	1.000	.574

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.469	21.683	21.683	3.469	21.683	21.683
2	2.293	14.330	36.013	2.293	14.330	36.013
3	1.312	8.202	44.215	1.312	8.202	44.215
4	1.242	7.763	51.979	1.242	7.763	51.979
5	1.107	6.916	58.894	1.107	6.916	58.894
6	.923	5.768	64.662			
7	.895	5.594	70.257			
8	.833	5.205	75.462			
9	.655	4.094	79.556			
10	.597	3.733	83.289			
11	.566	3.537	86.826			
12	.547	3.418	90.245			
13	.459	2.871	93.115			
14	.430	2.689	95.804			
15	.344	2.149	97.953			
16	.327	2.047	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix^a

	Component				
	1	2	3	4	5
WORK ENGAGEMENT_1	.384	.559	-.315		-.359
WORK ENGAGEMENT_2		.458		.466	-.375
WORK ENGAGEMENT_3			-.403	.457	.472
WORK ENGAGEMENT_4	.431	.494			
WORK ENGAGEMENT_5	.403	.477	.433		
WORK ENGAGEMENT_6	.525	-.570			
WORK ENGAGEMENT_7	.536		-.379		
WORK ENGAGEMENT_8	.422			-.355	
WORK ENGAGEMENT_9	.340		.602	-.039	
WORK ENGAGEMENT_10	.452			.518	
WORK ENGAGEMENT_11	.652	-.464			

WORK ENGAGEMENT_12	.513	-.335			-.378
WORK ENGAGEMENT_13	.362				-.369
WORK ENGAGEMENT_14	.582	-.515			
WORK ENGAGEMENT_15	.487	.335		-.414	.378
WORK ENGAGEMENT_16	.648				

Extraction Method: Principal Component Analysis.

a. 5 components extracted.



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APPENDIX B2.2: FACTOR ANALYSIS OF JOB DEMANDS

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.838
Bartlett's Test of Sphericity Approx. Chi-Square	455.346
Df	66
Sig.	.000

Communalities

	Initial	Extraction
WORDLOAD_1	1.000	.378
WORDLOAD_2	1.000	.486
WORDLOAD_3	1.000	.431
WORDLOAD_4	1.000	.471
WORDLOAD_5	1.000	.348
WORDLOAD_6	1.000	.420
WORDLOAD_7	1.000	.546
WORKSTRESS_8	1.000	.416
WORKSTRESS_9	1.000	.462
WORKSTRESS_10	1.000	.359
WORKSTRESS_11	1.000	.461
WORKSTRESS_12	1.000	.508

Extraction Method: Principal Component
Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.819	31.826	31.826	3.819	31.826	31.826
2	1.467	12.226	44.052	1.467	12.226	44.052
3	1.062	8.847	52.899			

4	.874	7.282	60.181		
5	.810	6.754	66.935		
6	.714	5.951	72.887		
7	.667	5.560	78.447		
8	.614	5.121	83.567		
9	.591	4.924	88.491		
10	.506	4.218	92.708		
11	.480	4.001	96.709		
12	.395	3.291	100.000		

Extraction Method: Principal Component Analysis.

Component Matrix^a

	Component	
	1	2
WORDLOAD_1	.614	
WORDLOAD_2	.695	
WORDLOAD_3	.355	.553
WORDLOAD_4	.682	
WORDLOAD_5	.588	
WORDLOAD_6		.608
WORDLOAD_7		.714
WORKSTRESS_8	.643	
WORKSTRESS_9	.673	
WORKSTRESS_10	.562	
WORKSTRESS_11	.499	-.460
WORKSTRESS_12	.711	

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

APPENDIX B2.3: FACTOR ANALYSIS OF JOB RESOURCES

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.607
Bartlett's Test of Sphericity	Approx. Chi-Square
	318.965
	Df
	28
	Sig.
	.000

Communalities

	Initial	Extraction
AUTONOMY_1	1.000	.563
AUTONOMY_2	1.000	.343
AUTONOMY_3	1.000	.541
S.SUPPORT_4	1.000	.476
S.SUPPORT_5	1.000	.453
S.SUPPORT_6	1.000	.525
S.SUPPORT_7	1.000	.681
S.SUPPORT_8	1.000	.482

Extraction Method: Principal Component
Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.556	31.952	31.952	2.556	31.952	31.952
2	1.509	18.859	50.811	1.509	18.859	50.811
3	1.235	15.435	66.246			
4	.825	10.309	76.555			
5	.671	8.389	84.944			
6	.515	6.439	91.383			
7	.398	4.980	96.363			
8	.291	3.637	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix^a

	Component	
	1	2
AUTONOMY_1	.658	-.360
AUTONOMY_2	.574	
AUTONOMY_3	.693	
S.SUPPORT_4	.662	
S.SUPPORT_5	.626	
S.SUPPORT_6	.344	.638
S.SUPPORT_7	.476	.674
S.SUPPORT_8	.371	.587

Extraction Method: Principal Component
Analysis.

a. 2 components extracted.



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APPENDIX B3: RELIABILITY TEST (AFTER FACTOR ANALYSIS)

Work Engagement

Case Processing Summary

		N	%
Cases	Valid	177	100.0
	Excluded ^a	0	.0
	Total	177	100.0

a. Listwise deletion based on all variables in the procedure.



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Case Processing Summary

		N	%
Cases	Valid	177	100.0
	Excluded ^a	0	.0
	Total	177	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.750	16

Item Statistics

	Mean	Std. Deviation	N
WORK ENGAGEMENT_1	4.3955	.55553	177
WORK ENGAGEMENT_2	4.4520	.53216	177
WORK ENGAGEMENT_3	4.4802	.50103	177
WORK ENGAGEMENT_4	4.4011	.55657	177
WORK ENGAGEMENT_5	4.4915	.54480	177
WORK ENGAGEMENT_6	4.1977	.79801	177
WORK ENGAGEMENT_7	4.3333	.57075	177
WORK ENGAGEMENT_8	4.3446	.63055	177
WORK ENGAGEMENT_9	4.4237	.56014	177
WORK ENGAGEMENT_10	4.3898	.58437	177
WORK ENGAGEMENT_11	4.0904	.82073	177
WORK ENGAGEMENT_12	4.2542	.68903	177
WORK ENGAGEMENT_13	4.3390	.57238	177
WORK ENGAGEMENT_14	4.1525	.77928	177
WORK ENGAGEMENT_15	4.3729	.58090	177
WORK ENGAGEMENT_16	4.2881	.64976	177

Case Processing Summary

		N	%
Cases	Valid	177	100.0
	Excluded ^a	0	.0
	Total	177	100.0



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Case Processing Summary

		N	%
Cases	Valid	177	100.0
	Excluded ^a	0	.0
	Total	177	100.0



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Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
WORK ENGAGEMENT_1	65.0113	19.579	.280	.743
WORK ENGAGEMENT_2	64.9548	19.941	.219	.748
WORK ENGAGEMENT_3	64.9266	20.637	.083	.757
WORK ENGAGEMENT_4	65.0056	19.369	.324	.740
WORK ENGAGEMENT_5	64.9153	19.521	.301	.742
WORK ENGAGEMENT_6	65.2090	17.962	.394	.733
WORK ENGAGEMENT_7	65.0734	18.921	.407	.733
WORK ENGAGEMENT_8	65.0621	19.195	.303	.742
WORK ENGAGEMENT_9	64.9831	19.676	.257	.745
WORK ENGAGEMENT_10	65.0169	19.108	.356	.737
WORK ENGAGEMENT_11	65.3164	17.127	.510	.719
WORK ENGAGEMENT_12	65.1525	18.494	.388	.733
WORK ENGAGEMENT_13	65.0678	19.598	.264	.744
WORK ENGAGEMENT_14	65.2542	17.702	.451	.726
WORK ENGAGEMENT_15	65.0339	19.135	.353	.737
WORK ENGAGEMENT_16	65.1186	18.060	.504	.722

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
69.4068	21.265	4.61144	16

APPENDIX B3: RELIABILITY TEST (AFTER FACTOR ANALYSIS)

Workload

Case Processing Summary

		N	%
Cases	Valid	177	100.0
	Excluded ^a	0	.0
	Total	177	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.475	3

Item Statistics

	Mean	Std. Deviation	N
WORDLOAD_3	3.7458	.53065	177
WORDLOAD_6	4.0960	.60003	177
WORDLOAD_7	4.0056	.54873	177

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
WORDLOAD_3	8.1017	.842	.263	.429
WORDLOAD_6	7.7514	.733	.279	.411
WORDLOAD_7	7.8418	.748	.349	.283

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
11.8475	1.380	1.17474	3

APPENDIX B3: RELIABILITY TEST (AFTER FACTOR ANALYSIS)

Work Pressure

Case Processing Summary

		N	%
Cases	Valid	177	100.0
	Excluded ^a	0	.0
	Total	177	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.817	9

Item Statistics

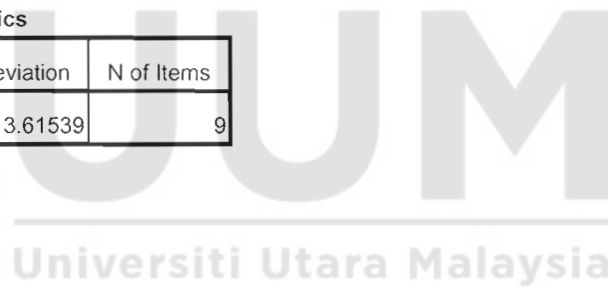
	Mean	Std. Deviation	N
WORDLOAD_1	4.2994	.67052	177
WORDLOAD_2	4.2542	.63764	177
WORDLOAD_4	4.3559	.64216	177
WORDLOAD_5	4.2486	.66170	177
WORKSTRESS_8	4.4407	.59174	177
WORKSTRESS_9	4.4633	.58393	177
WORKSTRESS_10	4.3503	.60435	177
WORKSTRESS_11	4.3955	.62303	177
WORKSTRESS_12	4.3107	.65674	177

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
WORDLOAD_1	34.8192	10.501	.488	.802
WORDLOAD_2	34.8644	10.300	.578	.790
WORDLOAD_4	34.7627	10.398	.546	.794
WORDLOAD_5	34.8701	10.602	.471	.804
WORKSTRESS_8	34.6780	10.720	.517	.798
WORKSTRESS_9	34.6554	10.602	.560	.793
WORKSTRESS_10	34.7684	10.872	.460	.805
WORKSTRESS_11	34.7232	10.951	.420	.810
WORKSTRESS_12	34.8079	10.133	.599	.787

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
39.1186	13.071	3.61539	9



APPENDIX B3: RELIABILITY TEST (AFTER FACTOR ANALYSIS)

Autonomy

Case Processing Summary

		N	%
Cases	Valid	177	100.0
	Excluded ^a	0	.0
	Total	177	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.708	5

Item Statistics

	Mean	Std. Deviation	N
AUTONOMY_1	4.3616	.59762	177
AUTONOMY_2	4.2316	.57159	177
AUTONOMY_3	4.3107	.61195	177
S.SUPPORT_4	4.0904	.86127	177
S.SUPPORT_5	4.1017	.86000	177

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
AUTONOMY_1	16.7345	4.287	.491	.655
AUTONOMY_2	16.8644	4.675	.347	.702
AUTONOMY_3	16.7853	4.249	.490	.654
S.SUPPORT_4	17.0056	3.426	.531	.634
S.SUPPORT_5	16.9944	3.483	.510	.644

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
21.0960	5.860	2.42075	5



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APPENDIX B3: RELIABILITY TEST (AFTER FACTOR ANALYSIS)

Supervisor Support

Case Processing Summary

		N	%
Cases	Valid	177	100.0
	Excluded ^a	0	.0
	Total	177	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.608	3

Item Statistics

	Mean	Std. Deviation	N
S.SUPPORT_6	4.2203	.67591	177
S.SUPPORT_7	4.1977	.63101	177
S.SUPPORT_8	4.3277	.55899	177

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
S.SUPPORT_6	8.5254	1.001	.374	.580
S.SUPPORT_7	8.5480	.920	.534	.327
S.SUPPORT_8	8.4181	1.211	.358	.587

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
12.7458	1.963	1.40122	3