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**WORK ENGAGEMENT AMONG EMPLOYEES AT STATE
DEPARTMENT OF HEALTH NEGERI SEMBILAN**



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**MASTER HUMAN RESOURCE MANAGEMENT
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Abstract

One of the reasons why organizations start to place greater emphasis on employees' work engagement is because it has positive and beneficial consequences at the individual and organizational levels, and these include organizational commitment, physical health and business-unit performance. In other words, high levels of work engagement can lead to greater commitment and satisfaction, lower absenteeism and quit rates, improved health and well-being, and better in-role and extra-role performance. However, to achieve a high level of engaged employees and to ensure engaged employees stay engaged is not an easy task. In most situations, management has the great influences on the job demands and resources of their employees. Therefore, this study examined the direct relationship between workload, work pressure, autonomy, social support, performance feedback and work engagement. A total of 175 questionnaires were personally distributed to respondents State of Health Negeri Sembilan after permission was granted. Out of the 175 questionnaires distributed, 164 questionnaires were returned, representing a response rate of 93.71%. However, only 163 questionnaires were usable for further analysis. The hypotheses for the direct relationship were tested using multiple regression analyses. Interestingly, the results for direct relationship showed that workload and work pressure were not related to work engagement, while autonomy, and performance feedback were positively related to work engagement. The research results reported in this study suggest the need for autonomy, and performance feedback to enhance work engagement. Even though work load and work pressure were found not related to work engagement in this study, it doesn't mean that the management can increased the workload and pressuring their employees without proper planning. Normally, employees will try to cope with job demands by putting energy in their jobs. But, prolonged exposure to and coping with job demands, will deteriorate employees' personal energy, and engendering feelings of exhaustion.

Keywords: Work engagement, workload, work pressure, autonomy, social support, performance feedback

Abstrak

Salah satu sebab mengapa organisasi mula meletakkan penekanan yang tinggi kepada keterlibatan kerja pekerja ada kerana kesan positif dan manfaat yang boleh diperolehi pada peringkat individu dan organisasi dan ini termasuklah komitmen terhadap organisasi, kesihatan fizikal dan prestasi unit perniagaan. Dalam erti kata yang lain, keterlibatan kerja yang tinggi boleh meningkatkan komitmen dan kepuasan pekerja, mengurangkan kadar ketidakhadiran dan lantik henti, meningkatkan tahap kesihatan diri dan dapat menjalankan peranan yang diberi dengan baik. Walau bagaimanapun, untuk mencapai tahap keterlibatan pekerja yang tinggi bukan sesuatu yang mudah. Dalam kebanyakan keadaan, pihak pengurusan mempunyai pengaruh yang kuat dalam menentukan tuntutan kerja dan sumber kepada pekerja. Oleh yang demikian, kajian ini mengkaji hubungan langsung antara bebanan kerja, tekanan kerja, autonomi, sokongan sosial, maklum balas prestasi dengan keterlibatan kerja. Sebanyak 175 borang soal selidik telah diedarkan secara peribadi kepada responden di Jabatan Kesihatan Negeri Negeri Sembilan. Daripada 175 borang soal selidik yang diedarkan, sebanyak 164 soal selidik telah diterima semula dengan kadar maklum balas sebanyak 93.71%. Walau bagaimanapun, sebanyak 163 soal selidik boleh digunakan untuk analisis selanjutnya. Hipotesis ke atas kesan langsung diuji dengan menggunakan analisis regresi berganda. Dapatan kajian bagi hubungan langsung menunjukkan bahawa bebanan kerja dan tekanan kerja tidak mempunyai hubungan dengan keterlibatan kerja. Manakala, hanya autonomi dan maklum balas prestasi didapati mempunyai hubungan yang positif dengan keterlibatan kerja. Dapatan kajian ini mencadangkan mengenai keperluan kepada autonomi dan maklum balas prestasi dalam meningkatkan keterlibatan kerja. Walaupun bebanan kerja dan tekanan kerja tidak mempunyai hubungan dengan keterlibatan kerja, ia tidak bermakna pihak pengurusan boleh meningkatkan bebanan kerja dan memberi tekanan yang tinggi terhadap pekerja tanpa perancangan yang baik. Kebiasaannya, pekerja akan cuba untuk menghadapi tuntutan kerja dengan memberikan sepenuh tenaga terhadap kerja mereka. Namun, pendedahan yang berpanjangan untuk menghadapi tuntutan kerja boleh mengakibatkan pekerja berasa letih dan tidak bertenaga.

Kata kunci: Keterlibatan kerja, bebanan kerja, tekanan kerja, autonomi, sokongan sosial, maklum balas prestasi

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

Issues of employees' engagement at work have been a concern for many organizations. Disengaged employees are not only contributing to the high turnover rate but it will also have a negative influence on the organization's performance and productivity. As shown in Gallup Blog (January 25, 2018), employees with the least engagement are found to quit more often as compared to highly engaged employees at work. The survey indicates that when employees are not engaged, they are more likely to leave the organizations as the employees tend to have performance issues or are unhappy. As a result, the organizations may lose their most talented and skilled employees.

Therefore, having a highly engaged employee is very crucial for organizations because they will help the organization to achieve the set objectives and goals through good performance. As argued by Schaufeli and Salanova (2007), in order for the organizations to survive and successfully compete in the turbulent work environment, organizations need to develop and retain employees who are highly motivated and are willing to go the extra mile for them. In addition, to survive in the rapidly changing work demands, organizations require employees who are full of energy and self-confidence; are passionate about their work; and are fully involved in their work activities. In other words, organizations today are in need of an engaged workforce.

According to Saks (2006), highly engaged employees tend to be more confident with their employers or supervisors and are most likely to report positively about their organizations. The reason why organizations start to emphasis on employees' work engagement is because it will lead to positive and beneficial consequences especially to the individual and organizational levels; including the organizational commitment, physical health and business-unit performance. In fact, studies have shown that those who feel engaged seem to be more satisfied with their jobs, feel more committed to the organizations and will stay longer in the organizations (Demerouti, Bakker, De Jonge, & Janssen, 2001; Schaufeli & Bakker, 2004; Schaufeli & Salanova, 2007). As a result, high level of work engagement will lead to lower absenteeism and quit rates, highly commitment and satisfaction, improves health and well-being, and increase performance and profitability, indirectly. Therefore, it is reasonable to suggest that highly engaged employees is likely to make a significant contribution to the success of the organizations.

Though many organizations have acknowledge the importance of having highly engaged employees, the reality shows that it is not an easy task to achieve and maintain a high level of engagement among employees. Thus, organization needs to figure out what is the best way to design a job and working condition that can enhance employee engagement.

1.2 Problem Statement

As shown in Table 1.1, a recent survey conducted by Gallup Blog (December 4, 2017) found that majority (67%) of the world's one billion full-time workers are found not

engaged with their work and 18% are actively disengaged at work. Only 15% are found engaged. In another Aon Hewitt's study also has measures regarding on employee engagement; consists of more than 1,000 organizations around the globe. Based on Aon Hewitt "Trends in Global Employee Engagement" report, results showed that employee engagement can be categorized in 4 categories; which are 24% employees highly engaged at work, 39% are employees moderate engaged at work, 22% employees' passive at work and 15% employees are actively disengaged at work (Aon Hewitt, 2017).

Table 1.1

Comparison of worldwide: Actively disengaged, not engaged, engaged employees in 2016 & 2017

	2016	2017
Engaged employees	13%	15%
Not engaged employees	71%	67%
Actively disengaged employees	16%	18%

Source: Gallup blog (2016 & 2017)

These current findings have not shown much change with the survey conducted by Gallup in 2013 on 142 countries. Based on the survey, it was found that Southeast Asia countries have the highest disengaged employees (73%) as compared to other regions.

Table 1.2

Worldwide: Engaged, not engaged, actively disengaged employee by region

Region	Engaged	Not Engaged	Actively Disengaged
United States and Canada	29%	54%	18%
Australia and New Zealand	24%	60%	16%
Latin America	21%	60%	19%
Commonwealth of Independent States and nearby countries	18%	62%	21%
Western Europe	14%	66%	20%
Southeast Asia	12%	73%	14%
Central and Eastern Europe	11%	63%	26%
Middle East and North Africa	10%	55%	35%
South Asia	10%	61%	29%
Sub-Saharan Africa	10%	57%	33%
East Asia	6%	68%	26%

Source: Gallup's State of the Global Workplace report (2013)

In Malaysia, the survey conducted by Gallup in year 2013 has found that 81% of employees are “not engaged” at work and 8% are “actively disengaged”. Only 11% of Malaysia’s employees are found to be highly engaged with their work.

Table 1.3
Engagement among employees (ASEAN Countries)

Country	Engaged	Disengaged	Actively Disengaged
Philippines	29%	63%	8%
Thailand	14%	84%	2%
Malaysia	11%	81%	8%
Indonesia	8%	77%	15%
Singapore	9%	76%	15%

Source: Adapted from Gallup's "State of the Global Workplace" report (2013)

Another survey on trends in global employee engagement which was conducted in 2017 also has shown low percentage of employee engagement in Malaysia (59%).



Figure 1.1. Employee engagement score

In the past, many studies have been conducted as an attempt to understand factors that might influence employees' engagement towards their work. For example, organizational commitment was found positively related to work engagement in studies involving 336 frontline employees in Jordanian banking (Albdour & Altarawneh, 2014); 272 employees

of Chinese Airlines (Li, Li & Shi, 2010); 199 nursing staff from various hospitals in South Africa (Beukes & Botha, 2013); 300 employees from the largest and oldest Chamber of Commerce associations in Florida, USA (Shuck, 2010); and 502 employees from four financial companies in Indonesia (Mangundjaya, 2012).

Even though many studies have been conducted in understanding about work engagement among employees, studies among employees in the public sector is still limited especially in the government health service in Malaysian setting. In the past, most of the studies were conducted in telecommunication companies (Brummelhuis, Bakker, Hetland & Keulemans, 2012; Schaufeli & Salanova, 2007; van Doornen, Houtveen, Langelan, Bakker, van Rhenen & Schaufeli, 2009), private health sector (Hakanen, Schaufeli & Ahola, 2008; Lin, Oi-ling, Kan & Xin-wen, 2009; Weigl, Hornung, Parker, Petru, Glaser & Angerer, 2010), hotels (Burke, Koynucu, Jing & Fiksenbaum, 2009; Salanova, Agut, & Peiro, 2005; Slatten & Mehmetoglu, 2011), insurance companies (Demerouti, Bakker, De Jonge, Janssen, & Schaufeli, 2001; Schaufeli & Bakker, 2004; Xu & Thomas, 2011), banks (Hassan & Ahmed, 2011; Koyuncu, Burke & Fiksenbaum, 2006), and education (Adekola, 2011; Hakanen, Bakker, & Schaufeli, 2006; Lorento-Prieto, Salanova-Soria, Martinez-Martinez & Schaufeli, 2008; Rothmann & Jordaan, 2006; Salmela-Aro, Tolvanen & Nurmi, 2009).

If there are studies on work engagement conducted in Malaysia, they are focused on academics (Sukhri, 2015); manufacturing industry (Mohamad Zaki, 2011; Kamaruddin, 2013); and accountants (Abdul Wahab, Saada & Selamat, 2014). Even though Razali

(2016) have conducted a study on nurses in Malaysia on work engagement issue, the study is more focused on job characteristics, emotional intelligence and work engagement. Study that investigate the relationship between job demands, job resources and work engagement among employees at government health services is still limited. In the past, job demands such as workload and work pressure were found to negatively related to work engagement when tested in different settings (Hakanen, Bakker & Demerouti, 2005; Hu, Schaufeli & Taris, 2013; Inoue, Kawakami, Tsuno, Shimazu, Tomioka & Nakanishi, 2013; Llorens, Bakker, Schaufeli, & Salanova, 2006; Tomic & Tomic, 2011). However, not many studies in the past take into account workload and work pressure in government health service setting as a predictor of work engagement.

Similarly, job resources such social support, performance feedback and autonomy engagement among employees social support, performance feedback and autonomy were positively related to work engagement in various settings and countries (Bakker & Demerouti, 2007, 2008; Buys & Rothmann, 2010; Lee & Ashforth, 1996; Lin, Oi-ling, Kan & Xin-wen, 2009; Korunka, Kubicek, Schaufeli & Hoonakker, 2009; Nahrgang, Morgeson & Hofmann, 2011; Rothmann & Joubert, 2007; Saks, 2006; Schaufeli & Bakker, 2004; Taipale, Selander, Antilla & Natti, 2011). However, studies that focus in the government health service settings are still not limited. Therefore, this study is conducted to examine the relationship between job demands, job resources and work engagement among employees at the government health service setting, namely State Department of Health Negeri Sembilan.

Based on the statistics given by the State Department of Health Negeri Sembilan, a total of 1141 applications have been received requesting for transfer from month of May till December 2017. Among the reasons given for transfer include seeking new working environment, and wanting to go back to their hometown. Even though the reasons given do not directly imply to workload or work pressure, it is worth to investigate whether these two factors contribute to the issues of disengagement among the employees. Similarly, it is also important to examine whether autonomy, social support and performance feedback can enhance work engagement among employees in government health service.

1.3 Research Questions

Based on the problems discussed above, the central question for this study is “what factors are considered critical in influencing employee’s work engagement”. Specifically,

1. Do job demands (such as word load and work pressure) related to work engagement?
2. Do job resources (such as autonomy, social support and performance feedback) related to work engagement?

1.4 Research Objectives

Generally, this study aims to examine factors that related to work engagement among employees in government health service. Thus, to answer the research questions posted above, the following research objectives were formulated:

1. To examine the relationship between job demands (work load and work pressure) and work engagement; and
2. To identify the relationship between job resources (autonomy, social support and performance feedback) and work engagement.

1.5 Significance of Study

This study is focused on investigating the relationship between job demands and job resources on work engagement among employees in the government health service especially in the State Department of Health, Negeri Sembilan. Though in the past, many studies have been carried out on work engagement, limited studies have been conducted in the government health service. Thus, the findings from this study is hope to benefit both practitioners and scholars. From the theoretical perspective, the findings from this study will contribute to the current body of knowledge on work engagement. In addition, the findings from this study will provide empirical evidence on the role of job demands and job resources in enhancing work engagement among employees in the government health service.

Apart from that, the findings from this study may also provide an effective contribution to the State Department of Health's management, on the method of enhancing work engagement among the employees. This study will provide empirical evidence on the role of job demands, and job resources on work engagement. Thus, helping the State

Department of Health's management to identify and focus on the most important and critical factors in achieving a more engaged employees. This is a broader contribution that extends beyond the State Department of Health context.

1.6 Scope of Study

This study is conducted with the intention to investigate factors that related to work engagement among employees. However, this study is only focused on employees at State Department of Health Negeri Sembilan (JKNNS). In this study, two components of job demands (workload and work pressure) and three components of job resources (autonomy, social support and performance feedback) were tested against work engagement. Respondents for this study includes medical officers, dentists, pharmacists, public health staffs, administrative staffs, engineers, and IT staffs. This study is using quantitative approach where data is collected at one point of time (cross sectional study) through distribution of questionnaire.

1.7 Definition of Key Terms

Work Engagement: Work engagement is “a positive, fulfilling work related state of mind that is characterized by vigor, dedication and absorption” (Schaufeli & Bakker, 2004, p.295).

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

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

1.8 Organization of Chapters

This chapter is the first of five chapters in this dissertation. Chapter 2 reviews past literature on work engagement and the concept of work engagement. The chapter also discusses past studies on factors that might influence work engagement. The discussions in Chapter 2 continue with the research framework tested in this study. The chapter ends with the development of the research hypotheses.

Chapter 3 describes on the method use in this study such as the research design and procedures. The chapter explains on the selection of respondents, sample types and size, and the development of the questionnaires. The chapter concludes with the description of the strategies and procedures that were used to analyze data collected from the survey.

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

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



CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter discusses issues related to work engagement as discussed in past literature. These issues are reviewed to provide theoretical foundation for the study. The discussion in this chapter begins with the concept of work engagement and how it was measured in the past. The discussions continue with the concept and past empirical studies of job demands and job resources. This chapter ends with the research framework and development of the research hypotheses.

2.2 Definition of Work Engagement

Kahn was the first to introduce the concept of work engagement in the year 1990 where he refers it as "harnessing of organizational members' selves to their work roles" (p. 694). In other words, work engagement is the extent to which an individual is attentive and absorbed in the performance of his or her work. According to Kahn (1990), people who are engaged are not only physically involved in their work, but they also are cognitively alert and emotionally connected to others at the moment of engagement. However, he believed that the level of work engagement varies across individuals as the amount of energy and dedication they contribute to their job is different.

There are also researchers who have regarded work engagement as a worthwhile concept when studying burnout, health, job satisfaction, job performance and turnover intention of employees. Maslach and Leiter (1997) for example, have referred work engagement as the opposite of job burnout where they defined burnout as an erosion of engagement. They have defined burnout as exhaustion, cynicism, and inefficacy and engagement is the direct opposite where energy replaces emotional exhaustion, involvement replaces cynicism, and a sense of efficacy replaces lack of professional accomplishment.

In other writing, Schaufeli, Salanova, Gonzalellez-Roma and Bakker (2002, p.74) defined work engagement as a “positive, fulfilling, work-related state of mind that is characterized by vigor, dedication and absorption.” They define vigor as high levels of energy and mental resilience that relate to work experience, and enthusiasm to invest effort in one’s work and to persist despite being faced with obstacles. It means that the individual feels motivated, eager and excited about his or her work and will keep on even when setbacks, limitations or challenges arise. Dedication is when a person deeply involved in one’s work and experiencing feelings of significance, enthusiasm, inspiration and challenge. In other words, individuals become overwhelmed in their work and feeling that their work is important, meaningful and challenging. Finally, absorption refers to being content and completely focused on one’s work.

May, Gilson, and Harter’s (2004) definition of work engagement was quite similar as what has been previously defined by Kahn (1990). Like Kahn, they also believed that work engagement consists of physical, emotional, and cognitive component. The physical

component is the energy used to perform the job; the emotional component is putting one's heart into one's job; and the cognitive component is described as being absorbed in a job so much that everything else is forgotten.

Other authors like Robertson-Smith and Markwick (2009) defined engagement as something given by the employee which can benefit the organization through commitment and dedication, advocacy, discretionary effort, using the maximum talent and fully support the organization's goals and values. Engaged employees normally will feel a sense of attachment towards their organization that lead to less turnover.

2.3 Job Demands

Authors such as Demerouti, Bakker, Nachreiner and Schaufeli (2001, p.501) refer job demands as “those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort, and are therefore associated with certain physiological and/or psychological costs”. According to Bakker and Demerouti (2008) and Schaufeli and Bakker (2004), though employees will try to cope with job demands by putting energy in their jobs, prolonged exposure to and coping with job demands, will deteriorate their personal energy, and engendering feelings of exhaustion. Thus, employees might lower their performance goals (e.g. decreasing their work tempo, reducing their punctuality) in an attempt to protect their resources and energy level. These changes may be due to job demands become stressors in certain situations.

As discussed in the literature, job demand can be considered as a good or a bad job stressor. Even though job demands can provide challenges in work, authors such as Steenland, Johnson, and Nowlin (1997) argued that job demands may also become stressors in situations that require high effort to sustain an expected performance level, and this might results in negative responses such as burnout. Bad job stressors are known as the hindrance stressors where it involves high level of undesirable constraints that interfere with or inhibit an individual's ability to achieve valued goals (Cavanough, Boswell, Roehling & Boudreau, 2000). Role conflict, role overload, and role ambiguity are some example of hindrance stressors.

On the other hand, stressors are considered to be good when it has potential to promote personal growth and achievement of the employee (Podsakoff, LePine & LePine, 2007). Good stressor is known as challenge stressor and it includes high levels of workload, time pressure, and responsibility (McCauley, Ruderman, Ohlott, & Marrow, 1994). These demands are considered to be rewarding work experiences, and are therefore considered as 'good' stressors.

2.3.1 Workload

Reviewing the literature indicates that there is no clear universal definition of workload. However, Cain (2007) has categorized workload into three categories: the amount of work and the number of things to do; time and the particular aspect of time one is concerned with; and, the subjective psychological experiences of the human operator. In other writing,

workload was defined as a high amount of work and implies that an individual has too much to do in too little time (Sonnentag & Bayer, 2005).

2.3.2 Work pressure

According to Karasek and Theorell (1990), work pressure is provisionally conceived of as a cognitive-energetic state of person, producing the experience of strain or felt pressure, which is associated with the ongoing and anticipated execution of work tasks. However, work pressure is vary and it can be accept or decline, depending on the employee's expectation of the amount of work that remains to be done successfully. For example, work pressure is measured on how fast one must work, how hard one must work, whether there is enough time to complete the work, and whether there is an interception to the work. In addition, Rothmann (2002) and Schaufeli and Enzmann (1998) included other situational factors of job demands as ambiguity and conflict in role, stressful events, pressure to make critical and immediate decisions, high responsibility, and having deadlines to meet. Nowadays, the jobs or tasks carrying out by the public servants are challenging enough. They are required to work extra role, working for the longest time, working with the minimum time with the maximum resources, meet the client's expectations and maintain the quality of services. For this reason, researcher will focus on work pressure among the public servants that occur in every occupational context.

While some workplace pressure is normal, excessive pressure can interfere with organizations productivity and performance, impact employee's physical and emotional

health, and affect the relationships and home life. Work pressure exist when employees overwhelmed at work, they lose confidence and may become angry, irritable, or depressed. In this study, work pressure is defined as the degree to which an employee has to work fast, has a great deal to work, and has a little time to complete the work (Karasek & Theorell, 1990).

2.4 Previous Studies on Job Demands and Work Engagement

Reviewing the literature on job demands and work engagement have shown that testing similar job demand's dimensions in different settings led to different results. For example, workload was found positively related to work engagement among 714 Dutch employees (Xanthopoulou, Bakker, Demerouti and Schaufeli, 2007) and among 329 information communication technology (ICT) and management consultants (Hallberg, Johanson & Schaufeli, 2007).

In other studies, workload was found negatively related to work engagement. For example, study on 169 hospital nurses where the results showed that the higher the workload, the lower the vigor and dedication among the hospital nurses (Tomic & Tomic, 2011), and on 1919 Finnish dentists (Hakanen, Bakker & Demerouti, 2005). Hu, Schaufeli and Taris (2013) who were using two different samples of respondents (625 blue collar workers from 3 mechanic factories and 716 health professionals from 4 Chinese hospital in China) also found negative relationship between workload and work engagement for both samples of respondents. In the academic setting, Rothman and Jordan (2006) found that workload was

negatively related to work engagement among 471 academic staff in South African higher education institutions.

Mix results were also found when testing work pressure (in terms of having to work very fast) on work engagement. In a study conducted by Schaufeli, Taris and Van Rhenen (2008) on 587 Telecom managers in Dutch, work pressure was found to be positively related to work engagement. Similar findings were also found when Bakker, Van Emmerik and Euwema (2006) conducted a study on 2229 Royal Dutch constabulary officers.

However, in other studies, work pressure was found negatively related to work engagement. For example, in a study involving 154 employees from HR department from different industries in German (Kuhnel, Sonnentag & Bledow, 2012) and 274 teachers in Netherlands (Lorente, Salanova, Martinez & Schaufeli, 2008), work pressure was negatively related to work engagement. Negative relationship was also found between work pressure and work engagement when tested on 203 employees from USA (Nahrgang, Morgeson & Hofman, 2011), and on 7869 service sector employees from eight European countries (Taipale, Selander, Anttila & Natti, 2011).

Reviewing the literature also have shown how in some studies, work pressure was found not related to work engagement. For example, Sonnentag (2003) found no significant relationship when tested on 147 German public service employees. Similar findings were also found in a study conducted by Coetzee and Rothman (2007) where work pressure did

not play a significant role in work engagement for 83 employees in a small manufacturing firm in north-west province in South Africa.

2.5 Job Resources

Authors such as Schaufeli and Bakker (2004) defined job resources as physical, psychological, social, or organizational aspects of a job. They believed that job resources may have the potential to reduce job demands where the associated physiological and psychological costs are functional in achieving work goals, and stimulate personal growth, learning, and development. In other writing, Hobfoll (1989) defined resources as “objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions, or energies” (p. 516).

Many authors believed that job resources are able to play either as an intrinsic motivational role (foster employees’ growth, learning, and development) or as an extrinsic motivational role (they are instrumental in achieving work goals) (Bakker & Demerouti, 2007; Ryan & Deci, 2000). As intrinsic motivators, job resources can promote individuals’ growth and development by satisfying the basic human needs such as the needs for autonomy, competence and relatedness. As an example, supervisory coaching can improve job competence; whereas, involvement in decision-making and colleague or supervisory support might satisfy the need for autonomy and the need to belong respectively.

Job resources may also play as an *extrinsic* motivational role. The resourceful work environment foster the willingness to dedicate one's efforts to the work task (Schaufeli & Bakker, 2004; Bakker & Demerouti, 2007). It is believed that in such environments, it is likely that the task will be completed successfully and the goal will be attained. For instance, supportive colleagues and performance feedback increase the likelihood of being successful in achieving one's work goals.

2.5.1 Autonomy

The most commonly cited definition of autonomy is one that formulated by Hackman and Oldham (1980). They defined job autonomy as the degree to which the job provides substantial freedom, independence and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out. In other writing, several authors have defined autonomy as the degree to which the job offers considerable liberty, free hand and choice to the individual in scheduling the work and determining the means to achieve the tasks (Hackman & Oldham 1980). It can also be defined as the choice and freedom inborn in the job to perform numerous tasks. These definitions resemble the psychological and metaphysical meaning of everyday autonomy. In this study, autonomy is defined as autonomy is the extent of freedom, independence, and discretion of an employee to plan his/her work pace and method Karasek (1985).

2.5.2 Social Support

Social support refers to social interaction with colleagues and supervisors which is advantageous to one's own well-being. It is also can be understood as a form of instrumental support, if it refers to additional resources provided by colleagues and supervisors (Karasek & Theorell, 1990). Social support is the perception and actuality that one is cared for, has assistance available from other people, and that one is part of a supportive social network. According to Wills (1991), social support can come from a variety of sources, including family, friends, romantic partners, pets, community ties, supervisor and coworkers (Wills, 1991).

Studies have shown how social support can be as an additional intangible resources that provided by colleagues and supervisors to develop work engagement among employees (Hakanen *et.al.*, 2006; Kahn, 1990), increased commitment and loyalty (Rhoades & Eisenberger, 2002). When employees feel safe at work and feel supported by the organizations, they are willing to invest their times and efforts to meet the work goals. Thus, social support can be regarded as a starter that derived motivational process and consequently to higher performance among employees at work. In this study, social support is defined as the level of helpful social interaction existing on the job from colleagues and supervisors (Karasek & Theorell, 1990).

2.5.3 Performance Feedback

Performance feedback is defined as the extent to which an employee knows his / her own job performance from the job itself, colleagues, supervisors, or customers (Sims, Szilagyi & Keller, 1976). Reviewing past literature show that performance feedback was positively related to work engagement, job satisfaction, job performance, influence, task enjoyment, organizational commitment, and productivity (Bakker & Bal, 2010), and in-role and extra-role performance (Demerouti, 2006).

2.6 Previous Studies on Job Resources and Work Engagement

Reviewing past studies have shown a positive relationship between job resources components such as social support, performance feedback and autonomy and work engagement in various settings and countries (Bakker & Demerouti, 2007, 2008; Buys & Rothmann, 2010; Lee & Ashforth, 1996; Lin, Oi-ling, Kan & Xin-wen, 2009; Korunka, Kubicek, Schaufeli & Hoonakker, 2009; Nahrgang, Morgeson & Hofmann, 2011; Rothmann & Joubert, 2007; Saks, 2006; Schaufeli & Bakker, 2004; Taipale, Selander, Antilla & Natti, 2011).

For example, Hakanen, Perhoniemi and Toppinen-Tanner (2008) found that job resources, such as the opportunity to be creative (craftsmanship) and positive feedback about the direct results of work, predicted work engagement in a 3-year panel study among 2,555 Finnish dentists. Similar findings were also found in a study conducted by Schaufeli,

Bakker and Van Rhenen (2009) when tested on managers and executives of a Dutch telecom company. The results showed that increases in social support, autonomy, and performance feedback were positive predictors of future work engagement and (reduced) registered sickness absenteeism.

In Netherland, researchers such as Xanthopoulou, Bakker, Demerouti and Schaufeli (2009) found that work engagement are best explained when all the dimensions of job resources such as autonomy, social support, and performance feedback are simultaneously taken into account when a longitudinal study of 163 employees in electrical engineering and electronic company was conducted. This finding support previous study conducted by Lloren, Bakker, Schaufeli and Salanova (2006) on employees in Spain and Holland, where they found that employee's drive, perseverance and interest to work depend on the extent to which organizations provide them with the job resources they need.

In 2010, Bakker and Bal have conducted a study on six different teacher training colleges to examine the intra-individual relationship between job resources and work engagement. The results suggested that job resources have motivational potential and enhance teachers' week-levels of work engagement.

2.7 Research Framework

In this study, the proposed research framework as shown in Figure 2.1 is developed based on job demands-resources model (Bakker & Demerouti, 2007), and the discussion of

literature on work engagement (Bakker & Demerouti, 2007; Bakker, Demerouti, Taris, Schaufeli & Schreurs, 2003; Demerouti, Bakker, Nachreiner & Schaufeli, 2001). The research framework for this study shows the relationship between job demands (workload, work pressure), job resources (autonomy, social support, feedback performance), and work engagement. In this study, job demands and job resources are the independent variables, while work engagement is the dependent variable.

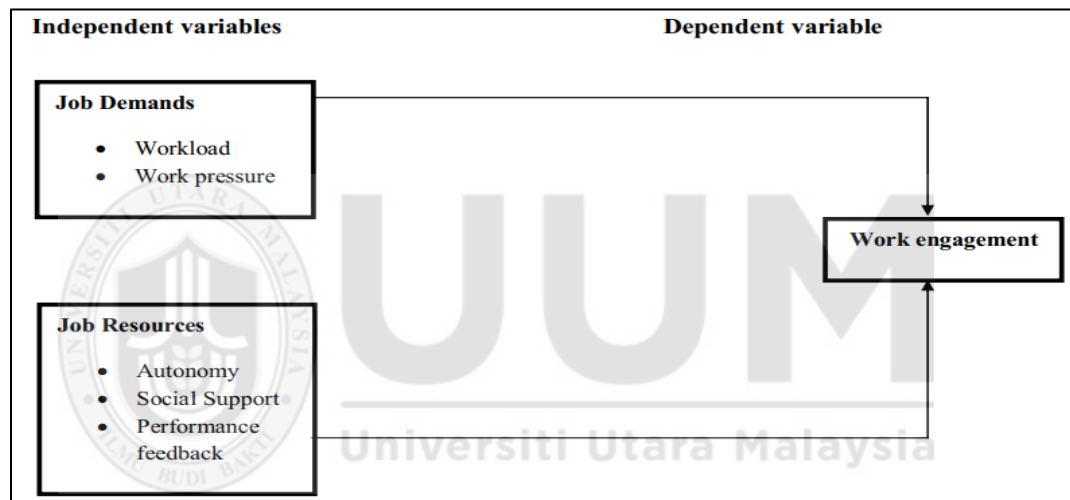


Figure 2.1. Research framework

2.8 Development of Hypotheses

2.8.1 Relationship between Job Demands and Work Engagement

Studies have reported negative relationship between job demands (workload and work pressure) and work engagement (Hakanen, Bakker & Demerouti, 2005; Hu, Schaufeli & Taris, 2011; Llorens *et.al*, 2006). Though, previous studies have not taken into account the

workload and work pressure among employees at government health service as a predictor of work engagement, it is predicted that similar relationship will be obtained. Therefore, the following research hypotheses are proposed:

H1a: Workload is negatively related to work engagement

H1b: Work pressure is negatively related to work engagement

2.8.2 Relationship with Job Resources and Work Engagement

Previous studies have shown that job resources (autonomy, social support and performance feedback) has positively related to work engagement in various settings and countries (Bakker & Demerouti, 2007; 2008; Lee & Ashforth, 1996; Rothmann & Joubert, 2007; Sak, 2006; Bakker & Schaufeli, 2004; Karasek & Theorell, 1990). However, there is limited studies that examined the relationship between autonomy, social support and performance feedback and work engagement among employees at government health service. Thus, it is expected that positive relationship will also found in this study and the following hypotheses are proposed:

H2a: Autonomy is positively related to work engagement

H2b: Social support is positively related to work engagement

H2c: Performance feedback is positively related to work engagement

2.9 Conclusions

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



CHAPTER 3

METHOD

3.1 Introduction

Chapter 3 discusses the methods used in the study. The discussion includes the sample design, survey materials used in this study, procedure for collecting data and the research measures. The chapter concludes with strategies for analyzing the data.

3.2 Research Design

According to Malhotra (1999), a research design is a framework or masterpiece for conducting the research. It specifies the details of procedures while obtaining the information needed to structure or to overcome the research problem. In this study, the quantitative research design is adopted because it will help the researcher to examine the relationship between the research variables (Kreuger & Neuman, 2006). As argued by Anderson, Sweeny and Williams (2000), quantitative research design can reliably determine if one idea or concept is better than the alternatives. Also, quantitative research design can help to answer questions about relationship among measured variables with the purpose of explaining, predicting and controlling the phenomenon (Leedy & Ormrod, 2005). Therefore, quantitative research design is suitable to use as it allows the testing of relationship between job demands, job resources and work engagement using the statistical methods.

For this study, the unit of analysis is at the individual level (employees at State Health Department Negeri Sembilan) and the primary data for this study was collected through distribution of questionnaires. The perceptions from respondents about the job demands such as workload and work pressure, and job resources such as autonomy, social support and performance feedback become the basis to understand their influence on work engagement. Thus, it is reasonable to use individual as a unit of analysis to test all the variables shown in the research framework.

This study is a cross-sectional, where the data was distributed and collected at one point of time. It is simple, less expensive and allows the collection of data in a short period.

3.3 Population and Sampling Design

3.3.1 Population

Population of this study includes employees in State Department of Health. There are officially fifteen state department of health in Malaysia, which under Malaysia Ministry of Health (twelve in Peninsular Malaysia, and three in Borneo). Since it was not practical to conduct a survey on all the fifteen state department of health, only one state department of health was chosen. Therefore, employees at State Department of Health Negeri Sembilan (JKNNS) have been chosen to be the population of this study. The total population for this study was 329 from six sections: administration and management; medical; food technology; public health; dental and pharmacy. The population also consists of two main group; medical (medical / public health / dental / food technology / pharmacist) and non-

medical (administration / engineering / IT / psychology). In JKNNS, there are four categories of employees which are top management (including the Director of JKNNS and the vice directors for all six sections), executive level (P&P) with the grade position between 41 and 54, support staff level 1 with the grade position between 19 and 40, and support staff level 2 with the grade position between 11 and 18.

The distribution of population as shown in Table 3.1. Total employees in JKNNS is 329; consists of Top Management with 7 officers, Executives level (P&P) with 101 officers, Support staff level 1 with 178 staffs and Support staff level 2 with 43 staffs.

Table 3.1
Distribution of population for JKNNS

Position Level	Total employees
Top Management	7
Executives level (P&P)	101
Support Staff level 1	178
Support Staff level 2	43
TOTAL	329

Source: Data retrieved from HR unit, JKNNS

3.3.2 Sampling Size

Zikmund (2003) argued that due to a large number of population, it is not practicable to collect data from the whole population. Therefore, the researcher need to do a sampling

process in order to determine the sampling size. Sekaran and Bougie (2010) defines sample as a “subset of the population of study”. Therefore, sample size will be used to represent the whole of population in research. Generally, sampling process involved three steps which are identifying the population, identifying sample size and choosing the sample. In this study, the total number of population is 329. Based on Krejcie and Morgan (1970), if the population is 329, then the suggested sample size would be 175. This means 175 employees in JKNNS is needed to represent the whole study population.

3.3.3 Sampling Technique

According to Sekaran (2003), in order to avoid the human bias occur while selecting the cases to be included in this sample, the researcher has decided to use a systematic random sampling. In addition, this sampling technique is easy to implement. Gay & Diehl (1996) provided six steps to implement systematic random sampling. First, define the population. The population for this study is 329. Second, determined the desire sample size. The sample size for this study is 175. Third, obtain the list of the population. The list was obtained from the HR Unit under study. Fourth, determine the K by dividing population by the desired sample size. In this study, the K-value is equal to 2 ($329/175=1.88$). Fifth, determine the total respondent for each of the position level under study. Sixth, researcher pick a random number from the list of the employees at JKNSS for each position level as the starting number. Then every 2nd name is automatically in the sample.

Probability sampling was determined by the following formula, before the questionnaires was distributed.

Probability sampling of public servants in JKNNS = $NP/T*NS$

(NP= Total number of public servants in JKNNS; T=Total number of public servants in position level; NS= The number of sample to be distributed)

Table 3.2
Distribution of respondents for each categories

Categories	Total number of public servants (N=329)	Total respondents (S=175)	% of sampling	Systematic random
Executives	108	55	31.4%	2 nd
Support staff 1	178	97	55.4%	2 nd
Support staff 2	43	23	13.2%	2 nd
Total	329	175	100%	

3.4 Operational Definitions and Measurements

The discussions on operational definitions and measurements in this study begin with the dependent variable (work engagement) and followed by the independent variable (job demands and job resources) in several sections.

3.4.1 Work Engagement Measures

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

Table 3.3
Work engagement items

Variable	Operational definition	Items	Authors
Work Engagement	a positive, fulfilling and work-related state of mind that is characterized by vigor, dedication and absorption	1. At my work, I feel that I am bursting with energy. 2. At my job, I feel strong and vigorous. 3. When I get up in the morning, I feel like going to work. 4. I can continue working for very long periods at a time. 5. At my job, I am very resilient, mentally. 6. At my work I always persevere, even when things do not go well. 7. I find the work that I do full of meaning and purpose. 8. I am enthusiastic about my job. 9. My jobs inspires me. 10. I am proud of the work that I do. 11. To me, my job is challenging. 12. Time flies when I'm working. 13. When I am working, I forget everything else around me. 14. I feel happy when I am working intensely. 15. I am immersed in my work. 16. I get carried away when I'm working. 17. It is difficult to detach myself from my job.	Schaufeli & Bakker, (2003)

3.4.2 Job Demands Measures

Job demands are the independent variable in this study. It is measured by workload and work pressure. The service workload is functionalized as the professional effort of the public servants in JKNNS lean with the activities like providing human services, administrations, community services and other business unit related-tasks. For workload, it was measured by sixteen items developed by Gillespie, et.al (2001) and Houston, Meyer and Paewai (2006) which examine the influence of workload in public servants' social life.

The second component of job demand, work pressure is operationalized as the degree to which an employee has to work fast and hard, has a great deal to do, and has too little time (Karasek & Theorell, 1990). Work pressure was measured by 5 items developed by Karasek and Theorell (1990). The 5 items were rephrased by changing the wording of the original version from a question format to a statement format to suit the agree-disagree response scales used for this study. In the past, researcher such as Melchior, Caspi, Milne, Danese, Poulton and Moffitt (2007); Shirom,et. al (2009); and Shirom, Toker, Alkaly, Jacobson and Balicer (2011) had also made similar changes to the original version of Karasek and Theorell's (1990) work pressure instruments. The original and adapted versions of the 5 items are shown in Table 3.4.

Table 3.4
Original and adapted versions of work pressure

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

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

Table 3.5
Job demands items

Variable	Components	Operational definition	Items	Authors
Job demands	Workload	The total amount of time a public servant devotes to activities like human services, administrations, community services and other business unit related-tasks.	1. I do not have enough time to perform quality work 2. I'm ready to face any interruption while working. 3. The amount of workload I am expected to do is reasonable.	Gillespie, <i>et.al.</i> ,(2001); Houston, Meyer & Paewai (2006)

		4. I often need to work after hours to meet my work requirements	
		5. Physical claims are required in completing my work.	
		6. My workload has increased over the past 12 months.	
		7. My work often make conflicting demands one.	
Work pressure	The degree to which a public servant has to work fast and hard, has a great deal to do, and has too little time	8. My work requires working hard	Karasek & Theorell (1990)
		9. My work requires working fast.	
		10. My work requires too much input from me.	
		11. I have enough time to complete my job.	

3.4.3 Job Resources Measures

Job resources are the second independent variable in this study, and was measured by autonomy, social support and performance feedback. Autonomy is the extent of freedom, independence, and discretion of an employee to plan his/her work pace and method (Karasek, 1985). Social support on the other hand is operationalized as the overall levels of helpful social interaction available on the job from co-workers and supervisors (Karasek

& Theorell, 1990). Autonomy and social support were measured by adopting items developed by Karasek (1985). Performance feedback is operationalized as the extent to which an employee knows his / her own job performance from the job itself, colleagues, supervisors, or customers (Sims, Szilagyi & Keller, 1976). In this study, performance feedback is measured by 4 items developed by Sims, Szilagyi, and Keller (1976). During the survey, respondents are asked to rate their degree of agreement with the job resources statements based on five-point scale whereby, 1 = strongly disagree, and 5 = strongly agree. The job resources items were shown in the Table 3.6 below.

Table 3.6
Job resources items

Variable	Components	Operational definition	Items	Authors
Job resources	Autonomy	The extent of freedom, independence, and discretion of a public servant to plan his / her work pace and method	1. My job allows me to make a lot of decision on my job	Karasek, (1985); Karasek & Theorell, (1990)
	Social support	The overall levels of helpful social interaction available on the job from co-workers and supervisors	2. On my job, I have very little freedom to decide how I do my work. 3. I have a lot of influence about what happens on my job. 4. My supervisor is concerned about the welfare of those under them. 5. My supervisor pays attention to what I am saying.	



Performance
feedback

The extent to which an
employee knows his /
her own job
performance from the
job itself, colleagues,
supervisors, or
customers

6. My supervisor is helpful in getting the job done.
7. My supervisor is successful in getting people to work together.
8. People I work with are competent in doing their jobs.
9. People I work with take a personal interest in me.
10. People I work with are friendly.
11. When needed, my colleagues will help me
12. I receive enough information from my supervisor about my job performance.
13. I receive enough feedback from my supervisor on how well I am doing.
14. There is enough opportunity in my job to find out on how I am doing.
15. I know how well I am performing on my job interfere my ability to perform work.

Sims, Szilagyi
& Keller
(1976)

3.5 Questionnaires Design

The questionnaire for this study was prepared in both languages, English and Bahasa Malaysia. Respondents were given a choice to choose between the two versions. All

respondents in this study choose to answer the Bahasa Malaysia version. Each respondents have received nine pages questionnaires (with cover letter attached); which are consists of three sections and one demographic section. The questionnaire used in this study is shown in Appendix A and B.

Section 1 asked about the work engagement and there is seventeen items. Section 2 consist of eleven items that asked about work load and work pressure. In section 3, there is fifteen items that asked autonomy, social support and performance feedback.

The last section, Section 4 is the demographic variables. A number of demographic variables have also be measured for descriptive and control purposes. It is included the respondent's gender, age, marital status, highest education qualification, total of monthly salary received, number of years with the current organization, number of years with current position and position grade. These information are necessary to show that the sample is representative of the employees at JKNNS and to ensure that the generalizations of the population can be made.

3.6 Pilot Test

The purpose of conducting a pilot test is to predict the reasonable sample size, to test the consistency and stability of the data and to help the researcher to take all the necessary modification related to study onwards. Also, as an attempt to check for validity and reliability of the questionnaire in order to gain a quality of the research results.

As for this study, the pilot test was conducted on employees with various positions at District Health Office in Tampin, Negeri Sembilan in the middle of May 2017. The pilot test involved 20 participants. Sekaran (2003) defined that the closer the reliability to 1.00, the better it would be. As shown in Table 3.7, all variables have satisfactory reliability values ranging from .54 to .92. Apart from that, there were no changes required to the questionnaire.

Table 3.7
Cronbach's Alpha for each research measures from the pilot test (n=20)

Variables	No. of Items	Cronbach's Alpha
Work engagement	17	0.92
Workload	10	0.54
Work pressure	5	0.65
Autonomy	3	0.55
Social support	8	0.92
Performance Feedback	4	0.82

3.7 Data Collection Procedures

Data collection procedures can be translated as a process of gathering and measuring information on variables that helps researcher to answer stated research questions, test the hypotheses and evaluate the outcomes. There are several methods that can be used to distribute the questionnaires or to gain the research-related information, such as self-

administrated, portal, telephones, internet or fax, face-to-face interviews, personal observations, or distribute questionnaires through electronic medium such as personal or group emails (Frazer & Lawley, 2000; Sekaran, 2003). However, it is all depends on the research's preference, cost, time constraints, potential response rate and many other important criteria to a study.

As for this study, researcher has decided to conduct a self-administered and collected the complete questionnaire from the 175 participants among employees in JKNNS since it has its own advantages like provides a high response rate, reduce interview bias and help the researcher to provide necessary explanation regarding the study (Oppenheim, 2000). Furthermore, it helps the researcher to collect the complete questionnaire in a provided time.

Before the actual data collection begins, permission from JKNNS management was first obtained. Then the researcher make an appointment with head of each selected units via telephone calls and the questionnaires have been distributed personally to the head offices. Respondents were given two weeks to complete the questionnaire before the researcher herself collect the complete questionnaire personally. Respondents were assured that all the information given will remain confidential at all times and will be used for the study only.

3.8 Technique of Data Analysis

Data collected through the survey were analyzed using SPSS (version 19) program for Windows. Prior to primary analyses, the data were examined for data entry accuracy, outliers, and distributional properties.

3.8.1 Descriptive Analysis

Sekaran (2003) defined descriptive analysis is a method to describe the basic features of the data in the research, such as the minimum, maximum, mean and standard deviation of a sample. As for this study, these categories of data helps the researcher to summarize the variables of interest and provide a quick summary of the demographic characteristics of respondents participated in this study. The main reason is to ensure that the respondents in this study represent the demographic characteristics of the whole population. Among the demographic characteristics asked in the questionnaire include gender, age, marital status, highest education qualification, total of basic salary received, number of years with the current organization, number of years with current position and position grade.

3.8.2 Correlation Analysis

In order to explain the strength and direction of the linear relationship between two variables, correlation analysis was conducted (Pallant & Manual, 2001). The correlation's

degree is tested to indicate the relationship between two variables; dependent variable and independent variable.

As for this study, Pearson Correlation is used to determine the relationship between work engagement, job demands and job resources. The value of positive and negative sign indicates whether there is a positive correlation (when one variable increases, the other variable also increases) or a negative correlation (when one variable increases, the other variable decreases) among the variables tested in this study. A correlation of 0 indicates no relationship between the two variables. However, a perfect correlation of 1 or -1 indicates that the value of one variable can be determined exactly the value of the other variable. As mentioned by Muchinsky (1993) the more closely the measure to +1, the more significant the relationship as shown in Table 3.8.

Table 3.8
Strength and direction of the coefficient of correlation

Value of Coefficient	Relation between variables
0.0 – 0.30	Very Low Relationship
0.30 – 0.50	Low Relationship
0.50 – 0.70	High Relationship
0.70 – 1.00	Very High Relationship

3.8.3 Regression Analysis

Multiple regression also is one of the statistical technique that can be used to analyze the relationship between a single dependent (criterion) variable and several independent (predictor) variables. In other words, it can estimates the relationship among variables. Sekaran (2003) argued that multiple regression analysis is use the independent variable whose values are known to predict the single dependent value selected by the researcher. Therefore, this values could provide information and determine the predictive power on the independent variables towards dependent variable. In addition, this analysis may forecast future outcomes.

As in this study, multiple regression is conducted to determine the relationship between independent variables (workload, work pressure, autonomy, social support and performance) towards the dependent variable (work engagement).

3.9 Conclusion

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

CHAPTER 4

FINDINGS

4.1 Introduction

Chapter 4 reports results of the study. This chapter starts by reporting the response rate and the demographic characteristics of the participants. It then continue with presenting the data screening process and the results of the correlation analysis. The chapter ending with a discussion on multiple regression analysis.

4.2 Response Rate

As mentioned in Chapter 3, data for this study was collected through questionnaire. A total of 175 questionnaires were distributed early December 2017. Respondents were given two weeks to complete the questionnaires. After the two weeks period, researcher collected the questionnaires and only 164 questionnaires were returned. However, one questionnaire was excluded from further analysis as the respondent failed to complete the survey. Therefore, only 163 questionnaires are potential to use for further analysis, giving a return rate of 93.71%. The summary of respondents' response rate is shown in Table 4.1.

Table 4.1
Respondents' response rate

Position Level	Total survey distributed	Total survey received	Percentage survey received (%)
Executive / Administration / Management	55	50	90.91
Support Staff Level 1	97	94	96.91
Support Staff Level 2	23	19	82.61
TOTAL	175	163	93.14

4.3 Demographic Characteristics of the Participants

Table 4.2 presents the detailed descriptive statistics of the participants' demographic characteristics. It is noted that 68.7% or 112 from the 163 participants was female. Most of the respondents were between 31 and 40 years-old. Out of 163 participants, 85.3% were married. Result shown that, most of the participants (39.9%) were holding a Diploma. Most participants (31.9%) in this survey received monthly income more than RM5000. Most of the participants have been working in the JKNNS (44.2%) and have been in their present positions (54.6%) for more than 7 years. Majority participants in this survey are from the support staff level 1 (57.7%) between position grades of 19 to 40; which consists of medical group (included health science, dental & pharmacy) and non-medical group (administration, engineering, IT & finance).

Table 4.2
Demographic characteristics of the participants (n= 163)

Descriptive	Frequencies	(%)	Mean	Std. Deviation	Median	Min.	Max.
Gender							
Male	51	31.3					
Female	112	68.7					
TOTAL	163	100					
Age							
			2.44	.916	2.00	1	4
18-30	23	14.1					
31-40	71	43.6					
41-50	44	27.0					
51-60	25	15.3					
Marital Status							
Single	20	12.3					
Married	139	85.3					
Divorced	4	2.5					
Highest Education Qualification							
SRP/PMR	2	1.2					
SPM/SPMV/Certificate	43	26.4					
STPM/Diploma/Adv.Diploma	65	39.9					
Bachelor Degree	43	26.4					
Masters/PhD	10	6.1					
Total of Basic Salary Received							
Less than RM1000	2	1.2					
RM1001 - RM2000	27	16.6					
RM2001 - RM3000	38	23.3					

RM3001 - RM4000	19	11.7
RM4001 - RM5000	25	15.3
More than RM5000	52	31.9

Years with Present Organization

Less than 1 year	16	9.8
1 - 3 Years	37	22.7
4 - 7 Years	38	23.3
More than 7 Years	72	44.2

Years with Present Job Position

Less than 1 year	8	4.9
1 - 3 Years	29	17.8
4 - 7 Years	37	22.7
More than 7 Years	89	54.6

Current Job Position

Executive / Administration Management	50	30.7
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• Grade 41 (Pharmacist, Environment Health Officer, Engineer, Food Technology Officer, Doctor)	7	4.29
• Grade 42 (Nurse)	11	6.75
• Grade 44 (Engineer, PTD, Nurse, Doctor)	9	5.52
• Grade 48 (Pharmacist, Doctor, Dentist, PTD)	16	9.82
• Grade 52 (Pharmacist)	3	1.84
• Grade 54 (Pharmacist, Doctor)	4	2.45
Support Staff Level 1	94	57.7

Grade 19 (PT P/O, PT(W), PKA, Computer Technician, Customer Service Officer)	33	20.24
Grade 22 (PT(Chief Clerk), PT(W), Librarian)	7	4.29
Grade 29 (Information Tech. Asst. Officer, Pharmacist Asst., Medical Asst., Env. Health Asst. Officer, Food Service Asst. Officer, Executive Officer, Secretary, Engineer Asst., Accountant Asst.)	20	12.27
Grade 32 (Dental Technologist, Secretary, Nurse, Executive Officer, Env. Health Asst. Officer)	14	8.59
Grade 36 (Nurse. Env. Health Asst Officer, Accountant Asst., Executive Officer, Dental Therapist, Dental Technologist)	19	11.66
Grade 38 (Dental Therapist)	1	0.61
Support staff Level 2	19	11.7
Grade 11 (Operation Staff., General Staff, Driver, Health Attendant)		

4.4 Data Screening

Before the primary analysis being conducted, all data were examined for data entry accuracy, outliers and distributional properties. This is crucial since the data used need to be reliable, useful and valid to be analyzed and interpreted for producing a good result. It

was conducted by observing basic descriptive statistics and frequency distributions to highlight any missing data, outliers, normality, linearity and homoscedasticity.

Through SPSS V19, some basic descriptive test was done and its result showed that there was no missing data presented from all 163 respondents' returned questionnaire. At the same time, a data validation test was also conducted by running a basic check of all entered data including cases, variables and data values to make sure all data entered were accurate. The results showed that all cases, variables and data valued inserted has passed the requested check and valid to be used for further analysis. From data's boxplots generated, there were ten cases are found to be outlier which. They are cases number 29, 63, 78, 107, 126, 154, 155, 156, 162 and 163. However, since the values were not too different to remaining distribution, all outliers were retained in the datasets (Tabachnick & Fidell, 2001).

Normality test was conducted by using histogram, skewness and kurtosis. From the descriptive test results, all variables had skewness and kurtosis below 1. It is preferably that the value of skewness and kurtosis to be within -2 to 2 for the data to be accepted as normally distributed (Trochim & Donnelly, 2006; Field, 2000 & 2009; Gravetter & Wallnau, 2014). Hence, the data entered have an acceptable normal distribution. Meanwhile, histograms shown in Appendix F inferred that the data scores were reasonably normally distributed, indicating that the data was approximated for all variables at a normal curve.

Also, linearity and homoscedasticity for all variables were checked and shown through the scatter plot diagrams (Appendix F). The test indicates that there was no evidence of non-linear patterns and a visual inspection of the distribution residuals on the diagrams suggested an absence of heteroscedasticity for all the variables.

In relation to multicollinearity, the result of the multiple regression analysis (Table 4.5) showed that tolerance values were between 0.585 and 0.785, while the variance inflation factor (VIF) value ranged from 1.274 to 1.710. Since tolerance values were greater than 0.10 and the VIF value were less than 10, multicollinearity of the variables can be omitted.

4.5 Correlation Analysis

Table 4.3 shows the summary of means, standard deviations and Pearson Correlations of all variables for all 163 respondents that participated in this study. The internal consistency reliabilities (Cronbach's Alpha) of the research measures are reported in parenthesis along the diagonal of the correlation table. As shown in Table 4.4, the Cronbach's alpha for work engagement was .92. For the job demands, the Cronbach's alpha of the two components (workload and work pressure) have satisfactory reliability values of .54 and .65. The Cronbach's alpha for the job resources, the three components of job resources (autonomy, social support, performance feedback) have also satisfactory reliability values ranging from .54 to .92.

Table 4.3 revealed significant positive relationships between all of job demand components and work engagement, with correlation coefficients between .23 and .29. This result indicates that participants who report higher workload and work pressure also tend to report a higher engagement towards their work.

Also, there were significant positive relationships between all job resources components and work engagement, with correlation coefficients between .33 and .53. These results imply that the more participants received autonomy, social support and performance feedback, the more engaged they were with their work.



Table 4.3
Descriptive statistics and correlations of variables

Variables	N	Mean	Std. Dev	1	2	3	4	5	6
1. Workload	163	3.10	0.45	(0.54)					
2. Work pressure	163	3.12	0.53	0.661**	(0.65)				
3. Autonomy	163	2.99	0.60	0.252**	0.269**	(0.54)			
4. Social support	163	3.65	0.63	0.023**	0.086**	0.202**	(0.92)		
5. Performance feedback	163	3.52	0.60	0.067**	0.138**	0.264**	0.766**	(0.82)	
6. Work engagement	163	3.69	0.50	0.232**	0.286**	0.331**	0.393**	0.529**	(0.92)

*. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).

4.6 Multiple Regression Analysis

As shown in Table 4.4, 35% ($R^2 = .35$, $F = 17.069$, $p < .01$) of the variance in work engagement was significantly explained by workload, work pressure, autonomy, social support and performance feedback. In the model, workload and work pressure were found not related to work engagement. While autonomy ($\beta = 0.15$, $p < 0.05$) and performance feedback ($\beta = 0.48$, $p < 0.01$) were positively related to work engagement. However, one component of job resources, social support, was found not related to work engagement. Therefore, only Hypotheses 2a and 2c were supported. The results suggest that work engagement among the employees at the government health service tends to increase when they are provided with autonomy and performance feedback.

Table 4.4
Regression results of workload, work pressure, autonomy, social support and performance feedback on work engagement

	Dependent Variable (Work Engagement) (Standardized coefficient) Beta	t	Significant (p)	Collinearity Statistics	
				Tolerance	VIF
Independent Variables					
Workload	0.08	0.87	0.38	0.56	1.80
Work Pressure	0.13	1.50	0.14	0.55	1.83
Autonomy	0.15	2.23	0.03*	0.86	1.16
Social Support	-0.02**	-0.18**	0.86	0.41	2.43
Performance Feedback	0.48	4.71	0.00**	0.40	2.51
F Value	17.069				
R ²	0.352				
Adjusted R ²	0.332				
Durbin Watson	1.736				

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

In short, the analysis techniques used in this study such as multiple regression, have able to answer the research objectives and test the proposed hypotheses. Table 4.16 presents the summary of the hypotheses testing.

Table 4.5
Summary of hypotheses testing

Hypotheses	Statement	Findings
H1a	Workload is negatively related to work engagement	Not Supported
H1b	Work pressure is negatively related to work engagement	Not Supported
H2a	Autonomy is positively related to work engagement	Supported
H2b	Social support is positively related to work engagement	Not Supported
H2c	Feedback performance is positively related to work engagement	Supported

4.7 Conclusion

This chapter described the demographic characteristics of the 163 respondents and the result of correlation and regression analysis. The results indicate that autonomy and performance feedback are positively significantly related to work engagement. Further research implications, limitations and direction of future research are discussed in chapter 5.

CHAPTER 5

DISCUSSIONS, RECOMMENDATIONS, CONCLUSIONS

5.1 Introduction

This chapter discusses the findings of the study in light of the literature reviewed on work engagement and the hypotheses developed in Chapter 2. The study elaborates and extends prior research on work engagement. The findings, as presented in Chapter 4, are discussed in the sections below. There are several contributions that can be drawn from the study.

5.2 Summary of Research

The main aim of this study is to examine the relationship between job demands, job resources and work engagement among employees in the government health service. Multiple regressions analysis was conducted to test hypotheses 1a, 1b, 2a, 2b and 2c which is to test the direct relationship between two components of job demand (workload and work pressure), three components of job resources (autonomy, social support and performance feedback) and job satisfaction. The results showed that both workload and work pressure were not related to work engagement while two components of job resources (autonomy, and performance feedback) were positively related to work engagement.

5.3 Relationship between Workload, Work Pressure and Work Engagement

It was hypothesized that workload and work pressure would be negatively related to work engagement. In other words, the higher the workload and work pressures, the lower would be the work engagement. However, results from the present study indicate that both components of job demand, namely workload and work pressure were not related to work engagement though in the past study workload was found negatively correlated with work engagement when tested on 169 hospital nurses (Tomic & Tomic, 2011) and on 1919 Finnish dentists (Hakanen, Bakker & Demerouti, 2005).

One possible explanation why workload and work pressure are not related to work engagement among employees in this study may be due to their nature of work. Though employment in healthcare occupation constantly dealing with high pressure and high workload, working in healthcare seems satisfying and important especially when the job makes a difference in people's lives by caring for people and helping others to lead a healthy life. Besides, those who are joining the healthcare profession already have some basic ideas about the nature of the job. This is gained through internship or houseman where the real work in the healthcare is being exposed.

Apart from that, there is an argument in the literature on how job demand can be considered as a good or a bad job stressor. As argued by Podsakoff, LePine & LePine (2007), stressors are considered to be good when it has potential to promote personal growth and achievement of the employee. This is known as challenge stressors which include high

levels of workload, time pressure, and responsibility (McCauley, Ruderman, Ohlott, & Marrow, 1994). These demands are considered to be rewarding work experiences, and are therefore considered as 'good' stressors. Thus, the results in this study indicate that the respondents might regard work pressure and workload in a positive way which indirectly increase their work engagement.

5.4 Relationship between Autonomy, Social Support, Performance and Work Engagement

In this study, job resources were measured by autonomy, social support and performance feedback. The results showed that only autonomy and performance feedback were found positively related to work engagement. The current research provides support for previous studies conducted by Bakker and Bal (2010), Bakker, Hakanen, Demerouti and Xanthopoulou (2007), Chung and Angeline (2010), Hakanen, Bakker and Schaufeli (2006), Lin, Oi-ling, Kan and Xin-wen (2009), Rothmann and Jordaan (2006).

One possibility for the current findings is that autonomy and performance feedback might have the potential to act as a motivating role in encouraging the employees in the public health industry to be more engaged in their work. Autonomy for example, may provide the employees with the freedom to make decisions and on how to carry out their work. As argued by Christian, Garza and Slaughter (2011), autonomy provides a sense of ownership and control of the work which in return motivates the employees to be more engaged in their work. Apart from that, the constructive performance feedback that the employees

received from the management and their coworker might stimulate their personal growth, learning and development and acted as a buffer to reduce job demands associated with their task.

Interestingly, social support seems not contributing to employees work engagement in the public health setting. Social support refers to social interaction with colleagues and supervisors which is advantageous to one's own well-being. Though social support is important for employees and can be a buffer for job related stress, Karasek and Theorell (1990) argued that social support is regards as additional resources provided by colleagues and supervisors. Besides, social support can be obtained from several sources such as spouses, friends, and coworkers. Though the employees might not receive social support at the workplace, they might receive it from their spouse, family and friends outside of the workplace. Thus, this might explain why social support might not be one of the factor that contribute to work engagement among the respondents in this study.

5.5 Implication for Theory

The current findings have contributed to the current body of knowledge on work engagement. Findings from the current study have given empirical evidence on the relationship between job demands and job resources on employees' work engagement in the government health service setting. Interestingly, job demands such as workload and work pressure were found not related to work engagement, while job resources such as autonomy, and performance feedback were positively related to work engagement. Though

in the past, there are limited studies that focusing on job demands, job resources and work engagement in the government health service context especially in Malaysia setting, the findings generally indicated the validity of the JD-R model as a basis in discussing the influence of job demands and job resources on work engagement.

5.6 Implications for Practice

The current research findings have several implications for management of the health industry. The results demonstrate that high workload and work pressure do not related to work engagement among the employees in the government health service.

The study also demonstrated that autonomy and performance feedback provided by the management were among the factors that had a positive impact in enhancing employees' work engagement. Therefore, management needs to continually giving autonomy, and performance feedback to their employees especially one that related to work if they would like to have highly engaged employees. This can be done through continually giving freedom to the employees in deciding on how to perform and organize their task an on how to achieve the targeted goal set by the management. Apart from that, the management can also continue giving constructive and objective performance feedback that can help employees to improve their work performance.

5.7 Limitations and Directions for Future Study

There are limitations in the design of this study that might influence the interpretations and generalizations of these findings. First, the study was aimed at understanding the influence of job demand and job resources on work engagement among the government health service, but the study was conducted on only State Department of Health Negeri Sembilan. The study does not include employees from all the fifteen State Department of Health or from private health service. Thus, the findings only captured perceptions of employees from one state department of health 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 other types of health service which might offer greater understanding on the issues of work engagement among employees in health setting. Private health industry might have different kind of job demands and job resources that can lead to different findings.

In short, though there are some limitations associated with the approach used in this study and given the exploratory nature of the study, the results of this study provide useful findings that should be of interest both researchers and practitioners.

5.8 Conclusions

The aim of this study was to investigate factors that might relate to employees' work engagement. The main concern of this study is the role of job demand and job resources

on work engagement. The results indicate that both the work load and the work pressure were not related to work engagement. When autonomy, social support and performance feedback were tested against work engagement, only autonomy and performance feedback were found to positively related to work engagement.

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



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SURVEY MATERIALS

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A STUDY ON WORK ENGAGEMENT

Dear Participant,

Thank you for agreeing to participate in this research.

I would appreciate it if you could answer the questions carefully as the information you provide will influence the accuracy and the success of this research. It will take no longer than 30 minutes to complete the questionnaire. All answers will be treated with strict confidence and will be used for the purpose of the study only.

If you have any questions regarding this research, you may address them to me at the contact details below.

Thank you for your cooperation and the time taken in answering this questionnaire.

Yours sincerely,

Siti Mawarni Binti Zainal (s813471)
Master Candidate
Othman Yeop Abdullah Graduate School of Business
Universiti Utara Malaysia
Malaysia
Email : ctmawarni_zainal@yahoo.com

SECTION ONE

DIRECTION: Please read each of the following items and indicate whether you agree or disagree with each of the statement. Please indicate your choice by **circling** the **number** in the range given.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. At my work, I feel that I am bursting with energy	1	2	3	4	5
2. At my job, I feel strong and vigorous	1	2	3	4	5
3. When I get up in the morning, I feel like going to work	1	2	3	4	5
4. I can continue working for very long periods at a time	1	2	3	4	5
5. At my job, I am very resilient mentally	1	2	3	4	5
6. At my work, I always preserve, even when things do not go well	1	2	3	4	5
7. I find the work that I do full of meaning and purpose	1	2	3	4	5
8. I am enthusiastic about my job	1	2	3	4	5
9. My job inspires me	1	2	3	4	5
10. I am proud of the work that I do	1	2	3	4	5
11. To me, my job is challenging	1	2	3	4	5
12. Time flies when I'm working	1	2	3	4	5
13. When I am working, I forget everything else around me	1	2	3	4	5

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
14. I feel happy when I am working intensely	1	2	3	4	5
15. I am immersed in my work	1	2	3	4	5
16. I get carried away when I'm working	1	2	3	4	5
17. It is difficult to detach myself from my job	1	2	3	4	5



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SECTION TWO

DIRECTION: Please read each of the following items and indicate whether you agree or disagree with each of the statement. Please indicate your choice by **circling** the **number** in the range given.

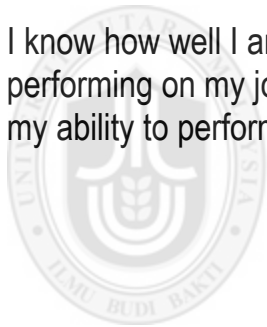
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I do not have enough time to perform quality job	1	2	3	4	5
2. I am ready to face any interruption while working	1	2	3	4	5
3. The amount of workload I am expected to do is reasonable	1	2	3	4	5
4. I often need to work after hours to meet my work requirements	1	2	3	4	5
5. Physical claims are required in completing my work	1	2	3	4	5
6. My workload has increased over the past 12 months	1	2	3	4	5
7. My work requires working hard	1	2	3	4	5
8. My work requires working fast	1	2	3	4	5
9. My work requires too much input from me	1	2	3	4	5
10. I have enough time to complete my job	1	2	3	4	5
11. My work often make conflicting demands on me	1	2	3	4	5

SECTION THREE

DIRECTION: Please read each of the following items and indicate whether you agree or disagree with each of the statement. Please indicate your choice by **circling** the **number** in the range given.

	Strongly Disagree	Disagree	Neutral	Agree	Stronly Agree
1. My job allows me to make a lot of decision on my job	1	2	3	4	5
2. On my job, I have very little freedom to decide how I do my work	1	2	3	4	5
3. I have a lot of influence about what happens on my job	1	2	3	4	5
4. My supervisor is concerned about the welfare of those under them	1	2	3	4	5
5. My supervisor pays attention to what I am saying	1	2	3	4	5
6. My supervisor is helpful in getting the job done	1	2	3	4	5
7. My supervisor is successful in getting people to work together	1	2	3	4	5
8. People I work with are competent in doing their jobs	1	2	3	4	5
9. People I work with take a personal interest in me	1	2	3	4	5
10. People I work with are friendly	1	2	3	4	5

	Strongly Disagree	Disagree	Neutral	Agree	Stronly Agree
11. When needed, my colleagues will help me	1	2	3	4	5
12. I receive enough information from my supervisor about my job performance	1	2	3	4	5
13. I receive enough feedback from my supervisor on how well I am doing	1	2	3	4	5
14. There is enough opportunity in my job to find out on how I am doing	1	2	3	4	5
15. I know how well I am performing on my job interfere my ability to perform work	1	2	3	4	5



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DEMOGRAPHIC INFORMATION

This part contains few demographic information pertaining to yourself. **Please tick (✓)** in the box or write your response in the space provided

1. My Gender:

☐

Male

☐

Female

2. My Age:

Please specify: _____ years old

3. My Marital Status:

☐

Single

☐

Married

☐

Divorced / Widowed / Separated

4. My Highest Education Qualification: _____

5. My Monthly Salary:

☐	Below RM1000	☐	RM 1001 – RM 2000
☐	RM 2001 – RM 3000	☐	RM 3001 – RM 4000
☐	RM 4001 – RM 5000	☐	Above RM 5001

6. Number of years with current organization:

☐
☐

Less than one year

1 – 3 years

☐
☐

4 – 7 years

More than 7 years

7. Number of years in current position:

☐
☐

Less than one year

1 - 3 years

☐
☐

4 - 7 years

More than 7 years

8. My current position: _____

9. My current position grade: _____



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-THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY-



KAJIAN BERKAITAN KETERLIBATAN KERJA

Responden yang dihormati,

Terima kasih di atas persetujuan anda untuk menyertai kajian ini.

Saya amat menghargai sekiranya anda dapat menjawab soalan dengan berhati-hati kerana maklumat yang anda beri akan mempengaruhi ketepatan dan kejayaan kajian ini. Ia akan mengambil masa tidak lebih daripada 30 minit untuk menyiapkan soal selidik ini. Kesemua jawapan akan dianggap sebagai betul-betul sulit dan hanya akan digunakan untuk tujuan kajian ini sahaja.

Sekiranya anda mempunyai apa-apa persoalan berkenaan dengan kajian ini, anda boleh kemukakan kepada saya seperti alamat di bawah.

Terima kasih di atas kerjasama yang diberi dan masa yang diambil dalam menjawab soal selidik ini.

Yang benar,

Siti Mawarni Binti Zainal (s813471)
Pelajar Sarjana Pengurusan Sumber Manusia
Pusat Pengajian Pengurusan Perniagaan
Universiti Utara Malaysia
Email: ctmawarni_zainal@yahoo.com

SEKSYEN SATU

ARAHAN: Sila baca setiap pernyataan di bawah dan nyatakan samada anda bersetuju atau tidak bersetuju dengan setiap penyertaan berikut. Sila nyatakan pilihan anda dengan membulatkan nombor yang diberi.

	Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat setuju
1. Semasa bekerja, saya berasa penuh bertenaga	1	2	3	4	5
2. Semasa bekerja, saya berasa kuat dan bertenaga	1	2	3	4	5
3. Apabila saya bangun pada waktu pagi, saya berasa ingin ke tempat kerja	1	2	3	4	5
4. Saya boleh bekerja dalam tempoh yang lama pada satu-satu masa	1	2	3	4	5
5. Semasa bekerja, saya sangat berdaya tahan dari segi mental	1	2	3	4	5
6. Saya sering gigih bekerja walaupun apabila ada perkara yang tidak dijangka berlaku	1	2	3	4	5
7. Saya dapati kerja yang saya lakukan adalah bermakna dan mempunyai tujuan	1	2	3	4	5
8. Saya sangat bersemangat terhadap pekerjaan saya	1	2	3	4	5
9. Pekerjaan saya memberi inspirasi kepada saya	1	2	3	4	5
10. Saya bangga dengan kerja yang saya lakukan	1	2	3	4	5
11. Bagi saya, pekerjaan saya sangat mencabar	1	2	3	4	5

Appendix B – Questionnaire (Bahasa Malaysia version)

	Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat setuju
12. Masa berlalu terlalu pantas ketika saya bekerja	1	2	3	4	5
13. Apabila sedang bekerja, saya terlupa apa yang berlaku di sekeliling saya	1	2	3	4	5
14. Saya berasa gembira apabila gigih bekerja	1	2	3	4	5
15. Saya sangat tekun apabila bekerja	1	2	3	4	5
16. Saya terbawa-bawa apabila saya bekerja	1	2	3	4	5
17. Adalah sukar bagi saya untuk pisahkan diri dengan kerja saya	1	2	3	4	5



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SEKSYEN DUA

ARAHAN: Sila baca setiap pernyataan di bawah dan nyatakan samada anda bersetuju atau tidak bersetuju dengan setiap penyertaan berikut. Sila nyatakan pilihan anda dengan membulatkan nombor yang diberi.

	Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat setuju
1. Dengan beban kerja yang saya ada, saya tidak mempunyai masa yang cukup untuk melakukan kerja-kerja saya	1	2	3	4	5
2. Saya sedia menghadapi sebarang gangguan semasa bekerja	1	2	3	4	5
3. Jumlah tanggungjawab kerja yang dijangka dilakukan adalah munasabah	1	2	3	4	5
4. Saya sering perlu bekerja selepas waktu bekerja bagi memenuhi keperluan kerja saya	1	2	3	4	5
5. Tuntutan fizikal adalah diperlukan dalam menyiapkan kerja saya	1	2	3	4	5
6. Beban kerja saya telah meningkat sejak 12 bulan yang lepas	1	2	3	4	5
7. Kerja saya memerlukan saya untuk bekerja keras	1	2	3	4	5
8. Kerja saya memerlukan saya untuk bekerja dengan pantas	1	2	3	4	5
9. Kerja saya memerlukan banyak input dari saya	1	2	3	4	5
10. Saya mempunyai masa yang cukup untuk menyiapkan kerja saya	1	2	3	4	5

Appendix B – Questionnaire (Bahasa Malaysia version)

	Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat setuju
11. Kerja saya sering menimbulkan konflik kepada saya	1	2	3	4	5



SEKSYEN TIGA

ARAHAN: Sila baca setiap pernyataan di bawah dan nyatakan samada anda bersetuju atau tidak bersetuju dengan setiap penyertaan berikut. Sila nyatakan pilihan anda dengan membulatkan nombor yang diberi.

	Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat setuju
1. Pekerjaan saya membolehkan saya membuat banyak keputusan secara sendiri	1	2	3	4	5
2. Semasa bekerja, saya tidak mempunyai kebebasan untuk menentukan cara bagaimana saya membuat kerja	1	2	3	4	5
3. Saya mempunyai pengaruh yang banyak terhadap apa yang berlaku terhadap pekerjaan saya	1	2	3	4	5
4. Penyelia saya mengambil berat tentang kebajikan pekerja di bawahnya	1	2	3	4	5
5. Penyelia saya memberi perhatian kepada apa yang saya katakan	1	2	3	4	5
6. Penyelia saya sangat membantu dalam memastikan kerja dapat disiapkan	1	2	3	4	5
7. Penyelia saya berjaya membuatkan orang lain bekerja bersama-sama	1	2	3	4	5
8. Mereka yang bekerja bersama saya sangat cekap dalam melakukan kerja mereka	1	2	3	4	5
9. Mereka yang bekerja bersama saya mengambil berat tentang saya	1	2	3	4	5

Appendix B – Questionnaire (Bahasa Malaysia version)

	Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat setuju
10. Mereka yang bekerja bersama saya sangat mesra	1	2	3	4	5
11. Apabila diperlukan, rakan sekerja saya akan membantu saya	1	2	3	4	5
12. Saya menerima maklumat yang mencukupi daripada penyelia tentang prestasi kerja saya	1	2	3	4	5
13. Saya menerima maklumbalas yang mencukupi daripada penyelia tentang bagaimana bagus saya dalam melakukan kerja saya	1	2	3	4	5
14. Terdapat banyak peluang dalam pekerjaan saya untuk mengetahui bagaimana saya lakukan kerja	1	2	3	4	5
15. Saya tahu bagaimana bagus saya dalam melaksanakan kerja saya	1	2	3	4	5

MAKLUMAT DEMOGRAFI

Bahagian ini mengandungi beberapa maklumat demografi anda. Sila tandakan (✓) dalam kotak atau menulis maklumbalas anda di ruang yang disediakan.

1. Gender saya:

☐

Lelaki

☐

Perempuan

2. Umur saya:

Sila nyatakan: _____ tahun

3. Status perkahwinan saya:

☐

Bujang

☐

Berkahwin

☐

Berceraai / Berpisah / Balu

4. Tahap pendidikan tertinggi saya: _____

5. Gaji bulanan saya:

☐	Bawah RM1000	☐	RM 1001 – RM 2000
☐	RM 2001 – RM 3000	☐	RM 3001 – RM 4000
☐	RM 4001 – RM 5000	☐	Lebih dari RM 5001

6. Jumlah tahun bersama organisasi sekarang:

Kurang dari setahun

4 – 7 tahun

1 – 3 tahun

Lebih dari 7 tahun

7. Jumlah tahun dalam jawatan sekarang:

Kurang dari setahun

4 - 7 tahun

1 - 3 tahun

Lebih dari 7 tahun

8. Jawatan sekarang: _____

9. Gred jawatan: _____



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-----TERIMA KASIH DI ATAS KERJASAMA YANG DIBERIKAN-----

Reliability

Notes

Output Created		27-Mar-2018 09:18:03
Comments		
Input	Data	C:\Users\User\Desktop\Pilot Test\merged QsPilotTest without work life balance.sav
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	Split File	<none>
	N of Rows in Working Data	20
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S2Q1 S2Q4 S2Q5 S2Q6 S2Q2n S2Q3n /SCALE('Workload') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE CORR /SUMMARY=TOTAL CORR.
Resources	Processor Time	00:00:00.015
	Elapsed Time	00:00:00.016

Scale: Workload

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.

Case Processing Summary

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.720	.717	6

Item Statistics

	Mean	Std. Deviation	N
S2Q1	3.3500	.93330	20
S2Q4	3.1500	.93330	20
S2Q5	3.9500	.82558	20
S2Q6	3.4500	.88704	20
S2Q2n	2.8000	.89443	20
S2Q3n	2.7000	.92338	20

Inter-Item Correlation Matrix

	S2Q1	S2Q4	S2Q5	S2Q6	S2Q2n	S2Q3n
S2Q1	1.000	.420	.161	.499	-.227	.495
S2Q4	.420	1.000	.420	.804	-.025	.544
S2Q5	.161	.420	1.000	.535	-.014	.048
S2Q6	.499	.804	.535	1.000	.119	.623
S2Q2n	-.227	-.025	-.014	.119	1.000	.051
S2Q3n	.495	.544	.048	.623	.051	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance
Inter-Item Correlations	.297	-.227	.804	1.031	-3.543	.085

Summary Item Statistics

	N of Items
Inter-Item Correlations	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S2Q1	16.0500	8.997	.407	.390	.695
S2Q4	16.2500	7.671	.697	.666	.599
S2Q5	15.4500	9.734	.336	.431	.713
S2Q6	15.9500	7.208	.872	.804	.543
S2Q2n	16.6000	11.516	-.028	.182	.809
S2Q3n	16.7000	8.326	.557	.533	.648

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
19.4000	12.147	3.48531	6

Reliability

Notes

Output Created		27-Mar-2018 09:20:56
Comments		
Input	Data	C:\Users\User\Desktop\Pilot Test\merged QsPilotTest without work life balance.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	20
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S2Q7 S2Q8 S2Q9 S2Q11 S2Q10n /SCALE('Work Pressure') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE CORR /SUMMARY=TOTAL CORR.
Resources	Processor Time	00:00:00.000
	Elapsed Time	00:00:00.000

Scale: Work Pressure

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.

Case Processing Summary

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.557	.545	5

Item Statistics

	Mean	Std. Deviation	N
S2Q7	3.8500	.98809	20
S2Q8	3.8000	1.00525	20
S2Q9	3.8500	.74516	20
S2Q11	2.5000	.88852	20
S2Q10n	2.7500	1.01955	20

Inter-Item Correlation Matrix

	S2Q7	S2Q8	S2Q9	S2Q11	S2Q10n
S2Q7	1.000	.763	.611	.390	-.039
S2Q8	.763	1.000	.520	.059	.000
S2Q9	.611	.520	1.000	-.199	-.606
S2Q11	.390	.059	-.199	1.000	.436
S2Q10n	-.039	.000	-.606	.436	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance
Inter-Item Correlations	.193	-.606	.763	1.369	-1.259	.169

Summary Item Statistics

	N of Items
Inter-Item Correlations	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S2Q7	12.9000	3.884	.776	.831	.168
S2Q8	12.9500	4.471	.565	.682	.331
S2Q9	12.9000	6.832	.127	.760	.589
S2Q11	14.2500	5.776	.308	.570	.507
S2Q10n	14.0000	7.053	-.039	.574	.703

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
16.7500	7.882	2.80741	5

Reliability

Notes

Output Created		27-Mar-2018 09:24:15
Comments		
Input	Data	C:\Users\User\Desktop\Pilot Test\merged QsPilotTest without work life balance.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	20
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S3Q1 S3Q2n S3Q3 /SCALE('Autonomy') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE CORR /SUMMARY=TOTAL CORR.
Resources	Processor Time	00:00:00.015
	Elapsed Time	00:00:00.015

Scale: Autonomy

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.

Case Processing Summary

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

Reliability Statistics

Cronbach's Alpha ^a	Cronbach's Alpha Based on Standardized Items ^a	N of Items
-.634	-.657	3

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Item Statistics

	Mean	Std. Deviation	N
S3Q1	3.2000	1.10501	20
S3Q2n	3.1500	.98809	20
S3Q3	3.4000	.88258	20

Inter-Item Correlation Matrix

	S3Q1	S3Q2n	S3Q3
S3Q1	1.000	-.463	.561
S3Q2n	-.463	1.000	-.555
S3Q3	.561	-.555	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance
Inter-Item Correlations	-.152	-.555	.561	1.116	-1.011	.307

Summary Item Statistics

	N of Items
Inter-Item Correlations	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S3Q1	6.5500	.787	.043	.348	-2.462 ^a
S3Q2n	6.6000	3.095	-.569	.342	.707
S3Q3	6.3500	1.187	.066	.426	-1.703 ^a

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
9.7500	2.092	1.44641	3

Reliability

Notes

Output Created		27-Mar-2018 09:24:58
Comments		
Input	Data	C:\Users\User\Desktop\Pilot Test\merged QsPilotTest without work life balance.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	20
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S3Q4 S3Q5 S3Q6 S3Q7 S3Q8 S3Q9 S3Q10 S3Q11 /SCALE('Social Support') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE CORR /SUMMARY=TOTAL CORR.
Resources	Processor Time	00:00:00.000
	Elapsed Time	00:00:00.016

Scale: Social Support**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	Cronbach's Alpha Based on Standardized Items	N of Items
.898	.898	8

Item Statistics

	Mean	Std. Deviation	N
S3Q4	4.00	.795	20
S3Q5	3.75	.851	20
S3Q6	3.85	.875	20
S3Q7	3.95	.887	20
S3Q8	3.85	.813	20
S3Q9	3.80	.768	20
S3Q10	4.00	.649	20
S3Q11	4.05	.686	20

Appendix C – Reliability for pilot test

Inter-Item Correlation Matrix

	S3Q4	S3Q5	S3Q6	S3Q7	S3Q8	S3Q9	S3Q10	S3Q11
S3Q4	1.000	.701	.832	.747	.570	.431	.510	.386
S3Q5	.701	1.000	.513	.471	.171	.161	.286	.023
S3Q6	.832	.513	1.000	.871	.707	.501	.463	.364
S3Q7	.747	.471	.871	1.000	.719	.603	.549	.437
S3Q8	.570	.171	.707	.719	1.000	.540	.499	.675
S3Q9	.431	.161	.501	.603	.540	1.000	.634	.719
S3Q10	.510	.286	.463	.549	.499	.634	1.000	.591
S3Q11	.386	.023	.364	.437	.675	.719	.591	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance
Inter-Item Correlations	.524	.023	.871	.849	38.661	.040

Summary Item Statistics

	N of Items
Inter-Item Correlations	8

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S3Q4	27.25	17.566	.806	.829	.873
S3Q5	27.50	19.632	.426	.596	.910
S3Q6	27.40	16.884	.823	.866	.871
S3Q7	27.30	16.642	.848	.820	.868
S3Q8	27.40	17.937	.722	.756	.881
S3Q9	27.45	18.682	.647	.684	.888
S3Q10	27.25	19.461	.644	.513	.889
S3Q11	27.20	19.642	.568	.746	.895

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
31.25	23.566	4.854	8

Reliability

Notes

Output Created		27-Mar-2018 09:25:33
Comments		
Input	Data	C:\Users\User\Desktop\Pilot Test\merged QsPilotTest without work life balance.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	20
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S3Q12 S3Q13 S3Q14 S3Q15 /SCALE('Performance Feedback') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE CORR /SUMMARY=TOTAL CORR.
Resources	Processor Time	00:00:00.015
	Elapsed Time	00:00:00.016

Scale: Performance Feedback

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.

Case Processing Summary

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.829	.830	4

Item Statistics

	Mean	Std. Deviation	N
S3Q12	4.05	.686	20
S3Q13	3.80	.834	20
S3Q14	3.60	.821	20
S3Q15	3.70	.801	20

Inter-Item Correlation Matrix

	S3Q12	S3Q13	S3Q14	S3Q15
S3Q12	1.000	.846	.131	.603
S3Q13	.846	1.000	.415	.693
S3Q14	.131	.415	1.000	.608
S3Q15	.603	.693	.608	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance
Inter-Item Correlations	.550	.131	.846	.716	6.471	.056

Summary Item Statistics

	N of Items
Inter-Item Correlations	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S3Q12	11.10	4.305	.625	.801	.800
S3Q13	11.35	3.397	.802	.812	.711
S3Q14	11.55	4.366	.442	.558	.879
S3Q15	11.45	3.524	.794	.650	.717

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
15.15	6.555	2.560	4

Reliability

Notes

Output Created		27-Mar-2018 09:26:22
Comments		
Input	Data	C:\Users\User\Desktop\Pilot Test\merged QsPilotTest without work life balance.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	20
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S1Q1 S1Q2 S1Q3 S1Q4 S1Q5 S1Q6 S1Q7 S1Q8 S1Q9 S1Q10 S1Q11 S1Q12 S1Q13 S1Q14 S1Q15 S1Q16 S1Q17 /SCALE('Work Engagement') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE CORR /SUMMARY=TOTAL CORR.
Resources	Processor Time	00:00:00.031
	Elapsed Time	00:00:00.033

Scale: Work Engagement**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	Cronbach's Alpha Based on Standardized Items	N of Items
.924	.929	17

Item Statistics

	Mean	Std. Deviation	N
S1Q1	4.00	.725	20
S1Q2	3.85	.745	20
S1Q3	3.80	.696	20
S1Q4	3.55	1.146	20
S1Q5	3.65	.875	20
S1Q6	3.75	.910	20
S1Q7	4.20	.616	20
S1Q8	4.20	.696	20
S1Q9	4.15	.745	20
S1Q10	4.20	.696	20
S1Q11	4.15	.813	20
S1Q12	4.20	.768	20
S1Q13	3.65	1.040	20
S1Q14	3.90	.718	20
S1Q15	4.10	.788	20
S1Q16	3.20	.834	20
S1Q17	3.25	.910	20

Appendix C – Reliability for pilot test

Inter-Item Correlation Matrix

	S1Q1	S1Q2	S1Q3	S1Q4	S1Q5	S1Q6	S1Q7	S1Q8
S1Q1	1.000	.876	.626	.633	.415	.478	.825	.626
S1Q2	.876	1.000	.650	.718	.642	.718	.757	.670
S1Q3	.626	.650	1.000	.343	.484	.415	.713	.739
S1Q4	.633	.718	.343	1.000	.727	.744	.433	.449
S1Q5	.415	.642	.484	.727	1.000	.611	.332	.553
S1Q6	.478	.718	.415	.744	.611	1.000	.470	.249
S1Q7	.825	.757	.713	.433	.332	.470	1.000	.639
S1Q8	.626	.670	.739	.449	.553	.249	.639	1.000
S1Q9	.682	.801	.670	.576	.650	.524	.620	.751
S1Q10	.521	.670	.522	.251	.380	.332	.639	.565
S1Q11	.089	.126	-.037	.189	.004	.480	.147	-.242
S1Q12	.378	.699	.276	.467	.580	.753	.356	.217
S1Q13	.349	.404	.262	.347	.205	.514	.280	-.044
S1Q14	.505	.659	.590	.326	.444	.443	.405	.569
S1Q15	.552	.654	.518	.286	.282	.257	.608	.729
S1Q16	.261	.390	.436	.485	.462	.624	.123	.200
S1Q17	.637	.679	.332	.618	.314	.651	.470	.332

Inter-Item Correlation Matrix

	S1Q9	S1Q10	S1Q11	S1Q12	S1Q13	S1Q14	S1Q15
S1Q1	.682	.521	.089	.378	.349	.505	.552
S1Q2	.801	.670	.126	.699	.404	.659	.654
S1Q3	.670	.522	-.037	.276	.262	.590	.518
S1Q4	.576	.251	.189	.467	.347	.326	.286
S1Q5	.650	.380	.004	.580	.205	.444	.282
S1Q6	.524	.332	.480	.753	.514	.443	.257
S1Q7	.620	.639	.147	.356	.280	.405	.608
S1Q8	.751	.565	-.242	.217	-.044	.569	.729
S1Q9	1.000	.650	.048	.497	.071	.718	.600
S1Q10	.650	1.000	-.056	.414	.102	.358	.633
S1Q11	.048	-.056	1.000	.371	.314	.117	-.107
S1Q12	.497	.414	.371	1.000	.488	.515	.400
S1Q13	.071	.102	.314	.488	1.000	.162	.045
S1Q14	.718	.358	.117	.515	.162	1.000	.577
S1Q15	.600	.633	-.107	.400	.045	.577	1.000
S1Q16	.288	.109	.342	.345	.389	.387	.048
S1Q17	.485	.166	.445	.527	.375	.443	.403

Inter-Item Correlation Matrix

	S1Q16	S1Q17
S1Q1	.261	.637
S1Q2	.390	.679
S1Q3	.436	.332
S1Q4	.485	.618
S1Q5	.462	.314
S1Q6	.624	.651
S1Q7	.123	.470
S1Q8	.200	.332
S1Q9	.288	.485
S1Q10	.109	.166
S1Q11	.342	.445
S1Q12	.345	.527
S1Q13	.389	.375
S1Q14	.387	.443
S1Q15	.048	.403
S1Q16	1.000	.277
S1Q17	.277	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance
Inter-Item Correlations	.436	-.242	.876	1.118	-3.621	.049

Summary Item Statistics

	N of Items
Inter-Item Correlations	17

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S1Q1	61.80	76.905	.769	.	.916
S1Q2	61.95	74.576	.939	.	.912
S1Q3	62.00	78.526	.666	.	.919
S1Q4	62.25	72.092	.710	.	.918
S1Q5	62.15	76.450	.654	.	.919
S1Q6	62.05	74.050	.788	.	.915
S1Q7	61.60	79.200	.697	.	.919
S1Q8	61.60	79.200	.609	.	.920
S1Q9	61.65	76.555	.775	.	.916
S1Q10	61.60	80.042	.538	.	.922
S1Q11	61.65	83.292	.220	.	.930
S1Q12	61.60	77.411	.683	.	.918
S1Q13	62.15	78.871	.393	.	.928
S1Q14	61.90	78.516	.643	.	.919
S1Q15	61.70	78.853	.554	.	.921
S1Q16	62.60	79.305	.486	.	.923
S1Q17	62.55	75.839	.665	.	.918

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
65.80	87.221	9.339	17

Reliability

Notes

Output Created		27-Mar-2018 09:32:37
Comments		
Input	Data	C:\Users\User\Desktop\Pilot Test\merged QsPilotTest without work life balance.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	20
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S3Q1 S3Q2n S3Q3 /SCALE('Autonomy') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE CORR /SUMMARY=TOTAL CORR.
Resources	Processor Time	00:00:00.016
	Elapsed Time	00:00:00.016

Scale: Autonomy**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 ^a	Cronbach's Alpha Based on Standardized Items ^a	N of Items
.634	.657	3

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Item Statistics

	Mean	Std. Deviation	N
S3Q1	3.2000	1.10501	20
S3Q2n	3.1500	.98809	20
S3Q3	3.4000	.88258	20

Inter-Item Correlation Matrix

	S3Q1	S3Q2n	S3Q3
S3Q1	1.000	-.463	.561
S3Q2n	-.463	1.000	-.555
S3Q3	.561	-.555	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance
Inter-Item Correlations	-.152	-.555	.561	1.116	-1.011	.307

Summary Item Statistics

	N of Items
Inter-Item Correlations	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S3Q1	6.5500	.787	.043	.348	-2.462 ^a
S3Q2n	6.6000	3.095	-.569	.342	.707
S3Q3	6.3500	1.187	.066	.426	-1.703 ^a

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
9.7500	2.092	1.44641	3

Reliability

Notes

Output Created		27-Mar-2018 09:33:15
Comments		
Input	Data	C:\Users\User\Desktop\Pilot Test\merged QsPilotTest without work life balance.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	20
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S3Q1 S3Q3 S3Q2 /SCALE('Autonomy without recode') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE CORR /SUMMARY=TOTAL CORR.
Resources	Processor Time	00:00:00.015
	Elapsed Time	00:00:00.014

Scale: Autonomy**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	Cronbach's Alpha Based on Standardized Items	N of Items
.762	.769	3

Item Statistics

	Mean	Std. Deviation	N
S3Q1	3.20	1.105	20
S3Q3	3.40	.883	20
S3Q2	2.85	.988	20

Inter-Item Correlation Matrix

	S3Q1	S3Q3	S3Q2
S3Q1	1.000	.561	.463
S3Q3	.561	1.000	.555
S3Q2	.463	.555	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance
Inter-Item Correlations	.526	.463	.561	.098	1.213	.002

Summary Item Statistics

	N of Items
Inter-Item Correlations	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S3Q1	6.25	2.724	.577	.348	.711
S3Q3	6.05	3.208	.653	.426	.630
S3Q2	6.60	3.095	.569	.342	.707

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
9.45	6.050	2.460	3



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Reliability

Notes

Output Created		27-Mar-2018 09:56:45
Comments		
Input	Data	C:\Users\User\Desktop\chapter 4 new without work life balance\merged Qsnew.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	163
	File	
	Matrix Input	C:\Users\User\Desktop\chapter 4 new without work life balance\merged Qsnew.sav
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S1Q1 S1Q2 S1Q3 S1Q4 S1Q5 S1Q6 S1Q7 S1Q8 S1Q9 S1Q10 S1Q11 S1Q12 S1Q13 S1Q14 S1Q15 S1Q16 S1Q17 /SCALE('Work Engagement') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE CORR /SUMMARY=TOTAL CORR.
Resources	Processor Time	00:00:00.016
	Elapsed Time	00:00:00.016

Scale: Work Engagement

Case Processing Summary

		N	%
Cases	Valid	163	100.0
	Excluded ^a	0	.0
	Total	163	100.0

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.920	.924	17

Item Statistics

	Mean	Std. Deviation	N
S1Q1	3.80	.668	163
S1Q2	3.67	.648	163
S1Q3	3.61	.724	163
S1Q4	3.48	.898	163
S1Q5	3.56	.658	163
S1Q6	3.57	.778	163
S1Q7	3.99	.657	163
S1Q8	3.94	.650	163
S1Q9	3.87	.713	163
S1Q10	4.10	.654	163
S1Q11	3.88	.757	163
S1Q12	3.98	.741	163
S1Q13	3.34	.925	163
S1Q14	3.83	.615	163
S1Q15	3.87	.730	163
S1Q16	3.13	.763	163
S1Q17	3.06	.767	163

Appendix D – Reliability for actual data collection

Inter-Item Correlation Matrix

	S1Q1	S1Q2	S1Q3	S1Q4	S1Q5	S1Q6	S1Q7	S1Q8
S1Q1	1.000	.842	.588	.483	.486	.461	.627	.599
S1Q2	.842	1.000	.550	.553	.499	.487	.584	.571
S1Q3	.588	.550	1.000	.427	.559	.510	.561	.570
S1Q4	.483	.553	.427	1.000	.527	.538	.449	.469
S1Q5	.486	.499	.559	.527	1.000	.610	.487	.434
S1Q6	.461	.487	.510	.538	.610	1.000	.509	.429
S1Q7	.627	.584	.561	.449	.487	.509	1.000	.721
S1Q8	.599	.571	.570	.469	.434	.429	.721	1.000
S1Q9	.567	.548	.571	.407	.459	.445	.708	.717
S1Q10	.515	.504	.518	.418	.393	.502	.721	.653
S1Q11	.258	.235	.310	.147	.158	.334	.295	.313
S1Q12	.429	.501	.447	.412	.389	.415	.507	.433
S1Q13	.173	.263	.258	.296	.207	.318	.230	.134
S1Q14	.486	.522	.486	.275	.287	.348	.514	.517
S1Q15	.566	.548	.453	.444	.397	.489	.537	.596
S1Q16	.148	.249	.316	.269	.137	.260	.126	.139
S1Q17	.386	.351	.399	.342	.237	.365	.308	.230

Appendix D – Reliability for actual data collection

Inter-Item Correlation Matrix

	S1Q9	S1Q10	S1Q11	S1Q12	S1Q13	S1Q14	S1Q15
S1Q1	.567	.515	.258	.429	.173	.486	.566
S1Q2	.548	.504	.235	.501	.263	.522	.548
S1Q3	.571	.518	.310	.447	.258	.486	.453
S1Q4	.407	.418	.147	.412	.296	.275	.444
S1Q5	.459	.393	.158	.389	.207	.287	.397
S1Q6	.445	.502	.334	.415	.318	.348	.489
S1Q7	.708	.721	.295	.507	.230	.514	.537
S1Q8	.717	.653	.313	.433	.134	.517	.596
S1Q9	1.000	.771	.407	.510	.227	.555	.585
S1Q10	.771	1.000	.449	.616	.287	.537	.520
S1Q11	.407	.449	1.000	.436	.207	.302	.252
S1Q12	.510	.616	.436	1.000	.459	.535	.452
S1Q13	.227	.287	.207	.459	1.000	.332	.313
S1Q14	.555	.537	.302	.535	.332	1.000	.556
S1Q15	.585	.520	.252	.452	.313	.556	1.000
S1Q16	.224	.159	.240	.299	.339	.258	.230
S1Q17	.342	.319	.289	.415	.422	.297	.378

Inter-Item Correlation Matrix

	S1Q16	S1Q17
S1Q1	.148	.386
S1Q2	.249	.351
S1Q3	.316	.399
S1Q4	.269	.342
S1Q5	.137	.237
S1Q6	.260	.365
S1Q7	.126	.308
S1Q8	.139	.230
S1Q9	.224	.342
S1Q10	.159	.319
S1Q11	.240	.289
S1Q12	.299	.415
S1Q13	.339	.422
S1Q14	.258	.297
S1Q15	.230	.378
S1Q16	1.000	.429
S1Q17	.429	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance
Inter-Item Correlations	.419	.126	.842	.715	6.665	.022

Summary Item Statistics

	N of Items
Inter-Item Correlations	17

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S1Q1	58.90	59.916	.700	.777	.913
S1Q2	59.03	59.906	.725	.768	.912
S1Q3	59.09	59.319	.696	.563	.913
S1Q4	59.21	58.589	.597	.489	.916
S1Q5	59.13	61.204	.580	.542	.916
S1Q6	59.13	59.162	.655	.555	.914
S1Q7	58.71	59.787	.727	.685	.912
S1Q8	58.75	60.223	.690	.677	.913
S1Q9	58.83	58.983	.741	.722	.912
S1Q10	58.60	59.786	.731	.726	.912
S1Q11	58.82	62.015	.421	.326	.920
S1Q12	58.72	59.315	.678	.566	.913
S1Q13	59.36	60.786	.413	.348	.922
S1Q14	58.87	61.199	.627	.508	.915
S1Q15	58.83	59.452	.677	.542	.913
S1Q16	59.57	62.703	.358	.317	.922
S1Q17	59.64	60.837	.516	.410	.918

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
62.70	67.607	8.222	17

Reliability

Notes

Output Created		27-Mar-2018 09:57:38
Comments		
Input	Data	C:\Users\User\Desktop\chapter 4 new without work life balance\merged Qsnew.sav
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	N of Rows in Working Data	163
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S2Q1 S2Q2n S2Q3n S2Q4 S2Q5 S2Q6 /SCALE('Workload') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE CORR /SUMMARY=TOTAL CORR.
Resources	Processor Time	00:00:00.000
	Elapsed Time	00:00:00.015

Scale: Workload**Case Processing Summary**

		N	%
Cases	Valid	163	100.0
	Excluded ^a	0	.0
	Total	163	100.0

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.535	.507	6

Item Statistics

	Mean	Std. Deviation	N
S2Q1	3.2331	.84306	163
S2Q2n	2.7730	.72265	163
S2Q3n	2.6564	.78866	163
S2Q4	3.0675	.90355	163
S2Q5	3.4969	.81932	163
S2Q6	3.4172	.88063	163

Appendix D – Reliability for actual data collection

Inter-Item Correlation Matrix

	S2Q1	S2Q2n	S2Q3n	S2Q4	S2Q5	S2Q6
S2Q1	1.000	-.065	.158	.279	.216	.517
S2Q2n	-.065	1.000	.263	-.260	-.142	-.093
S2Q3n	.158	.263	1.000	.059	-.221	.217
S2Q4	.279	-.260	.059	1.000	.438	.500
S2Q5	.216	-.142	-.221	.438	1.000	.327
S2Q6	.517	-.093	.217	.500	.327	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance
Inter-Item Correlations	.146	-.260	.517	.777	-1.987	.063

Summary Item Statistics

	N of Items
Inter-Item Correlations	6

Appendix D – Reliability for actual data collection

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S2Q1	15.4110	5.095	.426	.275	.414
S2Q2n	15.8712	7.310	-.104	.149	.635
S2Q3n	15.9877	6.197	.155	.222	.545
S2Q4	15.5767	4.999	.399	.376	.424
S2Q5	15.1472	5.793	.244	.293	.506
S2Q6	15.2270	4.436	.598	.436	.308

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
18.6442	7.428	2.72547	6

Reliability

Notes

Output Created		27-Mar-2018 09:59:54
Comments		
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	163
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S2Q7 S2Q8 S2Q9 S2Q10n S2Q11 /SCALE('Work Pressure') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE CORR /SUMMARY=TOTAL CORR.
Resources	Processor Time	00:00:00.000
	Elapsed Time	00:00:00.000

Scale: Work Pressure**Case Processing Summary**

		N	%
Cases	Valid	163	100.0
	Excluded ^a	0	.0
	Total	163	100.0

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.648	.636	5

Item Statistics

	Mean	Std. Deviation	N
S2Q7	3.2331	.89973	163
S2Q8	3.5644	.85373	163
S2Q9	3.5153	.80397	163
S2Q10n	2.8098	.78215	163
S2Q11	2.4785	.72297	163

Appendix D – Reliability for actual data collection

Inter-Item Correlation Matrix

	S2Q7	S2Q8	S2Q9	S2Q10n	S2Q11
S2Q7	1.000	.728	.499	.046	.264
S2Q8	.728	1.000	.563	-.060	.280
S2Q9	.499	.563	1.000	-.138	.125
S2Q10n	.046	-.060	-.138	1.000	.282
S2Q11	.264	.280	.125	.282	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance
Inter-Item Correlations	.259	-.138	.728	.865	-5.286	.073

Summary Item Statistics

	N of Items
Inter-Item Correlations	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S2Q7	12.3681	3.839	.637	.553	.462
S2Q8	12.0368	4.011	.630	.598	.472
S2Q9	12.0859	4.783	.417	.349	.588
S2Q10n	12.7914	6.154	.034	.128	.747
S2Q11	13.1227	5.219	.349	.170	.619

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
15.6012	6.896	2.62594	5

Reliability

Notes

Output Created		27-Mar-2018 10:00:38
Comments		
Input	Data	C:\Users\User\Desktop\chapter 4 new without work life balance\merged Qsnew.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	163
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S3Q1 S3Q2 S3Q3 /SCALE('Autonomy') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE CORR /SUMMARY=TOTAL CORR.
Resources	Processor Time	00:00:00.000
	Elapsed Time	00:00:00.015

Scale: Autonomy**Case Processing Summary**

		N	%
Cases	Valid	163	100.0
	Excluded ^a	0	.0
	Total	163	100.0

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.536	.541	3

Item Statistics

	Mean	Std. Deviation	N
S3Q1	3.10	.869	163
S3Q2	2.79	.837	163
S3Q3	3.09	.784	163

Appendix D – Reliability for actual data collection

Inter-Item Correlation Matrix

	S3Q1	S3Q2	S3Q3
S3Q1	1.000	.148	.394
S3Q2	.148	1.000	.303
S3Q3	.394	.303	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance
Inter-Item Correlations	.282	.148	.394	.246	2.665	.012

Summary Item Statistics

	N of Items
Inter-Item Correlations	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S3Q1	5.88	1.713	.331	.156	.464
S3Q2	6.19	1.908	.265	.093	.563
S3Q3	5.88	1.672	.461	.217	.258

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
8.98	3.222	1.795	3

Reliability

Notes

Output Created		27-Mar-2018 10:01:24
Comments		
Input	Data	C:\Users\User\Desktop\chapter 4 new without work life balance\merged Qsnew.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	163
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S3Q4 S3Q5 S3Q6 S3Q7 S3Q8 S3Q9 S3Q10 S3Q11 /SCALE('Social Support') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE CORR /SUMMARY=TOTAL CORR.
Resources	Processor Time	00:00:00.000
	Elapsed Time	00:00:00.000

Scale: Social Support**Case Processing Summary**

		N	%
Cases	Valid	163	100.0
	Excluded ^a	0	.0
	Total	163	100.0

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.920	.920	8

Item Statistics

	Mean	Std. Deviation	N
S3Q4	3.57	.909	163
S3Q5	3.59	.807	163
S3Q6	3.58	.888	163
S3Q7	3.53	.863	163
S3Q8	3.66	.715	163
S3Q9	3.66	.697	163
S3Q10	3.79	.689	163
S3Q11	3.84	.675	163

Appendix D – Reliability for actual data collection

Inter-Item Correlation Matrix

	S3Q4	S3Q5	S3Q6	S3Q7	S3Q8	S3Q9	S3Q10	S3Q11
S3Q4	1.000	.810	.840	.766	.427	.457	.447	.481
S3Q5	.810	1.000	.862	.761	.471	.494	.478	.468
S3Q6	.840	.862	1.000	.857	.444	.475	.473	.486
S3Q7	.766	.761	.857	1.000	.459	.440	.438	.518
S3Q8	.427	.471	.444	.459	1.000	.740	.568	.640
S3Q9	.457	.494	.475	.440	.740	1.000	.749	.709
S3Q10	.447	.478	.473	.438	.568	.749	1.000	.791
S3Q11	.481	.468	.486	.518	.640	.709	.791	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance
Inter-Item Correlations	.591	.427	.862	.435	2.020	.025

Summary Item Statistics

	N of Items
Inter-Item Correlations	8

Appendix D – Reliability for actual data collection

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S3Q4	25.65	18.426	.773	.743	.906
S3Q5	25.63	19.012	.799	.778	.904
S3Q6	25.64	18.282	.819	.858	.902
S3Q7	25.69	18.747	.775	.761	.906
S3Q8	25.56	20.630	.638	.597	.916
S3Q9	25.56	20.420	.695	.715	.912
S3Q10	25.43	20.605	.672	.709	.914
S3Q11	25.38	20.521	.704	.706	.912

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
29.22	25.284	5.028	8

Reliability

Notes

Output Created		27-Mar-2018 10:02:04
Comments		
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	163
	File	
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=S3Q12 S3Q13 S3Q14 S3Q15 /SCALE('Performance Feedback') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE CORR /SUMMARY=TOTAL CORR.
Resources	Processor Time	00:00:00.016
	Elapsed Time	00:00:00.016

Scale: Performance Feedback**Case Processing Summary**

		N	%
Cases	Valid	163	100.0
	Excluded ^a	0	.0
	Total	163	100.0

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.823	.820	4

Item Statistics

	Mean	Std. Deviation	N
S3Q12	3.63	.786	163
S3Q13	3.48	.804	163
S3Q14	3.48	.679	163
S3Q15	3.49	.679	163

Appendix D – Reliability for actual data collection

Inter-Item Correlation Matrix

	S3Q12	S3Q13	S3Q14	S3Q15
S3Q12	1.000	.806	.499	.415
S3Q13	.806	1.000	.568	.432
S3Q14	.499	.568	1.000	.478
S3Q15	.415	.432	.478	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance
Inter-Item Correlations	.533	.415	.806	.391	1.941	.019

Summary Item Statistics

	N of Items
Inter-Item Correlations	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S3Q12	10.45	3.101	.721	.656	.741
S3Q13	10.60	2.958	.763	.688	.719
S3Q14	10.60	3.661	.613	.390	.793
S3Q15	10.59	3.898	.506	.275	.836

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
14.08	5.716	2.391	4



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Frequencies

Notes

Output Created		21-Mar-2018 03:34:51
Comments		
Input	Data	C:\Users\End-User\Documents\Demographic.sav
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	163
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=Gender Age MaritalStatus EduQualification MonthlySalary YearsInPresentOrganization YearsInPresentPosition CurrentPosition PositionGrade GroupPosition /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN SKEWNESS SESKEW KURTOSIS SEKURT /HISTOGRAM NORMAL /ORDER=ANALYSIS.
Resources	Processor Time	00:00:02.137
	Elapsed Time	00:00:07.371

		Statistics			
		Gender	Age	Marital Status	Highest Academic Qualification
N	Valid	163	163	163	163
	Missing	0	0	0	0
Mean		1.69	2.44	1.90	3.10
Median		2.00	2.00	2.00	3.00
Std. Deviation		.465	.916	.372	.904
Skewness		-.815	.241	-1.121	.210
Std. Error of Skewness		.190	.190	.190	.190
Kurtosis		-1.353	-.746	3.313	-.559
Std. Error of Kurtosis		.378	.378	.378	.378
Minimum		1	1	1	1
Maximum		2	4	3	5

Statistics

		Monthly Salary Received	Years in Present Organization	Years in Present Position	Current Position
N	Valid	163	163	163	163
	Missing	0	0	0	0
Mean		4.19	3.02	3.27	1.81
Median		4.00	3.00	4.00	2.00
Std. Deviation		1.554	1.033	.923	.624
Skewness		-.152	-.581	-.945	.157
Std. Error of Skewness		.190	.190	.190	.190
Kurtosis		-1.437	-.964	-.296	-.534
Std. Error of Kurtosis		.378	.378	.378	.378
Minimum		1	1	1	1
Maximum		6	4	4	3

Statistics

		Current Grade	Group Position
N	Valid	163	163
	Missing	0	0
Mean		2.81	1.50
Median		3.00	2.00
Std. Deviation		.624	.502
Skewness		.157	-.012
Std. Error of Skewness		.190	.190
Kurtosis		-.534	-2.025
Std. Error of Kurtosis		.378	.378
Minimum		2	1
Maximum		4	2

Frequency Table

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	51	31.3	31.3	31.3
	Female	112	68.7	68.7	100.0
	Total	163	100.0	100.0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-30	23	14.1	14.1	14.1
	31-40	71	43.6	43.6	57.7
	41-50	44	27.0	27.0	84.7
	51-60	25	15.3	15.3	100.0
	Total	163	100.0	100.0	

Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	20	12.3	12.3	12.3
	Married	139	85.3	85.3	97.5
	Divorced/Widowed/Separated	4	2.5	2.5	100.0
	Total	163	100.0	100.0	

Highest Academic Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SRP/PMR	2	1.2	1.2	1.2
	SPM/SPMV/Certificate	43	26.4	26.4	27.6
	STPM/Diploma/Advanced Diploma	65	39.9	39.9	67.5
	Bachelor Degree	43	26.4	26.4	93.9
	Master/PhD	10	6.1	6.1	100.0
	Total	163	100.0	100.0	

Monthly Salary Received

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below RM1000	2	1.2	1.2	1.2
	RM1001 - RM2000	27	16.6	16.6	17.8
	RM2001 - RM3000	38	23.3	23.3	41.1
	RM3001 - RM4000	19	11.7	11.7	52.8
	RM4001 - RM5000	25	15.3	15.3	68.1
	Above RM5000	52	31.9	31.9	100.0
	Total	163	100.0	100.0	

Years in Present Organization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	16	9.8	9.8	9.8
	1 - 3 years	37	22.7	22.7	32.5
	3 - 4 years	38	23.3	23.3	55.8
	More than 7 years	72	44.2	44.2	100.0
	Total	163	100.0	100.0	

Years in Present Position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	8	4.9	4.9	4.9
	1 - 3 years	29	17.8	17.8	22.7
	3 - 4 years	37	22.7	22.7	45.4
	More than 7 years	89	54.6	54.6	100.0
	Total	163	100.0	100.0	

Current Position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Executive / Administration / Management	50	30.7	30.7	30.7
	Support Staff Level 1	94	57.7	57.7	88.3
	Support Staff Level 2	19	11.7	11.7	100.0
	Total	163	100.0	100.0	

Current Grade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	41 - 54	50	30.7	30.7	30.7
	19 - 40	94	57.7	57.7	88.3
	11 - 18	19	11.7	11.7	100.0
	Total	163	100.0	100.0	

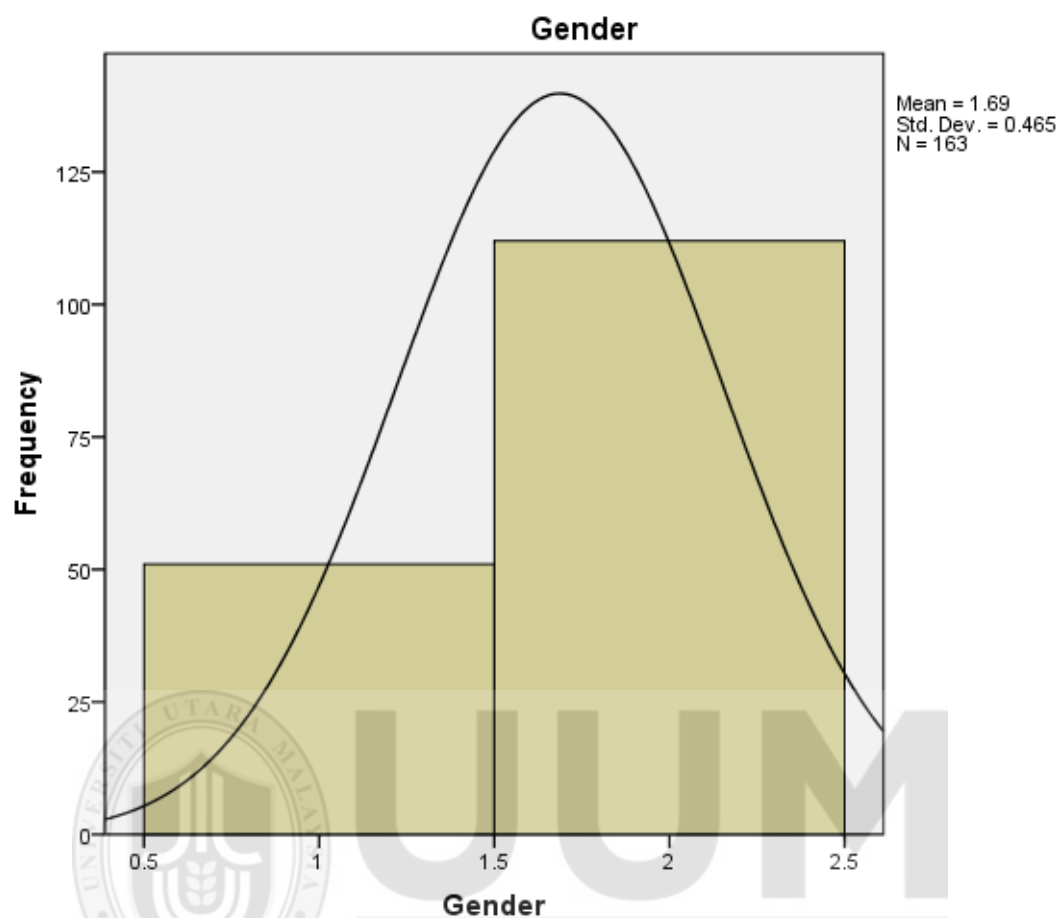
Group Position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Medical / Health Science / Dental	81	49.7	49.7	49.7
	Management / Administration / IT / Engineering / Finance	82	50.3	50.3	100.0
	Total	163	100.0	100.0	

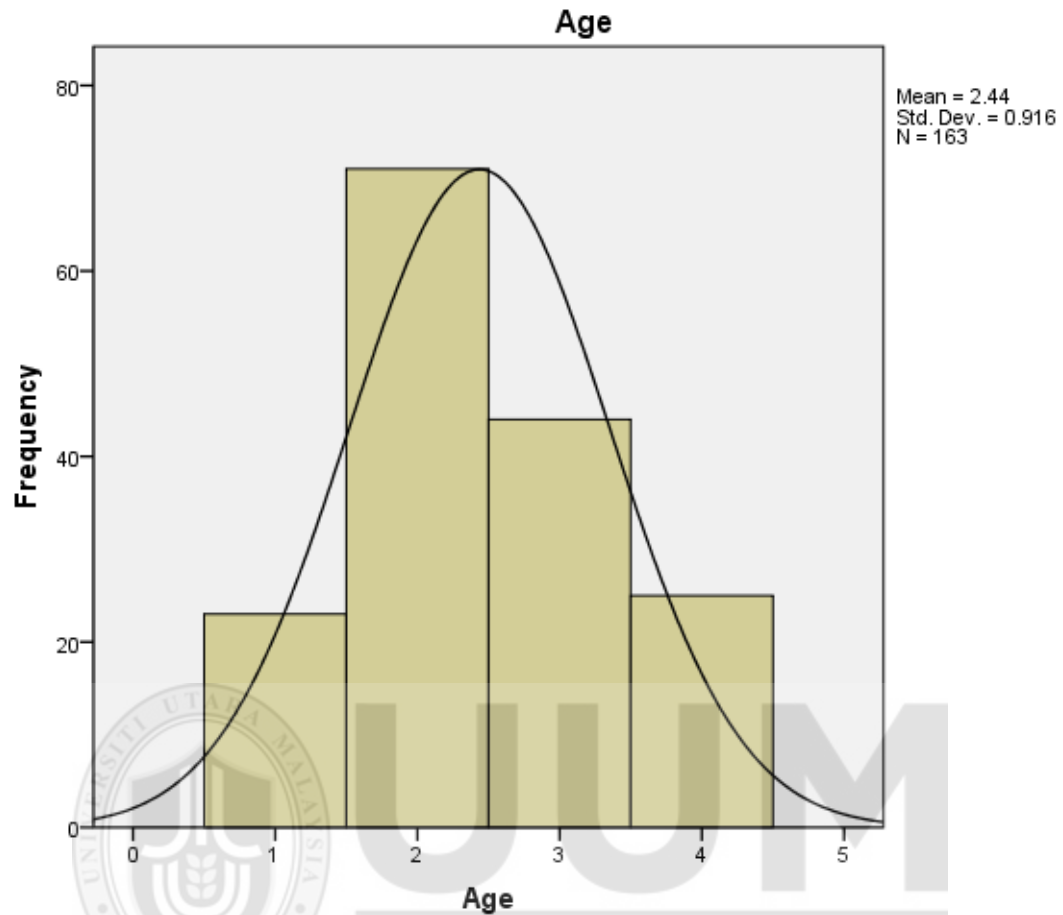
Histogram



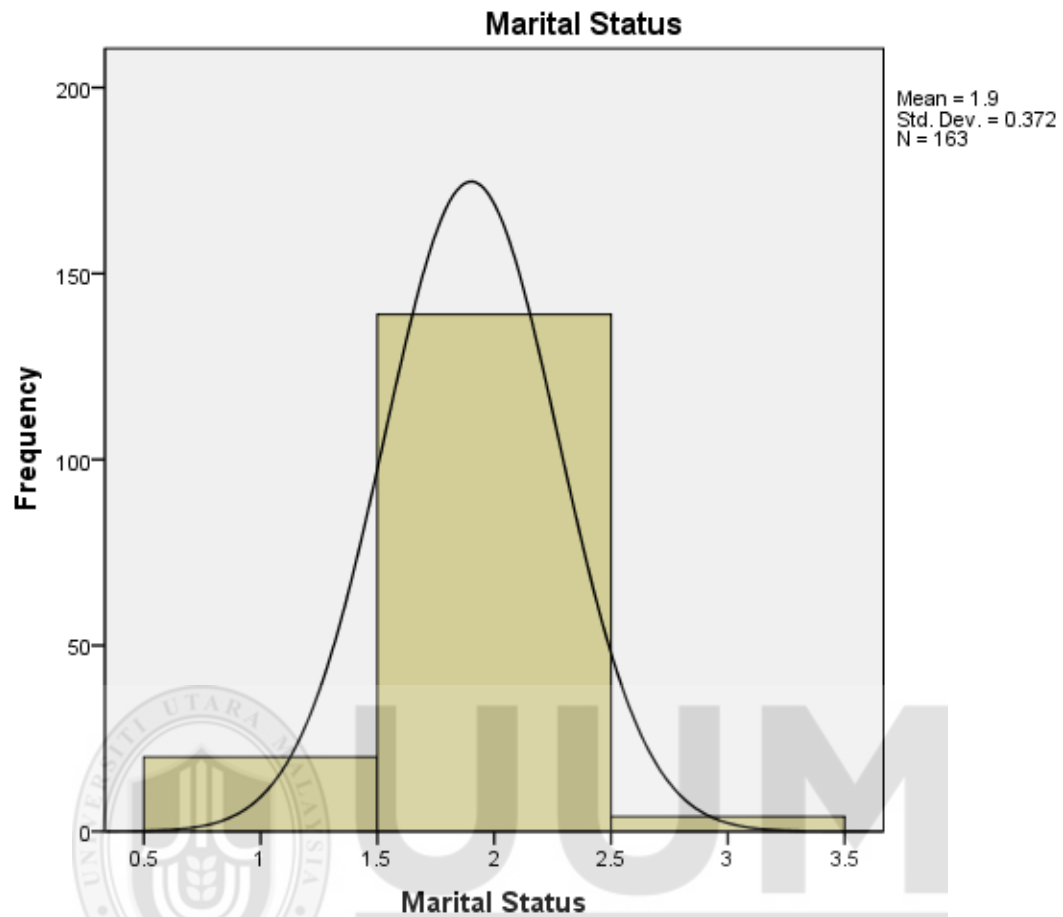
UUM
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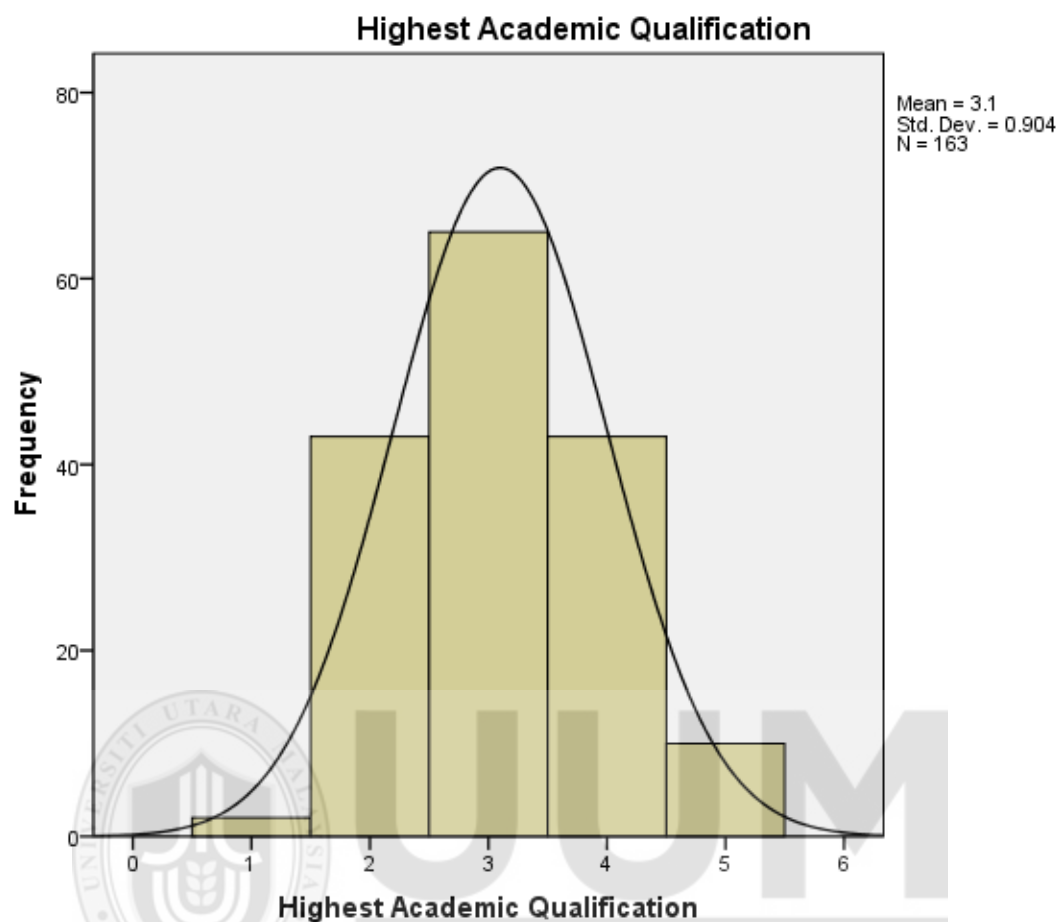


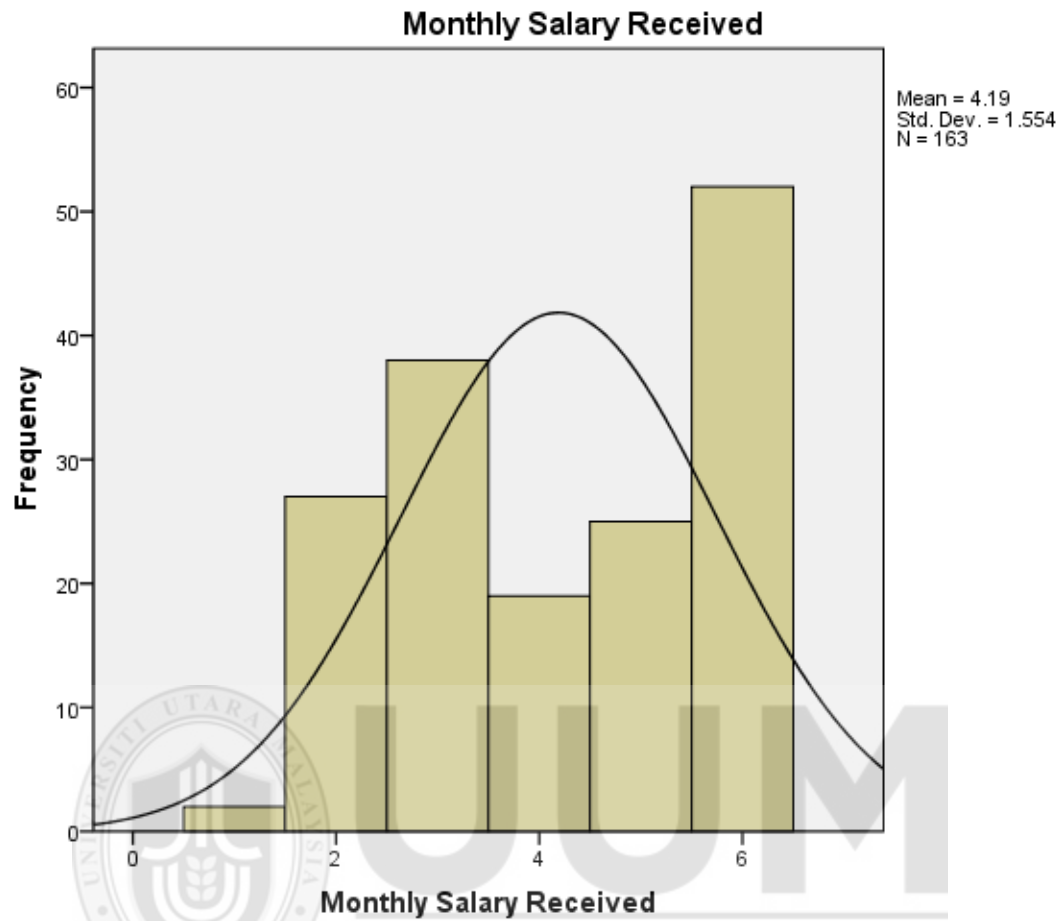
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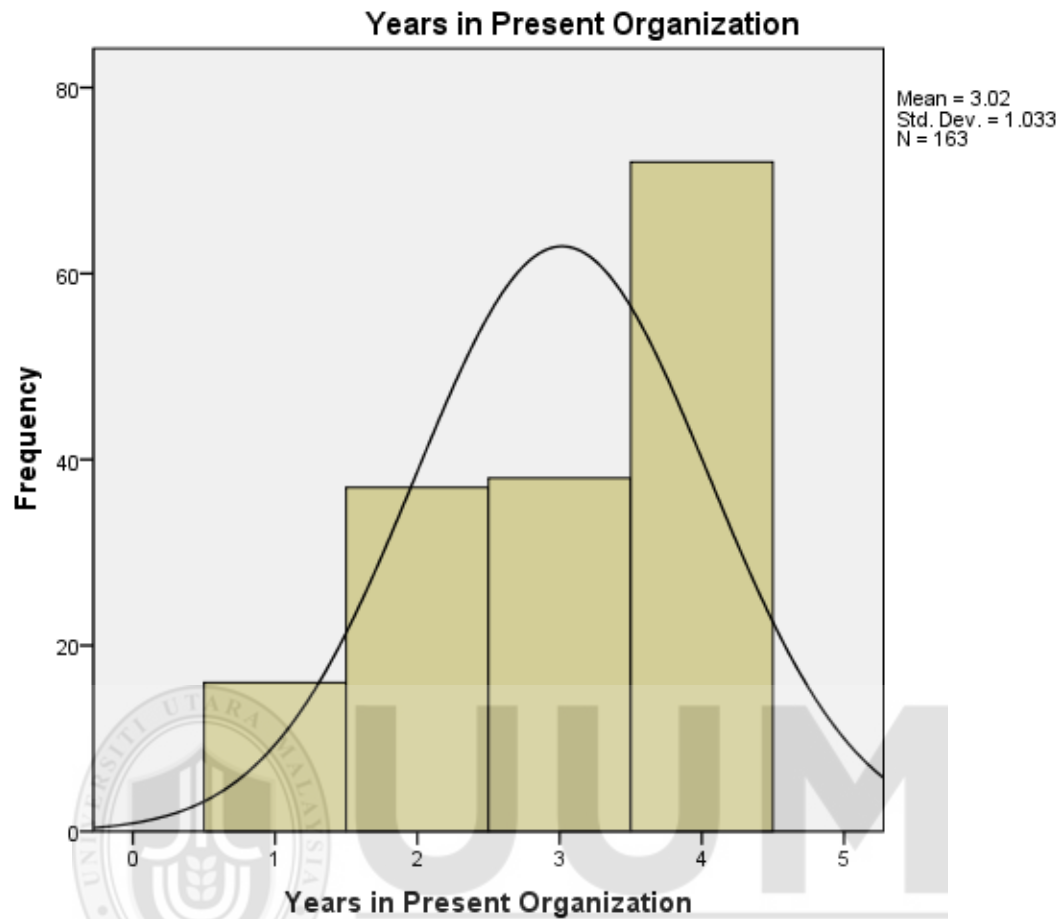


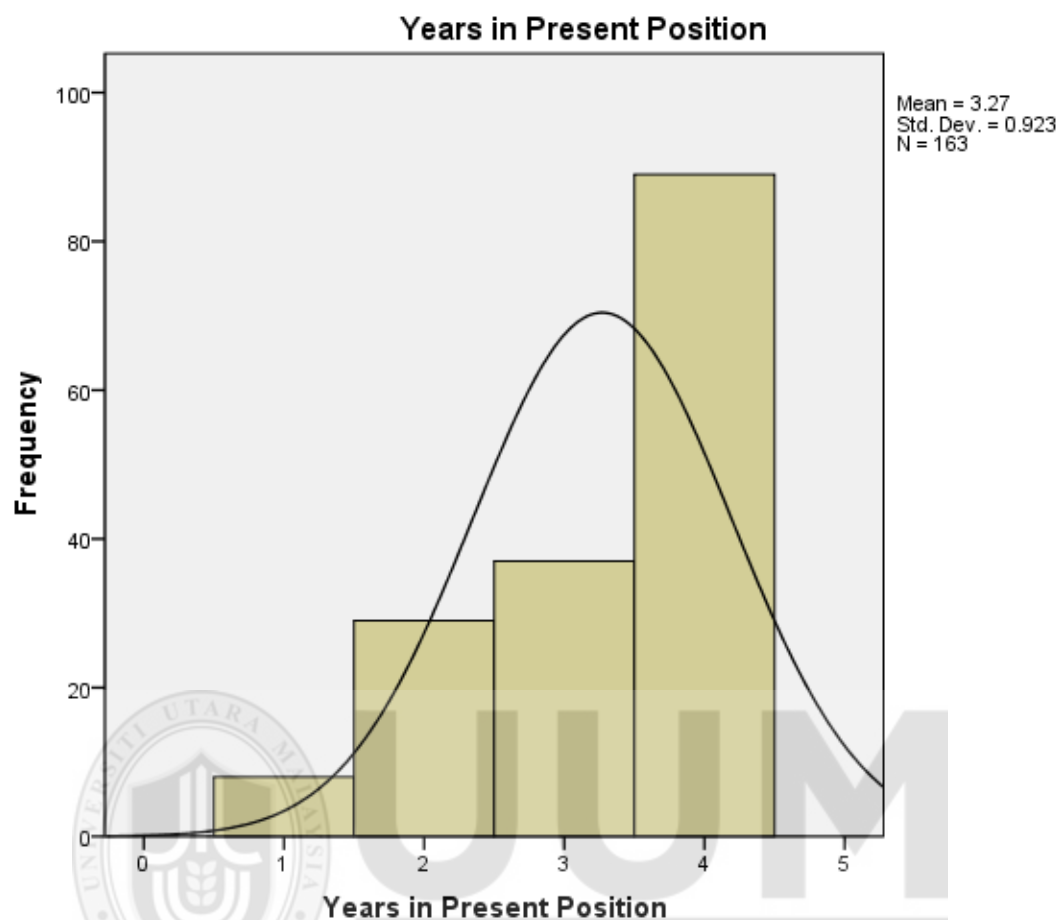
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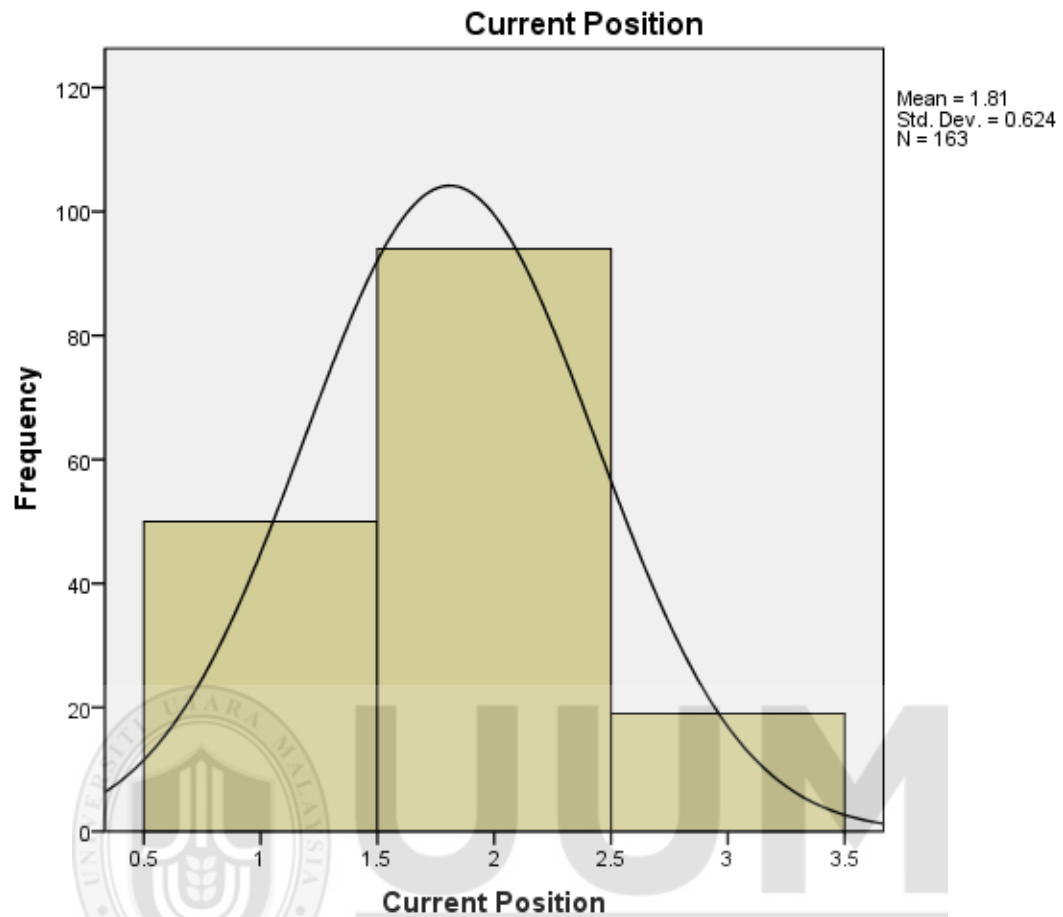




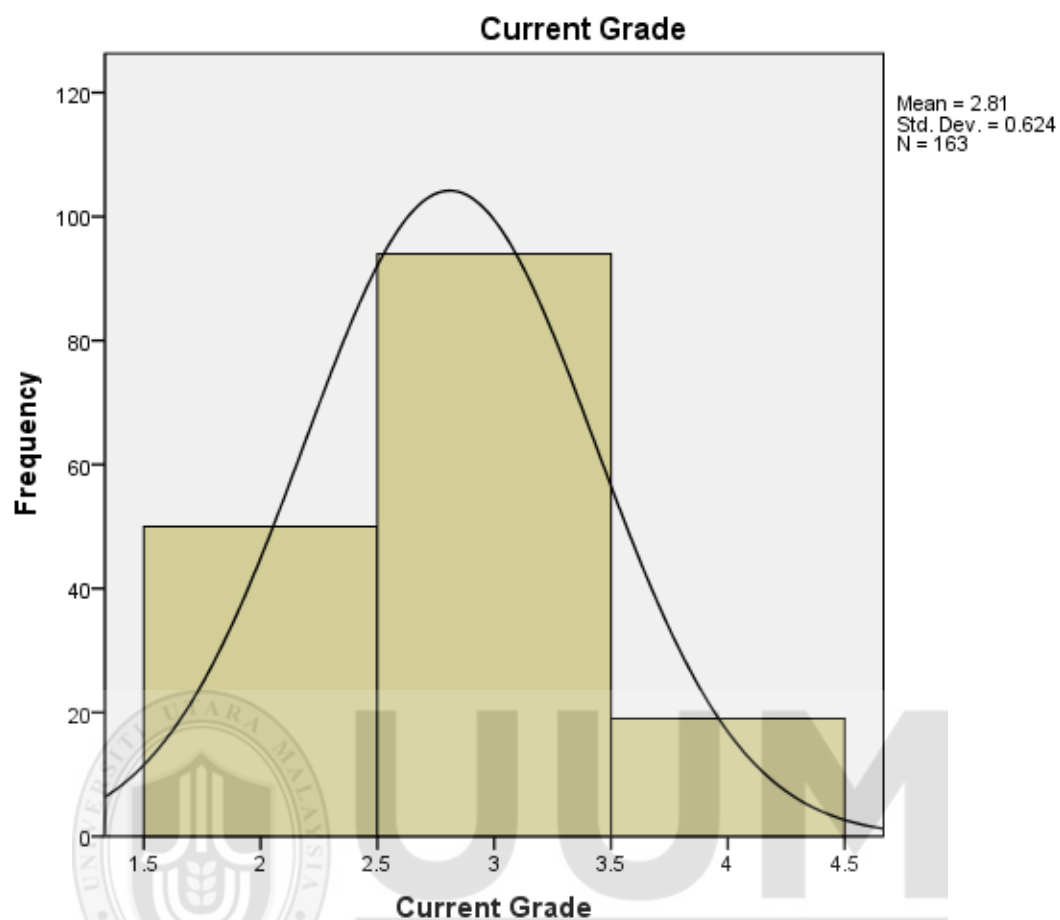




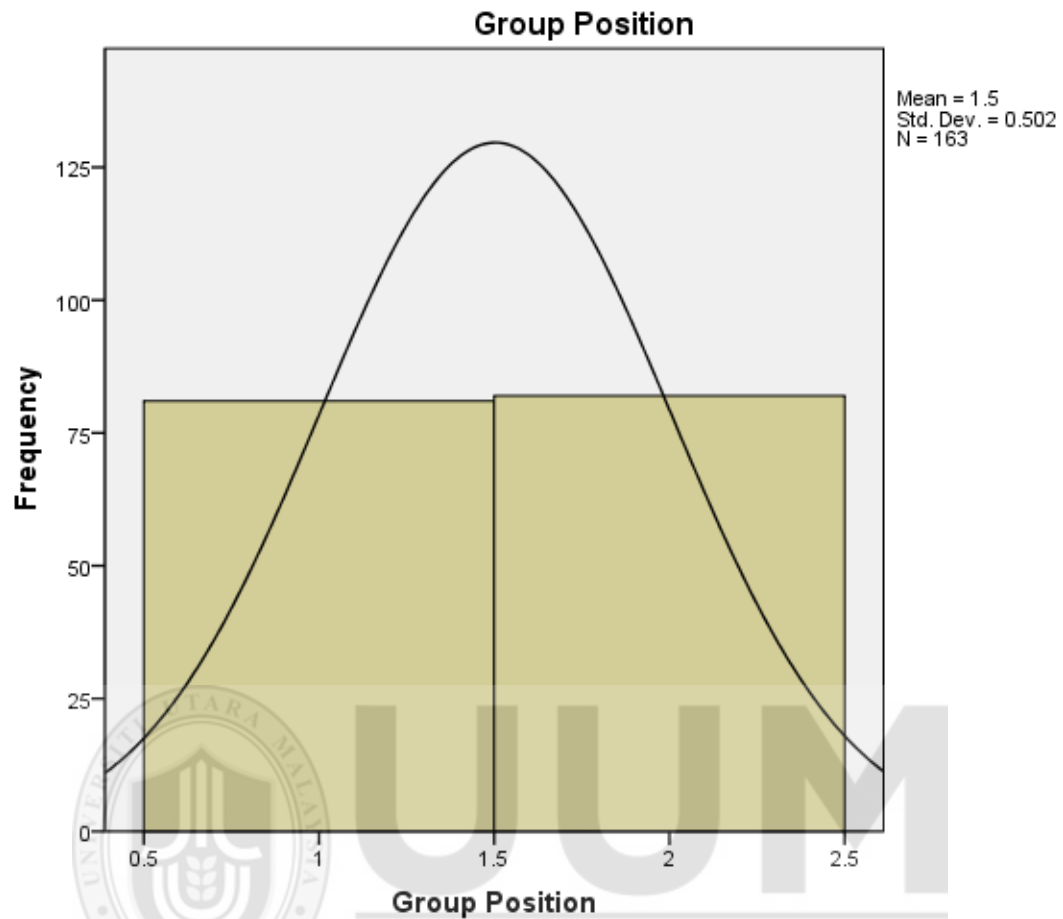




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Work engagement

Explore

Notes

Output Created		27-Mar-2018 12:13:41
Comments		
Input	Data	C:\Users\User\Documents\merged
	Active Dataset	Qsnew.sav
	Filter	DataSet1
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	<none>
	File	163
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for the dependent variable or factor(s) being analyzed.
Syntax		EXAMINE VARIABLES=WorkEngMean /PLOT BOXPLOT STEMLEAF HISTOGRAM NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES EXTREME /INTERVAL 95 /MISSING PAIRWISE /NOTOTAL.
Resources	Processor Time	00:00:01.484
	Elapsed Time	00:00:01.714

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
WorkEngMean	163	100.0%	0	.0%	163	100.0%

Descriptives

		Statistic	Std. Error
WorkEngMean	Mean	3.6882	.03788
95% Confidence Interval for Mean			
	Lower Bound	3.6134	
	Upper Bound	3.7630	
5% Trimmed Mean		3.6748	
Median		3.7059	
Variance		.234	
Std. Deviation		.48367	
Minimum		2.71	
Maximum		5.00	
Range		2.29	
Interquartile Range		.65	
Skewness		.344	.190
Kurtosis		-.141	.378

Extreme Values

			Case Number	Value
WorkEngMean	Highest	1	107	5.00
		2	29	4.88
		3	63	4.88
		4	15	4.71
		5	145	4.71 ^a
	Lowest	1	66	2.71
		2	14	2.76
		3	143	2.82
		4	60	2.82
		5	80	2.88 ^b

a. Only a partial list of cases with the value 4.71 are shown in the table of upper extremes.

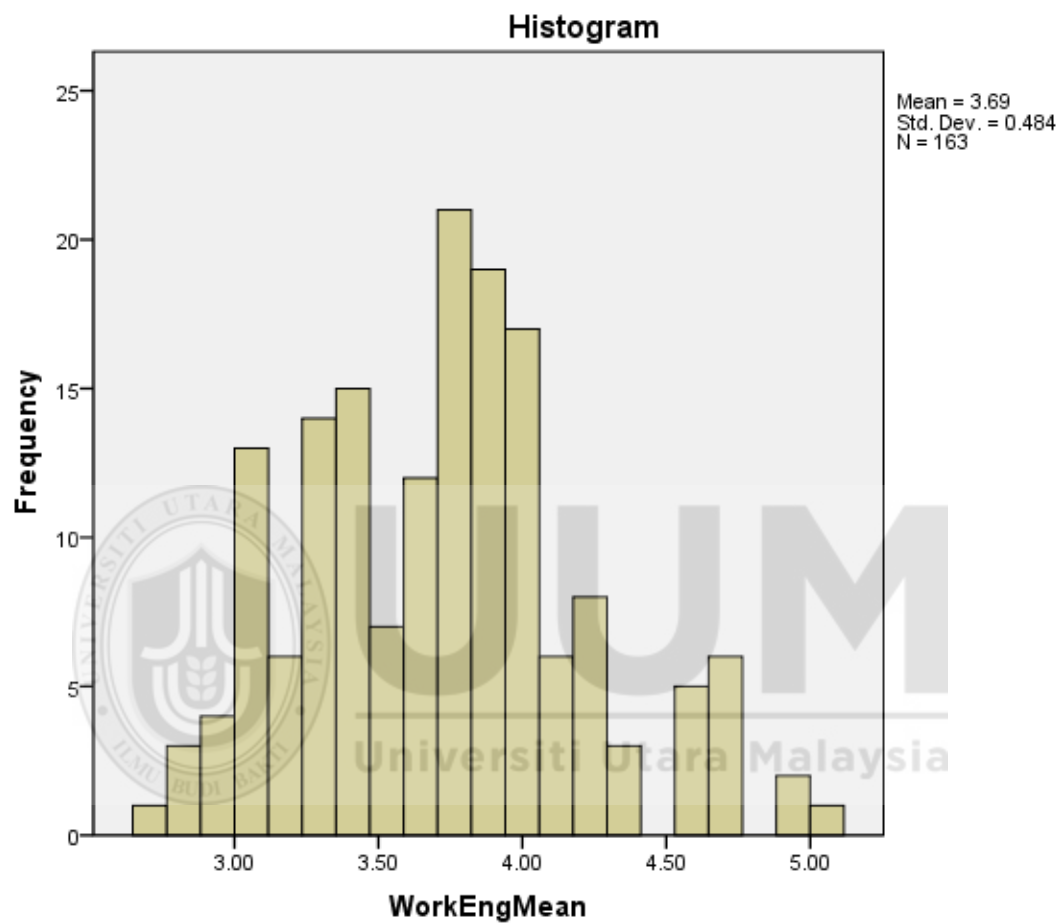
b. Only a partial list of cases with the value 2.88 are shown in the table of lower extremes.

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
WorkEngMean	.069	163	.053	.979	163	.016

a. Lilliefors Significance Correction

WorkEngMean



WorkEngMean Stem-and-Leaf Plot

Frequency Stem & Leaf

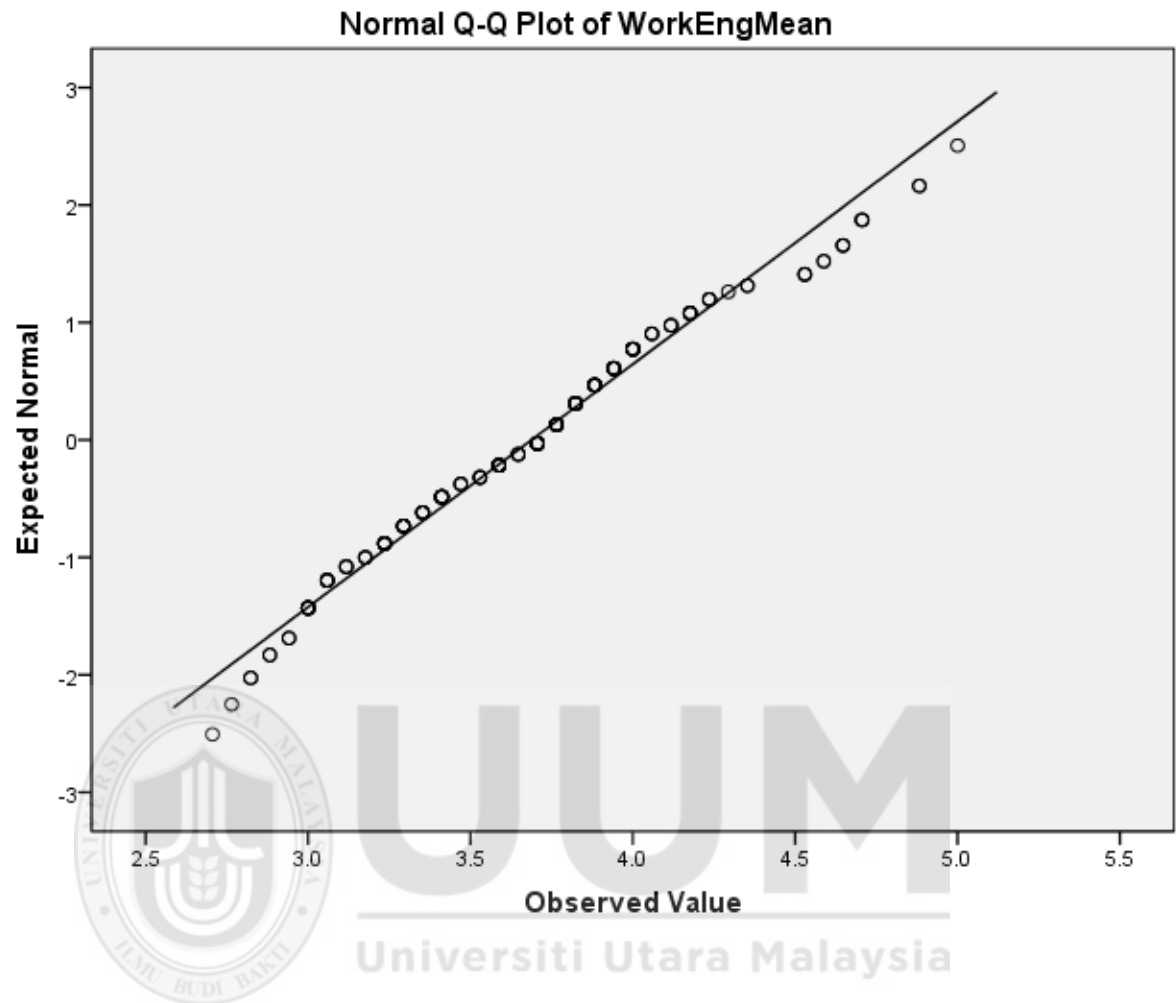
2.00	2 . 77
6.00	2 . 888899
19.00	3 . 0000000000000111111
19.00	3 . 2222222222222233333

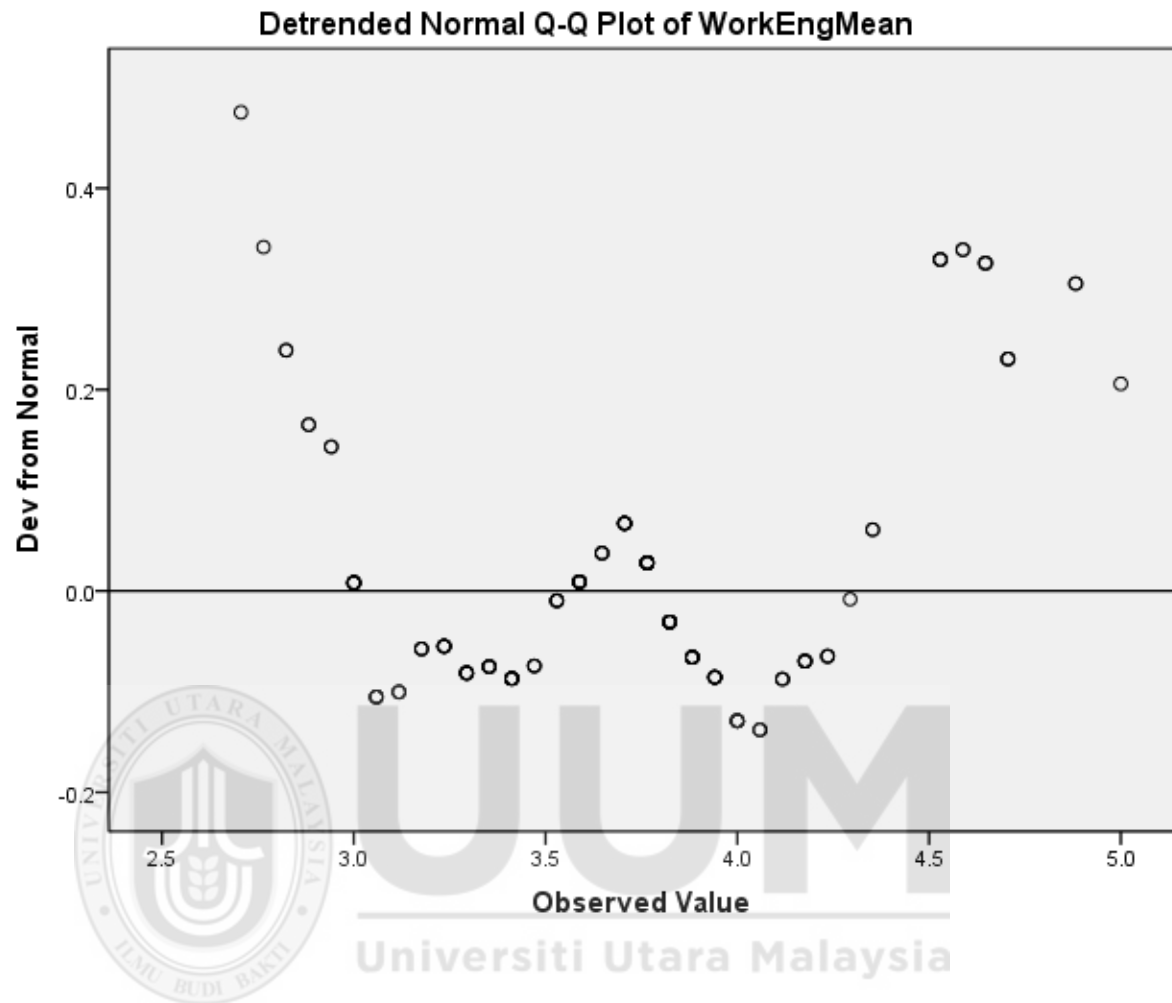
26.00 3 . 444444444444445555555555555555
 24.00 3 . 666777777777777777777777777777
 27.00 3 . 88888888888888888888888899999999
 20.00 4 . 0000000000000111111111
 6.00 4 . 222233
 5.00 4 . 55555
 6.00 4 . 666777
 3.00 Extremes (≥ 4.9)

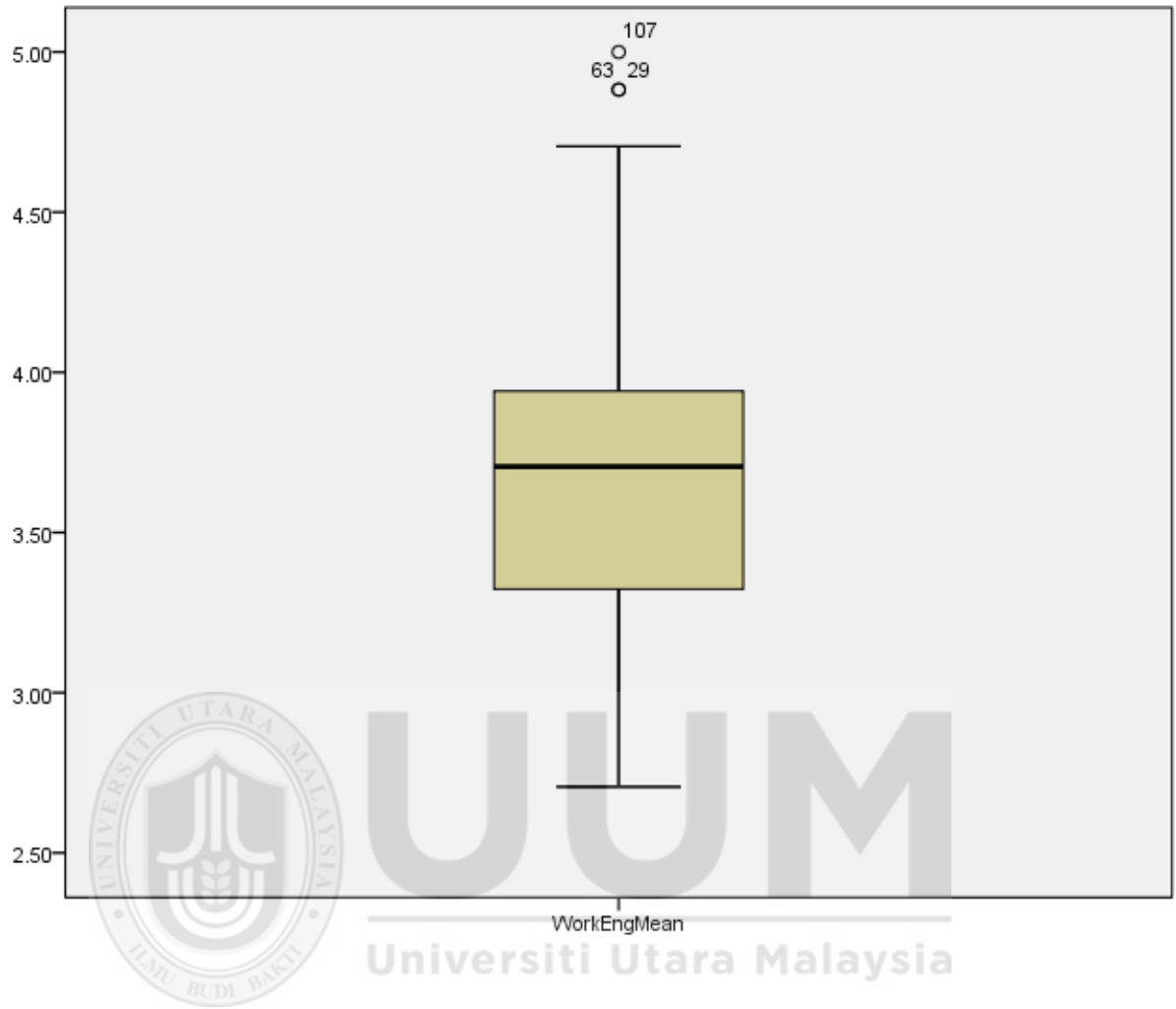
Stem width: 1.00

Each leaf: 1 case(s)









Workload

Explore

Notes

Output Created		27-Mar-2018 12:18:07
Comments		
Input	Data	C:\Users\User\Documents\merged Qsnew.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	163
	File	
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for the dependent variable or factor(s) being analyzed.
Syntax		EXAMINE VARIABLES=WorkloadMean /PLOT BOXPLOT STEMLEAF HISTOGRAM NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES EXTREME /INTERVAL 95 /MISSING PAIRWISE /NOTOTAL.
Resources	Processor Time	00:00:00.922
	Elapsed Time	00:00:00.872

Case Processing Summary

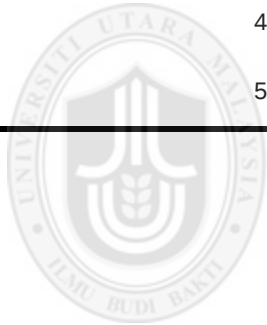
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
WorkloadMean	163	100.0%	0	.0%	163	100.0%

Descriptives

		Statistic	Std. Error
WorkloadMean	Mean	3.1074	.03558
95% Confidence Interval for Mean			
	Lower Bound	3.0371	
	Upper Bound	3.1776	
5% Trimmed Mean		3.1110	
Median		3.0000	
Variance		.206	
Std. Deviation		.45424	
Minimum		1.83	
Maximum		4.50	
Range		2.67	
Interquartile Range		.67	
Skewness		.027	.190
Kurtosis		.283	.378

Extreme Values

			Case Number	Value
WorkloadMean	Highest	1	126	4.50
		2	147	4.17
		3	52	4.00
		4	93	4.00
		5	163	4.00
	Lowest	1	128	1.83
		2	63	1.83
		3	6	2.00
		4	134	2.17
		5	18	2.17



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Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
WorkloadMean	.121	163	.000	.981	163	.022

a. Lilliefors Significance Correction

WorkloadMean

Frequency	Stem & Leaf
1	10
1	11
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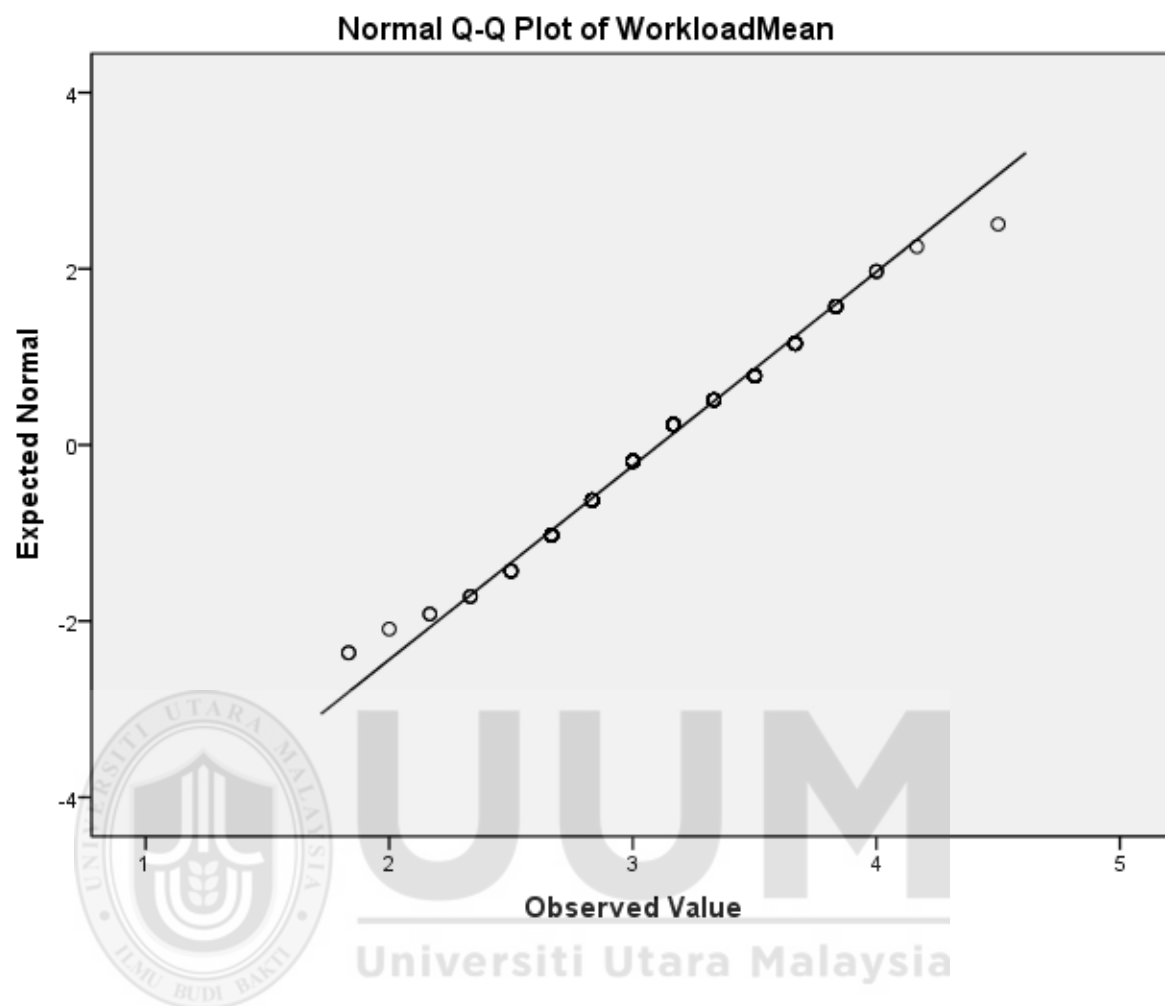
180

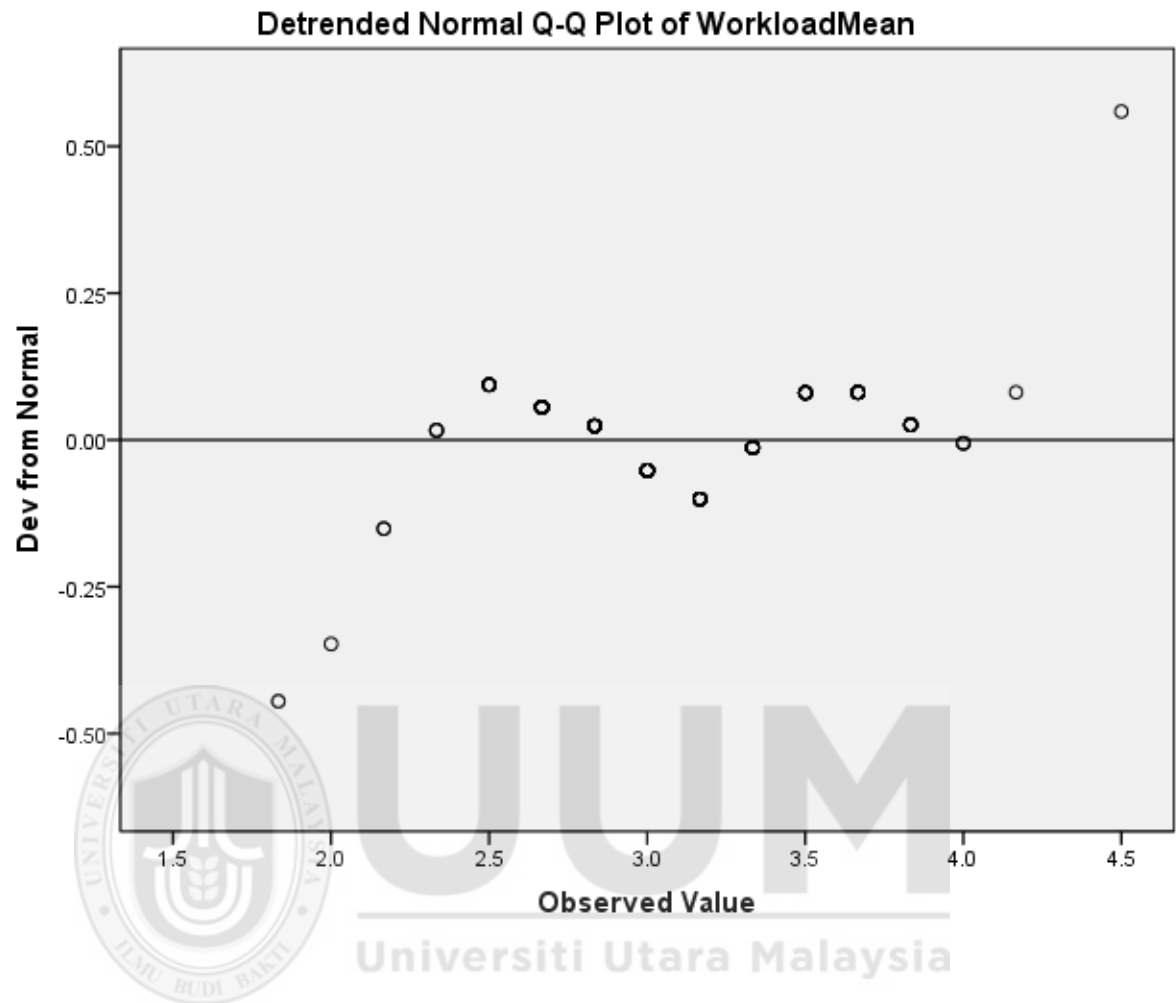
13.00 3 . 333333333333
16.00 3 . 55555555555555
14.00 3 . 666666666666
8.00 3 . 88888888
4.00 4 . 0001
1.00 Extremes (≥ 4.5)

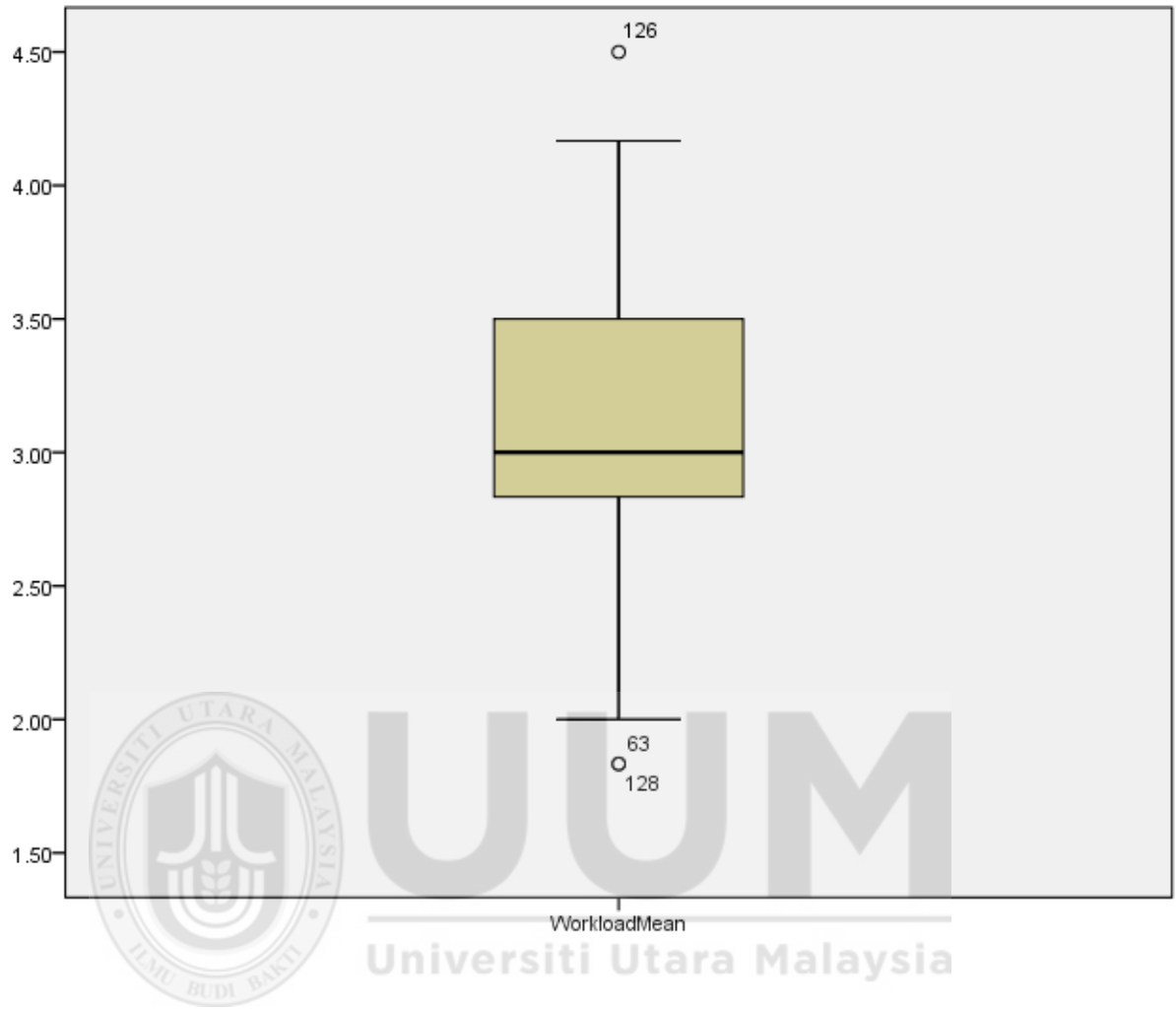
Stem width: 1.00

Each leaf: 1 case(s)









Work pressure

Explore

Notes

Output Created		27-Mar-2018 12:20:19
Comments		
Input	Data	C:\Users\User\Documents\merged
	Active Dataset	Qsnew.sav
	Filter	DataSet1
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	163
	File	
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for the dependent variable or factor(s) being analyzed.
Syntax		EXAMINE VARIABLES=WorkPressMean /PLOT BOXPLOT STEMLEAF HISTOGRAM NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES EXTREME /INTERVAL 95 /MISSING PAIRWISE /NOTOTAL.
Resources	Processor Time	00:00:00.875
	Elapsed Time	00:00:00.857

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
WorkPressMean	163	100.0%	0	.0%	163	100.0%

Descriptives

		Statistic	Std. Error
WorkPressMean	Mean	3.1202	.04114
95% Confidence Interval for Mean			
	Lower Bound	3.0390	
	Upper Bound	3.2015	
	5% Trimmed Mean	3.1182	
	Median	3.0000	
	Variance	.276	
	Std. Deviation	.52519	
	Minimum	1.60	
	Maximum	4.40	
	Range	2.80	
	Interquartile Range	.80	
	Skewness	.094	.190
	Kurtosis	-.013	.378

Extreme Values

			Case Number	Value
WorkPressMean	Highest	1	126	4.40
		2	156	4.40
		3	51	4.20
		4	154	4.20
		5	162	4.20 ^a
	Lowest	1	128	1.60
		2	27	1.80
		3	53	2.00
		4	36	2.00
		5	96	2.20 ^b

a. Only a partial list of cases with the value 4.20 are shown in the table of upper extremes.

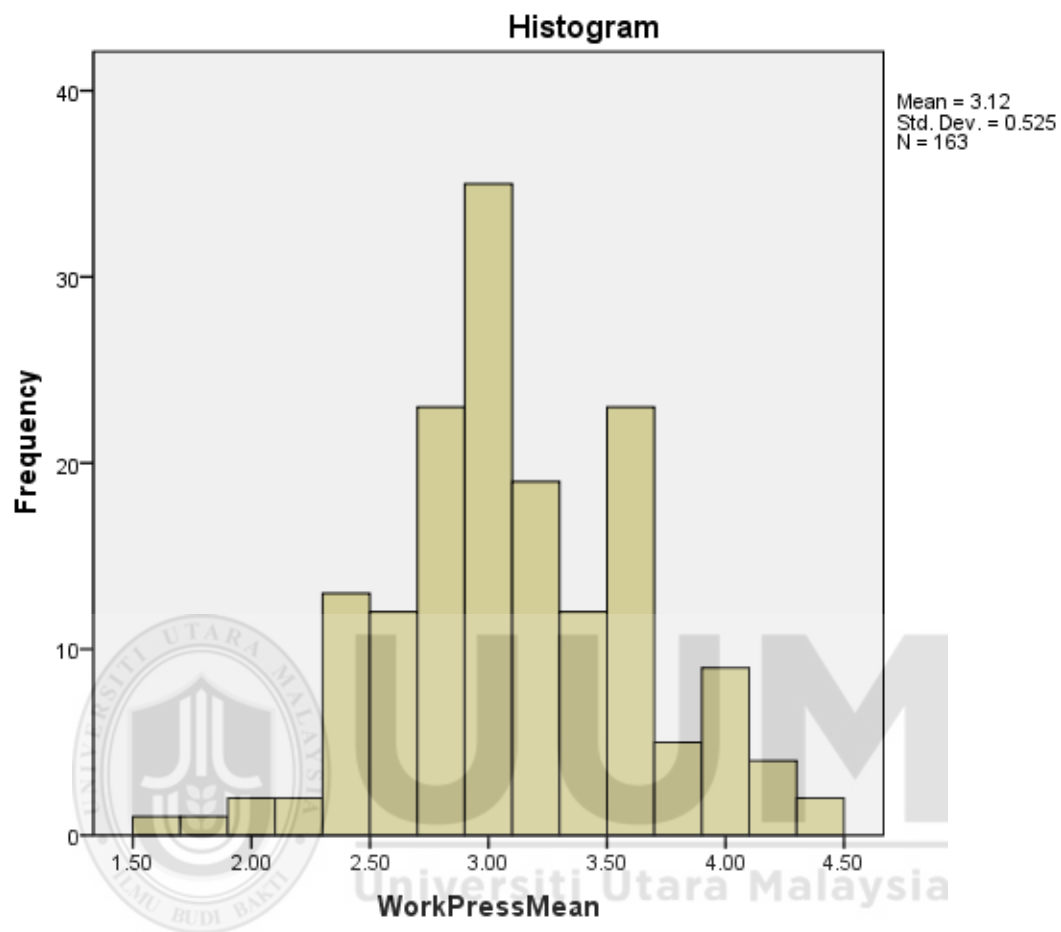
b. Only a partial list of cases with the value 2.20 are shown in the table of lower extremes.

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
WorkPressMean	.137	163	.000	.977	163	.009

a. Lilliefors Significance Correction

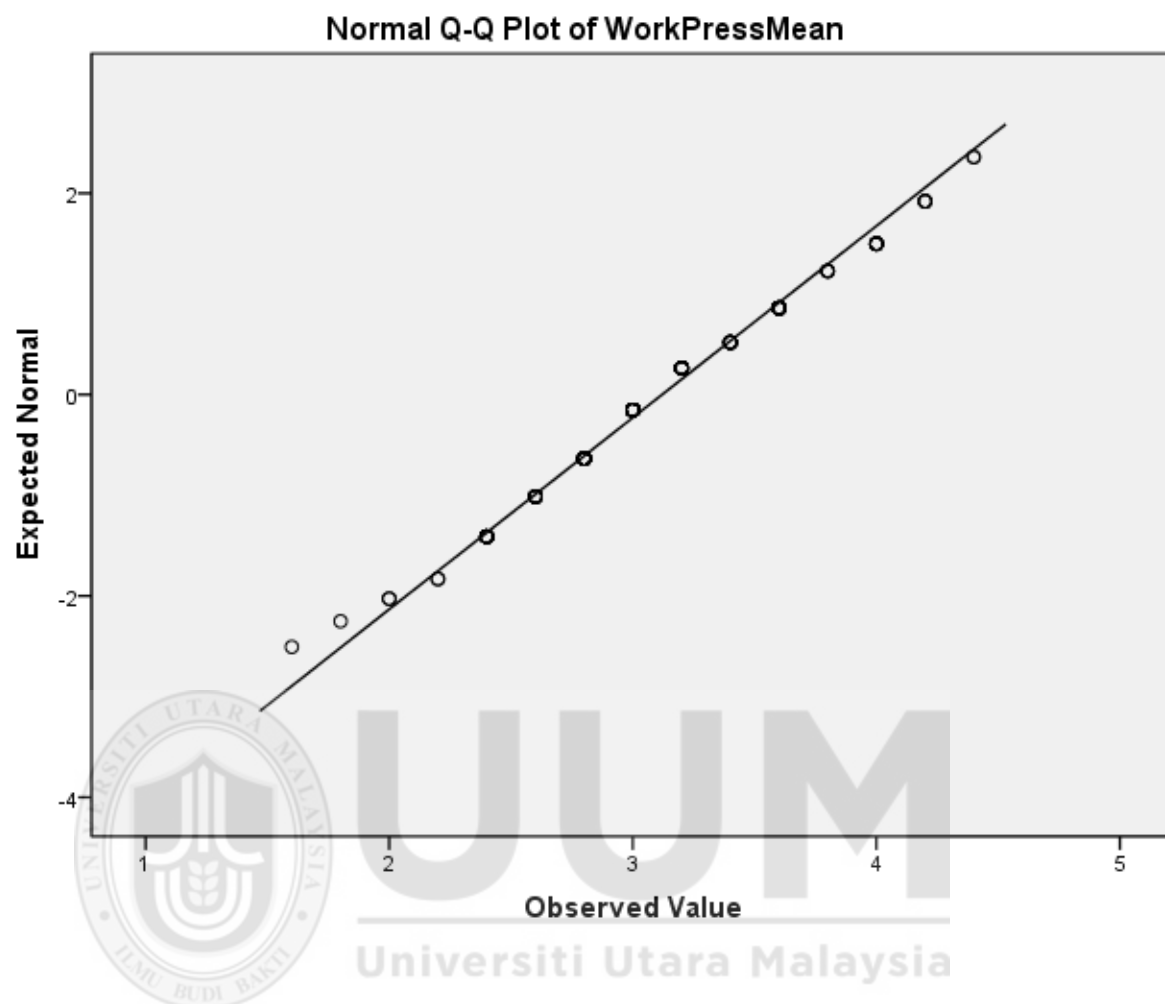
WorkPressMean

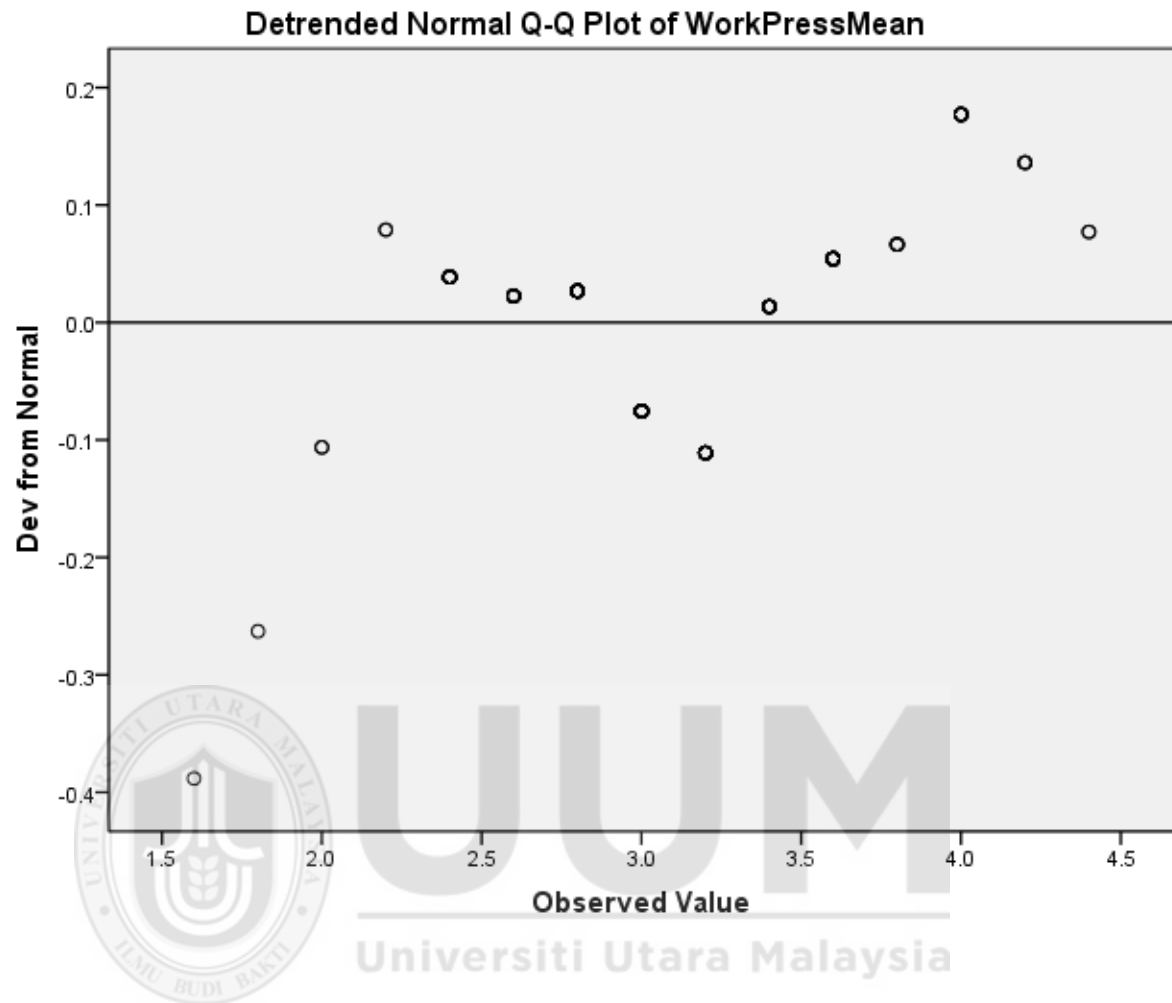


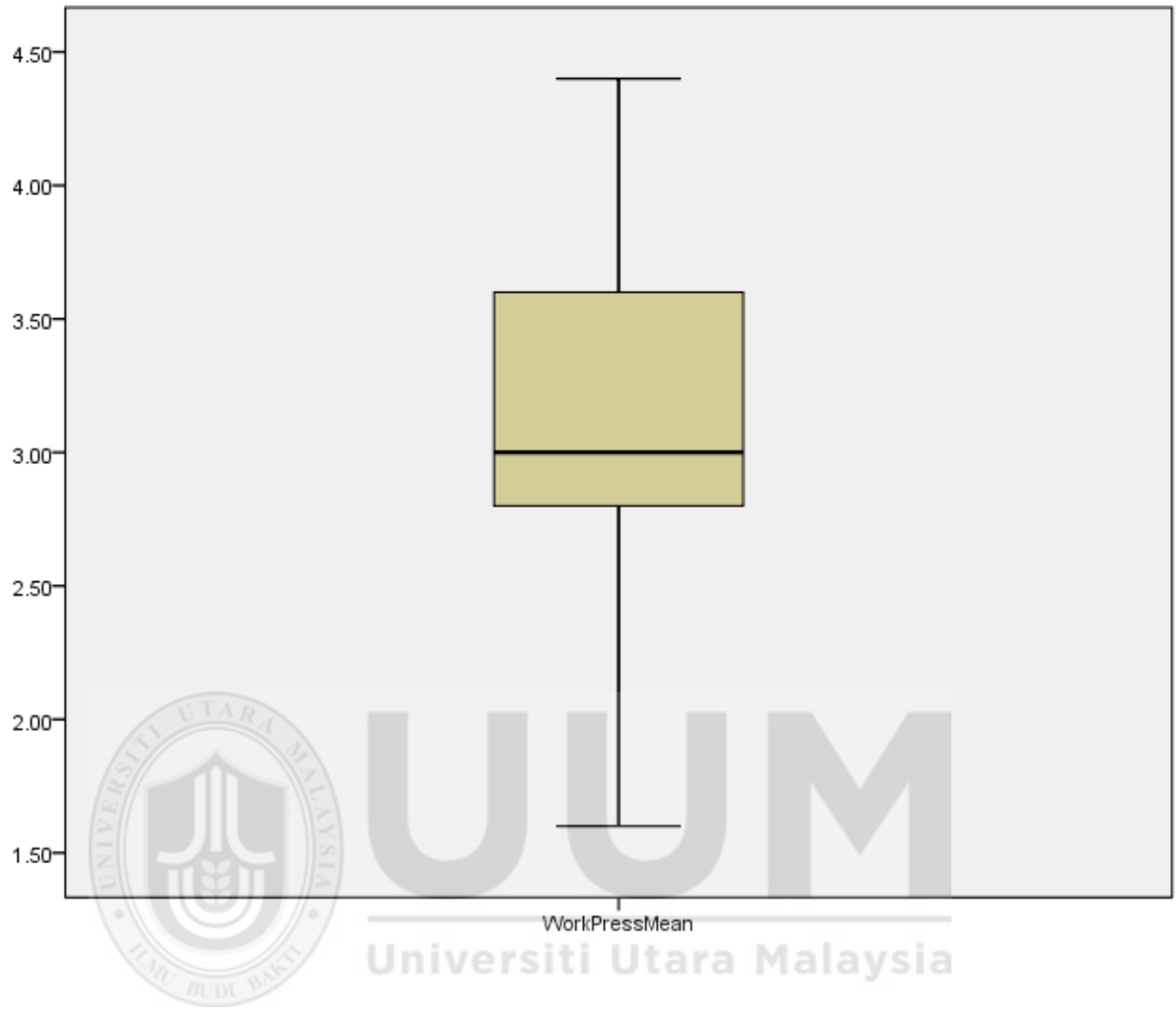
WorkPressMean Stem-and-Leaf Plot

Frequency Stem & Leaf

.00	1 .
1.00	1 . 6
1.00	1 . 8
2.00	2 . 00
2.00	2 . 22
13.00	2 . 44444444444444







Autonomy

Explore

Notes

Output Created	27-Mar-2018 12:21:11	
Comments		
Input	Data	C:\Users\User\Documents\merged Qsnew.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	163
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for the dependent variable or factor(s) being analyzed.
Syntax		EXAMINE VARIABLES=AutonomyMean /PLOT BOXPLOT STEMLEAF HISTOGRAM NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES EXTREME /INTERVAL 95 /MISSING PAIRWISE /NOTOTAL.
Resources	Processor Time	00:00:00.906
	Elapsed Time	00:00:00.906

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
AutonomyMean	163	100.0%	0	.0%	163	100.0%

Descriptives

		Statistic	Std. Error
AutonomyMean	Mean	2.9918	.04686
	95% Confidence Interval for Mean		
	Lower Bound	2.8993	
	Upper Bound	3.0844	
	5% Trimmed Mean	2.9705	
	Median	3.0000	
	Variance	.358	
	Std. Deviation	.59830	
	Minimum	1.00	
	Maximum	5.00	
	Range	4.00	
	Interquartile Range	.67	
	Skewness	.562	.190
	Kurtosis	1.970	.378

Extreme Values

			Case Number	Value
AutonomyMean	Highest	1	154	5.00
		2	155	5.00
		3	163	5.00
		4	107	4.67
		5	29	4.33
	Lowest	1	22	1.00
		2	109	2.00
		3	100	2.00
		4	89	2.00
		5	78	2.00 ^a

a. Only a partial list of cases with the value 2.00 are shown in the table of lower extremes.

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
AutonomyMean	.182	163	.000	.931	163	.000

a. Lilliefors Significance Correction

AutonomyMean

Frequency	Stem & Leaf
1	10
1	11
1	12
1	13
1	14
1	15
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28.00 3 . 3333333333333333333333333333

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10.00 3 . 6666666666

.00 3 .

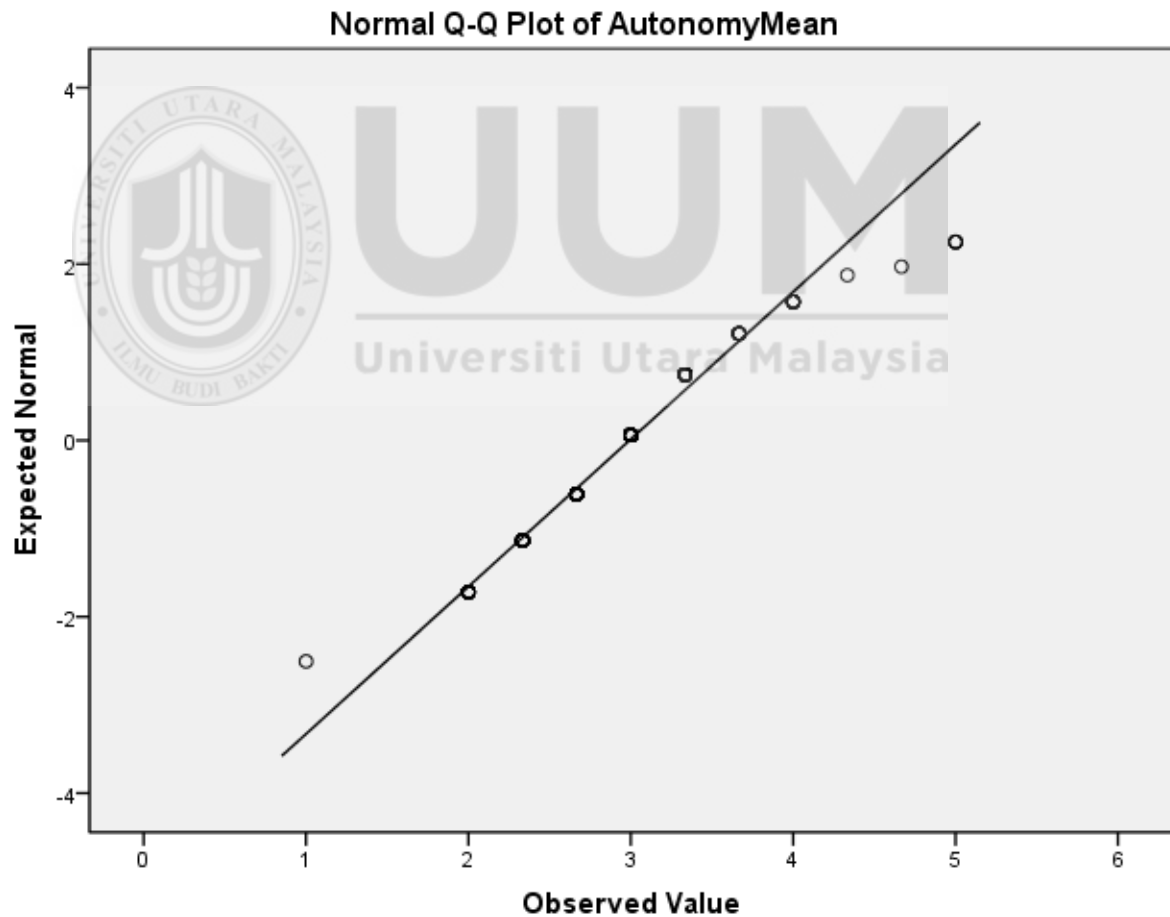
8.00 4 . 00000000

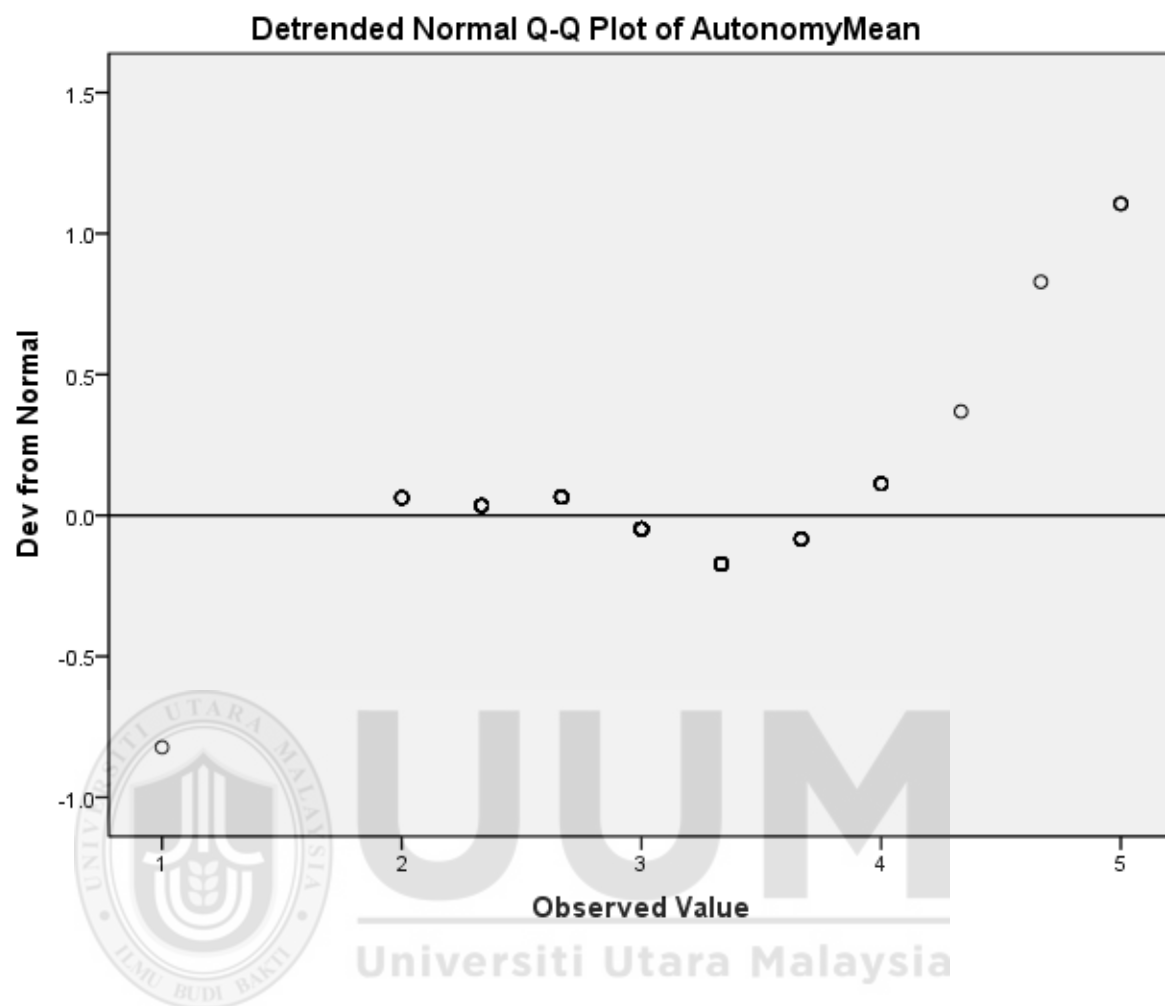
1.00 4 . 3

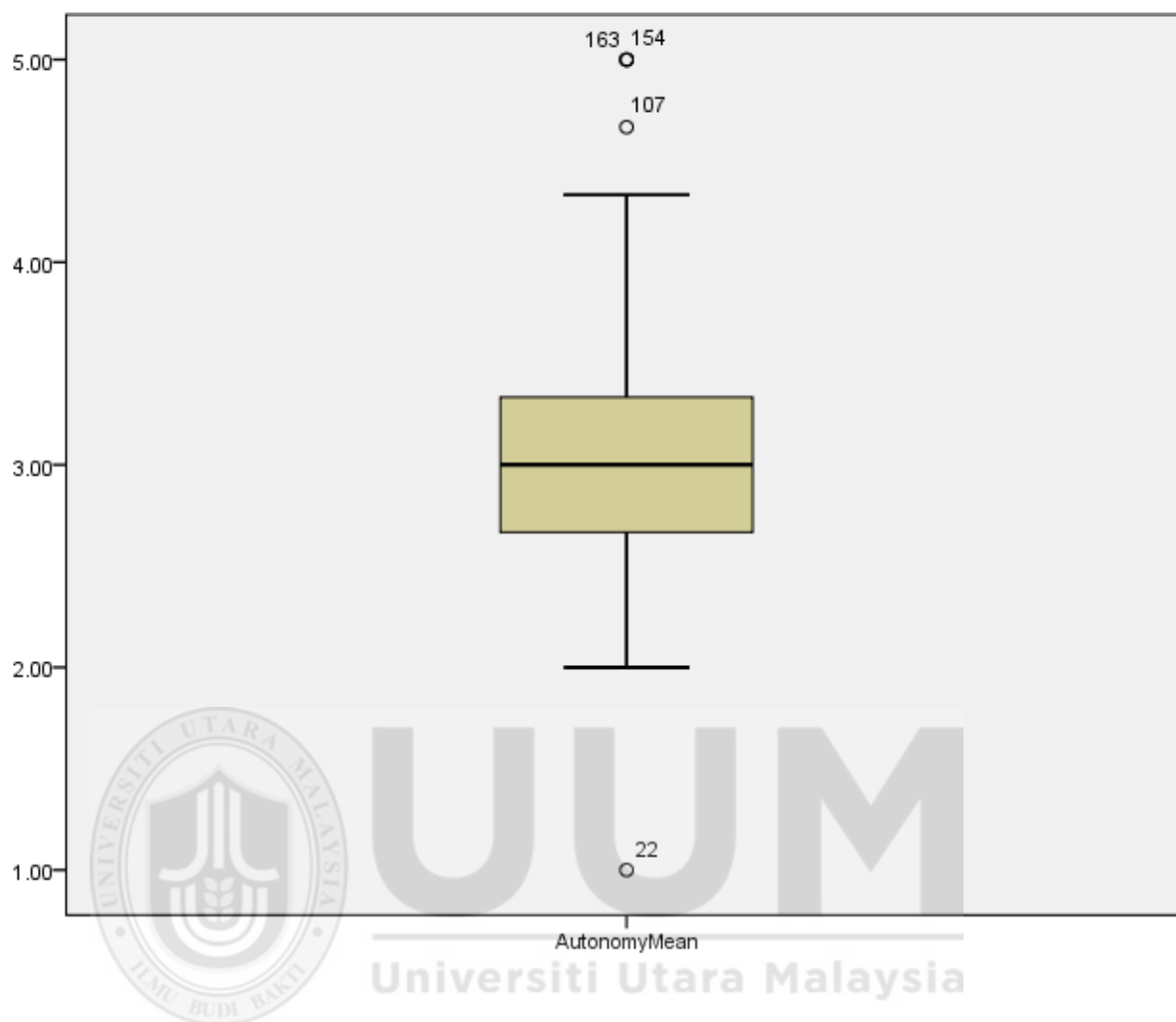
4.00 Extremes (≥ 4.7)

Stem width: 1.00

Each leaf: 1 case(s)







Social support

Explore

Notes

Output Created		27-Mar-2018 12:22:04
Comments		
Input	Data	C:\Users\User\Documents\merged
	Active Dataset	Qsnew.sav
	Filter	DataSet1
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	163
	File	
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for the dependent variable or factor(s) being analyzed.
Syntax		EXAMINE VARIABLES=SocSptMean /PLOT BOXPLOT STEMLEAF HISTOGRAM NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES EXTREME /INTERVAL 95 /MISSING PAIRWISE /NOTOTAL.
Resources	Processor Time	00:00:00.843
	Elapsed Time	00:00:00.849

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
SocSptMean	163	100.0%	0	.0%	163	100.0%

Descriptives

		Statistic	Std. Error
SocSptMean	Mean	3.6526	.04923
95% Confidence Interval for Mean			
	Lower Bound	3.5554	
	Upper Bound	3.7498	
5% Trimmed Mean		3.6650	
Median		3.7500	
Variance		.395	
Std. Deviation		.62854	
Minimum		1.00	
Maximum		5.00	
Range		4.00	
Interquartile Range		.75	
Skewness		-.503	.190
Kurtosis		1.412	.378

Extreme Values

			Case Number	Value
SocSptMean	Highest	1	19	5.00
		2	24	5.00
		3	120	5.00
		4	149	5.00
		5	15	4.88 ^a
	Lowest	1	78	1.00
		2	51	2.00
		3	38	2.13
		4	70	2.38
		5	39	2.38

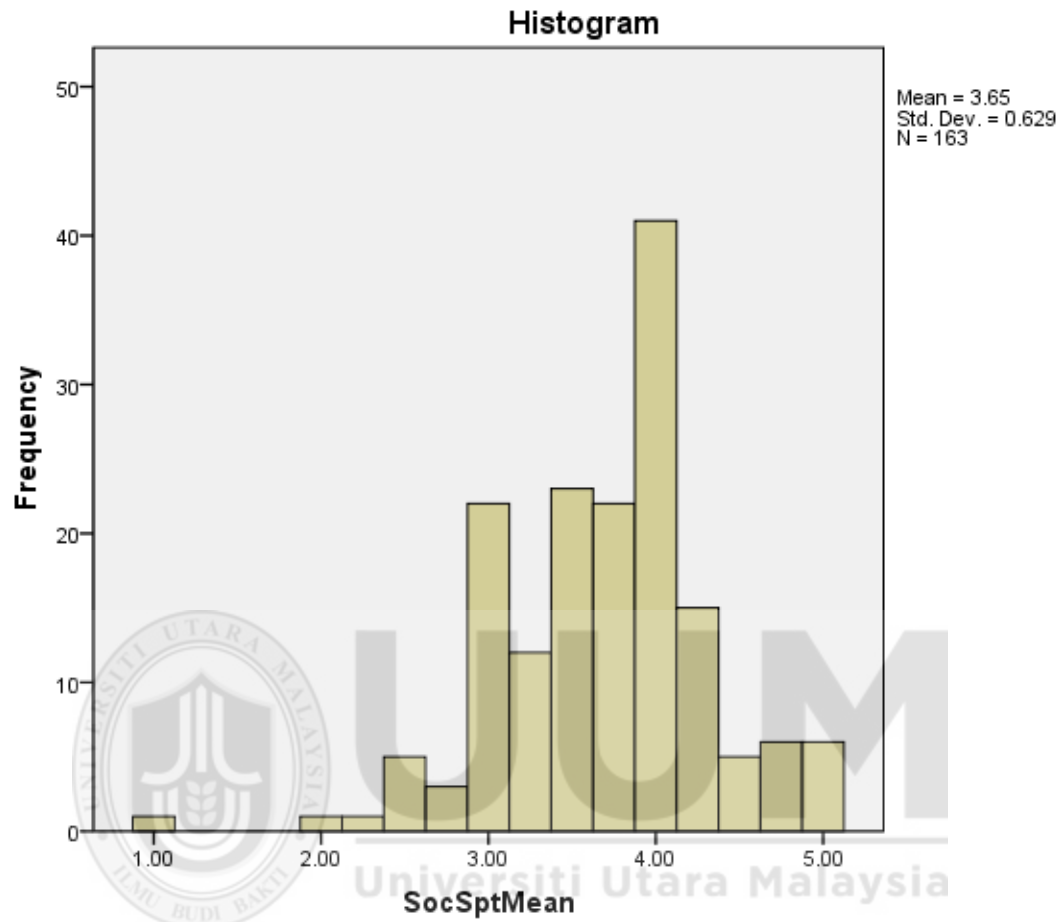
a. Only a partial list of cases with the value 4.88 are shown in the table of upper extremes.

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
SocSptMean	.121	163	.000	.964	163	.000

a. Lilliefors Significance Correction

SocSptMean



SocSptMean Stem-and-Leaf Plot

Frequency Stem & Leaf

2.00 Extremes (= ≤ 2.0)

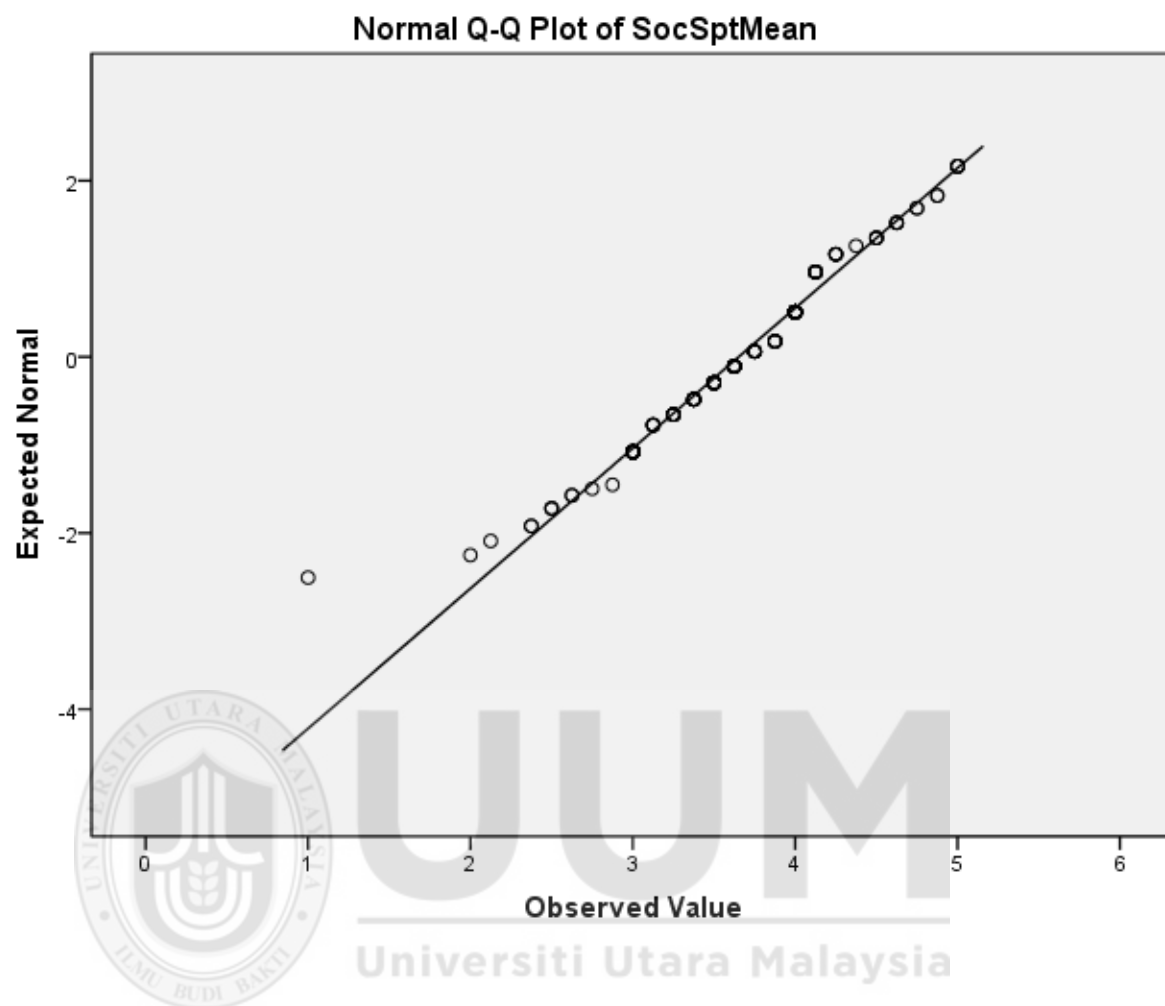
1.00 2 . 1

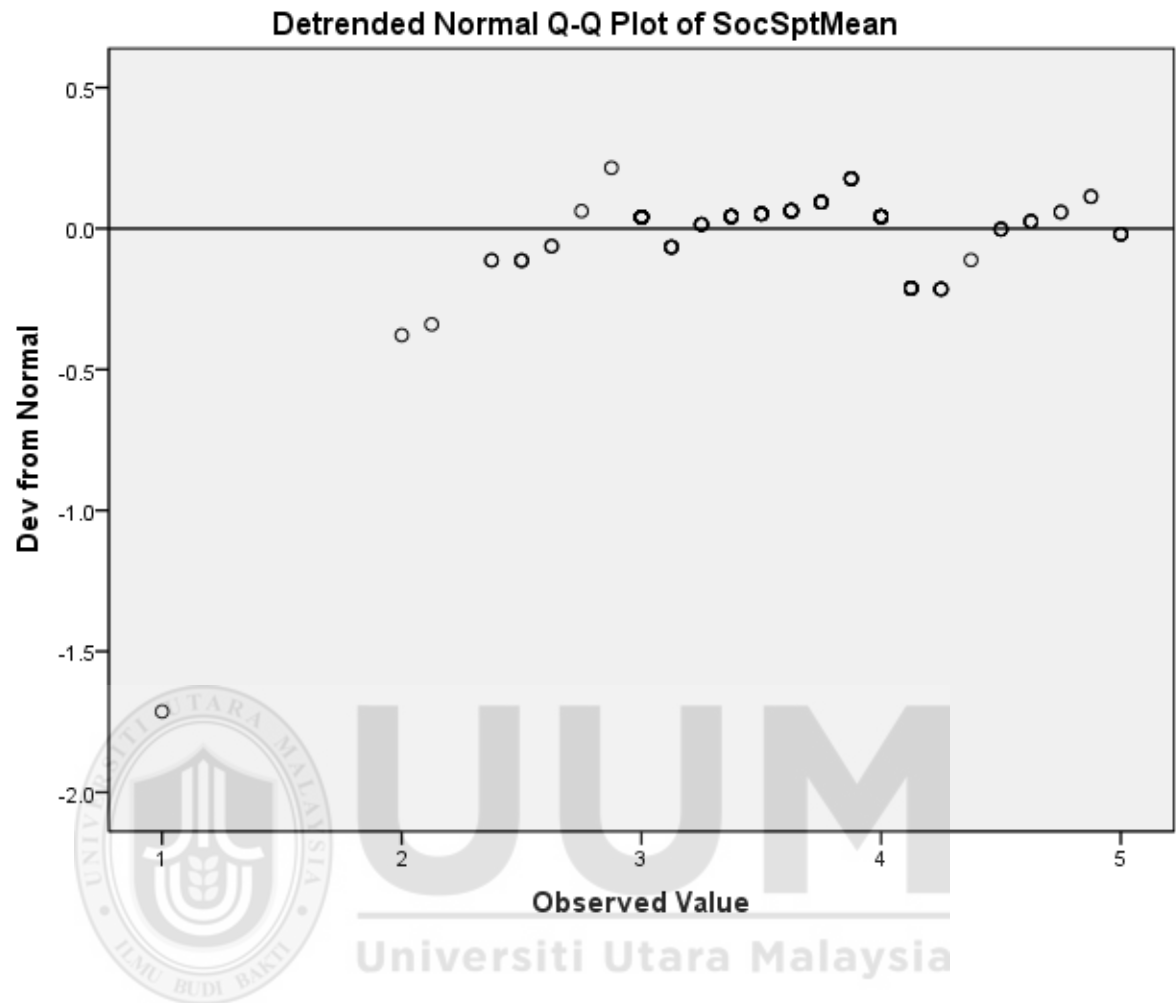
2.00 2 . 33

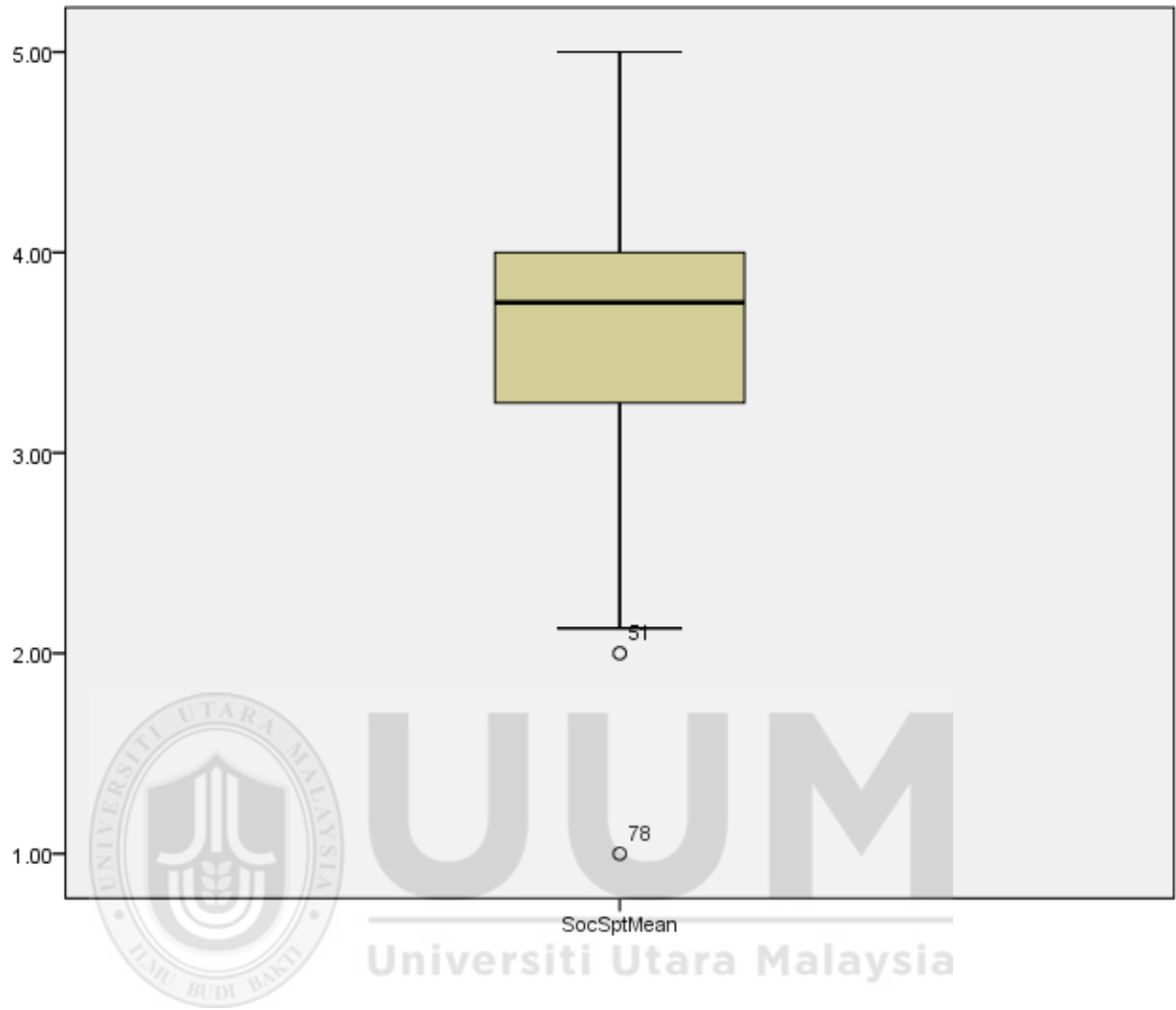
3.00 2 . 555

3.00 2 . 667

1.00 2 . 8







Performance feedback

Explore

Notes

Output Created		27-Mar-2018 12:22:57
Comments		
Input	Data	C:\Users\User\Documents\merged Qsnew.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	163
	File	
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for the dependent variable or factor(s) being analyzed.
Syntax		EXAMINE VARIABLES=PerfFeedMean /PLOT BOXPLOT STEMLEAF HISTOGRAM NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES EXTREME /CINTERVAL 95 /MISSING PAIRWISE /NOTOTAL.
Resources	Processor Time	00:00:01.157
	Elapsed Time	00:00:01.128

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
PerfFeedMean	163	100.0%	0	.0%	163	100.0%

Descriptives

		Statistic	Std. Error
PerfFeedMean	Mean	3.5199	.04682
95% Confidence Interval for Mean			
	Lower Bound	3.4275	
	Upper Bound	3.6124	
5% Trimmed Mean		3.5290	
Median		3.5000	
Variance		.357	
Std. Deviation		.59769	
Minimum		1.50	
Maximum		5.00	
Range		3.50	
Interquartile Range		1.00	
Skewness		-.202	.190
Kurtosis		.381	.378

Extreme Values

			Case Number	Value
PerfFeedMean	Highest	1	15	5.00
		2	59	5.00
		3	19	4.75
		4	29	4.75
		5	24	4.50 ^a
	Lowest	1	78	1.50
		2	70	1.75
		3	141	2.25
		4	111	2.25
		5	38	2.25

a. Only a partial list of cases with the value 4.50 are shown in the table of upper extremes.

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PerfFeedMean	.133	163	.000	.958	163	.000

a. Lilliefors Significance Correction

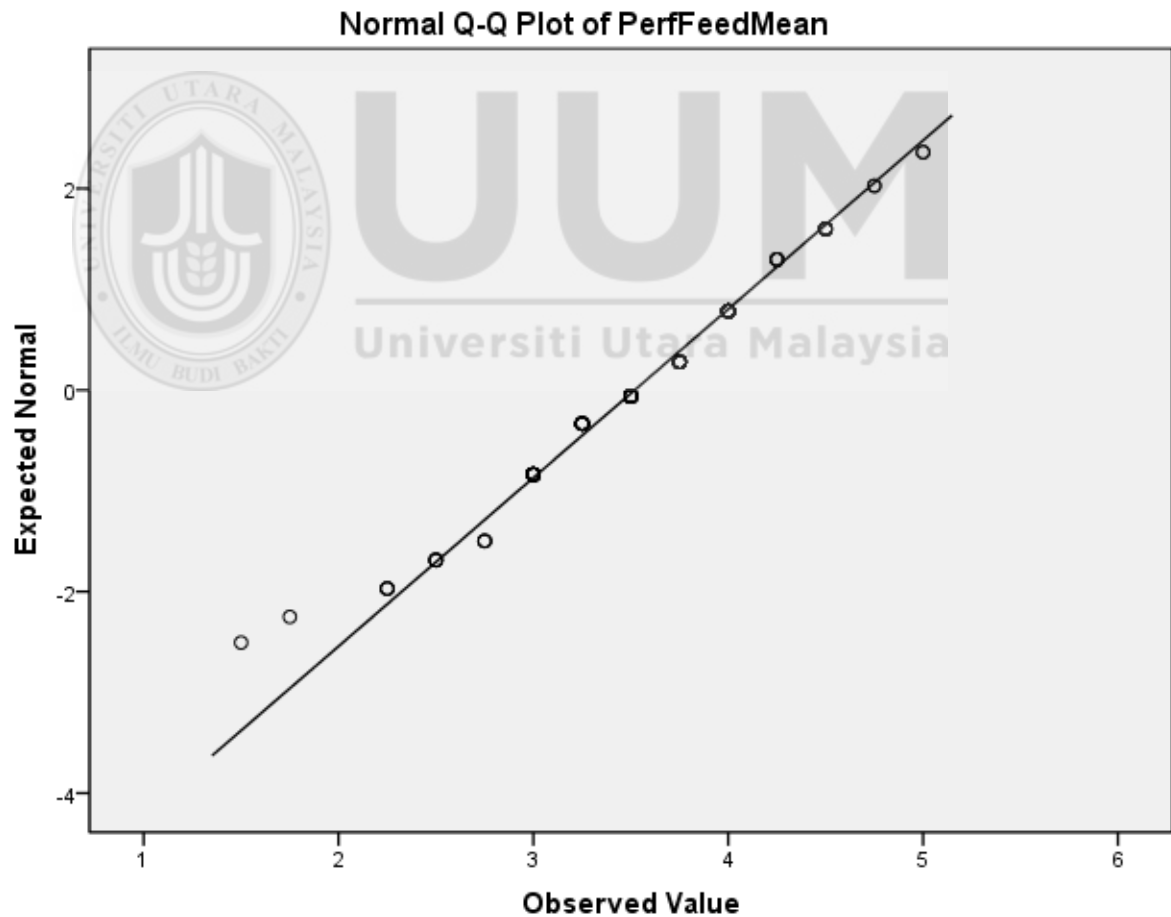
PerfFeedMean

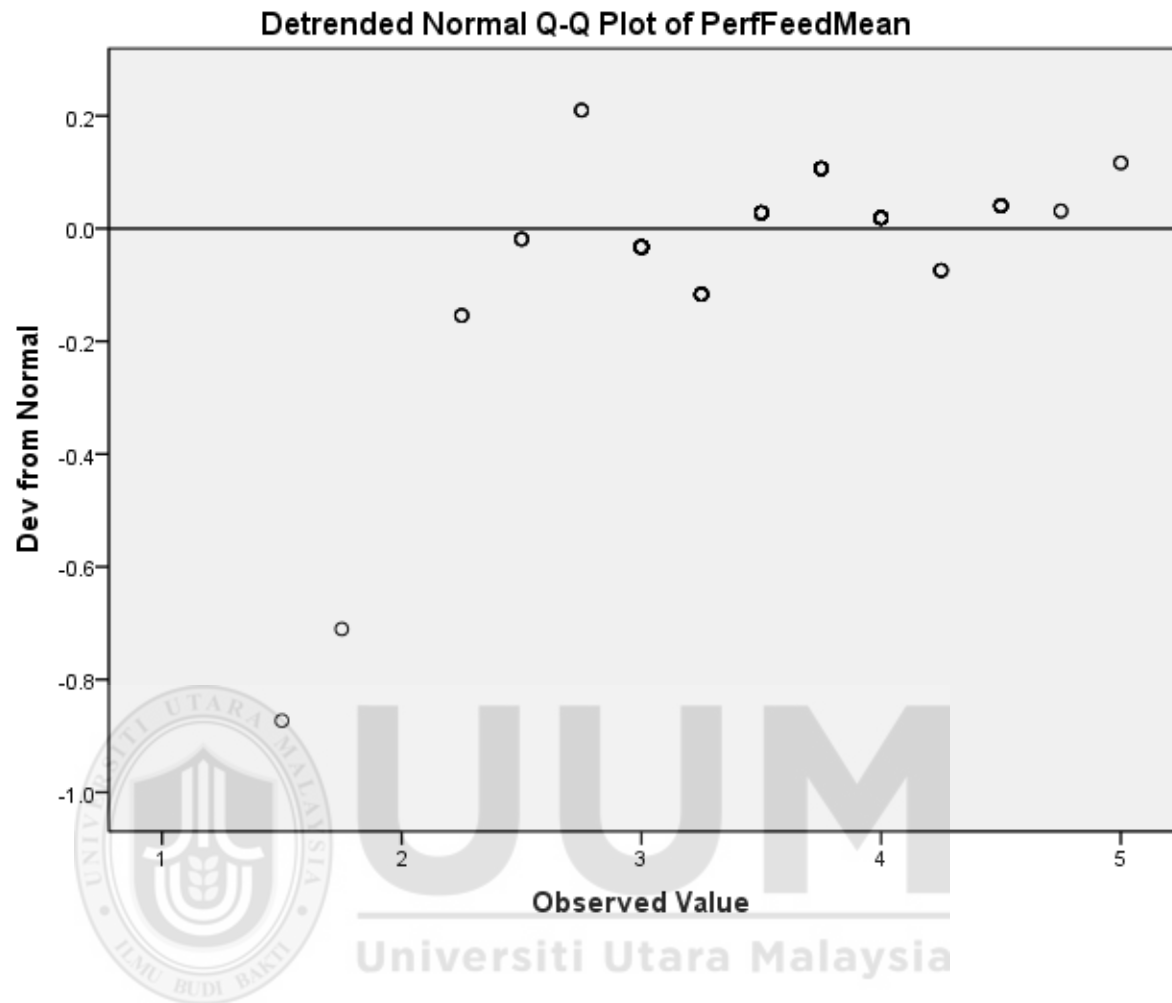
Frequency	Stem & Leaf
1	1 0
1	1 1
1	1 2
1	1 3
1	1 4
1	1 5
1	1 6
1	1 7
1	1 8
1	1 9
1	2 0
1	2 1
1	2 2
1	2 3
1	2 4
1	2 5
1	2 6
1	2 7
1	2 8
1	2 9
1	3 0
1	3 1
1	3 2
1	3 3
1	3 4
1	3 5
1	3 6
1	3 7
1	3 8
1	3 9
1	4 0
1	4 1
1	4 2
1	4 3
1	4 4
1	4 5
1	4 6
1	4 7
1	4 8
1	4 9
1	5 0
1	5 1
1	5 2
1	5 3
1	5 4
1	5 5
1	5 6
1	5 7
1	5 8
1	5 9
1	6 0
1	6 1
1	6 2
1	6 3
1	6 4
1	6 5
1	6 6
1	6 7
1	6 8
1	6 9
1	7 0
1	7 1
1	7 2
1	7 3
1	7 4
1	7 5
1	7 6
1	7 7
1	7 8
1	7 9
1	8 0
1	8 1
1	8 2
1	8 3
1	8 4
1	8 5
1	8 6
1	8 7
1	8 8
1	8 9
1	9 0
1	9 1
1	9 2
1	9 3
1	9 4
1	9 5
1	9 6
1	9 7
1	9 8
1	9 9

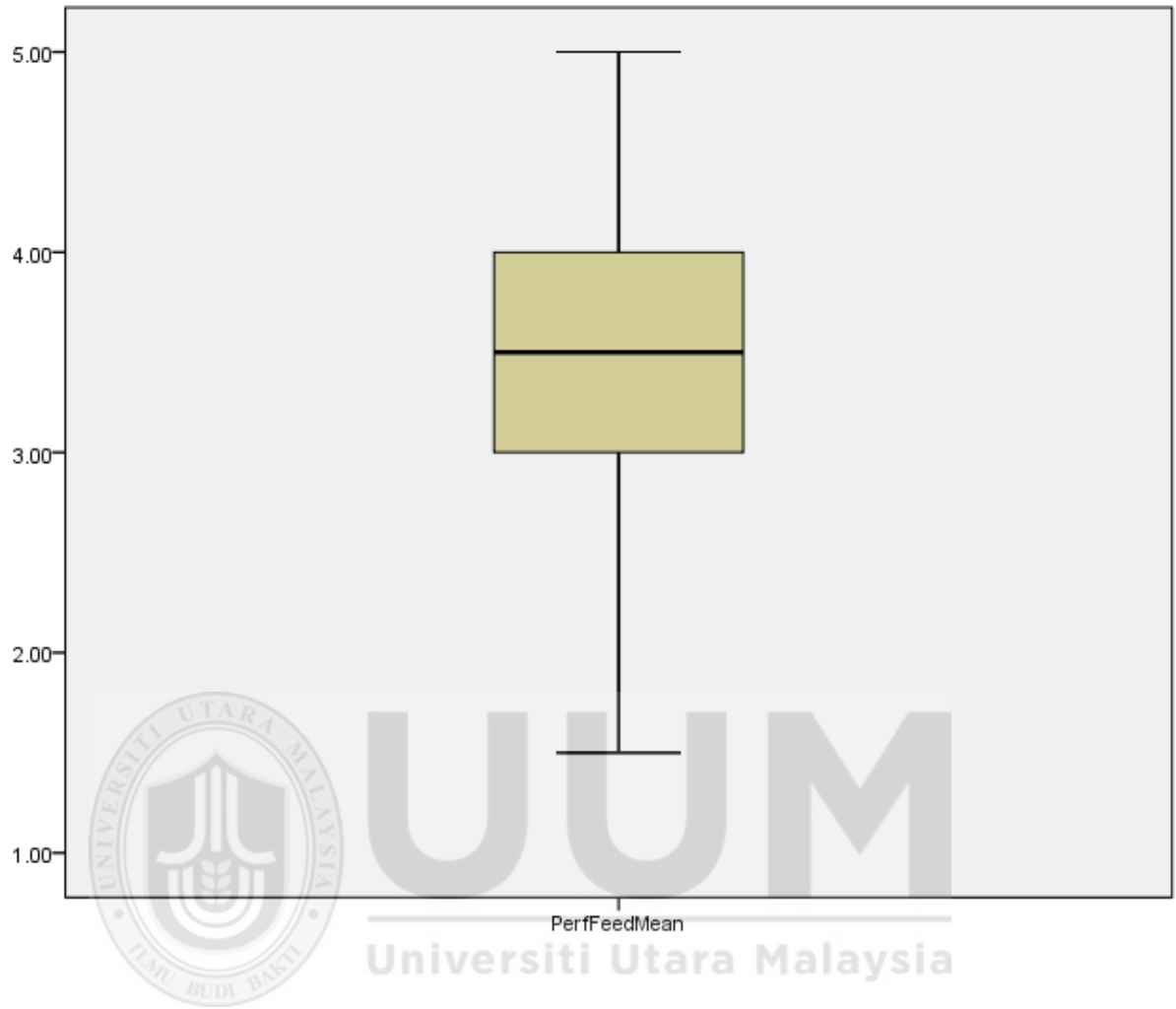
211

[illegible]

Stem width: 1.00
Each leaf: 1 case(s)







Correlations

Notes

Output Created	27-Mar-2018 10:25:47	
Comments		
Input	Data	C:\Users\User\Documents\merged Qsnew.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	163
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax	CORRELATIONS /VARIABLES=WorkEngMean WorkloadMean WorkPressMean AutonomyMean SocSptMean PerfFeedMean /PRINT=TWOTAIL NOSIG /STATISTICS DESCRIPTIVES /MISSING=PAIRWISE.	
Resources	Processor Time	00:00:00.015
	Elapsed Time	00:00:00.031

Descriptive Statistics

	Mean	Std. Deviation	N
WorkEngMean	3.6882	.48367	163
WorkloadMean	3.1074	.45424	163
WorkPressMean	3.1202	.52519	163
AutonomyMean	2.9918	.59830	163
SocSptMean	3.6526	.62854	163
PerfFeedMean	3.5199	.59769	163



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Correlations

		WorkEngMean	WorkloadMean	WorkPressMean
WorkEngMean	Pearson Correlation	1	.232**	.286**
	Sig. (2-tailed)		.003	.000
	N	163	163	163
WorkloadMean	Pearson Correlation	.232**	1	.661**
	Sig. (2-tailed)	.003		.000
	N	163	163	163
WorkPressMean	Pearson Correlation	.286**	.661**	1
	Sig. (2-tailed)	.000	.000	
	N	163	163	163
AutonomyMean	Pearson Correlation	.331**	.252**	.269**
	Sig. (2-tailed)	.000	.001	.001
	N	163	163	163
SocSptMean	Pearson Correlation	.393**	.023	.086
	Sig. (2-tailed)	.000	.767	.274
	N	163	163	163
PerfFeedMean	Pearson Correlation	.529**	.067	.138
	Sig. (2-tailed)	.000	.396	.079
	N	163	163	163

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

Correlations

		AutonomyMean	SocSptMean	PerfFeedMean
WorkEngMean	Pearson Correlation	.331**	.393**	.529**
	Sig. (2-tailed)	.000	.000	.000
	N	163	163	163
WorkloadMean	Pearson Correlation	.252**	.023	.067
	Sig. (2-tailed)	.001	.767	.396
	N	163	163	163
WorkPressMean	Pearson Correlation	.269**	.086	.138
	Sig. (2-tailed)	.001	.274	.079
	N	163	163	163
AutonomyMean	Pearson Correlation	1	.202**	.264**
	Sig. (2-tailed)		.010	.001
	N	163	163	163
SocSptMean	Pearson Correlation	.202**	1	.766**
	Sig. (2-tailed)	.010		.000
	N	163	163	163
PerfFeedMean	Pearson Correlation	.264**	.766**	1
	Sig. (2-tailed)	.001	.000	
	N	163	163	163

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

Regression

Notes

Output Created		28-Mar-2018 09:35:50
Comments		
Input	Data	C:\Users\User\Desktop\chapter 4 new without work life balance\merged Qsnew.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	163
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Correlation coefficients for each pair of variables are based on all the cases with valid data for that pair. Regression statistics are based on these correlations.
Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING PAIRWISE /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT WorkEngMean /METHOD=ENTER WorkloadMean WorkPressMean AutonomyMean SocSptMean PerfFeedMean /SCATTERPLOT=(*ZRESID ,*ZPRED) /RESIDUALS DURBIN NORMPROB(ZRESID) /CASEWISE PLOT(ZRESID) OUTLIERS(3) /SAVE MAHAL COOK.
Resources	Processor Time	00:00:00.531
	Elapsed Time	00:00:00.532
	Memory Required	4444 bytes
	Additional Memory Required for Residual Plots	536 bytes
Variables Created or Modified	MAH_13	Mahalanobis Distance
	COO_13	Cook's Distance

Descriptive Statistics

	Mean	Std. Deviation	N
WorkEngMean	3.6882	.48367	163
WorkloadMean	3.1074	.45424	163
WorkPressMean	3.1202	.52519	163
AutonomyMean	2.9918	.59830	163
SocSptMean	3.6526	.62854	163
PerfFeedMean	3.5199	.59769	163



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Correlations

		WorkEngMean	WorkloadMean	WorkPressMean
Pearson Correlation	WorkEngMean	1.000	.232	.286
	WorkloadMean	.232	1.000	.661
	WorkPressMean	.286	.661	1.000
	AutonomyMean	.331	.252	.269
	SocSptMean	.393	.023	.086
	PerfFeedMean	.529	.067	.138
Sig. (1-tailed)	WorkEngMean	.	.001	.000
	WorkloadMean	.001	.	.000
	WorkPressMean	.000	.000	.
	AutonomyMean	.000	.001	.000
	SocSptMean	.000	.384	.137
	PerfFeedMean	.000	.198	.040
N	WorkEngMean	163	163	163
	WorkloadMean	163	163	163
	WorkPressMean	163	163	163
	AutonomyMean	163	163	163
	SocSptMean	163	163	163
	PerfFeedMean	163	163	163

Appendix H – Multiple regression analysis

Correlations

		AutonomyMean	SocSptMean	PerfFeedMean
Pearson Correlation	WorkEngMean	.331	.393	.529
	WorkloadMean	.252	.023	.067
	WorkPressMean	.269	.086	.138
	AutonomyMean	1.000	.202	.264
	SocSptMean	.202	1.000	.766
	PerfFeedMean	.264	.766	1.000
Sig. (1-tailed)	WorkEngMean	.000	.000	.000
	WorkloadMean	.001	.384	.198
	WorkPressMean	.000	.137	.040
	AutonomyMean	.	.005	.000
	SocSptMean	.005	.	.000
	PerfFeedMean	.000	.000	.
N	WorkEngMean	163	163	163
	WorkloadMean	163	163	163
	WorkPressMean	163	163	163
	AutonomyMean	163	163	163
	SocSptMean	163	163	163
	PerfFeedMean	163	163	163

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	PerfFeedMean, WorkloadMean, AutonomyMean, WorkPressMean, SocSptMean ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: WorkEngMean

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.593 ^a	.352	.332	.39544

a. Predictors: (Constant), PerfFeedMean, WorkloadMean, AutonomyMean, WorkPressMean, SocSptMean

b. Dependent Variable: WorkEngMean

Model Summary^b

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.352	17.069	5	157	.000	1.736

b. Dependent Variable: WorkEngMean

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.346	5	2.669	17.069	.000 ^a
	Residual	24.551	157	.156		
	Total	37.897	162			

a. Predictors: (Constant), PerfFeedMean, WorkloadMean, AutonomyMean, WorkPressMean, SocSptMean

b. Dependent Variable: WorkEngMean

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.378	.291		4.729	.000
	WorkloadMean	.080	.092	.075	.873	.384
	WorkPressMean	.120	.080	.130	1.502	.135
	AutonomyMean	.124	.056	.154	2.228	.027
	SocSptMean	-.014	.077	-.018	-.180	.857
	PerfFeedMean	.388	.082	.479	4.710	.000

a. Dependent Variable: WorkEngMean

Coefficients^a

Model		95.0% Confidence Interval for B		Correlations		
		Lower Bound	Upper Bound	Zero-order	Partial	Part
1	(Constant)	.802	1.953			
	WorkloadMean	-.101	.261	.232	.070	.056
	WorkPressMean	-.038	.278	.286	.119	.096
	AutonomyMean	.014	.235	.331	.175	.143
	SocSptMean	-.166	.138	.393	-.014	-.012
	PerfFeedMean	.225	.551	.529	.352	.303

a. Dependent Variable: WorkEngMean

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	WorkloadMean	.555	1.801
	WorkPressMean	.548	1.826
	AutonomyMean	.864	1.158
	SocSptMean	.412	2.426
	PerfFeedMean	.398	2.510

a. Dependent Variable: WorkEngMean

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	WorkloadMean	WorkPressMean
1	1	5.906	1.000	.00	.00	.00
	2	.041	11.968	.00	.05	.08
	3	.028	14.554	.01	.03	.05
	4	.011	23.293	.58	.05	.47
	5	.007	28.773	.38	.86	.41
	6	.006	30.224	.04	.01	.00

a. Dependent Variable: WorkEngMean

Collinearity Diagnostics^a

Model	Dimension	Variance Proportions		
		AutonomyMean	SocSptMean	PerfFeedMean
1	1	.00	.00	.00
	2	.02	.09	.07
	3	.95	.01	.00
	4	.01	.01	.05
	5	.00	.00	.06
	6	.01	.89	.82

a. Dependent Variable: WorkEngMean

Casewise Diagnostics^a

Case Number	Std. Residual	WorkEngMean	Predicted Value	Residual
63	3.724	4.88	3.4098	1.47256
145	3.150	4.71	3.4602	1.24567

a. Dependent Variable: WorkEngMean

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.7951	4.4914	3.6882	.28702	163
Std. Predicted Value	-3.112	2.798	.000	1.000	163
Standard Error of Predicted Value	.034	.138	.072	.023	163
Adjusted Predicted Value	2.7668	4.5149	3.6858	.28925	163
Residual	-.80496	1.47256	.00000	.38929	163
Std. Residual	-2.036	3.724	.000	.984	163
Stud. Residual	-2.103	3.878	.003	1.006	163
Deleted Residual	-.85879	1.59691	.00241	.40662	163
Stud. Deleted Residual	-2.126	4.065	.005	1.016	163
Mahal. Distance	.222	18.673	4.969	3.831	163
Cook's Distance	.000	.212	.008	.019	163
Centered Leverage Value	.001	.115	.031	.024	163

a. Dependent Variable: WorkEngMean

Charts

