WORK ENGAGEMENT AMONGST ACADEMICS IN JORDAN

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DOCTOR OF PHILOSOPHY

UNIVERSITI UTARA MALAYSIA

APRIL 2015

WORK ENGAGEMENT AMONGST ACADEMICS IN JORDAN

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Thesis Submitted to
School of Business Management
Universiti Utara Malaysia
In Fulfillment of the Requirement for the Doctor of Philosophy

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ABSTRACT

This study examined the direct relationship between workload, work pressure, autonomy, social support, performance feedback and work engagement. The study also investigated the mediating effect of job satisfaction on the relationship between workload, work pressure, autonomy, social support, performance feedback and work engagement. Finally, the study examined the moderating effect of trust on the relationship between job satisfaction and work engagement. A total of 700 questionnaires were personally distributed to respondents from four universities in Jordan (Mu'tah University, The University of Jordan, The Hashemite University and Yarmouk University) after permission was granted by the university management. Out of the 700 questionnaires distributed, 567 questionnaires were returned, representing a response rate of 81%. However, only 532 questionnaires were usable for further analysis. The hypotheses for direct and mediating effect were tested using multiple regression analyses, and the hypotheses for interacting effect were tested using hierarchical multiple regression. The results for direct relationship showed that workload and work pressure were negatively related to work engagement and job satisfaction, while, autonomy, social support and performance feedback were positively related to work engagement and job satisfaction. The results also showed that job satisfaction was positively related to work engagement. Meanwhile, the findings for mediating effect showed that job satisfaction partially mediated the relationship between workload, work pressure, autonomy, social support, performance feedback and work engagement. Furthermore,the results from hierarchical multiple regressions showed that trust quasi moderated the relationship between job satisfaction and work engagement. The research results reported in this study suggest the need for autonomy, social support and performance feedback to enhance academics' work engagement and satisfaction, whereas, too much workload and work pressure will decrease academic's work engagement and satisfaction. Apart from that, the university management also need to consider the role of job satisfaction and trust when planning for enhancing academics' work engagement.

Keywords: work engagement, job demands, job resources, job satisfaction, trust

ABSTRAK

Kajian ini mengkaji hubungan langsung antara bebanan kerja, tekanan kerja, autonomi, sokongan sosial, maklum balas prestasi dengan keterlibatan kerja dan kepuasan kerja. Kajian ini juga mengkaji kesan perantara kepuasan kerja ke atas hubungan antara bebanan kerja, tekanan kerja, autonomi, sokongan sosial, maklum balas prestasi dengan keterlibatan kerja. Akhir sekali , kajian ini juga mengkaji kesan kepercayaan sebagai penyederhana dalam hubungan antara kepuasan kerja dan keterlibatan kerja. Sebanyak 700 borang soal selidik telah diedarkan secara peribadi kepada responden di empat buah universiti di Jordan (*Mu'tah University, The University of Jordan, The Hashemite University* dan *Yarmouk University*). Daripada 700 borang soal selidik yang diedarkan, sebanyak 567 soal selidik telah diterima semula dengan kadar maklum balas sebanyak 81%. Walau bagaimanapun, sebanyak 532 soal selidik boleh digunakan untuk analisis selanjutnya. Hipotesis ke atas kesan langsung dan kesan perantara diuji dengan menggunakan analisis regresi berganda, manakala hipotesis bagi kesan interaksi diuji dengan menggunakan analisis regresi berganda bertingkat. Dapatan kajian bagi hubungan langsung menunjukkan bahawa bebanan kerja dan tekanan kerja mempunyai hubungan yang negatif dengan keterlibatan kerja dan kepuasan kerja. Manakala autonomi, sokongan sosial dan maklum balas prestasi mempunyai hubungan yang positif dengan keterlibatan kerja dan kepuasan kerja. Dapatan kajian juga menunjukkan hubungan positif antara kepuasan kerja dan keterlibatan kerja. Sementara itu, dapatan bagi ujian perantara menunjukkan bahawa kepuasan kerja memainkan peranan sebagai separa perantara dalam hubungan antara maklum balas prestasi dengan keterlibatan kerja, bebanan kerja, tekanan kerja, autonomi, sokongan sosial dan keterlibatan kerja. Seterusnya, keputusan daripada analisis regresi berganda bertingkat menunjukkan bahawa kepercayaan berperanan sebagai penyederhana separa dalam hubungan antara kepuasan kerja dan keterlibatan kerja. Dapatan kajian yang diperolehi daripada kajian ini mencadangkan mengenai keperluan kepada autonomi, sokongan sosial dan maklum balas prestasi dalam meningkatkan keterlibatan kerja dalam kalangan ahli akademik. Sementara itu, bebanan kerja dan tekanan kerja yang tinggi akan mengurangkan keterlibatan dan kepuasan kerja. Selain itu, pengurusan universiti juga perlu mengambil kira peranan kepuasan kerja serta kepercayaan dalam membuat perancangan bagi meningkatkan keterlibatan kerja akademik.

Kata kunci: keterlibatan kerja, tuntutan kerja, sumber kerja, kepuasan kerja, kepercayaan

ACKNOWLEDGEMENT

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CHAPTER ONE

INTRODUCTION

1.1   Background of Study

To survive and successfully compete in the rapidly changing and turbulent work environment, organizations need to develop and retain employees who are highly motivated and are willing to go the extra mile for them (Schaufeli & Salanova, 2007). In recognition of this fact, modern organizations are now putting less emphasis on traditional control systems and cost cutting through downsizing and redesigning of their business processes. Instead, they are focusing more on the effective management of their human capital for enhancing their efficiency and effectiveness. These organizations are, therefore, increasingly investing in conditions, which could enable them to develop employees who are "proactive and show initiative, collaborate smoothly with others, take responsibility for their own professional development and are committed to high quality performance standards" (Bakker & Schaufeli, 2008, p. 147). Thus, organizations require employees who are full with energy and self-confidence; are enthusiastic and passionate about their work; and are fully involved in their work activities. In other words, modern organizations need an engaged work force.

Organizations are becoming more and more convinced that staff engagement is the secret to maintaining business success and profitability. 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 fact, studies have shown that those who feel engaged seem to be more satisfied with their jobs, feel more committed to the organization, and do not intend to leave the organization (Demerouti, Bakker, De Jonge, Janssen & Schaufeli, 2001; Schaufeli & Bakker, 2004; Schaufeli & Salanova, 2007). 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. Thus, it is reasonable to suggest that an engaged employees is likely to make a significant contribution to the bottom line of the concerned organization.

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 influences the job demands and resources of their employees. They are the one who have the legitimate power to influence work conditions. 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

According to Gallup's "State of the global workplace" report (2013), only 13% of employees around the world are actively engaged in their jobs, that's only one in every eight employees from across 142 countries. As shown in Table 1.1, United States and

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Canada had the highest percentage of engaged employees as compared to other country, followed by Australia and New Zealand. The highest level of actively disengaged workers are found in the Middle East and North Africa (35%) and this follows by South Asia (29%) and Central and Eastern Europe (26%). The study also revealed that, those who are actively disengaged have higher absenteeism rate, have more safety incidents and lower retention rates. Based on recent survey conducted from January to December 2014 involving 80,837 employees, there is an increment of employee engagement from 2013 to 2014 by 1.9%. However, majority of employees (51%) are still not engaged and 17.5% are actively disengaged (Gallup, 2015). Realizing that the engagement level among employees are still low, there is a need to carry out more studies to fully understand the reasons for the occurrence especially in Asia, so that a more comprehensive measure can be taken.

Table 1.1
Level of engagement by region

Country	Engaged	Not Engaged	Actively Disengaged
United States and Canada	29%	54%	18%
Australia and New Zealand	24%	60%	16%
Latin America	21%	60%	19%
Russia, Kazakhstan, Moldova, Ukraine, Balrus and Azerbajan	18%	62%	21%
Western Europe	14%	66%	20%
Southeast Asia	12%	73%	14%
Central and Eastern Europe	11%	63%	26%

South Asia	10%	61%	29%
Middle East and North Africa	10%	55%	35%

Source: (Gallup, 2013)

A review of literature shows that there is a considerable amount of interest been dedicated to work engagement in the last few decades. Some authors argued that this is because it foretells employee outcomes, organizational success and financial performance in the form of total shareholder return (Bates, 2004; Baumruk, 2004; Harter, Schmidt, & Hayes, 2002; Richman, 2006). Another reason for the risen popularity in studying engagement may be due to its antecedents which coming from work environment characteristics and human resource management practices, rather than employee or individual characteristics. Engagement has antecedents that companies can control, allowing engagement to be improved with planned interventions strategies.

Even though studies on work engagement are substantial, most of the studies were conducted in telecommunication companies (Brummelhuis, Bakker, Hetland & Keulemans, 2012; Schaufeli & Salanova, 2007; van Doornen, Houtveen, Langelaan, Bakker, van Rhenen & Schaufeli, 2009), health sector (Hakanen, Schaufeli & Ahola, 2008; Lin, Oi-ling, Kan & Xin-wen, 2009; Weigl, Hornung, Parker, Petru, Glaser & Angerer, 2010), hotels (Burke, Koyncu, 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, Salonova-Soria,

Martinez-Martinez & Schaufeli, 2008; Rothmann & Jordaan, 2006; Salmela-Aro, Tolvanen & Nurmi, 2009).

However, not much attention has been given on the issues of work engagement among the university's academicians. If there were studies conducted in the educational sector, they were more focus on the students and teachers (Babcock-Robertson & Strickland, 2010; Bakker & Bal, 2010; Basikin, 2007; Hakanen, Bakker & Schaufeli, 2006; Lorento-Prieto, Salonova-Soria, Martinez-Martinez, & Schaufeli, 2008; Salmela-Aro, Tolvanen & Nurmi, 2009). For example, Hakanen, Bakker and Schaufeli (2006) studied the teachers' working conditions and how they were related to teachers' well-being such as burnout and how work engagement influence over health problems and organizational commitment in Finland. Salmela-Aro, Tolvanen and Nurmi (2009) on the other hand, studied how students' achievement strategies gauged during university studies would affect work burnout and work engagement in 10, 14 and 17 years later. Thus, this study sought to extend the body of research on work engagement by investigating issues of work engagement among university academics.

Many authors have agreed that teaching is considered to be one of the most stressful occupations, and this is due to a high workload, inadequate salary, large class sizes, emotional demands, student misbehavior and the perceived low status of the profession (Burke & Greenglass, 1994; Carlson & Thompson, 1995; Hakanen, Bakker & Schaufeli, 2006; Konermann-van Hunsel, 2012; Kyriacou & Sutcliffe, 1978). Studies have shown how the high levels of teaching commitments, the pressure to attract external funding,

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and the high levels of role conflict (e.g. among the triple demands of teaching, research, and administration) constitute important sources of job-related stress for academics, while role conflict has, in turn, been linked to high levels of job dissatisfaction and anxiety (Gillespie, Walsh, Winefield, Dua & Stough, 2001; Kinman, 2001; Winefield, Boyd, Saebel & Pignata, 2008; Sonnentag & Frese, 2003; Winefield et al., 2003).In Australia, Rea (2011) found that research and teaching staffs in universities work very long hours to cover their workloads and they are the most dissatisfied. As a result, nearly half of the academic workforce in Australian universities intends to move to overseas universities or leave the higher education in the next 10 years (Burke, 2011). In other part of the globe, Alrai (2010) found that 776 university professors with PhD from Jordanian universities left their work between September 2007 and September 2008, and this number comprise of 17 percent of the total number of professors working in universities. Among the reasons these academics left the universities was lack of satisfaction.

In the past, studies on job demands, job resources and work engagement have shown a mix results when tested in various settings. While majority of studies have shown significant relationships and influence of job demands and job resources on work engagement (Bakker, & Schaufeli, 2008; Fourie, Rothmann, & Vann De Vijver, 2008; Halbesleben, Harvey, & Bolino, 2009; Mauno, Kinnunen, & Ruokolainen, 2007; Rothmann & Jordaan, 2006; Saks, 2006; Schaufeli & Bakker, 2004; Schaufeli, Bakker, & Van Rhenen, 2009; Taipale, Selander, Anttila, & Natti, 2011; Tomic & Tomic, 2011; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009), there are few other studies have

shown   no effect between job demands and job resources towards work engagement (Bakker, Demerouti, & Schaufeli, 2003; Hakanen, Schaufeli, et al., 2008).

In the academic setting, many authors believed that job demands especially the workload can diminish levels of faculty commitment to the institution (Daly & Dee, 2006; Gilbert, 2000; Griffin, 1998). There is evidence showing how the academic workload and work pressure has been constantly rising due to the expansion of the higher education and this has been believed to contribute to the increase of stress level among the academicians (Metcalf, Rolfe & Weale,2005: Singh & Bush, 1998). In a study involving 471 academic staff in South African higher education institution, Rothmann and Jordaan (2006) found that workload was negatively related to work engagement while autonomy and social support were positively related to work engagement. In other study, work pressure was found to be negatively related to work engagement when tested on 274 teachers in Netherlands (Lorente, Salanova, Martinez & Schaufeli, 2008). In terms of studies on job resources, Nadim (2013) found positive relationship between job resources (such as autonomy, social support) and work engagement among 60 academic staff at College of Banking and Financial Studies, Muscat-Oman public college. Since, studies of job demands and job resources on work engagement among the academicians are limited, there is difficult to draw a conclusion on whether there was a consistency or inconsistency in past research findings. Thus, the effect of job demands and job resources on the work engagement among the academicians in Jordan is yet to be known.

Past studies have also revealed how work engagement was related to job satisfaction. For example, in a study conducted on 153 manufacturing employees in Gauteng, South Africa has shown significant positive correlation between satisfaction and work engagement (Durand, 2008). Similar findings were also found when a study conducted on 193 police officers in Australia (Brunetto, Shacklock & Farr-Wharton, 2012).In the academic setting, a study conducted by Alhawary and Aborumman (2011) on 300 academic staffs in Jordan have shown how the overall academic satisfaction has a statistical significant effect on the overall university commitment. In other words, academicians who are satisfied are more committed to the university. In another study, workload was found to be negatively related to job satisfaction when tested on 107 faculty members in Pakistan's public universities (Shahzad, Mumtaz, Hayat & Khan, 2010). In terms of work pressure, the results indicate negative relationship when tested against job satisfaction on 400 academicians in Pakistan (Bhatti, Hashmi, Raza, Shaikh & Shafiq, 2011) and on 268 private and public secondary school's teachers in Nepal (Kayatasha & Kayatasha, 2012). In terms of job resources, autonomy and social support were found significantly positively related to job satisfaction when tested on 783 academic faculties at University of Michigan Medical School (Chung, Song, Kim, Woolliscroft & Quint, 2010). Autonomy was also found to be significant determinant of job satisfaction when tested on 2249 elementary and middle school teachers in Norwegian (Skaalvik & Skaalvik, 2010) and on 280 public school teachers in Malaysia (Fung, Ahmad & Omar, 2014).

However there are limited studies that attempted to examine the mediating effect of job satisfaction in the relationship between job demands-resources and work engagement (Van den Broeck, Vansteenkiste, De Witte, & Lens; Zapf, Knorz, & Kulla, 1996). Researchers have begun to realize the missing mediating links between job demands, job resources and work engagement. For example, Va den Broeck, Vansteenkiste, De Witte and Lens (2008) have argued about the existence of possible mediator such as job satisfaction that may account for the significant linked between job demands, job resources, job satisfaction and work engagement. Although empirical findings may have advanced the understanding of these links, little is known about the mediating role of job satisfaction in the relationship between job demands, job resources, job satisfaction and work engagement. Also, there is still exists an unclear support that indicates a direct relationship between the variables. The question of whether job demands and job resources as perceived by the academic staff would directly or indirectly affect their job satisfaction which eventually lead to work engagement remains unanswered. Therefore, this study is interested to investigate the role of job satisfaction as a mediator factor on relationship between job demands-resources and work engagement in the academic context.

Apart from job satisfaction, literature on work engagement had also highlighted the significant role of trust. The issues of globalization, liberalization and the implication of change in business environment such as social, economic, political and technologies will likely influence the trust among the workers in the organizations. The review of organization's literature also confirmed the significance of trust as a prerequisite of

organizational effectiveness. Trust can give big impact to organization's success such as continuous changes in roles, job designing and responsibilities (Fard, Rajabzadeh, & Hasiri, 2010); increase firms' willingness (Zaltman, & Moorman, 1988), reduce negotiation costs (Zaheer, McEvily, & Perrone, 1998), encourage proprietary information exchange (Zand, 1972), develop long-term orientation (Doney, & Cannon, 1997; Ganesan, 1994); and increase performance (Jap, Manolis, & Weitz, 1999).

In the context of work engagement, trust appears to be a significant aspect in the organization as it develops relationship between management and employees (Tzafrir & Dolan, 2004). In the past, studies on work engagement and trust have shown how increase in trust has directly or indirectly leads to positive workplace behaviors and attitudes such as organizational commitment, employees' work engagement and employees' satisfaction (Baothams, 2011; Dirks & Ferrin, 2002; Mayor & Salovey, 1997; Srivastava, 2013; Tanner, 2007). For example, in a study involving 168 research scientists from 6 Irish science research centers, Chughtai and Buckley (2011) found that trust in supervisors was positively related to work engagement.

In the academic setting, trust has been found to positively related to work engagement. For example, a study conducted by Chughtai and Buckley (2009) on 238 teachers in Pakistan has revealed how trust was found to be significantly positively related to work engagement. However, studies on trust as a moderator are still limited especially in the academic context though it has been hinted in the conceptual work (Chughtai & Buckley, 2011; Dirks, 1999). Since trust has not been tested as a moderator in the relationship

between job satisfaction and work engagement, the present study attempts to empirically confirm it roles and offers different ways of thinking about trust theoretically and practically.

A review of literature also reveals that majority of the studies concerning work engagement were conducted in the US and European countries. Since there are differences in the culture of the organization, its leadership, the quality of communication, the styles of management, levels of trust and respect, the organization's reputation, inhomogeneous environments, and different aspects of working life, some authors believed that there is a need to understand the engagement levels in other countries (Maslach & Leiter, 2008; Babcock-Robertson, & Strickland, 2010). Towers Perrin has surveyed 85,000 employees from all around the world and the results revealed varying engagement levels. Results of the survey showed that Mexico (40%) and Brazil (31%) headed the list of the highest engaged workforce, and this followed by US (21%) and Canada (17%) (Ram & Prabhakar, 2011). Countries with the lowest employee engagement were Europe (11%) and Asia (7%). Study by Gallup (2013) upon 142 countries also confirmed the same scenario cross the world, where 63% are not engaged in their work. This study also stated that, employees in Middle East and China show the lowest rates of work engagement among the nation. Realizing the low level of engagement among employees in Asia, there is a need to carry out more studies in these countries to fully understand reasons for the occurrence so that a more comprehensive action can be taken.

Data for this study was collected in Jordan. The many changes that have been imposed on the education sector by the successive government made it an ideal setting for this research as it provides a context in which there is an urgent need for a more engaged academics. During the last ten years, Jordanian Higher Education sector has witnessed a significant progress in terms of the diversity of study programs, patterns of teaching and learning and the expansion of higher education institutions. These changes are important in promoting the economy, social and knowledge level among the Jordanian people. Thus, in dealing with these ever growing and emerging changes in the higher institutions and in ensuring the programs offered relevant with the current market needs, cooperation and engagement of all the academicians are expected.

In summary, the Jordanian government has acknowledged the importance of higher education in developing the country economy. Thus, this research can make an effective contribution to understand the utmost way to plan for successful higher education in Jordan. This study also should benefit both scholars and practitioners regarding ways for increasing the level of work engagement among the academics. A literature search reveals limited empirical studies on the issues of job demand and job resources on work engagement among the academics.

1.3   Research Questions

Based on the problems discussed above, the central question for this study would be "what factors are considered critical in influencing individual's work engagement." Specifically,

1. do job demands and job resources related to work engagement?

2. do job demands and job resources related to job satisfaction?

3. does job satisfaction related to work engagement?

4. does job satisfaction mediate the relationship between job demands and work engagement?

5. does job satisfaction mediate the relationship between job resources and work engagement?

6. does trust moderate the relationship between job satisfaction and work engagement?

1.4   Research Objectives

Generally, this study aims to examine what influence work engagement among academicians. Therefore, to answer the research questions posted above, the following research objectives were formulated:

1. to examine the relationship between job demands, job resources and work engagement;

2. to determine the relationship between job demands, job resources and job satisfaction;

3. to examine the relationship between job satisfaction and work engagement;

4. to determine the mediating effects of job satisfaction on the relationship between job demands and work engagement;

5. to examine the mediating effects of job satisfaction on the relationship between job resources and work engagement; and

6. to examine the moderating effect of trust on the relationship between job satisfaction and work engagement

1.5   Significance of Study

This study is conducted to test how job demands and job resources influence work engagement among the academicians. It is hope that, the findings from this study may benefit both scholars and practitioners regarding methods to increase work engagement among academicians. From the theoretical perspective, potential findings from this study may contribute to the current body of knowledge on work engagement. A literature search reveals limited empirical studies on the issues of work engagement among academicians. Most studies on work engagement were focusing on hospital staffs in the health industry (Hakanen, Schaufeli & Ahola, 2008; Lin, Oi-ling, Kan & Xin-wen, 2009; Mauno, Kinnunen, & Ruokolainen, 2007; Weigl, Hornung, Parker, Petru, Glaser & Angerer, 2010), employees and managers in the telecommunication industry (Brummelhuis, Bakker, Hetland & Keulemans, 2012; Salanova & Schaufeli, 2008; van Doornen, Houtveen, Langelaan, Bakker, van Rhenen & Schaufeli, 2009), service workers in the hotel industry (Burke, Koyuncu, Jing, & Fiksenbaum, 2009; Salanova, Agut &

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Peiró, 2005; Slåtten & Mehmetoglu, 2011), and employees and manager in the banking industry (Hassan & Ahmed, 2011; Koyuncu, Burke & Fiksenbaum, 2006).

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

1.6   Scope of Study

The main focus of this study is to examine factors that might influence work engagement among the academicians. Specifically, the study aims to identify whether factors like job demands (workload and work pressure) and job resources (autonomy, social support and performance feedback) have a direct relationship with work engagement. Apart from that, the study also aims to determine whether job satisfaction mediates the relationship between job demands, job resources and work engagement and whether trust moderates the relationship between job satisfaction and work engagement.

For this study, which was cross-sectional, data were collected from four universities in Jordan (Mu'tah University, The University of Jordan, The Hashemite University and Yarmouk University) involving 532 academicians.

1.7   Definition of Key Terms

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

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

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

Job satisfaction: Job satisfaction refers to "pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p. 1300)

Trust: Generally, trust is the willingness of a party based on the expectations that the other party will a particular action important to the trustor, irrespective of the ability to monitor or control the party (Mayer, Davis & Schoorman, 1995). In this study, trust

refers to individuals' confidence and expectation about the actions of their organizations (Tyler, 2003)

1.8   Organization of Chapters in Thesis

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

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

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

Chapter 5 discusses the interpretation of the research findings for the study. The findings are compared to those found in the past research reviewed in Chapter 2. New findings are

also discussed. The chapter ends with a discussion on limitations of the study, their implications for both researchers and practitioners, and some suggestions for future research.

CHAPTER TWO

LITERATURE REVIEW

2.1   Introduction

This chapter sets out issues related to work engagement as presented and discussed in the management literatures. These issues are reviewed to provide a theoretical foundation for the research. The chapter begins by describing the concept of work engagement, and this followed by findings from past studies on work engagement. The chapter then reviews how job demands, job resources, job satisfaction and trust related to work engagement. The chapter concludes by discussing the underpinning theory, the research framework and the development of hypotheses.

2.2   Work Engagement

2.2.1   The Concept of Work Enagement

The concept of work engagement was first coined by Kahn in 1990, who defined it as "the harnessing of organizational members' selves to their work roles" (p. 694). It is the extent to which an individual is attentive and absorbed in the performance of his or her work. Kahn (1990) argued that when people are engaged, they are not only are physically involved in their work, but they also are cognitively alert and emotionally connected to others at the moment of engagement. However, the level of work engagement varies

across individuals as the amount of energy and dedication they contribute to their job is different.

This concept has evolved through the years and has been regarded as a worthwhile concept by many researchers in 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 by defining burnout as an erosion of engagement. They argued that while burnout is defined by exhaustion, cynicism, and inefficacy, engagement is the direct opposite where energy replaces emotional exhaustion, involvement replaces cynicism, and a sense of efficacy replaces lack of professional accomplishment.

May, Gilson, and Harter's (2004) definition of work engagement was quite similar as what has been previously defined by Kahn (1990). 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.

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." According to them, vigor refers to 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. This 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 referred as being 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.

Though there are many defintions of work engagement have ben put forward in the literature, this study adopted the definition given by Schaufeli, Salanova, Gonzalellez-Roma and Bakker (2002) where work engagement is regarded as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication and absorption.

Beside engagement, a term like commitment is also widely discussed in the literature. Though the concept of work engagement and commitment seems to be related, Maslach, Schaufeli and Leiter (2001) argued that the two concepts are not identical. Their argument is that people can be engaged in their jobs, but they might not be committed to their organizations. Similarly, they might be committed to their organization, but they are not engaged in their work. Thinking along the same line, Rothman and Jordaan (2006) also argued that the two terms are not identical. To them highly engaged people identify personally with the job and are motivated by the work itself. Whereas, highly committed people identify themselves with the organization's goal and values, willing to exert effort for the organization and desire to continue as part of the organization. These claims have

been supported by an empirical study conducted by Winter, Taylor and Sarrors (2000) on 319 academicians, where they found that the academicians remain very attached to their work activities, but they do not exhibit the same levels of attachment to their institutions.

In the past, various predictors of work engagement have been studied and these include organizational commitment (Li, Li & Shi, 2010); distributive, procedural justice, rewards and recognition (Saks, 2006); person-job fit and person-organization fit (Hamid & Yahya, 2011; Kimura, 2011); and leadership style (Babcock-Roberson & Strickland, 2010; Leithwood & Jantzi, 1999; Tims, Bakker & Xanthopoulu, 2011). These are discussed next.

2.2.2   Previous studies on Work Engagement

In past studies, various predictors have tested and been found to be related with work engagement. For example, organizational commitment was found positively related to work engagement in studies involving 336 frontline employees in Jordanian banking (Albdour & Altaraweh, 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).

Several studies have also conducted to test the relationship between transformational leadership and work engagement. The results indicate positive relationship between the two variables when tested on 45 employees in Netherland (Tims, Bakker & Xanthopoulou, 2011); 240 nurses in Iran (Hayati, Charkhabi & Naami, 2014); and 150 employees from service sector in Pakistan (Waqas Raja, 2012).

Apart from organizational commitment and transformational leadership style, several authors have also tested organizational justice and organizational culture in predicting work engagement. Li, Li and Shi (2010) for example, have found positive relationship between organizational justice and work engagement in a study involving 272 employees of the Chinese Airlines. Similar results were also found in studies involving 356 employees in internet customer service in the United States (Strom, Sears & Kelly, 2013) and on 312 officers in corporate sector in Pakistan (Alvi & Abbasi, 2012).

In terms of organizational culture (formality, rationality, achievement orientation, participation and collaboration, communication professional orientation and teacher autonomy), positive relationship was found to be related to work engagement in studies involving 251 teachers from 15 Islamic high school in Jakarta, Indonesia (Arifin, Troena, Djumahir & Rahayu, 2014) and 102 hotel staff in Central Java, Indonesia (Suharti & Suliyanto, 2012). In other study, Krog (2014) has tested four types of organizational culture namely, clan culture, adhocracy culture, hierarchical culture and market culture on work engagement which involving 463 employees working in Norwegian

organizations. The results showed that only clan culture had a positive relationship with work engagement while the other three had no significant relationship.

Reviewing the literature also have shown how corporate social responsibility was significantly positively related to work engagement when tested on 336 frontline employees working in the Jordanian banking sector (Albdour & Altarawneh, 2012) and on 236 middle managers from various private companies such as finance, telecoms, food and beverages, and retail in Portugal (Ferreira & Oliveira, 2014).

Though many studies in the past have showed positive relationship, there were also studies that showed the opposite. For example, in a study conducted by Iqbal, Khan and Iqbal (2012), they found that there was negative and significant relationship between job stress and employee engagement when tested on 137 employees from different types of organization (e.g., oil and gas sector, telecommunication sector, educational sector and banks) in Islamabad in Pakistan. In other study, Stander and Rothmann (2010) examined the relationship between job insecurity and work engagement among 442 employees from government and manufacturing organizations in South Africa, and they found that job insecurity was significantly negatively related to work engagement. A negative relationship was also found between academic burnout and academic engagement among Nigeria university undergraduates (college students) (Ugwu, Onyishi & Tyoyima, 2013). In another study, transactional leadership style was found negatively related to work engagement when tested on 269 employees from different industries such as textile industry; leather and foot wear industry; chemical industry; electronics,

telecommunications and information technology industry; and mechanical industry in Vietnam (Khuong &Yen, 2014). Other study was indicated that abusive supervision was negatively related to work engagement among 195 employees and 130 managers from social services, education industries in USA (Taylor, 2012).

In short, various factors have been tested in the past to predict work engagement.Some factors like organizational commitment, transformational leadership style, organizational justice, organizational culture, and corporate social responsibility were found to be positively related to work engagement. While factors like job stress, job insecurity, burnout, transactional leadership style and abusive supervision were negatively related to work engagement. These mixed findings on work engagement have provide an avenue for future researchers to further examine other potential factors in other context of studies to capture a more comprehensive understanding.

2.3   Job Demands

2.3.1   The Concept of Job Demands

According to Demerouti, Bakker, Nachreiner and Schaufeli (2001, p.501), job demands are "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". Authors such as Bakker and Demerouti (2008) and Schaufeli and Bakker (2004) argued that 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. As a result, 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.

In the literature, job demand can be considered as a good or a bad job stressor. Though it has been suggested that job demands might provide challenges in work, 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 elicit negative responses such as burnout. Job stressors that are known to be bad are the hindrance stressors. According to Cavanough, Boswell, Roehling & Boudreau (2000), hindrance job stressors involve high level of undesirable constraints that interfere with or inhibit an individual's ability to achieve valued goals. Examples of hindrance stressors include role conflict, role overload, and role ambiguity.

Stressors are considered to be good when it has potential to promote personal growth and achievement of the employee (Podsakoff, LePine & LePine, 2007). 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.

2.3.1.1 Workload

Workload refers to the degree to which the person's individual resources are charged when carrying out work tasks. There is no clear universal definition of workload. But, the aspects of workload fall 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 (Cain, 2007). The workload in the literature 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). Allen (1996) defined workload as the high amount of work a faculty member devotes to activities like teaching, research, administration, and community services and other academic related tasks.

Reviewing past empirical studies had shown that testing similar job demand's dimensions led to different results on work engagement. For example, workload was found positively related to work engagement among 714 Dutch employees (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2007). A positive relationship was also found between workload and work engagement among 329 information communication technology (ICT) and management consultants (Hallberg, Johanson & Schaufeli, 2007).

However, in other study, workload was found negatively correlated with work engagement when tested on 169 hospital nurses where the higher the workload, the lower the vigor and dedication among the hospital nurses (Tomic & Tomic, 2011). Similar

findings were also found by Hakanen, Bakker and Demerouti (2005) where workload was negatively related to work engagement among the 1919 Finnish dentists. In other study, Hu, Schaufeli and Taris (2011) 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), to test the relationship between workload and work engagement. They found that workload was negatively related to work engagement for both samples of respondents. In the academic setting, a study conducted by Rothmann and Jordan (2006) found that workload were negatively related to work engagement among 471 academic staff in South African higher education institutions.

2.3.1.2 Work Pressure

Work pressure is provisionally conceived of as a cognitive-energetic state of the person, producing the experience of strain or felt pressure, which is associated with the ongoing and anticipated execution of work tasks. At present it can best be understood as the subjective reflection of the person's psychological / physiological state while carrying out tasks. Obviously, this state can vary and work pressure can augment or decline, depending on the worker's expectation of the amount of work that remains to be done and his / her assessment of the chance to accomplish the work successfully. Although work pressure is conceived as a dynamic phenomenon, one would expect it to change less quickly than workload. Work pressure seems to be a more enduring state which may extend into people's leisure time. In this study work pressure is defined 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).

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

However, work pressure was found to be negatively related to work engagement in a study involving 154 employees from HR department from different industries in German (Kuhnel, Sonnentag and Bledow, 2012). Similar findings were also found when work pressure was tested on 274 teachers in the Netherlands (Lorente, Salanova, Martinez & Schaufeli, 2008). In other study, Nahrgang, Morgeson and Hofman (2011) also found that work pressure tends to hinder 203 employees from USA from engaging in their work. The negative relationship between work pressure and work engagement was also reported in a study conducted by Taipale, Selander, Anttila and Natti (2011) on 7869 service sector employees from eight European countries.

Though in some studies, work pressure have shown either positive or negative relationship with work engagement, Sonnentag (2003) found no significant relationship between work pressure and work engagement among the 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.

2.3.2   Previous Studies on Job Demands

In the past, job demands have been tested as predictor of various outcomes such as burnout (Bakker, Demerouti & Verbeke, 2004; Hakanen, Bakker & Schaufeli, 2006); job satisfaction (Bhatti, Hashmi, Raza, Shaikh & Shafiq, 2011; Chughati & Perveen, 2013); turnover intention (Qureshi, Jamil, Iftikhar, Arif, Lodhi, Naseem & Zaman, 2012); performance (Bakker, Demerouti & Verbeke, 2004; Omolayo & Omole, 2013; Singh, Tiwari & Singh, 2010) and the results are mixed depending on the outcome tested. For example, in a study conducted by Bakker, Demerouti and Verbeke (2004), job demand components such as work pressure and workload were found to be significantly positively related to burnout when tested on 274 employees of various sectors and positions in Netherland. These result imply that the higher the work pressure and workload, the higher the employees experiencing the burnout. Positive relationship was also found in a study involving workload and turnover intention among the 250 textile's employees in Pakistan (Qureshi, Jamil, Iftikhar, Arif, Lodhi, Naseem & Zaman, 2012). On the other hand, negative relationship was found when work pressure was tested against job performance in a study involving 400 university academicians (Bhatti, Hashmi, Raza, Shaikh & Shafiq, 2011) and among the 100 private and public school teachers in Pakistan (Chughati & Perveen, 2013). But, in other study, there was no relationship found when workload was tested against job performance which involved

150 academics and non-academics at Eiki State University of Nigeria (Omolayo & Omole, 2013).

Interestingly, reviewing the literature on job demands and work engagement have shown how 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). Positive relationship was also found between workload and work engagement among 329 information communication technology (ICT) and management consultants (Hallberg, Johanson & Schaufeli, 2007).

But, in other study, workload was found negatively correlated with work engagement when tested on 169 hospital nurses where the higher the workload, the lower the vigor and dedication among the hospital nurses (Tomic and Tomic, 2011). Similar results were also shown in a study conducted by Hakanen, Bakker and Demerouti (2005) where workload was found negatively related to work engagement when tested on 1919 Finnish dentists. Hu, Schaufeli and Taris (2011) 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 how workload negatively related to 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. Work pressure was found to be positively related to work engagement in a study conducted by Schaufeli, Taris and Van Rhenen (2008) on 587 Telecom managers in Dutch and in a study conducted by Bakker, Van Emmerik and Euwema (2006) on 2229 Royal Dutch constabulary officers.

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

Even though there are studies showing how work pressure is either positively or negatively related to work engagement, 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.

2.4   Job Resources

2.4.1   The Concept of Job Resources

In the literature, Schaufeli and Bakker (2004) have defined job resources as physical, psychological, social, or organizational aspects of a job. They argued that job resources may have the potential to reduce job demands and the associated physiological and psychological costs; are functional in achieving work goals, and stimulate personal growth, learning, and development. In a broader context, 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).

Therefore, job resources are assumed to play either an intrinsic motivational role because they foster employees' growth, learning, and development or an extrinsic motivational role because they are instrumental in achieving work goals (Bakker & Demerouti, 2007; Ryan & Deci, 2000). As intrinsic motivators, job resources, by satisfying the basic human needs such as the needs for autonomy, competence and relatedness promote individuals' growth and development. For 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 an *extrinsic* motivational role, because resourceful work environments foster the willingness to dedicate one's efforts to the work task (Schaufeli & Bakker, 2004; Bakker & Demerouti, 2007). They believed that in such environments,

it is likely that the task will be completed successfully and that the goal will be attained. For instance, supportive colleagues and performance feedback increase the likelihood of being successful in achieving one's work goals. In either case, be it through the satisfaction of basic needs or through the achievement of work goals, the outcome is positive, and engagement is likely to occur. In short, it is expected that an appropriate supply of job resources might supplement employees' work engagement by providing opportunities for personal growth and development; whereas, their deficiency can obstruct goal accomplishment and as result may lead employees to develop a negative and cynical attitude towards their work.

Past empirical research has consistently demonstrated that job resources such as social support from colleagues and supervisors, autonomy and performance feedback can play a pivotal role in employees' work engagement. These are discussed next.

2.4.1.1　　　Autonomy

Autonomy implies the degree to which the job provides substantial freedom, independence and discretion to the employee in scheduling the work and in determining the procedures to be used in carrying it out. High autonomy might engender and develop more experience of responsibility toward the outcomes because outcomes are largely on incumbents' judgment and efforts (Hackman & Oldham, 1980). One of the most commonly cited definitions of autonomy is that formulated by Hackman and Oldham (1975). 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 sum, autonomy as a job characteristic is mostly described in terms of self-determination, discretion and freedom. Autonomy has also been defined as the degree to which the job offers considerable liberty, proving free hand and choice to the individual in scheduling the work and also defining the means to achieve the tasks (Hackman & Oldham 1975; Marchese & Ryan, 2001; Morgeson, Delaney-Klinger & Hemingway, 2005; Parker, Axtell & Turner, 2001). Brey (1999) defined autonomy as the choice and freedom inborn in the job to perform numerous tasks. These descriptions come close to the psychological and metaphysical meaning of everyday autonomy. Following the same train of thought, autonomy can be theoretically defined as the worker's self-determination, discretion or freedom, inherent in the job, to determine several task elements. In this study, autonomy is defined as the extent of freedom, independence, and discretion of an employee to plan his/her work pace and method Karasek (1985). Individuals with autonomy have the liberty to control the pace of work and to regulate work processes and evaluation procedures.

2.4.1.2   Social Support

In the literature, social support usually been defined with the same general meaning, but different in the specifics (House, 1981). It can be thought of as the interpersonal interactions, which benefit at least one party in any way. Social support can be received from several sources such as spouses, friends, and coworkers.

Social support refers to social interaction with colleagues and supervisors which is advantageous to one's own well-being. On the other hand, social support can operates as a buffer to work stress. Social support can be understood as a form of instrumental support, if it refers to additional resources provided by colleagues and supervisors (Johnson & Hall, 1988; Karasek & Theorell, 1990).

According to several researchers, social support in the workplace is a well-researched intangible resource and predictor of work engagement (e.g. Hakanen et al., 2006; Kahn, 1990; Rhoades & Eisenberger, 2002; Saks, 2006; Taipale et al., 2011). It is the belief that one's work organization cares about one's well being and values individual contributions. Perceived support contributes to an employee's feeling of meaning and purpose, and leads to increased commitment and loyalty (Rhoades & Eisenberger, 2002). Supportive management contributes to an increase in feelings of safety, thus contributing to engagement (Kahn, 1990). When employees feel supported by their organization, they are likely to reciprocate by investing time and energy into meeting the goals of the organization (Bakker, Albrecht & Leiter, 2011). In this study, social support is defined as overall levels of helpful social interaction available on the job from co-workers and supervisors (Karasek & Theorell, 1990).

2.4.1.3 Performance Feedback

Performance feedback was found to be positively related to work engagement, job satisfaction, job performance, influence, task enjoyment, organizational commitment, and

productivity (Bakker & Bal, 2010 Bakker et al., 2010), and in-role and extra-role performance (Demerouti, 2006). Moreover, feedback and both job satisfaction and job performance were significantly higher among the managers high in need for achievement and need for independence than among those low in these needs (Orpen, 1985). Positive feedback seems to enhance work engagement levels, whereas negative feedback diminishes it (Coetzer & Rothmann, 2007).

Performance feedback from colleagues and supervisors contributes to an employee's motivation (Firestone & Pennell, 1993). When an employer recognizes an employee's contribution or a job well done, work engagement for that employee increases (Roberts & Davenport, 2002; Rutter & Jacobson, 1986). In this study, performance feedback 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).

2.4.2 Previous Studies on Job Resources

Consistent with the notions about the motivational role of job resources, many past studies have shown a positive relationship between job resources which include social support, performance feedback and autonomy and work engagement in various settings and countries (Bakker & Demeroutti, 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, in a 3-year panel study among 2,555 Finnish dentists, 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. Similar findings were also found in a study conducted by Schaufeli, Bakker and Van Rhenen (2009). In their study which was conducted on managers and executives of a Dutch telecom company, it was found that changes in job resources predicted engagement over a period of 1 year. Specifically, 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 another longitudinal study of 163 employees in electrical engineering and electronic company in Netherland, Xanthopoulu, 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. 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 a survey of over two thousand school teachers in Finland, Hakanen, Bakker and Schaufeli (2006) found positive relationship between job resource in the form of job control, information and supervisory support and work engagement. A year later, similar

findings were also reported in a study conducted by Bakker, Hakanen, Demerouti, and Xanthopoulou (2007) on Finnish teachers working in elementary, secondary, and vocational schools. 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 study showed a causal relationship between week-levels of work engagement and job resources, suggesting that job resources have motivational potential and enhance teachers' week-levels of work engagement.

However, it is also important to note that job resources become salient and gain their motivational potential when employees are confronted with high job demands. Hakanen, Bakker, and Demerouti (2005) tested this hypothesized interaction between job demands and job resources in a sample of Finnish dentists employed in the public sector. It was hypothesized and found that job resources (e.g., variability in the required professional skills, peer contacts) were most beneficial in maintaining work engagement under conditions of high job demands (e.g., workload). In a two-year longitudinal study of the health care personnel in Finland, Mauno, Kinnunen and Ruokolainen (2007) found that job resources rather than job demand relate significantly to employees' work engagement.

2.5   Job Satisfaction

2.5.1   The Concept of Job Satisfaction

The importance of employees' job satisfaction has goes back to the second half of the

20th century, with the appearance of Maslow's theory (1987). Since then, researchers

have given deep consideration to the matter and various analytical studies have been

undertaken. Many scholars have long been interested in knowing why some people report

being very satisfied with their job while others express the opposite.

A review of literature reveals that there is no consistency in definition of job satisfaction.

Mertler (2002) for example, regards job satisfaction as the willingness to perform a task.

Unlike Mertler, several other authors have proposed job satisfaction as how people feel

about their jobs, feeling of pleasurable or positive emotional state that one derives from

their job experience where employee compare the actual job outcome with the desired job

outcomes which in turn results in an affectionate reaction to a given job situation (Henne

& Locke, 1985; Locke, 1976; Kusku, 2003; Rad & Yarmohammadin, 2006; Spector;

1997).

In the academic setting, academic researchers would prefer to define job satisfaction

based on the dual theory of Herzberg, the hygiene and motivator factors (Lacy &

Sheehan, 1997; Rad & Yarmohammadin, 2006; Ssesanga & Garret, 2005). As such, job

satisfaction studies were based on the notion that satisfaction comes from intrinsic factors

which are related to job content and extrinsic factors that are associated with the working

environment. This study will adopt the definition of job satisfaction as the reaction of individuals towards their jobs and the source of satisfaction that comes from the intrinsic and extrinsic factors pertaining to the job contents.

2.5.2 Previous studies on Job Satisfaction

Job satisfaction is a topic of considerable interest to employers since it is likely to influence a worker's and hence, the firm's performance. Job satisfaction is said to affect organizational outcome, such as turnover, absenteeism, organizational commitment, employee engagement and job performance. Previous studies have suggested that firms are likely to benefit through lower job turnover and higher productivity if their workers have a high level of job satisfaction. It is also important for workers to be happy in their work, given the amount of time they have to devote to it throughout their working lives (Nguyen, Taylor & Bradley, 2003).

In a study conducted by Kotze and Roodt (2005) on 120 highest paid employees from two banks in South Africa, job satisfaction was found strongly correlated with employee commitment and retention. Job satisfaction was also found related with organizational commitment when tested on 331 teachers in two public universities in Pakistan (Malik, Nawab, Naeem & Danish, 2010). Apart from commitment, job satisfaction was also found to relate with job performance. Job satisfaction was found to be positively related to job performance when tested on 337 academicians of 20 Malaysian public universities (Ismail & Mamat, 2013) and on 322 employees of large Sri Lankan apparel sector (Perera, Khatibi, Navaratna & Chinna, 2014).

Job satisfaction was also found to be positively related with work engagement in past studies which involving 901 individuals in United Kingdom, 193 Australian police officers, and 405 employees of surface coating manufacturing in Gauteng (Avery, McKay &Wilson, 2007; Brunetto, Shacklock & Farr-Wharton, 2012; Durand, 2008)

In relation to relationship between job demands, job resources and job satisfaction, mixed results were found. For example, a study conducted in Pakistan on 400 university teachers has shown negative relationship between job stress and job satisfaction and between work pressure and job satisfaction (Bhatti, Hashmi, Raza & Shafiq, 2011). Similar findings were also found in a study conducted by Comm and Mathaisel (2000) where work pressure was negatively related to employee's satisfaction. Negative relationship was also found between academic work load and job satisfaction when tested on 320 Universiti Teknologi MARA's (UiTM) lecturers (Zainuddin, Junaidah & Nazmi, 2010).

If job demands were found negatively related to job satisfaction, job resources such as skill variety, significance, autonomy, feedback, social support have the opposite effect on job satisfaction. These variables were found positively related to job satisfaction when tested on 573 employees at Northeastern medical college in USA (Taber & Alliger, 1995). Autonomy was also positively related to job satisfaction in a study conducted by Katerndahl, Parchman and Wood (2009) on 18,947 physicians at American Medical Association and American Osteopathic Association using secondary data from 1996 to

2001. In a study involving 308 hospital nurses in Taiwan, Chu, Hsu, Price and Lee (2003) found that social support was positively correlated with job satisfaction. Apart from social support, performance feedback was also found to be positively related to job satisfaction in a study involving 279 academic librarians from eight university libraries in West Malaysia (Karim, 2009).

Reviewing the literature also has shown how job satisfaction was tested as a mediator in the relationship of various variables. For example, job satisfaction was found to mediate the relationship between active and passive / avoiding leadership styles and organizational commitment in a study involving 537 employees of 17 Croatian organizations (e.g., manufacturing, public sector, services) (Susanj & Jakopec, 2012). Job satisfaction was also mediates the relationship between transformational leadership and organizational commitment of 600 public relation employees in Taiwan (Yang, 2012).

In other writing, job satisfaction was reported to mediate the relationship between perceived organizational support and citizenship behaviors and partially mediate the relationship between perceived organizational support and organizational commitment that involved 223 workers from various organizations such as ministry of agriculture, parastatal organizations, banks, private agro-allied companies and insurance companies in Nigeria (Olugbenga, Bello & Comfort, 2012). In the United Arab Emirates, a study conducted on 361 employees of various organizations has revealed how job satisfaction mediates the relationship between work overload and organizational commitment (Yousef, 2002).

Job satisfaction was also found to mediate the relationship between compensation structure and organizational commitment in a study involving 62 employees from power utility-based organization in the Peninsular Malaysia (Ibrahim & Boerhaneoddin, 2010). In another study conducted on 310 management institute teachers in India had revealed how job satisfaction mediate the relationship between job related factors like pay, promotion opportunities, supervision and work-schedule flexibility and organizational commitment (Sharma & Azmi, 2012).

Job satisfaction is important because it affects the health, mental health, and social functioning of workers as well as the effectiveness and efficiency of the organizations for which they worked. Although job satisfaction was much studied concept in the literature, the studies examined human service workers and others variables and not professional workers such as academicians in universities. Thus, there were limited number of studies that were helpful in developing an understanding of academicians in this area. Consequently, there was demonstrated need for this study that focused on the job satisfaction as mediating of academicians within higher education organizations.

In conclusion, studies on job satisfaction as mediator may be enormous. But studies on job satisfaction as a mediator in the relationship between job demands and work engagement and between job resources and work engagement in the academic setting are still limited. Thus, one of the objectives of this study is to investigate the mediating role of job satisfaction in relationship of the mentioned variables.

2.6   Trust

2.6.1   The Concept of Trust

Several definitions of trust have been put forward in the literature. Some authors relate trust to a personality trait or disposition of the trustor that influences the extent to which this individual generally trusts others. For example, Rotter (1967) who was among the first authors to discuss trust as a form of personality argued that trust is a generalized expectancy where words or promises of others could be relied upon. Kramer (1999) regards this personality-based of trust as dispositional trust, while Mayer, Davis and Schoorman (1995) referred it as propensity to trust and define it as "the willingness of a party to be vulnerable to the actions of another party based on the expectations that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party (p.712)."

Many authors agreed that trust can be the key factor in improving competitive advantage and organizational effectiveness in the competition for human talents, long term stability and the well-being of the members of the organization (Cook & Wall, 1980; Huff & Kelley, 2003; Shockley-Zalabak, Ellis & Winograd, 2000; Laschinger, Finegan & Shamian, 2001).This is because trust influenced employees' perceptions of and confidence in their organizations, as well as beliefs concerning whether the organizations were acting in employees' best interests (Gilbert & Tang, 1998).

In other writing, authors such as O'Brien (2001) and Reina and Reina (1999) believed that trust can increases creativity and critical thinking at the employee level. This is because when leaders create trusting environment, workers feel greater freedom to express their ideas and thus, perform beyond the expectation of the management. Sharing similar views, Shockley-Zalabak, Ellis and Winograd (2000) found that organizations with higher levels of trust were more successful and innovative than organizations with lower levels of trust.

2.6.2   Previous Studies on Trust

In the literature, a number of studies have highlighted the importance of trust in promoting positive outcomes for individuals and the organization they work for (Colquitt, Scott & Le PiPine, 2007; Chughtai & Buckley, 2011; Dick & Ferrin, 2001; Fard, Rajabzadeh & Hasiri, 2010; Hassan & Ahmed, 2011; Vineburgh, 2010; Wang & Hsieh, 2013). For example, in a study conducted by Vineburgh (2010) on 3070 faculty members from 73 historically black colleges and universities in the United States have showed how absence or loss of trust were related to the loss of high-caliber employees to other (and often competing) organizations, a loss of interest among employees in the job and organization, employee retirement, employee complacency, employee defiance, and increased levels of absenteeism and tardiness.

Trust has also consistently been found to positively related to many organizational variables such as quality of communication (Chang, Chuang & Chao, 2011; Cheung, Yiu

& Lam, 2013), problem solving (Liu & Ma, 2014; Mintu-Wimsatt, Garci & Calantone, 2005), organizational commitment (Liu & Wang, 2013; Dirks & Ferrin, 2002), better task performance (Mach, Dolan & Tzafir, 2010), organizational citizenship behavior (Chhetri, 2014) and job satisfaction (Dirks & Ferrin, 2002).

In a study which involved 800 employees from public services organization in Iran, Fard, Rajabzadeh and Hasiri (2010) found that organizational trust was positively related to managerial competency. Trust was also found positively related to task performance and citizenship behavior, but negatively related to counterproductive behavior in a meta-analytic study involving 249 articles (Colquitt, Scott & LePine, 2007).

Several studies have also tested trust on employees' work engagement. For example, Chughtai and Buckley (2011) found significant positive relationship between trust and work engagement. The study tested trust in supervisor and trust propensity on employees' work engagement which involved 168 research scientists from 6 Irish science research centers. In other study, Hassan and Ahmed (2011) found that interpersonal trust do predict employees' work engagement when tested on 395 Malaysian bank employees.

Apart from examining trust in direct relationships, trust was also tested as a moderator in past studies. For example, Alfes, Shantz and Truss (2012) have tested trust as a moderator in a relationship between HRM practices and performance and well-being of 613 employees and the line manager in service sectors in UK. They found that trust moderates the relationship between HRM practices and performance as well as between

HRM practices and well-being. In other study, trust was also found to moderate the relationship between paternalistic leadership and ethical climate in a study conducted on 227 Turkish employees (Otken & Cenkci, 2011).

In a study involving organizational politics and organizational commitment, trust was found to moderate the relationship when tested on 142 academicians in one of the Israel major research universities (Vigoda-Gadot & Talmud, 2010). Trust also moderates the relationship between justice and commitment in a study involving 450 teachers in Taiwan (Ting, 2013). However, study involving trust as a moderator in a relationship between job satisfaction and work engagement is still limited especially in the context of the academician. Therefore, this study is aiming at testing the role of trust as a moderator in the relationship between job satisfaction and work engagement.

Trust between parties is an important antecedent of cooperative relationships between managers and employees. In organizational settings, trust can be an important determinant of productivity in individuals, groups, and the organization (Dirks &Ferrin, 2001, 2002; Kramer & Tyler, 1996; Rousseau, Sitkin, Burt & Camerer, 1998). Trust can exist between individuals, groups, and institutions and can represent either a global belief in humanity or a situation-specific and/or trustee-specific attitude (Butler, 1991). McAllister (1995) found that subordinates who reported higher levels of trust in their managers also reported higher levels of managerial effectiveness. In other writing, Yocum (2006) found that academic who displays a high level of integrity will probably inspire trust, and will probably inspire respect as well (Yocum, 2006). As reported by

Wicks, Berman and Jones (1999), trust is perhaps the most important construct in the academic/management relationship because optimal trust begins when the management develops some element of affect-based belief in the moral character of the academic, and in turn result in desirable outcomes such engagement. Therefore, it is argued that trust is likely to have a positive relationship with work engagement.

2.7   Conclusions and Research Issues to be Addressed

The above literature review indicates that studies on work engagement are enormous but there are still areas that need attention and deeply explore. Most of the past studies on work engagement have mainly focus on its' impact on outcomes such organizational commitment and organizational citizenship behavior. Thus, to further reconfirm the importance of work engagement as a critical determinant of organizational effectiveness, it is essential to test its effect on a broader range of outcome variables. In this study, the role of job demands and job resources are examine to see their effect on work engagement.

With regards to the factors that relating to work engagement, the literature reviewed has indicate limited studies that examine the influence of Job Demands-Resources Model on work engagement. Most of the studies in the past have focuses on factors such as leadership style, organizational justice and organizational commitment when predicting employees' work engagement (Beukes & Botha, 2013; Ghadi, Fernando & Caputi, 2013; Strom, Sears & Kelly, 2013). Studies that focusing on employees' perception of the job

characteristic-related factors as proposed by Job Demands-Resources Model such as workload, work pressure, autonomy, social support and performance feedback are still limited and inconclusive. If there were studies that focusing on the Job Demands-Resources Model and work engagement, the studies were conducted on other setting such as in the banking, manufacturing, healthcare and telecommunications rather than in the academic setting involving higher education institutions. Hence, this study aims to contribute to the body of knowledge on work engagement by examining the relationship between job demands (workload and work pressure), job resources (autonomy, social support, performance feedback) and work engagement among the academics.

Reviewing the literature also has indicate that the mediating role of job satisfaction on the relationship between job demands, job resources and work engagement has received less attention from researchers. Most studies in the past examined either the direct relationship between job demands, job resources and work engagement (Taipale, Selander, Antilla & Natti, 2011), the direct relationship between job demands, job resources and job satisfaction (Orgambidez-Ramos, Borrego-Ales & Mendoza-Siera, 2014), or the direct relationship between job satisfaction and work engagement (Avery, McKay & Wilson, 2007; Durand, 2008). Apart from that, past studies have also shown how the role of trust as a moderator in the relationship between job satisfaction and work engagement are still limited. Therefore, this study intends to expand the knowledge on academics' work engagement by examining the mediating role of job satisfaction and the moderating role of trust on the relationship between job demands, job resources and work engagement.

Lastly, the literature also revealed that most of the studies on work engagement have been concentrated in the context of Western countries such as the US, European countries, and Australia. Conducting similar studies in other parts of the world is important due to the differences in national and organizational cultures, policies, work environment, and leadership styles that might lead to different conclusions. Therefore, this study is focusing on work engagement issues among the academics in the Jordanian higher education context.

2.8   Underpinning Theory

2.8.1   Job Demands-Resources Model

Job Demands-Resources model is used to explain the direct relationship between job demand, job resources and work engagement. The model was developed by Bakker and Demerouti (2007), and Demerouti, Bakker, Nachreiner and Schaufeli (2001) which incorporates many possible working conditions, and focuses on both negative and positive indicators of employee well-being that can be applied to a wide range of occupations and be used to improve employee well-being and performance.

This model explain how two specific sets of work situations which are job demand and job resources will influence employees behaviors (Bakker & Demerouti, 2007; Bakker, Demerouti, De Boer, & Schaufeli, 2003; Bakker, Demerouti, & Verbeke, 2004; Demerouti et al., 2001). Job demands which include workload and work pressure can influence the academics negatively to engage with their job. For example, employee with

high demanding of workload can feel that they are not happy with their job and cannot put more effort on the job. Meaning that employees working in a high-strain job (characterized by workload and work pressure) experience the lower well-being (e.g., work engagement). Findings were found by Hakanen, Bakker and Demerouti (2005) where workload was negatively related to work engagement among the 1919 Finnish dentists. Similar findings were also found in Rothmann and Jordaan (2006) among academic staff in three higher education institutions in South Africa that job demands (workload) negatively related to work engagement.

On the other hand, the job resources justify that if the organization can provide the employees with good job resources such as autonomy, social support and performance feedback, they can boost their commitment to the organization. By providing them with relevant opportunities, they also can increase their competent and decision-making possibilities.

Schaufeli, Bakker and Van Rhenen (2009) found that increases in social support, autonomy, and performance feedback had positively predicted future work engagement and reduced registered sickness absenteeism. Employees will be more engaged in their work if they regard their work as challenging and have the freedom to be independent in their work tasks. In other study, Roberts and Davenport (2002) found that career development, identification with the organization and a rewarding work environment also increased the work engagement levels of employees.

Similar findings were also found in a study conducted by Rothmann and Jordaan (2006) where job resources (autonomy, social support, performance feedback) influenced strongly on academics' work engagement in higher education institutions. Academics tend to be more engaged in their work if the university provides them with valued resources to enhance their skills and abilities, and to manage their careers. In other study, Schaufeli and Bakker (2004) also found that work engagement is strongly predicted by job resources. Thus, it can be expected that job resources may have a positive relationship with work engagement. The academics will be more likely to engage in their work if they are given the autonomy, feedback and social support (e.g., good relationship with coworkers and management).

In the literature, many studies have shown how job demands and job resources have a profound impact on employee well-being (e.g. work engagement) (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2007; Van Den Broeck, Vansteenkiste, De Witte & Lens, 2008). For instance, research has discovered that job demands such as a high workload and work pressure may lead to sleeping problems, exhaustion, and impaired health (e.g. Doi, 2005; Halbesleben & Buckley, 2004), whereas job resources such as social support, performance feedback, and autonomy may initiate motivation which can lead to work engagement (e.g. Demerouti et al., 2001; Salanova et al., 2005; Taris & Feij, 2004). Therefore, the combination of JD-R will support and balance of the negative and positive employee's behavior in work place.

2.8.2   Social Exchange Theory

Social Exchange Theory (SET) which was introduced by Mauss (1954), Blau (1964) and Emerson (1976) is used to explain the indirect relationship between job demand, job resources and work engagement through job satisfaction. In other words, SET is applied to elaborate workplace behavior issues between employees and employers. On the other hand, this theory also suggests the interactions between both parties that generate obligations (Emerson, 1976). For example, one party works in ways that benefit another party, and establish commitment for future based on reciprocity rule and the other will follow the positive outcomes. Therefore, employees' evaluation of their exchange relationship with the organization and its representatives (i.e., academics) determines their attitudes and behavior (Blau, 1964).

The social exchange is the most accepted and widely used theory in recent research on work engagement. According to Saks (2006), a strong theoretical rationale for explaining employee engagement can be found in Social Exchange Theory (SET). This is becasuse the central tenet of the social exchange theory is that people make social decisions based on perceived costs and benefits. This assumption affirms that human being evaluate all social relationships to determine the benefits they will obtain out of such relationship (Homans, 1958; Blau, 1964). Saks (2006) also noted that, a good way for employees to repay their organization is through their level of engagement. Employees will choose whether or not to engage themselves in relation to the resources they get from their organization. This perception shows a reciprocal relationship between the supports

organizations give to their employees and employee's willingness to make the most of their individual and team performance.

Crawford et al., (2014) found that academics who are psychologically available, feel capable and prepared to invest their resources into role performances at work, while academics that are lack resources or feel distracted from investing them into role performances. Based on social exchange theory, academics feel obliged to engage as repayment for the resources they receive from their university (Saks, 2006). Academics protect themselves from job demands such as cognitive or emotional demands, workload, work pressure when they feel overwhelmed (Kahn & Heapy, 2014). They become distant towards their roles and other people, which imply that the authentic selves become unavailable for performance in a specific role (Rothman & Baumann, 2014).

Apart from that, Social Exchange Theory also provides a theoretical foundation to explain why academics choose to become more or less engaged in their work and university. When academics receive resources from their university, they feel obliged to repay the university with greater levels of engagement. Academics feel obliged to bring themselves more deeply into their role performances as repayment for the resources they receive from their university. On the other hand, when the university fails to provide the resources needed by the academics, the academics are more likely to withdraw and disengage themselves from their roles and job.

On the basis of Social Exchange Theory, researchers often expect employees who are satisfy with their jobs to perform better in these jobs and engage at work (e.g., Fried, Shirom, Gilboa, & Cooper, 2008; Fisher, 2003; Rayton & Yalabik, 2014). Thus, there is a theoretical possibility that job satisfaction may mediate the relationship between job demands, job resources and work engagement. This reciprocal exchange is grounded in social exchange theory (Blau, 1964) and the mutual transaction of benefits to each party shapes the social interactions. It is reasonable to assume that academics are more likely to respond favorably when the university provide the necessary resources rather than lack of resources. Indeed, the theory indicates the importance of resources as a basic for the well-being and satisfaction of academics (Blau, 1964). Therefore, academics are more likely to have a high degree of satisfaction and continue their employment with the universities when provided with job resources instead of treated them with job demands.

Social exchange theory (Blau, 1964) also suggests that academics engage in positive or negative behaviors toward the universities only in response to positive or negative actions that are seen to originate from the universities. This argument, in turn, suggest that job satisfaction may mediates the relationship between job demands-resources and work engagement. The researcher argues that theoretical frameworks, and the implicit mediation mechanisms, need to be extended to include factors that influence the perception of engagement such as job satisfaction.

2.8.3 Attribution Theory

Attribution theory emerged from Heider's (1958) psychology and subsequent reformulations by Jones and Davis (1965) and Kelley (1967). The theory rests on three assumptions: (a) that individuals attempt to determine the causes of both their and others' behavior; (b) that individuals do not assign causes of behavior randomly, and (c) that the causes attributed to behavior will influence subsequent behavior (Jones, 1979). Thus, attribution theory proposed that a person is an intuitive psychologist who seeks to explain behavior and to draw inferences about actors and environments based on beliefs. This theory is considered to be the most influential contemporary theory with implications for academic motivation (Weiner, 1992). It incorporates behavior modification in the sense that it emphasizes the idea that academics are strongly motivated by the pleasant outcome of being able to feel good about themselves (Weiner, 1980, 1992). Therefore, this theory is able to discuss the role of trust as a moderating variable in the relationship between job satisfaction and work engagement in the academic setting.

Recently many researchers have studied and applied the attribution theory to the issue of trust (e.g., Ferrin, Kim, Cooper & Dirks, 2007; Hansen, 2012; Jarvenpaa, Shaw & Staples, 2004; Tomlinson & Mayer, 2009; Wang & Huff, 2007). These studies indicate that trust in a relationship is enhanced to the extent that the other's trustworthiness can be ascribed to factors that are internal to the trust. Drawing on such insights, it is predicted that in an environment where trust is low, academics are expected to be more likely to attribute negative outcomes to situational causes and less likely to attribute positive

experiences to external causes. While, when trust is high the academics should be expected to be more likely attribute positive outcomes to situational causes and more likely to attribute positive experiences to external causes. Moreover, Dirks and Ferrin (2001) identify two explanations for the moderation effect: (1) trust affects how one assesses the future behavior of another party with whom one is interdependent (or who may take action that affects oneself), and (2) trust also affects how one interprets the past (or present) actions of the other party.

Trust provides the basis for academic's motivation, effective team-building and academic retention. Academics will be committed to the university if they trust the university's capabilities and its limitations. When trust is regarded as a guiding principle in the organizational culture, it will provide a university foundation to build job satisfaction and committed staff (DeFrank & Ivancevich, 1998). But, when trust becomes less than a back-and-forth commitment, there is a potential for a decrease in academic's job satisfaction and commitment to the task at hand and to the university as a whole.

Attribution theory suggests that causes of actions are attributed to internal characteristics of the other person when the behavior of others is consistent with prior expectations, and causes are attributed to external situational characteristics when the behavior is inconsistent with prior expectations (Jones & Nisbett, 1971). The moderation model suggests that trust does not directly elicit any particular behavioral outcomes, but influences how people interpret or evaluate information related to attitudes and behavior.

For example, the basis for the expectation that academics will perform above expectations is the establishment of trust. As trust in administrators increased, academics' perceptions of the success, accuracy and fairness of the academics also increases. When the sense of trust is strong between an academic and manager, it adds efficiency to other elements of workplace productivity, and improves the job security of academics. Creating an environment that make academics feel supported and valued will indirectly empowered and motivate academics to engage and give their best.

Trust plays a moderating role in situations or conditions with moderately strong structure where there is some guidance and information to assess the behavior of others, but still some ambiguity about what the other party's behavior means. Factors are present to influence attitudes and behaviors; trust is the lens through which these factors are interpreted. In situations (or conditions) with strong structure, external cues such as norms and rules will "over determine" how others behave. Such situations involve little uncertainty and ambiguity, and there is little role for trust to help make sense of others' behavior.

2.9   Research Framework

The research framework shown in Figure 2.1 is developed based on job demands-resources model (Bakker & Demerouti, 2007), social exchange theory (Emerson, 1976), attribution theory (Heider, 1958) 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), job satisfaction, trust, and work engagement. In this study, job demands and job resources are the independent variables, while work engagement is the dependent variable. This research framework also tested job satisfaction as the mediating variable in the relationship between job demands, job resources and work engagement, and trust as the moderating variable in the relationship between job satisfaction and work engagement.

For the independent variables, job demands and job resources are chosen based on the job demands-resources model. According to the job demands-resources model, the interaction between job demands and job resources is important in developing work strain and motivation which will impact on the work outcome such as work engagement. The model proposed that each job is associated with certain physiological or psychological costs or demands that will enhance the work engagement. Even though in the literature (e.g., Demerouti & Bakker, 2011) job demands are referred to the physical, psychological, social or organizational aspects of the job, this study only tested the psychological (cognitive and mental) aspect of the job. Psychological aspect is chosen as mental and cognitive demand is more relevant with the academics. In the academic setting, the nature of its work (research, publication, teaching) is more about processing of information, and therefore, mental aspect of job demands is more important in this type of occupation (Demerouti, Bakker, Nachreiner & Schaufeli, 2001, Demerouti, Bakker, De Jonge, Janssen, & Schaufeli, 2001).

On the other hand, job resources are the physical, psychological and organizational aspect of the job that will motivate employee to complete the task successfully. Similar to job demands, job resources are also referred to the physical, psychological, social or organizational aspects of the job. According to Demerouti and Bakker (2011), these resources can be located at the organizational, interpersonal and task level. For this study, job resources are measured at the interpersonal (social support) and task level (autonomy and performance feedback). Autonomy is related with more opportunities to cope with stressful situations (Jenkins, 1991; Karasek, 1998), and for this reason, autonomy could be greater essential for academics health and well-being. When performance feedback (specific and accurate information) is provided in a constructive manner, both the academics and the university's management might improve or change their performance. Evaluating academics for good performance may help retain their motivation and signals them to continue in this direction (Hackman & Oldham, 1980). Social support is a forthright resource, in that it is functional in attaining work goals. Thus, instrumental support from university might help to get the work done in time, and may therefore ease the impact of work overload on strain (Van der Doef & Maes, 1999).

Moreover, the finding in Rothmann and Jordaan's (2006) study revealed that job resources such as autonomy, social support impacted strongly on the work engagement of academics at higher education institutions. Hence, when higher education institutions provide enough job resources (e.g. autonomy, performance feedback, and social support), the long-term consequences comprise engagement at work and increase motivation and

commitment (Hobfoll, 1998). Academics at higher education institutions are expected to be able and willing to be invested in their jobs if two conditions are met: they must have the necessary resources available; and the university must be observed as providing the necessary work environment for employees to utilize their abilities and satisfy their needs. When resources are lacking, individuals cannot decrease the potentially negative effect of high job demands and they cannot achieve their work goals, and the long-term consequences comprise withdrawal from work and reduced motivation and commitment.

In this study, job satisfaction is chosen as the mediating variables based on the social exchange theory. The adoption of SET provides a new view to explain the improvement of job satisfaction and work engagement in the organization. Job satisfaction is used to reflect employee's feeling about the job elements in their workplace. Therefore, the perception of job behavior is explains by the relationship between job demand, job resources and work engagement.

Lastly, based on attribution theory, trust is tested as the moderating variable in the relationship between job satisfaction and work engagement. According to the theory, environment with low trust will contribute to negative job outcomes or employee behavior which caused by the situation that employee is in. For example, organization climates attribute the employee behavior to his believe and trust or disbelieve or distrust to his work.

Independent variables   **Mediating variables**   **Dependent**

variable
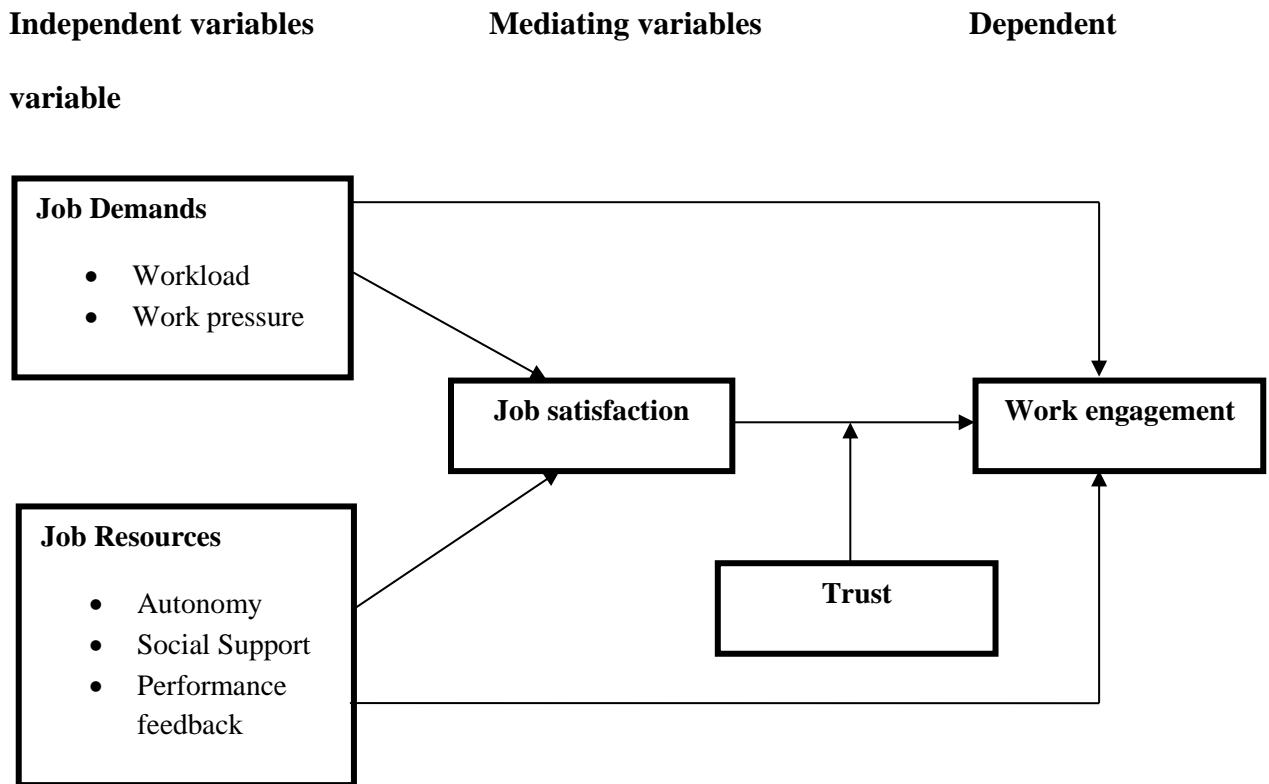
Figure 2.1
Research framework

2.10   Development of Hypotheses

2.10.1   Relationship between Job Demands and Work Engagement

Past studies have reported negative relationships between job demands (workload, work

pressure) and work engagement (Berkel, Proper, Boot, Bongers & Beek, 2011; Hakanen,

Bakker & Demerouti, 2005; Hu, Schaufeli & Taris, 2011; Inoue, Kawakami, Tsuno,

Shimazu, Tomioka & Nakanishi, 2013; Llorens, Bakker, Schaufeli, & Salanova, 2006;

Tomic & Tomic, 2011). For example, workload was found negatively correlated with

work engagement when tested on 169 hospital nurses where the higher the workload, the

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lower the vigor and dedication among the hospital nurses (Tomic & Tomic, 2011). Similar findings were also found by Hakanen, Bakker and Demerouti (2005) where workload was negatively related to work engagement among the 1919 Finnish dentists. In other study, Hu, Schaufeli and Taris (2011) 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), and to test the relationship between workload and work engagement. They found workload was negatively related to work engagement for both samples of respondents. In the academic setting, a study conducted by Rothmann and Jordan (2006) found that workload were negatively related to work engagement among 471 academic staff in South African higher education institutions.

Work pressure was found to be negatively related to work engagement in a study involving 154 employees from HR department from different industries in German (Kuhnel, Sonnentag and Bledow, 2012). Similar findings were also found when work pressure was tested on 274 teachers in Netherlands (Lorente, Salanova, Martinez & Schaufeli, 2008).In other study, Nahrgang, Morgeson and Hofman (2011) also found that work pressure tend to hinder 203 employees from USA from engaging in their work. Negative relationship between work pressure and work engagement was also reported in a study conducted by Taipale, Selander, Anttila and Natti (2011) on 7869 service sector employees from eight European countries. Based on these findings, the following research hypotheses are proposed:

H1a: Workload is negatively related to work engagement

H1b: Work pressure is negatively related to work engagement

2.10.2 Relationship between Job Resources and Work Engagement

Past studies have shown how job resources were positively related to job satisfaction (Bartram, Joiner & Stanton, 2004; Bratt, Broome, Kelber & Lostocco, 2000; Chu, Hsu, Price & Lee, 2003; Ko & Yom, 2003). For example, in one study, Bartram, Joiner and Stanton (2004) have investigated the effects of social support on job satisfaction among 157 registered nurses in a private hospital in Australia. They found that social support received from supervisors and co-workers increased job satisfaction among the respondents.

In other writing, Fried and Ferris (1987) have also reported how autonomy and feedback were strongly related to job satisfaction when reviewed 200 studies. Similar findings were also found by Brown and Peterson (1993) when they conducted 59 meta-analysis studies, and in a study involving 286 nursing staff of a large Malaysian hospital where feedback is a significant contributor of job satisfaction (Pearson & Chong, 1997).

Based on the above discussion, the following hypotheses are proposed:

H2a: Autonomy is positively related to work engagement

H2b: Social support is positively related to work engagement

H2c: Feedback performance is positively related to work engagement

2.10.3   Relationship between Job Demands and Job Satisfaction

Reviewing the literature showed that studies on job demand and job satisfaction have a negative relationship. For example, in a study conducted by Chandraiah, Agrawal, Marimuthu and Manoharan (2003) on 105 managers from six large industries in India has revealed negative relationship between workload and job satisfaction. Similar findings were also reported in several others studies such as in a study conducted by De Cuyper and De Witte (2006) on 568 employees from eight Belgian companies, and on 107 faculty members from public universities in Pakistan (Shahzad, Mumtaz, Hayat & Khan, 2010)

In terms of work pressure, Bhatti, Hashmi, Raza, Shaikh and Shafiq (2011) found that work pressure was negatively related to job satisfaction when tested on 400 public university's teachers in Pakistan. Similar findings were also reported in a study conducted by Kayatasha and Kayatasha (2012) on 268 private and public secondary school teachers in Nepal. Therefore, the study proposed the following hypotheses:

H3a: Work load is negatively related to job satisfaction

H3b: Work pressure is negatively related to job satisfaction

2.10.4 Relationship between Job Resources and Job Satisfaction

Past studies have shown how job resources were positively related to job satisfaction (Bartram, Joiner & Stanton, 2004; Bratt, Broome, Kelber & Lostocco, 2000; Chu, Hsu,

Price & Lee, 2003; Ko & Yom, 2003). For example, in one study, Bartram, Joiner and Stanton (2004) have investigated the effects of social support on job satisfaction among 157 registered nurses in a private hospital in Australia. They found that social support received from supervisors and co-workers increased job satisfaction among the respondents.

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Based on the above discussion, the following hypotheses are proposed:

H4a: Autonomy is positively related to job satisfaction

H4b: Social support is positively related to job satisfaction

H4c: Feedback performance is positively related to job satisfaction

2.10.5 Relationship between Job Satisfaction and Work Engagement

According to social exchange theory, individuals will be more motivated to engage in voluntary actions as a reciprocal response to their satisfaction (Murphy, Athanasou & King, 2002). It means that if employees are satisfied with their job, they will make extra contribution to the organization in return. As for this study, it was predicted that if

employees are satisfied with their jobs, they will be more engaged in their works. Empirically, previous studies have shown how job satisfaction was positively correlated with work engagement. Brunetto, Shacklock and Farr-Wharton (2012) for example, found that job satisfaction was positively related to work engagement when tested on 193 police officers in Australia. Similar findings were also reported in a study involving 901 individuals employed in wholesale, construction, finance and agriculture in United Kingdom (Avery, McKay & Wilson, 2007) and among 153 employees in surface coating manufacturing in Gauteng, South Africa (Durand, 2008).

In academic setting, though studies on the relationship between job satisfaction and work engagement are still limited, several studies have shown how job satisfaction were positively related to commitment. For example, a study conducted by Appaw-Agbola, Agbotse and Ayimah (2013) on 90 Ho Polytechnic lecturers has shown positive relationship between job satisfaction and commitment. Positive relationship between job satisfaction and commitment were also found among 320 lecturers at Universiti Teknologi MARA (Zainuddin, Junaidah & Nazmi, 2010).

Based on these analyses, the following hypothesis is proposed:

H5: Job satisfaction is positively related to work engagement

2.10.6 Job Satisfaction as a Mediator in the Relationship between Job Demand and Work Engagement

Studies that empirically tested job satisfaction as a mediating factor in the relationship between job demand and work engagement are still limited, especially in the academic context. In the past, job satisfaction has been found to mediate the relationship between job insecurity and affective commitment (Buitendach & De Witte, 2005); between role of stressors and organizational commitment (Yousef, 2002), and between role conflict, workload and intent to stay (Al-Omari, Qablan & Khasawneh, 2008)

In other studies such as in Malik, Waheed and Malik (2010), job satisfaction was found partially mediated the relationship between job stress (role overload and role conflict) and affective commitment among 151 branch managers of private sector commercial banks in Pakistan. In the academic context, a study conducted by Shahzad, Mumtaz, Hayat and Khan (2010) revealed a mediating effect of job satisfaction on the relationship of both faculty workload and compensation with academic quality among 107 faculty members working in Pakistan's public educational institutions.

Based on the above discussions, the following hypotheses are proposed:

H6a: Job satisfaction mediates the relationship between academic workload and work engagement

H6b: Job satisfaction mediates the relationship between work pressure and work engagement

2.10.7 Job Satisfaction as a Mediator in the Relationship between Job Resources and Work Engagement

Specific study that test job satisfaction as mediator in the relationship between job resources and work engagement is limited. In one study, job satisfaction was found mediated the relationship between autonomy, supervisory support and feedback and work engagement when tested on 745 employees of the Dutch-speaking part of 17 organizations in Belgium (Van den Broeck, Vansteenkiste, De Witte and Lens, 2008). Job satisfaction was also found either to mediate or partially mediates the relationship between job resources dimensions when tested on other variable apart from work engagement. For example, in a study conducted on 300 general managers and human resource managers of 5 star and chain hotels in Bodrum, Turkey, job satisfaction was found partially mediated the relationship between support and organizational commitment (Colakoglu, Culha & Atay, 2010). In other study, job satisfaction was found mediates the relationship between job characteristics such as autonomy and feedback and citizenship behavior when tested on 300 employees from different industries such as machine production, metal treatment, defense subcontractors, construction / earth moving machines and equipment, plastic, rubber, electrical and electronic products in Turkey (Ünüvar, 2006). In addition, job satisfaction was also found mediated the relationship between job autonomy, feedback and employee performance in a study involving 150 employees working in multinational industry in Pakistan (Ali & Zia-ur-Rehman, 2014).

Based on the above discussions, the following hypotheses are proposed:

H7a: Job satisfaction mediates the relationship between autonomy and work engagement

H7b: Job satisfaction mediates the relationship between social support and work engagement

H7c: Job satisfaction mediates the relationship between feedback performance and work engagement

2.10.8 Trust as a Moderator in the Relationship between Job Satisfaction and Work Engagement

Though there is a lack of study on trust that focusing on job satisfaction and work engagement, trust appears to play a positive and statistically significant role individually and in a moderating sense in other context. For example, trust has been found to increase firms' willingness to openly discuss one another's needs (Zaltman & Moorman, 1988), reduce negotiation costs (Zaheer, McEvily & Perrone, 1998), encourage exchange of information (Zand, 1972), develop long-term orientation (Doney & Cannon, 1997; Ganeson, 1994), and increase performance (Jap, Manolis, & Weitz, 1999).

Previous studies have also suggest that people who have high trust are more inclined to engage in pro-social behavior because they feel assured that others will reciprocate their good deeds in some appropriate way (Van Dyne, Vande Walle, Kostova, Latham & Cummings, 2000; Colquitt, Scott & LePine, 2007). In other writing, Rotter (1980) has

reported how people with high trust are less likely to lie, cheat or steal and they are more likely to respect the rights of others, are liked by others and are sought out as friends.

McKnight and Chervany (2001) assert that individuals, who are predisposed to trust others, generally tend to be less critical of others and are usually more likely to give other people the benefit of the doubt. Furthermore, Colquitt, Scott & Lepine (2007) in their meta-analytic study showed that trusting individuals are likely to refrain from engaging in counterproductive behaviors. Finally, high trust have been found to be less suspicious and therefore, less inclined to monitor the actions of others (Van Dyne, Vande Walle, Kostova, Latham & Commings, 2000).

Studies also have shown how trust moderates the relationship between HRM practices and employees' attitude in 46 Italian organizations (Innocenti, Pilati & Peluso, 2011). Trust also was found to moderate the relationship between organizational politics and organizational commitment among the 142 academician in one of Israel's major research universities (Vigoda, Gadot & Talmud, 2010). In other study, trust was found to moderate the relationship between justice and commitment among 142 academics in one of middle east's major research universities.

Therefore, based on this premise, the following hypothesis is proposed:

H8: Trust moderates the relationship between job satisfaction and work engagement

2.11 Conclusions

This chapter has presented the discussion on past and existing empirical works in the areas of work engagement, job demands, job resources, job satisfaction and trust. Empirical studies on the mediating effects of job satisfaction as well as the moderating effect of trust were also addressed. 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 THREE

METHOD

3.1 Introduction

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

3.2 Research Design

Quantitative research design is used in this study as it enables the researcher to test the relationship between the research variables (Kreuger & Neuman, 2006); can reliably determine if one idea or concept is better than the alternatives (Anderson, Sweeney & Williams, 2000); and is able to answer questions about relationships among measured variables with the purpose of explaining, predicting, and controlling phenomena (Leedy & Ormrod, 2005). Therefore, quantitative research design is more suitable for this study as it allows the testing of relationship between variables using statistical methods. This corresponds with the primary objective of this study, which is to examine the direct relationship between job demands, job resources and work engagement and between job demands, job resources and job satisfaction. Also, to examine the mediating effect of job satisfaction and the moderating effect of trust on the relationship between job demands, job resources, and work engagement. Second, it allows the analysis to be carried out on a large sample which can be generalized to the whole population. Third, the research

design permits the use of standard and formal sets of questionnaire to be distributed to every respondent.

Apart from that, this study is conducted in the natural environment of the organization where the researcher interference is minimal. According to Hair, Jr, Money, Samouel and Page (2007) and Zikmund (2003), conducting a study in a natural environment will create high external validity and the findings will be more robust, relevant and comprehensive.

For this study, the unit of analysis is at the individual level (academic staffs) and the primary data for this study was collected through distribution of questionnaire. Respondents' perceptions about the job demands such as workload and work pressure, and job resources such as autonomy, social support, and performance feedback become the basis for understanding their influence on work engagement. Therefore, it is suitable to use individual as a unit of analysis to test all the variables shown in the research framework.

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

3.3   Population and Sampling Design

3.3.1   Population

Based on the statistic given by the Ministry of Higher Education and Scientific Research, there are ten public universities in Jordan, located in three regions (South, Middle and North) with a total number of academic staffs, 6260 (Ministry of Higher Education and Scientific Research – Jordan, 2011). Table 3.1 shows the total number of academic staff for each of the universities in these three regions. Reason for choosing academics as the respondents for this study is due to the fact that the rapid changes imposed on the education sector by the successive government in Jordan made it an ideal setting for this research as it provides a context in which there is a need for committed and engaged academics to adopt with all the changes required by the government.

Since it was not practical to conduct a survey on all the ten public universities, only four universities were chosen. In this study, one university was chosen, each from the southern and northern region, while two universities were chosen from the middle region. These four universities (Mu'tah University, The University of Jordan, The Hashemite University and Yarmouk University) were chosen as they have the most number of academic staffs. Thus, the total population for this study was 3654.

Table 3.1
Distribution of public universities in Jordan

Region	University	Total number of academic staffs
South	**Mu'tah University**	**572**
	Al-Hussein bin Talal University	275
	Tafila Technical University	214
Middle	**The University of Jordan**	**1312**
	The Hashemite University	**687**
	Al-Balqa Applied University	474
	German Jordanian University	271
North	**Yarmouk University**	**1083**
	Jordan University of Science and Technology	1005
	Al al-Bayt University	367
	TOTAL	6260

3.3.2 Sampling Size

Due to a large number of study population, it is not practical to collect data from the whole population (Zikmund, 2003).Therefore, sampling process need to be done to determine the sampling size. In general, sampling process involved three steps which are identifying the population, identifying sample size and choosing the sample. As mentioned earlier, the total population is 3654. Based on the sample size table by Krejcie and Morgan (1970), the sample size for this study is 346.This means 346 academic staffs is needed to represent the whole study population. This sample size fit with Roscoe's rule

of thumb where a sample that is larger than 30 and less than 500 is appropriate for most research. However, the researcher has decided to distribute 700 questionnaires with the intention to receive higher response rate. As argued by Hair, Black, Babin, Anderson and Tatham (2006), a large sample size is needed to be able to generalize to the whole population.

3.3.3   Sampling Technique

In this study, all the 700 respondents from these four universities are selected base on a systematic random sampling. Systemic random sample reduced the potential for human bias in the selection of cases to be included in the sample and simple to implement. According to Gay and Diehl (1996), systematic random sampling involves six steps. First, define the population. In this study, the population is 3654. Second, determine the desired sample size. The sample size for this study is 700. Third, obtain a list of the population. The list was obtained from the universities under study. Fourth, determine the K by dividing population by the desired sample size. In this study, K is equal to 5 (3654/700 = 5.22). Fifth, determine the total respondent for each of the universities under study (refer Table 3.2). Sixth, researcher will pick a random number from the list of academic staff for each university as the starting number. Then every 5th name is automatically in the sample.

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

Probability sampling of academic staff = **NP / T*NS**

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

Table 3.2
Distribution of respondents for each university

Region	University	Total number of academic staffs (N = 3654)	Total respondents (S = 700)	% of sampling	Systematic random
South	Mu'tah University	572	110	16%	5th
Middle	The University of Jordan	1312	251	36%	5th
	The Hashemite University	687	132	19%	5th
North	Yarmouk University	1083	207	29%	5th
Total		**3654**	**700**	**100%**	

3.4 Operational Definitions and Measurements

The measurement adopted in this study and their operational definitions are discussed in several subsections. The discussion begins with the dependent variable and this followed by the independent variables, mediating variable and moderating variable.

3.4.1 Work Engagement Measures

Work engagement is a 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 & Baker, 2003). As shown in Table 3.3, work engagement was measured by 17 items developed by Schaufeli and Baker (2003). This 17-item work engagement instrument has been shown to be both reliable and valid for measuring work engagement. Several studies have reported that the instrument has adequate internal consistency (the Cronbach alphas ranging from .70 to.91) (De Braine & Roodt, 2011; Schaufeli & Bakker, 2004). 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. I find the work that I do full of meaning and purpose 3. Time flies when I'm not working 4. At my job, I feel strong and vigorous 5. I am enthusiastic about my job 6. When I am working, I forget everything else around me 7. My job inspires me 8. When I get up in the morning, I feel like going to work 9. I feel happy when I am working intensely 10. I am proud of the work that I do 11. I am immersed in my work 12. I can continue working for very long periods at a time	Schaufeli & Baker (2003)

13. To me, my job is challenging
14. I get carried away when I'm working
15. At my job, I am very resilient, mentally
16. It is difficult to detach myself from my job
17. At my work I always perserve, even when things do not go well

3.4.2 Job Demands Measures

Job demands are the independent variable. In this study, job demand is measured by academic workload and work pressure. Academic workload is operationalized as the professional effort of a faculty member devotes to activities like teaching, research, administration, and community services and other academic related tasks (Allen, 1996). Academic workload was measured by 10 items developed by Gillespie, et. al (2001) and Houston, Meyer & Paewai (2006). Past studies have reported that the instrument has adequate internal consistency (the Cronbach alphas ranging from .74 to .78) (Apaydin, 2012; Boyd, Bakker, Winefield, Gillepsie & Stough, 2010; Gillespie, et. al, 2001; Houston, Meyer & Paewei, 2006).

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). Past studies have reported that the instrument has adequate internal consistency (the Cronbach alphas ranging from .73 to .85) (Brenninkmeijer, Demerouti, le Blanc, & van Emmerik, 2010; De Braine & Roodt, 2011; Mauno, Kinnunen, & Ruokolainen, 2007; Shirom, Melamed, Rogowski, Shapira, & Berliner, 2009; Taipale, Selander, Anttila, & Nätti, 2011). 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 items

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

In this study, participants rated their degree of agreement with the 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 demand items

Variable	Components	Operational definition	Items	Authors
Job demands	Academic Workload	The total amount of time a faculty member devotes to activities like teaching, research, administration, and community services and other academic related tasks	1. I do not have enough time to perform quality research 2. The number of hours I am expected to teach has increased in recent years 3. The amount of administration I am expected to do is manageable, given my other responsibilities 4. My workload has increased over the past 12 months 5. I often need to work after hours to meet my work requirements 6. The amount of administration I am expected to do is reasonable 7. The number of students I am expected to teach and / or supervise is reasonable 8. I feel pressured to attract external research funding 9. I believe the promotions procedures recognize the variety of work that staff do 10. I believe that teaching and research achievements are considered equally by promotions committees	Gillespie, Walsh, Winefield, Dua& Stough (2001); Houston, Meyer & Paewai(2006)
	Work pressure	The degree to which an employee has to work fast and hard, has a great deal to do, and has too little time	11. My work requires working very hard 12. My work requires working fast 13. My work requires too much input from me 14. I have enough time to complete my job 15. My job often make conflicting demands on me	Karasek & Theorell (1990)

3.4.3 Job Resources Measures

Job resources are the second independent variable. In this study, job resources were measured by autonomy, social support and performance feedback. According to Karasek

(1985), autonomy is the extent of freedom, independence, and discretion of an employee to plan his/her work pace and method. 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). Items to measure autonomy and social support were adopted from Karasek (1985). The instrument has adequate internal consistency (the Cronbach alphas ranging from .70 to .84) (Brenninkmeijer, Demerouti, Blanc, & van Emmerik, 2010; Karasek, 1985; Lin, Oi-ling, Kan, & Xin-wen, 2009; Pienaar, Sieberhagen & Mostert, 2007). Minor changes have been made to the social support items where the word supervisor was replaced by the word Dean to suit the context of study. In the past, some authors have also made some changes to the original version of Karasek (1985) instrument. For example, Melchior, Caspi, Milne, Danese, Poulton and Moffitt (2007) have made minor changes to the original statement form items to a question form (e.g., "*When needed, my colleagues will help me*" to*"Do you get help and support from your colleagues?).* Similarly, Shirom, Toker, Alkaly, Jacobson and Balicer(2011) had also rephrased the original items from "*My supervisor is helpful in getting the job done*" to "*Supervisor was helpful in solving problems*".

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). Similarly, the word supervisor in the original items was replaced by the word Dean to suit the context of the study. In the past, authors such as Leung, Zhang and Skitmore (2008) and Goebel, Deeter-Schmelz and

Kennedy (2013) had also made minor changes to Sims, Szilagyi and Keller's (1976) original version of feeback performance. For example, the original item "*I receive enough information from my supervisor about my job performance*" was rephrased to "*It is hard to receive information from my supervisor on my job performance.*"

Apart from that, the response scale was also changed from its original knowledge of action scale to an agreement scale taking into consideration the difficulty for participants to rate whether the satement is true or not. In this study, participants rated their degree of agreement with the autonomy, social support and performance feedback statements based on five-point scale whereby, 1 = strongly disagree, and 5 = strongly agree. Table 3.6 shows the job resources items used in this study.

Table 3.6
Job resources items

Variable	Components	Operational definition		Items	Authors
Job resources	Autonomy	The extent of freedom, independence, and discretion of an employee to plan his/her work pace and method	1. 2. 3.	My job allows me to make a lot of decision on my job On my job, I have very little freedom to decide how I do my work I have a lot of influence about what happens on my job	Karasek (1985)
	Social support	Overall levels of helpful social interaction available on the job from co-workers and supervisors	4. 5. 6. 7. 8.	My Dean is concerned about the welfare of those under them My Dean pays attention to what I am saying My Dean is helpful in getting the job done My Dean is successful in getting people to work together People I work with are competent in doing their jobs	Karasek (1985)

		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

| Performance feedback | The extent to which an employee knows his / her own job performance from the job itself, colleagues, supervisors, or customers | 12. I receive enough information from my Dean about my job performance 13. I receive enough feedback from my Dean 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 | Sims, Szilagyi and Keller (1976) |

3.4.4   Job Satisfaction Measures

Job satisfaction is the mediating variable. In this study, job satisfaction is operationalized as an attitude that people have about their jobs and the organizations in which they perform these jobs (Weiss, Dawis, England & Lofquist, 1967). To measure job satisfaction, a short version of job satisfaction instrument developed by Weiss, Dawis, England and Lofquist (1967) was adapted. The adapted 20-item has been shown to be both reliable and valid for measuring job satisfaction. In past studies, the instrument has been reported to have an adequate internal consistency with Cronbach alphas ranging from .90 to .96 (Aydogdu & Asikgil, 2011; Van Wyk & Adonisi, 2008; Weiss, Dawis, England & Lofquist, 1967). The 20 items were rephrased by changing the wording of the original version from a short statement format to a full statement format to suit the agree-disagree response scale. In addition, words like organization and supervisor were also changed to University and Dean to suit the context of study. In the past, some authors

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have also made some changes to the original version of job satisfaction scale. Visser and Coetzee (2005) for example, made minor alteration in the wording of the original job satisfaction items such as adding the word satisfied in several items where appropriate. The original and adapted versions of the 20 items are shown in Table 3.7.

Table 3.7
Original and adapted versions of job satisfaction items

Original version	Adapted version
The chance to do different things from time to time.	I have the chance to do different things from time to time
The chance to try my own methods of doing the job	I have the opportunity to participate in determining the methods, procedures, and goals in my job
Being able to do things that don't go against my conscience	I have the ability to do things that do not go against my conscious
The chance to do things for other people	I have the chance to do things for other people
The chance to tell people what to do	I have the chance to tell people what to do
Being able to keep busy all the time	The work in this university keeps me busy all the time
The feeling of accomplishment I get from the job	I get the feeling of worthwhile accomplishment from the work in the university
The chance to do something that makes use of my abilities	I have the opportunity to perform up to my abilities
The chance to be "somebody" in the community	I feel satisfied with the extend to which my job gives me a definite place in the community
The chance to work alone on the job	I have the opportunity to work alone on my job
The freedom to use my own judgment	I have the freedom to use my own judgment at work
My pay and the amount of work I do	I feel that my salary is fair for the kind of job I perform
The way my job provides for steady employment	I feel satisfied with the way that the job provides for steady employment

Original version	Adapted version
The working conditions	I feel satisfied with the working conditions in the university (air-conditioning, lighting, ventilation, etc.)
The competence of my supervisor in making decisions	I feel satisfied with the way my Dean helps make my job more pleasant
The way my boss handles his/her workers	I am satisfied with the way my Dean feels each employee is important
The praise I get for doing a good job	I feel satisfied with the recognition I get for a job well done
The chance for advancement on this job	I am satisfied with the chance for advancement in this university
The way my co-workers get along with each other	I feel satisfied with the way my peers get along with one another
The way company policies are put into practice.	I am satisfied with the way work policies in this university are put into practice

The response scale was changed from its' original version of level of satisfaction scale to an agreement scale to suit the newly rephrased statement. Each respondent was asked the degree of agreement for each of the job satisfaction statement by using five-point scale whereby, 1 = strongly disagree, and 5 = strongly agree. Table 3.8 shows job satisfaction items used in the study.

Table 3.8
Job satisfaction items

Variable	Operational definition	Items	Authors
Job satisfaction	An attitude that people have about their jobs and the organizations in which they perform these	1. I have the chance to do different things from time to time. 2. I have the opportunity to participate in determining the methods, procedures, and goals in my job. 3. I have the ability to do things that do not go against my conscious.	Weiss, Dawis, England and Lofquist (1967)

jobs	4. I have the chance to do things for other people.
	5. I have the chance to tell people what to do.
	6. The work in this university keeps me busy all the time.
	7. I get the feeling of worthwhile accomplishment from the work in the university.
	8. I have the opportunity to perform up to my abilities.
	9. I feel satisfied with the extend to which my job gives me a definite place in the community.
	10. I have the opportunity to work alone on my job.
	11. I have the freedom to use my own judgment at work.
	12. I feel that my salary is fair for the kind of job I perform.
	13. I feel satisfied with the way that the job provides for steady employment.
	14. I feel satisfied with the working conditions in the university (air-conditioning, lighting, ventilation, etc.).
	15. I feel satisfied with the way my Dean helps make my job more pleasant.
	16. I am satisfied with the way my Dean feels each employee is important.
	17. I feel satisfied with the recognition I get for a job well done.
	18. I am satisfied with the chance for advancement in this university.
	19. I feel satisfied with the way my peers get along with one another.
	20. I am satisfied with the way work policies in this university are put into practice.

3.4.5 Trust Measures

In this study, trust is the moderating variable. Trust is operationalized as individuals' confidence and expectation about the actions of their organizations (Tyler, 2003). Measurement for trust was adapted from Tyler (2003). Several studies have reported that the instrument has adequate internal consistency (the Cronbach alphas ranging from.93 to .95 (Tyler, 2003; Tyler &Wakslak, 2004).

Four of the 7 items were rephrased to suit the context of study.In the past, some authors have also made changes to the original version of the Tyler (2003) trust instrument. For example, Maaniemi (2013) have rephrased the original items from "*My supervisor considers my views when decisions are being made*"to "*My supervisor treats me fairly when decisions are being made*." The original and adapted for the 4 items rephrased are shown in Table 3.9.

Table 3.9
Original and adapted versions of trust items

Original version	Adapted version
The authorities try hard to be fair to their employees	The university tries hard to be fair to their employees
My supervisor gives me honest explanations for decisions	My Dean gives me honest explanations for decisions
My supervisor considers my views when decisions are being made	My Dean considers my views when decisions are being made
My supervisor takes account of my needs	My Dean takes account of my needs

In this study, participants was asked to rate their degree of agreement for each of the trust statement based on five-point scale whereby, 1 = strongly disagree, and 5 = strongly agree. Table 3.10 shows the trust items used in this study.

Table 3.10
Trust items

Variable	Operational definition	Items	Authors
Trust	Individuals' confidence and expectations about the actions of their organizations	1. I am usually given an honest explanation for decisions 2. My views are considered when decisions are made 3. My needs are taken into account when decisions are made 4. The university tries hard to be fair to their employees 5. My Dean gives me honest explanations for decisions 6. My Dean considers my views when decisions are being made 7. My Dean takes account of my needs	Tyler (2003)

3.5   Questionnaire Design

All questionnaires were prepared in English, as professional-level workers such as academic staffs can and often do work in English. Each participant in this survey received nine-page questionnaire (with cover letter attached). The questionnaire used in this study is shown in Appendix A.

The nine-page questionnaire consisted of six sections. Section 1 asked about the work engagement and there are 17 items. Section 2 asked about job demands while Section 3 asked about job resources. Both sections consist of 15 items. In Section 4 of the questionnaire, there are 20 questions on job satisfaction. Section 5 asked about trust and there are 7 items.

The final section of the questionnaire, Section 6, is the demographic variables. A number of demographic variables will also be measured for descriptive and control purposes. These include gender, age, highest academic qualifications, total of basic salary received, number of years with the present organization and position. This information is necessary to show that the sample is representative and to ensure that generalizations to the wider population of organizations and employees can be made.

3.6   Pilot Test

Saunders, Lewis and Thornbill (2009) believed that it is always useful to carry out a pilot study before the actual data collection. A pilot study is not a pre-test, but it is used more formatively to help the researcher in constructing pertinent lines of questioning (Yin, 1994). It is done by testing and checking the questionnaire on a small sample of the subjects through the pilot study.

The purpose of conducting pilot study is to achieve a flawless questionnaire so that it would be possible for the researcher to take all the necessary modifications after the pilot study. As stated by Sekaran (2000), a pilot study is performed to correct any inadequacies in the instrument prior to data collection. In other words, the researcher would have a sufficient time to check the reliability, validity and viability of the research instrument as well as to determine the time needed for conducting the actual study.

For this study, the pilot test was conducted at Al-Balqa Applied University in December 2012.The questionnaire was distributed to 30 academic staffs. There were no changes required to the questionnaire. The internal consistency reliabilities (Cronbach's Alpha) of the research measures from the pilot study are reported in Table 3.11. As shown in Table 3.11, all variables have satisfactory reliability values ranging from .80 to .94.

Table 3.11
The Cronbach's Alpha for each research measures from the pilot study(n = 30)

Variable	No. of items	Cronbach's Alpha
Work engagement	17	0.88
Academic workload	10	0.84
Work pressure	5	0.91
Autonomy	3	0.80
Social support	8	0.94
Performance feedback	4	0.86
Job satisfaction	20	0.84
Trust	7	0.85

3.7   Data Collection Procedure

Questionnaires can be distributed through many ways such as self-administered, postal, telephone, internet or fax, and the choice normally depends on the researcher's preference, cost, time constraints, potential response rate and many other important criteria to a study (Frazer &Lawley, 2000). For this study, researcher has personally administered and collected the complete questionnaire. Personally administered

questionnaires have several advantages such as it provides a high response rate, reduces interviewer bias and gives the benefits of mutual personal contact (Oppenheim, 2000). It also permits the researcher to provide necessary explanations to clarify doubts or to put additional necessary information to the respondents as well as it allows the researcher to collect all completed questionnaires within a short period of time (Hayes, 2000; Sekaran, 2003).

The actual data collection began after the questionnaire was pilot tested. Written permission to conduct the study at the Jordanian public universities was first obtained from the management of each the four public universities under study (Mu'tah University, University of Jordan, Hashemite University, and Yarmouk University). The university's management was then issued a formal letter to all faculties at the respective university requesting for assistance and cooperation in allowing the researcher to collect data. Data were collected between January and April 2013. Respondents were assured that all the information given will remain confidential at all times and will be used for the study only. Respondents were given 30 minutes to complete the survey forms. Each meeting lasted between 30 to 60 minutes.

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   Factor Analysis

One important step in data analysis is to understand the dimensionality of variables in the proposed relationship in empirical research (Hair, Jr., Anderson, Tatham, & William 1998). Factor analysis enables the researcher to reduce the complexity of data and represent a lot of relationships in a simpler form. Therefore, factor analysis will be carried out to establish the interrelationships of variables that belong together and to summarize the information in a larger number of correlated variables into a smaller number of factors that are not correlated with each other of job demands-resources, job satisfaction, trust and work engagement.

3.8.2   Correlation Analysis

Pallant and Manual (2001) stated that correlation analysis is a statistical technique used to explain the strength and direction of the linear relationship between two variables. The correlation's degree is concerned to assess the strength and significance of a relationship between the variables. The ideal correlation of 1 or -1 indicates that the value of one variable can be determined accurately by knowing the value of other variable. Therefore, in order to determine the strength of the relationship between the variables in this study, the correlation technique will be used to understand the direction of the relationship and amount of correlation between that dimensions of independent variables (job demands-resources), mediating variable (job satisfaction), moderating variable (trust) and dependent variable (work engagement). Additionally, in order to interpret the value

between 0 (no relationship) and 1 (perfect relationship), Cohen's (1988) suggestion will be followed. When the value of r is between $\pm$ 0.1 to $\pm$ 0.29, the relationship is said to be small. The relationship is considered medium when r value is between $\pm$ 0.30 to $\pm$ 0.49, and the strength is large when r value is between $\pm$ 0.50 and above.

3.8.3 Regression Analysis

Multiple regression analysis is a statistical technique that can be used to analyze the relationship between a single dependent (criterion) variable and several independent (predictor) variables. The objective of multiple regression analysis is to use the independent variable whose values are known to predict the single dependent value selected by the researcher. Each independent variable is weighted by the regression analysis procedure to ensure maximal prediction from the set of independent variables. The set of weighted independent variables forms the regression variate, linear combination of the independent variables that best predicts the dependent variable (Hair, Jr., Black, Babin & Anderson, 2010). Furthermore, multiple regressions are important because it can forecast future outcomes. The purpose of performing a multiple regression is to determine the predictive power of the independent variables (in this study, job demands-resources) toward the dependent variable (work engagement). For moderating variable (trust) hierarchical regression analysis was used.

3.8.4 Test of Mediation

To test the mediation hypotheses, the bootstrapping method developed by Preacher and Hayes (2008) was employed. Moreover, Preacher and Hayes (2008) argued that this mediation testing procedure has more advantages than other techniques, such as the causal steps approach (Baron & Kenny, 1986). Secondly, this method can also be applied to small samples. The bootstrapping method, which is based on 5,000 bootstrap samples, is mainly used to test the mediation hypotheses where testing multivariate normality is not needed. Thirdly, this method employs only one single analysis to test the multiple mediator models. Therefore, the risk of making type I error is reduced. Moreover, the bootstrapping method is a non-parametric resampling procedure where the data set is repeatedly sampled and then indirect effect is estimated in each resampling data set. Therefore, in this study, SPSS will mainly be used to analyze the data, while the macro developed by Preacher and Hayes (2008), also known as the indirect macro, will be used to analyze the mediator effect. This study will be based on 5,000 bootstrap samples and a 95 percent confidence interval.

3.8.5 Test of Moderation

A moderator is an independent variable that affects the strength and / or direction of association between another independent variable and an outcome variable. A moderator variable may initially be analyzed in a multiple regression model as one of the independent variables. However, subsequent steps in the analysis may uncover two

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distinct regression slopes in the data that depend on the value of the moderator. The moderator interacts with the independent variable so that the independent variable's association with the outcome variable is stronger or weaker at different levels of the moderator variable. In other words, the association of the independent variable with the outcome variable depends on the value (or level) of the moderator variable (Cohen, 1988).

Though the approach to testing for statistical significance of a moderator effect varies if the independent variables are categorical or continuous, the general strategy is to test for an interaction using hierarchical multiple regression analysis. In the first step (or steps) of the regression, the independent variables (including the moderator) are entered into the model as predictors of the outcome variable. The independent variables do not have to be significant predictors of the outcome variable in order to test for an interaction in the next step. In a separate step, an interaction term (the product of two independent variables, which represent the moderator effect) is entered. If the interaction term explains a statistically significant amount of variance in the dependent variable, a moderator effect is present.

3.9   Conclusions

This chapter has explained the research method and strategy for the study. It described how the sample of organizations was obtained, the selection of the respondents, development of the questionnaire, the research materials, and the survey procedure. This chapter also briefly explains the adoption of several analyses such as correlation and

regression analysis to test the research hypotheses. The results of the study are reported in

Chapter 4.

CHAPTER FOUR

FINDINGS

4.1 Introduction

Chapter 4 reports results of the study. The chapter begins by reporting the response rate and the demographic characteristics of the participants. It then presents the data screening process. The discussions continue with a report on factor analysis, correlation analysis and regression analysis. The chapter ends with a discussion on mediating and moderating analysis.

4.2 Response Rate

As discussed in Chapter 3, data for this study was collected through questionnaire. A total of seven hundred questionnaires were distributed between January and April of 2013. Respondents were given a day to complete the questionnaire. At the end of the survey period, a total of 567 were returned, yielding a return rate of 81%. Thirty-five respondents' data were excluded as they failed to complete the survey. Therefore, data from 532 participants are potentially available for further analysis. Table 4.1 presents the summary of respondents' response rate.

Table 4.1
Respondents' response rate

University	Total survey distributed	Total survey received	Percentage
Jordan University	251	236	89%
Mu'tah University	110	108	77%
Yarmouk University	207	128	58%
Hashemite University	132	95	77%
Total	**700**	**567**	**81%**

4.3   Demographic Characteristics of the Participants

Detailed descriptive statistics of the participants' demographic characteristics are presented in Table 4.2. It is noted that 81% of the 532 participants in this survey were males. The average age of the participants was 51 years old. Out of 532 participants, 86.2% were married. All the participants in this survey (100%) had higher academic qualifications of doctoral degree. Majority of the participants (53.9%) had a monthly income between USD20001 and USD3000. Most of the participants had served their university (55.3%) and had been in their present position (42.87%) between 1 to 3 years.Associate Professor made up 35% of the total participants. The rest consisted of professor, assistant professor, instructor and lecturer.

Table 4.2
Demographic characteristics of the participants (n=532)

Description	Frequency	%	Mean	Std. Dev.	Median	Min	Max
Gender							
Male	430	81					
Female	102	19					
Age							
Total response	532	100	51.22	7.35	54.00	35	69
Marital Status							
Single	73	13.8					
Married	459	86.2					
Divorced/Separated/Widowed	0	0					
Highest Academic Qualification							
Master' Degree	0	0					
Doctoral Degree	532	100					
Monthly Salary							
Below USD 2000	223	41.7					
USD 2001 – USD 3000	286	53.9					
USD 3001 – USD 4000	23	4.4					
Above USD 4000	0	0					
Years with present university							
Less than a year	107	20.2					
1 – 3 years	295	55.3					
4 – 7 years	94	17.7					
More than 7 years	36	6.9					
Years in present position							

Description	Frequency	%	Mean	Std. Dev.	Median	Min	Max
Less than a year	116	21.7					
1 – 3 years	226	42.87					
4 – 7 years	104	19.4					
More than 7 years	86	16.1					
Current position							
Professor	11	2.1					
Associate Professor	184	35.1					
Assistant Professor	140	26.1					
Lecturer	109	20.2					
Instructor	88	16.5					

4.4   Data Screening

Prior to the primary analyses, the data were examined for data entry accuracy, outliers, and distributional properties. Data screening was conducted by examining basic descriptive statistics and frequency distributions. Data screening is significant in the earlier steps as it affects the decisions taken in the steps that follow.The procedures comprise four assumptions: identification of missing data, outliers, normality, linearity and homoscedasticity.

The data were carefully examined for missing information. Descriptive data results showed that out of 532 returned questionnaires, 19 had missing information. For this study, the mean replacement method was applied as the missing data values were found to be missing in a totally random manner (Hair et al., 2006; Pallant, 2011).

Eleven cases were found to be outlier (47, 60, 321, 344, 404, 412, 419, 453, 458, 488 and 493). Since the mean values of these cases were similar, and the fact that the values were not too different to the remaining distribution, these cases were retained in the datasets for further analysis as suggested by Tabachnick and Fidell (2001). The results for outliers of variables outputs analysis are presented in Appendix B8.

Normality test is conducted using histograms, skewness and kurtosis. For this study, it was found that none of the variables had skewness greater than .511 or a kurtosis index greater than .659. Therefore, the data appeared to have a normal distribution. In addition, all histograms used for checking normality showed that the scores to be reasonably normally distributed, implying that data was approximated for all variables at a normal curve. The results for normality of variables outputs analysis are given in Appendix B4.

Finally, results of linearity and homoscedasticityfor all variables through the scatter plot diagrams indicates no evidence of nonlinear patterns and a visual inspection of the distribution of residuals suggested an absence of heteroscedasticity for the variables. The results of linearity and homoscedasticity for all the variables can be found in Appendix B6.

Concerning to multicollinearity, the results showed that the tolerance values were between 0.826 and 0.959, and the variance inflation factor (VIF) value ranged from 1.059 to 1.210. Given that the tolerance value is substantially greater than 0.10 and the VIF

value is less than 10, indicates the multicollinearity was not a problem.The results of all variables can be found in Appendix B7.

4.5   Factor Analysis

The research design is based on different sets of measures that reflected the different dimension of the broader concepts of work engagement, job demands and job resources, job satisfaction and trust. Exploratory factor analysis (EFA) was used to ascertain whether the survey questions loaded on the respective dimensions for measurement of job demands, job resources, job satisfaction, trust and work engagement. Principal components analysis with a varimax rotation was used for identifying the variables associated with a specific factor used in this study and for data reduction to eliminate those questions that did not load significantly on any factor.

There are two steps of validation processes conducted in this study. The first step was checking the KMO and the Bartlett's Test table, and second was inspecting the component matrix table and rotated component matrix table. According to Pallant (2011), the data is suitable for factor analysis if the KMO value is 0.6 and above and Bartlett's Test of Sphericity significant value is 0.05 or smaller. Pallant (2011) also suggests that the value of the correlation in component matrix is 0.3 or greater. In this study, if the value were less than 0.3, the item will be deleted. According to Sekaran (2003), the value of less than 0.3 indicates that the item is measuring something different from the whole scale.

4.5.1   Work Engagement Measurement

Table 4.3 and Table 4.4 show the factor analysis results for work engagement. Result in Table 4.3 shows the value of KMO was 0.753, which was more than 0.60 and the Bartlett's test was highly significant (p=0.000). Therefore, factor analysis was appropriate for this data.

Table 4.3
KMO and Bartlett's test of work engagement

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.753
Bartlett's Test of Sphericity	Approx. Chi-Square	3498.809
	df	91
	Sig.	.000

Varimax rotated principal components factor was conducted on the 17-items for the work engagement scale and revealed that the factor explained a total variance of about 64.3%. Factor analysis results in Table 4.4 shows that 14 of 17 items in the work engagement were greater than 0.3 and could be retained for further analysis. Items 4, 5 and 13 were deleted from further analysis because their values were less than 0.3.

Previous studies have indicated that the three dimensions of work engagement are highly correlated (Schaufeli & Salanova, 2007). Schaufeli and Salanova (2007) reported that, the average correlation between the three engagement dimensions has been found to be

around 0.65. Due to the high correlation between the three dimensions of work engagement, several authors have suggested that the composite score of work engagement can also be used for empirical research (Bakker & Demerouti, 2008).

Some researchers have used the sum of the components as a measure for work engagement (e.g., De Lange, De Witte, & Notelaers, 2008; Sonnentag, 2003; Wang & Hsieh, 2013). These researchers had followed the recommendation of Sonnentag (2003) and Schaufeli, Bakker and Salanova (2006) and had computed the overall work engagement factor score.Therefore, in the current study, the mean value of the 14 items included in the Utrecht Work Engagement Scale was calculated to determine the overall score for work engagement.

Table 4.4
Rotated component matrix of work engagement

Rotated Component Matrix of Work Engagement			
	Component		
	1	2	3
1. At my work, I feel that I am bursting with energy.			.854
2. At my job, I feel strong and vigorous.			.690
3. When I get up in the morning, I feel like going to work.			.809
4. At my work I always persevere, even when things do not go well.			.829
5. I find the work that I do full of meaning and purpose.		.885	
6. I am enthusiastic about my job.		.741	

7. My job inspires me.		.779
8. I am proud of the work that I do.		.775
9. To me, my job is challenging.		.757
10. Time flies when I'm working.	.887	
11. I feel happy when I am working intensely.	.782	
12. I am immersed in my work.	.751	
13. I get carried away when I'm working.	.760	
14. It is difficult to detach myself from my job.	.840	

4.5.2   Job Demands Measurement

Table 4.5 and Table 4.6 present the factor analysis results of the job demands measurements. Results in Table 4.5 show that the value of KMO is 0.868, which is more than 0.60 and the Bartlett's test is highly significant (p=0.000). Therefore, factor analysis is appropriate for this data.

Table 4.5
KMO and Bartlett's test of job demands

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.868
Bartlett's Test of Sphericity	Approx. Chi-Square	3391.078
	df	66
	Sig.	.000

When varimax rotated principal components factor was conducted on the 15-item scale, the items were divided into academic workload that contained ten (10) items and work pressure that contained five (5) items. All the items extracted recorded a correlation in the component matrix of 0.3, except 2 items from academic workload and one item from work pressure. These 3 items were dropped from further analysis.

The surviving 8 items for academic workload had loadings of between 0.618 and 0.825 and had been validated in previous studies (Boyd, Bakker, Winefield, Gillespie, & Stough, 2010; Houston, Meyer, & Paewai, 2006). The surviving 4 items for work pressure recorded loading of between 0.801 and 0.895 and had been validated in previous studies (e.g., Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003; Dikkers, Jansen, de Lange, Vinkenburg, & Kooij, 2010). Factor analysis results from Table 4.6 shows that all twelve (12) items for job demands had a correlation value in the component matrix of greater than 0.3. Therefore, all items were retained for further analysis.

Table 4.6
Rotated component matrix of job demands

Rotated Component Matrix of Job Demands		
	Component	
	Workload	**Work pressure**
1. I do not have enough time to perform quality research.	.618	
2. The amount of administration I am expected to do is manageable, given my other responsibilities.	.708	
3. My workload has increased over the past 12 months.	.683	
4. I often need to work after hours to meet my work requirements.	.726	

5. The amount of administration I am expected to do is reasonable.	.825	
6. I feel pressured to attract external research funding.	.805	
7. I believe the promotions procedures recognize the variety of work that staff do.	.785	
8. I believe that teaching and research achievements are considered equally by promotions committees.	.747	
1. My work requires working very hard.		.895
2. My work requires working fast.		.876
3. My work requires too much input from me.		.801
4. My job often make conflicting demands on me		.877

4.5.3 Job Resources Measurement

Table 4.7 and Table 4.8 show the factor analysis results for the job resources. Results in Table 4.7 show the value KMO is 0.718, which was above 0.60 and the Bartlett's test was highly significant (p=0.000). Therefore, factor analysis is appropriate for this data.

Table 4.7
KMO and Bartlett's test of job resources

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.718
Bartlett's Test of Sphericity	Approx. Chi-Square	3683.526
	df	78
	Sig.	.000

The varimax rotated principal components factor was then conducted on the job resources of a 15-item scale. It revealed three structural factors. The correlation matrix also revealed that most items coefficients were 0.3 and above. The 15 items loaded on three factors were labeled as job resources. Factor analysis results from Table 4.8 show that of the fifteen (15) items in the job resources, items 2 and 6 from social support were below 0.3, so 13 items are retained for further study. The items were three (3) for autonomy with loadings between 0.808 and 0.901, six (6) for social support with recorded loadings between 0.470 and 0.915, and four (4) for performance feedback with recorded loadings between 0.724 and 0.823.

Table 4.8
Rotated component matrix of job resources

Rotated Component Matrix of Job Resources			
		Component	
	Social support	Performance Feedback	Autonomy
1. My job allows me to make a lot of decision on my own.			.901
2. On my job, I have very little freedom to decide how I do my work.			.808
3. I have a lot of influence about what happens on my job.			.856
1. My Dean is concerned about the welfare of those under them.	.905		
2. My Dean is helpful in getting the job done.	.915		
3. My Dean is successful in getting people to work together.	.470		
4. People I work with are competent in doing their jobs.	.579		
5. People I work with are friendly.	.815		
6. When needed, my colleagues will help me.	.720		

1. I receive enough information from my Dean about my job performance.	.773
2. I receive enough feedback from my Dean on how well I am doing.	.774
3. There is enough opportunity in my job to find out on how I am doing.	.724
4. I know how well I am performing on my job.	.823

4.5.4 Job Satisfaction Measurement

Table 4.9 and Table 4.10 show the factor analysis results for the job satisfaction. Results in Table 4.9 above show that the value of KMO was 0.960, which was above 0.60 and the Bartlett's test was highly significant (p=0.000). Therefore, the factor analysis was appropriate for this data.

Table 4.9
KMO and Bartlett's test of job satisfaction

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.960
Bartlett's Test of Sphericity	Approx. Chi-Square	6235.006
	df	153
	Sig.	.000

When Moorman (1993) conducted factor analysis on the Minnesota Satisfaction Questionnaire (MSQ), he found two factors: one is assessing satisfaction with intrinsic

aspects of the job and the other assessing satisfaction with the extrinsic aspects. In other writing, Schriesheim, Powers, Scandura, Gardiner and Lankau (1993) found a structure comprising 3 subscales: intrinsic, extrinsic and general satisfaction.

In this study, varimax rotated principal components factor was conducted on the 20- item scale and revealed a one-factor structure that explained a total variance of about 51.26%. The factor loading had values between 0.645 and 0.809. Given that all the items extracted were recorded a level of above 0.3, none of the items were deleted. All the 20 items were loaded on a single factor and labeled as job satisfaction. Factor analysis result from Table 4.10 showed that 18 of the items in the job satisfaction were greater than 0.3. Items 6 and 12 were dropped, and 18 items are retained for further analysis.

Table 4.10
Rotated component matrix of job satisfaction

Component Matrix of Job Satisfaction	
	Component
	Job Satisfaction
1. I have the chance to do different things from time to time.	0.808
2. I have the opportunity to participate in determining the methods, procedures, and goals in my job.	0.645
3. I have the ability to do things that do not go against my conscious.	0.745
4. I have the chance to do things for other people.	0.712
5. I have the chance to tell people what to do.	0.734
6. I get the feeling of worthwhile accomplishment from the work in the university.	0.767
7. I have the opportunity to perform up to my abilities.	0.784

8. I feel satisfied with the extent to which my job gives me a definite place in the community.	0.725
9. I have the opportunity to work alone on my job.	0.753
10. I have the freedom to use my own judgment at work.	0.745
11. I feel satisfied with the way that the job provides for steady employment.	0.784
12. I feel satisfied with the working conditions in the university (air-conditioning, lighting, ventilation, etc.).	0.750
13. I feel satisfied with the way my Dean helps make my job more pleasant.	0.729
14. I am satisfied with the way my Dean feels each employee is important.	0.725
15. I feel satisfied with the recognition I get for a job well done.	0.776
16. I am satisfied with the chance for advancement in this university.	0.738
17. I feel satisfied with the way my peers get along with one another.	0.733
18. I am satisfied with the way work policies in this university are put into practice.	0.680

4.5.5   Trust Measurement

Table 4.11 and Table 4.2 show the factor analysis results for the trust measurement. Results in Table 4.11 show that the value of KMO was 0.864, which is above 0.60, and the Bartlett's test is highly significant (p=0.000). Therefore, factor analysis was appropriate for this data.

Table 4.11
KMO and Bartlett's test of trust

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.864
Bartlett's Test of Sphericity	Approx. Chi-Square	2710.345
	df	21
	Sig.	.000

Varimax rotated principal components factor was conducted on the 7-item scale and revealed a one-factor structure that explained a total variance of about 65.2%. The factor loading indicated a value between 0.632 and 0.897. All the 7 items were loaded on a single factor and labeled as trust. Factor analysis result from Table 4.12 above shows that all seven (7) items in the trust were greater than 0.3 so all items are retained for further analysis.

Table 4.12
Rotated component matrix of trust

Component Matrix of Trust	
	Component
	Trust
1. I am usually given an honest explanation for decisions.	.789
2. My views are considered when decisions are made.	.859
3. My needs are taken into account when decisions are made.	.897
4. The university tries hard to be fair to their employees.	.632
5. My Dean gives me honest explanations for decisions.	.749

| 6. My Dean considers my views when decisions are being made. | .884 |
| 7. My Dean takes account of my needs. | .809 |

4.6   Correlation Analysis

Table 4.13 presents the means, standard deviations, and Pearson correlations of variables for the 532 participants. 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 4.13, the Cronbach's alpha for work engagement was .75, job satisfaction was .95 and trust was .90. For the job demands, the Cronbach's alpha of the two components (workload and work pressure) have satisfactory reliability values of .88 and .90. The Cronbach's alpha for the three components of job resources (autonomy, social support, performance feedback) have also satisfactory reliability values ranging from .77 to .83.

Table 4.13 revealed significant negative relationships between all of job demand components and work engagement, with correlation coefficients between -.40 and -.51. This result indicates that participants who report higher workload and work pressure also tend to report a lower engagement towards their work.

Also, there were significant positive relationships between all job resources components and work engagement, with correlation coefficients between .21 and .53. These results

imply that the more participants received autonomy, social support and performance feedback, the more engaged they were with their work.

There were also significant negative correlations between all job demand components and job satisfaction, with correlation coefficient between -.33 and -.75. Hence, the more participants report they had higher workload and work pressure, the less satisfied they were with their job.

Table 4.13 also shows a significant positive relationship between all job resources components and job satisfaction, with correlation coefficient between .20 and .28. The results indicate that the more the participants received autonomy, socials support and performance feedback, the more they feel satisfied with their work.

Lastly, participants' rating of job satisfaction was significantly positively correlated with the work engagement ($r = .54$, $p<.01$), suggesting that the more participants were satisfied with their job, the more engaged they were.

Table 4.13

Descriptive statistics, scale reliabilities, and correlations of variables

		N	Mean	S.D.	1	2	3	4	5	6	7
1	Academic workload	532	2.06	0.52	(.88)						
2	Work Pressure	532	2.42	0.90	.27**	(.90)					
3	Autonomy	532	3.77	0.82	-0.05	-.30**	(.82)				
4	Social Support	532	3.57	0.78	-.12**	-13**	-.06	(.83)			
5	Performance Feedback	532	3.57	0.78	-.18**	-0.16**	.08	.12**	(.77)		
6	Job Satisfaction	532	3.72	0.71	-.33**	-.75**	0.28**	.20**	.25**	(.95)	
7	Work Engagement	532	3.71	0.46	-.40**	-.51**	.53**	.25**	.21**	.54**	(.75)

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

4.7   Multiple Regression Analysis

4.7.1   Relationship between Job Demands, Job Resources and Work Engagement

As shown in Table 4.14, 54% (R^2 = .54, F = 122.71, 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 (β = -0.265, p<0.01) and work pressure (β = -0.264, p<0.01) were found negatively related to work engagement, while autonomy (β = 0.446, p<0.01), social support (β = 0.263, p<0.01), and performance feedback (β = 0.063, p<0.05) were positively related to work engagement. Therefore, Hypotheses 1a, 1b, 2a, 2b and 2c were supported. The results suggest that academics with high workload and work pressure tend to have lower work engagement. However, work engagement among the academics tends to increase when they are provided with autonomy, social support and performance feedback.

Table 4.14
Regression results of workload, work pressure, autonomy, social support and performance feedback on work engagement

Independent variables	Dependent variable	t	Sig.	Tolerance	VIF
	Work engagement				
	(Std Beta)				
Workload	-.265**	-8.50	0.000	0.901	1.11
Work Pressure	-.264**	-8.11	0.000	0.826	1.21
Autonomy	.446**	14.27	0.000	0.900	1.11

Social support	.263**	6.78	0.000	0.959	1.04
Performance feedback	.063*	2.07	0.038	0.945	1.05
F value	122.71				
R²	0.54				
Adj.R²	0.53				
Durbin-Watson	1.757				

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

4.7.2 Relationship between Job Demands, Job Resources and Job Satisfaction

Results in Table 4.15 show that 60.1% (R^2 = .601, F = 158.44, p < .01) of the variance in job satisfaction was significantly explained by workload, work pressure, autonomy, social support and performance feedback. In the model, workload (β = -0.111, p<0.01) and work pressure (β = -0.670, p<0.01) were found negatively related to job satisfaction, while autonomy (β = 0.073, p<0.05), social support (β = 0.093, p<0.01), and performance feedback (β = 0.100, p<0.05) were positively related to work engagement. Therefore, Hypotheses 3a, 3b, 4a, 4b and 4c were supported. The results suggest that academics with high workload and work pressure tend to be less satisfied with their work. But, job satisfaction among the academics tends to increase when they are provided with autonomy, social support and performance feedback.

Table 4.15

Regression results of workload, work pressure, autonomy, social support and performance feedback on job satisfaction

Independent variables	Dependent variable	t	Sig.	Tolerance	VIF
	Job satisfaction				
	(Std Beta)				
Academic workload	-.111**	-3.84	0.000	0.901	1.11
Work Pressure	-.670**	-22.11	0.000	0.826	1.21
Autonomy	.073*	2.52	0.012	0.900	1.11
Social support	.093**	3.19	0.001	0.959	1.04
Performance feedback	.100*	3.52	0.000	0.945	1.05
F value	158.44				
R^2	0.601				
Adj.R^2	0.60				
Durbin-Watson	1.67				

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

4.8 Linear Regression Analysis

Results in Table 4.16 shows that 28.6% (R^2 = .286, F = 212.45, p < .01) of the variance in work engagement was significantly explained by job satisfaction. In the model, job satisfaction (β = 0.535, p<0.01) was found positively related to work engagement. Therefore, Hypothesis 5 was supported. The results demonstrate that academics who are satisfied with their job are more engaged in what they do.

Table 4.16

Regression results of job satisfaction on work engagement

Independent variable	Dependent variable	t	Sig.	Tolerance	VIF
	Work Engagement				
	(Std Beta)				
Job satisfaction	.535**	14.57	0.00	1.00	1.00
F value	212.45				
R²	0.286				
Adj.R²	0.285				
Durbin-Watson	1.78				

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

4.9   Multiple Regression Analysis

4.9.1   Mediating Effect of Job Satisfaction

This section discusses the effect of job satisfaction on the relationship between workload, work pressure, autonomy, social support, performance feedback and work engagement (Hypotheses 6a, 6b, 7a, 7b and 7c). To analyze the mediation hypotheses, the bootstrapping method developed by Preacher and Hayes (2008) was employed. Moreover, Preacher and Hayes (2008) argued that this mediation testing procedure has more advantages than other techniques, such as the causal steps approach (Baron & Kenny, 1986). For example, the multiple mediators can be tested either simultaneously or separately. Secondly, this method can also be applied to small samples. The

bootstrapping method, which is based on 5,000 bootstrap samples, is mainly used to test the mediation hypotheses, and there is no need to test multivariate normality. Thirdly, this method employs only one single analysis to test the multiple mediator models. Therefore, the risk of making type I error is reduced. Moreover, the bootstrapping method is a non-parametric resampling procedure; the data set is repeatedly sampled and then indirect effect is estimated in each resampling data set. Therefore, in this study, SPSS was mainly used to analyze the data, while the macro developed by Preacher and Hayes (2008), also known as the indirect macro, was used to analyze the mediator effect. The analysis was based on 5,000 bootstrap samples and a 95 percent confidence interval.

The results presented in the Table 4.17 were based on 5000 bootstrapped samples using bias-corrected and accelerated 95% confidence intervals (Preacher & Hayes, 2008) and showed that the indirect effect of job satisfaction is indeed significantly different from zero at $p < .01$. The procedure for testing mediation as presented in Table 4.17 showed that the indirect effect of workload ($\beta = -.13$, $p < .01$) and work pressure ($\beta = -.13$, $p < .01$) on work engagement through job satisfaction was negative and significant. As for the autonomy ($\beta = .066$, $p < .01$) and social support ($\beta = .032$, $p < .01$), and performance feedback ($\beta = .075$, $p < .01$) the indirect effect on work engagement were positive and significant. Since a # b # c is positive, the type of mediation is classified as partial mediation. Therefore, Hypothesis 6a, 6b, 7a, 7b and 7c are partially supported.

Table 4.17

Summary of mediation test (job satisfaction) in the relationship between workload, work pressure, autonomy, social support, performance feedback and work engagement

Variable							Bootstrap Results for Indirect Effect			
IV	M	DV	Effect IV on M (a)	Direct effect M on DV (b)	Effect IV on DV (c)	Direct effect IV on DV (c')	Indirect Effect	SE	BCa 95% CI (5000 bootstraps)	
									Lower	Upper
Workload	JS	WE	-.45**	.29**	-.35**	-.22**	-.13**	.017	-.17	-.10
Work pressure			-.60**	.23**	-.26**	-.12**	-.13**	.020	-.18	-.09
Autonomy			.24**	.27**	.30**	.23**	.066**	.009	.05	.09
Social support			.18**	.33**	.15**	.09**	.032**	.013	.03	.09
Performance feedback			.22**	.33**	.13**	.05**	.075**	.013	.05	.10

*IV = Independent Variable, M = Mediating Variable, DV = Dependent Variable, SE = Standard Error, JS = Job Satisfaction, WE = Work Engagement, CI = confidence interval **p<.01*

4.10 Hierarchical Multiple Regression Analysis

4.10.1 Moderation effect of Trust

To test Hypothesis 8, hierarchical multiple regression analysis is performed. As shown in Table 4.18 job satisfaction variable was entered in Step 1 and explained around 28.6% of the work engagement variance.The result showed that the job satisfaction has a significant influence on work engagement (β = .535; t = 14.576; p < .001). The result when the moderator is entered at Step 2, explained around 30.0% of the variance in trust and job satisfaction to work engagement (β = .436; t = 9.187; p <.001).

When the interaction item is entered at Step 3, R-Square has increased by 1.1% and explained around 31.1% of the work engagement variance ($\beta = .922$; $t = 5.383$; $p < .001$). Thus, Hypothesis 8 is partially supported.

Table 4.18
Results of hierarchical multiple regression on trust as moderator in the relationship between job satisfaction and work engagement

Variables	Model 1 Step 1	Model 2 Step 2	Model 3 Step 3
Job satisfaction (Beta)	.535	.436	.922
Moderator variable			
Trust (Beta)		.154	.674
Interactive between variables			
Job satisfaction *Trust			-.917
R^2	.286	.300	.311
Adj. R^2	.285	.297	.308
R^2 change	.286	.014	.011
Sig F change	.000	.000	.005
Durbin-Watson			1.82

The moderating effect of trust on the relationship between job satisfaction and work engagement is shown in Figure 4.1. The results demonstrate that academics who worked in a low trust environment tend to be less engaged with their work as compared to those who worked in a high trust environment, even when both had high job satisfaction.

However, the gap in work engagement in a low and high trust environment is smaller

between those who had high job satisfaction as compared those with low job satisfaction.
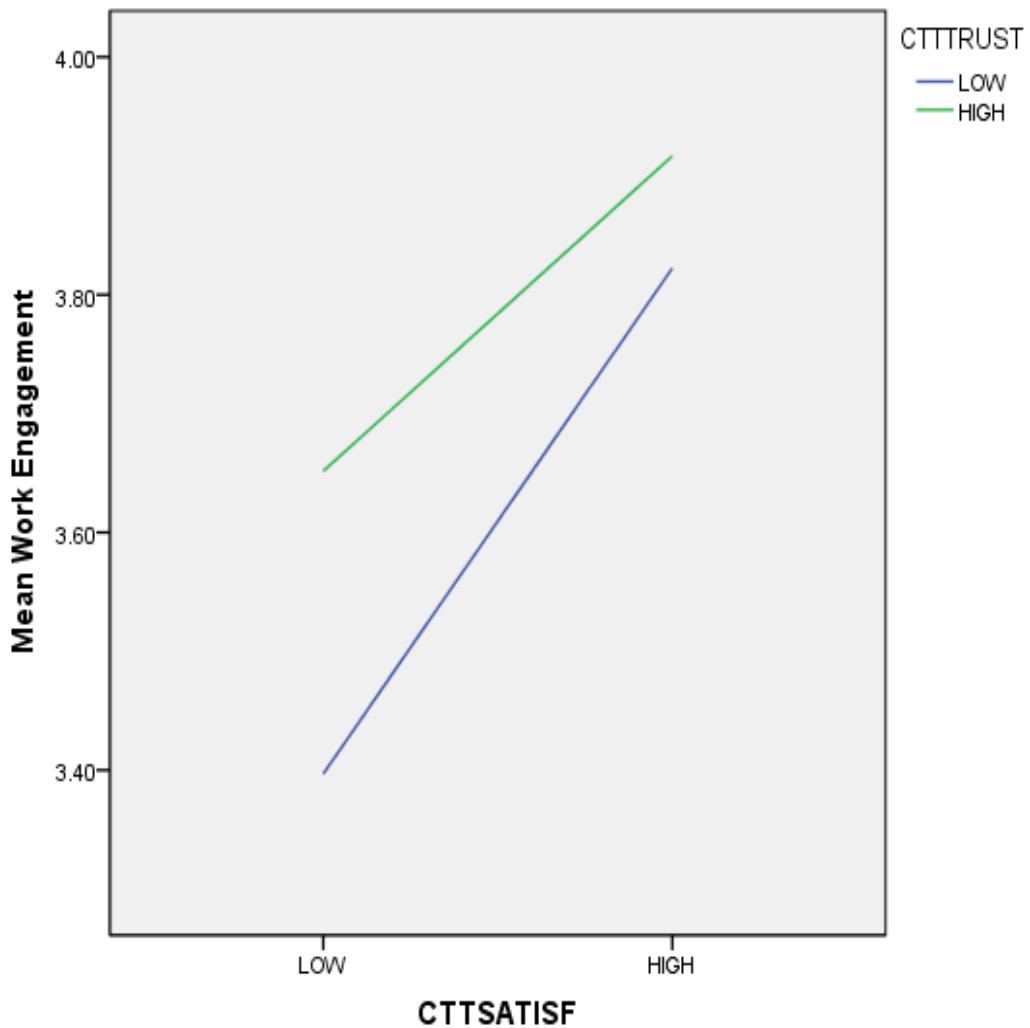

Figure 4.1
Interaction plot between job satisfaction and trust on work engagement

In conclusion, the analysis techniques used in this study such as multiple regression,

linear regression and hierarchical multiple regression have able to answer the research

objectives and test the proposed hypotheses. Table 4.19 presents the summary of the

hypotheses testing.

Table 4.19
Summary of hypotheses testing

Hypotheses	Statement	Findings
H1a	Academic work load is negatively related to work engagement	Supported
H1b	Work pressure is negatively related to work engagement	Supported
H2a	Autonomy is positively related to work engagement	Supported
H2b	Social support is positively related to work engagement	Supported
H2c	Performance feedback is positively related to work engagement	Supported
H3a	Academic work load is negatively related to job satisfaction	Supported
H3b	Work pressure is negatively related to job satisfaction	Supported
H4a	Autonomy is positively related to job satisfaction	Supported
H4b	Social support is positively related to job satisfaction	Supported
H4c	Performance feedback is positively related to job satisfaction	Supported
H5	Job satisfaction is positively related to work engagement	Supported
H6a	Job satisfaction mediates the relationship between academic workload and work engagement	Partially mediated
H6b	Job satisfaction mediates the relationship between work pressure and work engagement	Partially mediated
H7a	Job satisfaction mediates the relationship between autonomy and work engagement	Partially mediated
H7b	Job satisfaction mediates the relationship between social support and work engagement	Partially mediated
H7c	Job satisfaction mediates the relationship between performance feedback and work engagement	Partially mediated
H8	Trust moderates the relationship between job satisfaction and work engagement.	Quasi moderated

4.11 Conclusions

This chapter described the demographic characteristics of the 532 participants, the results of the correlation, and regression analyses. The research hypotheses were considered in the light of those results. The results indicate that workload and work pressure negatively related to work engagement while, autonomy, social support and performance feedback were positively related to work engagement. In other words, for those who received high workload and work pressure tend to be less engaged in their work. But, receiving autonomy, social support and performance feedback tend to enhance the work engagement.

The results also imply that the job satisfaction play a mediation role in the relationship between performance feedback and work engagement. But for the workload, work pressure, autonomy and social support, all had a direct and indirect relationship with work engagement.

As for the trust, the results show that trust played a quasi-moderating role in the relationship between job satisfaction and work engagement. For those who are in the low trust environment tend to be less engaged as compared to those in high trust environment even though both had high job satisfaction. These research findings are discussed in the next chapter, Chapter 5.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

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 reported in this thesis 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 the Research

The main purpose of this study is to investigate the relationship between job demands, job resources and work engagement. The study also interested to examine the role of job satisfaction as a mediator in the relationship between job demands and work engagement and in the relationship between job resources and work engagement and trust as a moderator in the relationship between job satisfaction and work engagement.

To test the research hypotheses, simple linear regression, multiple regressions and hierarchical regressions were conducted. Multiple regressions analysis were conducted to test hypotheses 1a, 1b, 2a, 2b and 2c which is to test the direct relationship between two

components of job demands namely workload and work pressure, three components of job resources namely autonomy, social support and performance feedback and work engagement. The findings revealed that both workload and work pressure were negatively related to work engagement while all the components of job resources (autonomy, social support and performance feedback) were positively related to work engagement.

Multiple regressions analysis was also conducted to test hypotheses 3a, 3b, 4a, 4b and 4c 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 negatively related to job satisfaction whereas autonomy, social support and performance feedback were positively related to job satisfaction.

Hypothesis 5 was tested using simple linear regression which is to test the direct relationship between job satisfaction and work engagement. The present finding indicates that there is a positive association between job satisfaction and work engagement.

Bootstrapping method developed by Preacher and Hayes (2008) was employed to test the mediating effect of job satisfaction in the relationship between workload, work pressure, autonomy, social support, performance feedback and work engagement. Five hypotheses namely hypotheses 6a, 6b, 7a, 7b and 7c were proposed and all were partially mediated.

Finally, the moderating effect of trust on the relationship between job satisfaction and work engagement was tested using hierarchical regression. The findings demonstrate that trust partially moderates the relationship between job satisfaction and work engagement.

5.3 Job Demands, Job Resources and Work Engagement

5.3.1 Relationship between Workload, Work Pressure and Work Engagement

Results from the present study indicate that both components of job demand, namely workload and work pressure were negatively related to work engagement. These findings support previous studies conducted by Karasek and Theorell (1990), Kinman (2001), Lease (1999), McClenehan, Giles and Mallett (2007) and Taipale, Selander, Anttila and Nätti (2011). Interestingly, the results also reveal that the issues of workload and work pressure in the academic setting are universal issues and not influence by the local context. In other word, the results imply that regardless of being an academician in Jordanian universities or in universities in other parts of the world, academic workload and work pressure have been regarded to be among the factors that might reduce the level of academics' work engagement.

Logically, individuals who are continuously being exposed to high workload and work pressure tend to experience high feelings of exhaustion, and negative attitude (cynicism) and this might have impact on the employee work engagement and productivity. It was reported that academics in the Jordanian universities are currently teach more than 25

hours a week, which is above of what Ministry of Higher Education policy on teaching hours of 9 to 15 hours a week. With such heavy teaching workload, it may difficult for the academics to concentrate on other academic task such as research and publication. These might explain the reasons why the participants in this study regarded workload and work pressure as among the factors that related to their work engagement.

5.3.2 Relationship between Autonomy, Social Support, Performance Feedback and Work Engagement

In this study, job resources were measured by autonomy, social support and performance feedback. The results indicate that academics who received autonomy, social support and performance feedback from the university's management, tend to be more engaged in their work. The current research findings were in line with 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) and support the premise of social exchange theory.

According to social exchange theory, human relationship is formed by the use of a subjective cost-benefit analysis and the comparison of alternatives. Also, individuals are psychologically indebted and hence compelled to return benefits they received in material or non-material form to the one that benefited them (Blau, 1964). Therefore, when the academics perceived the autonomy, social support and performance

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feedback that they received as something that is beneficial and positive, they will in return feel indebted to the university and this, indirectly translated into positive behavior such as being more engaged in their work.

Another possibility is that these three factors have the potential to act as a motivating role in encouraging the academics to be more engaged in their work. Autonomy for example, provides the academics with the freedom in making decision and on how to carry out their work, to teach, to be creative, and to advance the frontiers of knowledge through research and knowledge sharing. As argued by Christian, Garza and Slaughter (2011), autonomy provides a sense of ownership and control of the work which in return motivates the academics to be more engaged in their work. Apart from that, the support and constructive performance feedback that the academics received from the university's 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.

5.4   Job Demands, Job Resources and Job Satisfaction

5.4.1   Relationship between Workload, Work Pressure and Job Satisfaction

The findings of the study revealed that academics who perceived that they had high workload and work pressure tend to be less satisfied with their job. These results support past studies on workload, work pressure and job satisfaction (Bhatti, Hashmi, Raza, Shaikh & Shafiq, 2011; Houston, Luanna, Meyer & Paewei, 2006; Mustafa & Ghee, 2013). As explained by the Job Demands-Resources Model (Bakker & Demerouti, 2007),

job demand may turn into stressor in a situation that requires high effort to sustain high performance level. In other words, when an individual was burden with too much tasks with most of them are not related to their work, or not having enough time to complete the task given to them, it may evokes negative feelings and outcomes such as unsatisfied with work and burnout. People tend to be more satisfied with their work if they do it with a sense of their own choice rather than with a sense of doing things to please someone else, to get some kind of reward, or avoid punishment.

5.4.2   The relationship between Autonomy, Social Support, Performance Feedback and Job Satisfaction

The current research findings indicate that providing the academics with autonomy, social support and performance feedback may actually increased their job satisfaction. These findings provide support for past studies conducted by Bartram, Joiner and Stanton (2004), Bratt, Broome, Kelber and Lostocco (2000), Chu, Hsu, Price and Lee (2003), Ko and Yom (2003). In the academic setting, autonomy is often referred to as academic freedom where any members of the academic community can express openly their scientific and professional opinion even if they involve critical approach. Also, freedom to decide on how task need to be carried out or getting it done. As suggested by the current findings, autonomy has been considered to be one of the factors that can lead to job satisfaction. These might be due to the fact that most of the respondents in this study are associate professors with average age of 55 years old and possess higher education

background. Thus, they might not prefer to be closely monitored and being instructed of what to do as they have vast experience related to academic task.

Apart from autonomy, academics who received social support and performance feedback at their university were also reported to have more satisfaction in their work. One possible explanation for these results is that majority of the respondents in this study are considered new with the university (3 years and below). Therefore, compared to other factors tested in this study, a clear and constructive feedback provided by the university's management has been perceived to be more beneficial as it helps them to perform better. When they are clear about the direction (mission and vision of the university) and the expectation required by the university, the will perform accordingly and feel satisfied with the results.

5.5   Relationship between Job Satisfaction and Work Engagement

Results of the present study revealed that job satisfaction and work engagement were positively related. In other words, highly satisfied academics are also engaged in their work. The current findings supported past empirical studies on job satisfaction and work engagement (Avery, McKay & Wilson, 2007; Brunetto, Shacklock & Farr-Wharton, 2012; Durand, 2008; Vansteenkiste, De Witte & Lee, 2008). One possible explanation for these results is that individuals who are feeling happy and satisfied with their work are normally more motivated, eager, excited and have a sense of passion with their work even when challenges arises. Thus, it is not surprising to see people who are highly

satisfied with their work are also highly engaged. Besides, satisfaction is a positive feeling that had a great influence on how people react and perceive things. As in this study, though majority of the respondents are considered new with the university (less than 3 years), the findings indicate that they are satisfied with the feedback they received from the Dean, the job opportunity, the friendly work environment, the freedom given, and the participation in the decision making. This feeling of satisfaction in turn leads them to be more engaged in their work.

Though there is no hypothesis testing the relationship between years with organization and feeling of satisfaction, an interesting finding emerge from this study shows that the feeling of satisfaction with work is not necessarily depending on the duration the employees with the organization, but more on how the organization treat their employees. Many of us use to think that the longer the employees with an organization, the higher the feelings of satisfaction as they already adapted with the work environment. But the current findings prove otherwise.

5.6   Job Satisfaction as a Mediator

In this study, job satisfaction was tested as a mediator between two components of job demands namely, workload and work pressure; three components of job resources namely, autonomy, social support and performance feedback; and work engagement. The present findings demonstrate that workload, work pressure, autonomy, social support and performance feedback had a direct relationship with work engagement, and at the same

time, part of the relationship was influence by the mediating factor which was job satisfaction.

The current findings indicate that workload, work pressure, autonomy, social support and performance feedback will influence job satisfaction and this can lead to work engagement among academician in Jordan universities. In other words, even if workload, work pressure, autonomy, social support and performance feedback are directly related to work engagement, serious attention must also be given on how to manage academics' workload and work pressure as a way to enhance job satisfaction. This is because, if academics were given too much work or pressure, they might not feel satisfied with the work and gradually disengaged with their work. Similarly, by giving the academicians the autonomy, support and feedback, will increase their job satisfaction and thus, increase their work engagement.

However, if the management of faculty wrongly gives feedback to them, it will create the negative feeling and develop bad perception to the management. This scenario will affect the satisfaction and directly impact to the work engagement among members of the faculty. Clearly, the negative perception will create negative employees value to their relationship with the faculty management, and they felt unsatisfied with their job and will decrease their focus on job. Therefore, management should encourage being open to give feedback to their employees performance to ensure the communication gap will be minimize and will enhance the job satisfaction and work engagement.

5.7   Trust as a Moderator

In this study, trust has been as a moderator between job satisfaction and work engagement. The current research findings indicate that work engagement among academics in a low trust environment is lower than those academics in high trust environment even though the academics in both environments had high job satisfaction. One possible reason for these findings might be due to is that among the academic staff at public university in Jordan, they still require transparent decision making related to the job and career. For example, management's explanation is transparent when they make decisions regarding promotion given to a staff. This would increase their confidence in their management and subsequently, they will be satisfied with any decision made and will show a positive attitude towards their work. This perception will be good opportunity to the university to captivate their employees and at the same time capable in creating a harmony relationship between the top management of university and academic staff.

Moreover, the existence of trust and transparency in the working environment in university provides opportunities for academic staff to obtain clear information related to the planning and direction of the university. This will increases the positive response to the university management. Indirectly, when the academics have high trust to the university management or leaders, the academic strongly believe that their university management have make a good fair to their views in relation to issues such as complain about the management style or facilities provided or equal opportunity in giving ideas to the university. Therefore, the free flow information in the university working

environment will boost the job satisfaction and work engagement among the academics in Jordan's university.

5.8   Research Implication

5.8.1   Theoretical Implications

The current findings have contributed to the current body of knowledge on work engagement in several ways. First, findings from the current study have given empirical evidence on the relationship between job demands and job resources on academics' work engagement. In this study, job demands such as workload and work pressure were found negatively related to work engagement, while job resources such as autonomy, social support 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 academic context especially in Jordanian setting, the findings generally indicated the validity of the JD-R model and support the social exchange theory as a basis in discussing the influence of job demands and job resources on academics' work engagement. Thus, the validity of the job demands and resources and its constructs in the educational context, especially in the area of higher education in Jordan reflects the model's wide applicability in different contexts, as shown in earlier studies (e.g., Bakker & Demerouti, 2007; Bakker, Demerouti & Verbeke, 2004; Demerouti & Bakker, 2011; Demerouti, Bakker, Nachreiner & Schaufeli, 2001; Schaufeli & Bakker, 2004).

Apart from that, the current study has also contributed to the body of knowledge on work engagement by extending and elaborating the JD-R model by including job satisfaction as mediating variable and trust as moderating variable. The present findings empirically showed that workload, work pressure, autonomy, social support and performance feedback were both directly and indirectly related to work engagement through the inclusion of job satisfaction. Since job satisfaction was not empirically tested as a mediator in the relationship between job demands, job resources and work engagement, the current findings provide new empirical evidence to the body of knowledge regarding the mediation effect of job satisfaction. By demonstrating the existence of significant direct and indirect influences of job demands-resources and work engagement through the variable of job satisfaction, this study provide clear evidence that the mediating role of job satisfaction is empirically confirmed.

Finally, the present findings also contribute to the body of knowledge by including trust as moderator in the relationship between job satisfaction and work engagement. Even though past studies have shown the importance of trust in improving competitive advantage and organizational effectiveness (Cook & Wall, 1980; Huff & Kelley, 2003; Shockley-Zalabak, Ellis, & Winograd, 2000; Spence Laschinger, Finegan, & Shamian, 2001); and increases creativity and critical thinking at the employee level (O'Brien, 2001; Reina & Reina, 1999), the current research findings have enrich the existing body of knowledge on trust. The present study empirically showed that work engagement among the academics in a low trust environment is lower than those academics in high trust environment even though the academics in both environments had high job satisfaction.

Therefore, the university's management needs to consider the role of trust in the effort of enhancing the work engagement among the academics.

5.8.2 Implications for Practice

The current research findings have several implications for management of the universities. The results demonstrate that high workload and work pressure not only reduced satisfaction but it can also reduced work engagement among the academics. To overcome the issues of heavy workload and work pressure, the university's management may want to consider of hiring more academics, incorporating technology into teaching and learning and reduce administrative work that is not related to the academics main task. Apart from that, the university's management also needs to ensure that the goal and expectation set for the academics are in-line with the yearly performance appraisal and reasonable workloads be fairly distributed between individual employees.

The study also demonstrated that autonomy, social support and performance feedback provided by the university were among the factors that had a positive impact in enhancing academics' work engagement and satisfaction. Therefore, management of the universities need to continually giving autonomy, social support and performance feedback to their academics especially one that related to teaching and learning if they would like to have highly engaged and satisfied academics. This can be done through continually giving freedom to the academics in deciding on how to perform and organize their academic task and on how to achieve the targeted goal set by the university. Apart

from that, the university's management can also continue giving support in terms of providing the academics with teaching and learning facilities, allowing the academics to attend training, conferences and seminars for professional development, and giving constructive and objective performance feedback that can help academics to improve their work performance.

Apart from autonomy, social support and performance feedback, the current findings also have indicated that job satisfaction was also perceived by the academics to contribute to their engagement towards work. Since there was a direct relationship between job satisfaction and academics' work engagement, it is suggested that the university's management to consider providing positive working environment, involving the academics in decision making, rewarding and recognizing contribution made by the academics and giving more control and flexibility to the academics in terms of planning and carrying out their work as way to enhance the academics' job satisfaction.

Another interesting finding found in this study is the role of job satisfaction in the relationship between academic workload, work pressure, autonomy, social support, performance feedback and work engagement. The current research findings indicate that workload, work pressure, autonomy, social support and performance feedback have the direct and indirect relationship with work engagement. Thus, the university's management may not have to focus their effort on increasing the academic job satisfaction in order to get high work engagement.

In terms of the role of trust, the findings of the present study have demonstrated that trust had some influence in academics work engagement and job satisfaction. Academics with high job satisfaction but, in a low trust environment, have lower work engagement as compared to those who are in high trust environment. Therefore, to create a culture of trust in the academic setting, the university's management must ensure that they have a good quality of leadership especially among the top university management, encourage more academics to be involved the university's decision making, treat the academics with fairness regardless of position or personal characteristics, learn how to delegate tasks and empower the academics, act and speaks consistently, be approachable and often interact with the academics, and always ask for feedback.

In summary, the prescriptions discussed above are suggestive of the types of actions that university's management can take to increase academics' work engagement and satisfaction. It is hoped that results from the study will encourage new thinking among the university management. The research results reported in this study suggest the need for autonomy, social support and performance feedback to enhance academics' work engagement and satisfaction. Whereas, too much workload and work pressure will decrease academic's work engagement and satisfaction. Apart from that, the university's management also needs to consider the role of job satisfaction and trust when planning for enhancing academics' work engagement.

5.9   Limitations and Direction for Future Research

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

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

Apart from that variables tested in this study were limited to job demands (workload and work pressure), job resources (autonomy, social support and performance feedback), job satisfaction and trust. Other situational factors that beyond the scope of this study such as organizational structure, organizational culture, personal resources and personality trait was not included in this study. This provides another direction for future research.

The present study was cross-sectional as it was not practical to conduct a longitudinal study. A cross-sectional design is simple, inexpensive and allows for the collection of data in a relatively short period. Although there are advantages to using a cross-sectional design, this method offers limited information regarding changes in the level of engagement when different types of job demands and job resources were imposed. Perhaps, in the future, it may be worth investigating the issues of work engagement using a longitudinal study.

In summary, while there are some limitations associated with the approach used here 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.

5.10   Conclusions

The aim of this thesis was to investigate factors that might relate to academics' work engagement. The main concern of this thesis is the role of job demand and job resources on work engagement. Also, the mediating role of job satisfaction and the moderating role of trust on work engagement. The results indicate that both the work load and the work pressure were negatively related to work engagement. When autonomy, social support and performance feedback were tested against work engagement, positive relationship was found.

An important contribution made by this thesis is the mediating role of job satisfaction and the moderating role of trust. The current findings indicate that all the factors tested such as workload, work pressure, autonomy, social support and performance feedback had a direct and indirect relationship to work engagement. The results also revealed that trust did not fully moderate the relationship between job satisfaction and 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 academics, a more complete understanding of the influence of these factors will be achieved.

REFERENCES

Adekola, B. (2011). Antecedents and consequences of work engagement among managers and professionals in Nigeria. *British Journal of Management & Economics, 1*(2), 83-99.

Albdour, A. A., & Altarawneh, I. I. (2012). Corporate social responsibility and employee engagement in Jordan. *International Journal of Business and Management, 7*(16), 98-105.

Albdour, A. A., & Altarawneh, I. I. (2014). Employee engagement and organizational commitment: Evidence from Jordan. *International Journal of Business, 19*(2), 194-212.

Alfes, K., Shantz, A., & Truss, C. (2012).The link between perceived HRM practices, performance and wellbeing: The moderating effect of trust in the employer. *Human Resource Management Journal, 22*(4), 409-427.

Alhawary, F. A., & Aborumman, A., H. (2011). Measuring the effect of academic satisfaction on multi-dimensional commitment: Case study of applied science private university in Jordan. *International Business Research, 4*(2), 153-160.

Ali, N., & Zia-ur-Rehman M. (2014). Impact of job design on employee performance, mediating role of job satisfaction: A study of FMCG's sector in Pakistan. *International Journal of Business and Management, 9*(2), 70-79.

Allen, H.L. (1996). Faculty Workload and Productivity in the 1990s: Preliminary Findings.*The Nea 1996 Almanac of Higher Education. Retrieved from http://www.nea.org/assets/img/PubAlmanac/ALM_96_04.pdf*

Al-Omari, A. A., Qablan, A. M., & Khasawneh, S. M. (2008). Faculty members' intentions to stay in Jordanian public universities. *International Journal of Applied Educational Studies*, *1*(1), 26-43.

Alrai (2010, December 15). *University professors from PhDs in the official Jordanian Universities.* Jordan. Retrieved from http://www.alrai.com/

Altaf, A., & Awan M., A. (2011). Moderating affect of workplace spirituality on the relationship of job overload and job satisfaction. *Journal of Business Ethics, 104* (1), 93-99.

Alvi, A. K., & Abbasi, A. S. (2012). Impact of organizational justice on employee engagement in banking sector of Pakistan. *Middle-East Journal of Scientific Research, 12*(5), 643-649.

Anderson, D., Sweeney, D. J., & Williams, T.A. (2000). *Essentials of statistics for business and economics* (2nd ed.*).* Cincinnati, Ohio: South-Western College Publishing.

Apaydin, C. (2012). The workload of faculty members: The example of educational faculties in Turkey. *College Student Journal*, *46*(1), 203-213.

Appaw-Agbola, E. T., Agbotse, G. K., &Ayimah, J. C. (2013). Measuring the influence of job satisfaction on work commitment among Ho Polytechnic lecturers. *Journal of Social Sciences, 3*(2), 91-102.

Arifin, F., Troena, E. A., Djumahir, & Rahayu, M. (2014). Organizational culture, transformational leadership, work engagement and teacher's performance: Test of a model. *International Journal of Education and Research, 2*(1), 1-14.

Avery, D. R., McKay, P. F., & Wilson, D. C. (2007). Engaging the aging workforce: The relationship between perceived age similarity, satisfaction with coworkers, and employee engagement. *Journal of Applied Psychology, 92*(6), 1542-1556.

Aydogdu, S., & Asikgil, B. (2011). An empirical study of the relationship among job satisfaction, organizational commitment and turnover intention. *International Review of Management and Marketing*, *1*(3), 43-53.

Babcock-Roberson, M. E., & Strickland, O. J. (2010). The relationship between charismatic leadership, work engagement, and organizational citizenship behaviors. *The Journal of psychology, 144*(3), 313-326.

Bakker, A.B., & Demerouti, E., (2008). Toward a model of work engagement .*Career Development International, 13*(3), 209 – 223

Bakker, A. B., & Bal, M. P. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology, 83*(1), 189-206.

Bakker, A. B., & Demerouti, E. (2007).The job demands-resources model: State of the art. *Journal of Managerial Psychology, 22*(3), 309-328.

Bakker, A. B., & Schaufeli, W. B. (2008). Positive organizational behavior: Engaged employees in flourishing organizations. *Journal of Organizational Behavior, 29*(2), 147-154.

Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, *99*, 274-284.

Bakker, A. B., van Emmerik, H., & Euwema, M. C. (2006). Crossover of burnout and engagement in work teams. *Work and Occupations, 33*, 464-489.

Bakker, A.B., & Demerouti, E. (2007).The job demands-resources model: State of the art. *Journal of Managerial Psychology, 22*(3), 309-328.

Bakker, A.B., & Demerouti, E. (2008).Towards a model of work engagement. *Career Development International, 13*(3), 209-223.

Bakker, A.B., Demerouti, E., & Schaufeli, W.B. (2003). Dual processes at work in a call centre: An application of the job demands-resources model. *European Journal of Work and Organisational Psychology, 12*, 393-417.

Bakker, A.B., Demerouti, E., & Schaufeli, W.B. (2005). The crossover of burnout and work engagement among working couples. *Human Relations, 58*(5), 661-689.

Bakker, A.B., Demerouti, E., &Verbeke, W. (2004).Using the job demands resources model to predict burnout and performance. *Human Resource Management, 43*(1) 83-104

Bakker, A.B., Demerouti, E., Taris, T., Schaufeli, W.B., & Schreurs, P. (2003). A multi-group analysis of the job demands - resources model in four home care organizations. *International Journal of Stress Management, 10*(1), 16-38.

Baotham, S. (2011). Antecedent and consequence of job satisfaction and organizational commitment of Thai employees in RMUTT. *Review of Business Research, 11*(3), 1-14.

Baron, R. M., & Kenny, D. A. (1986).T he moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173-1182.

Bartram, T., Joiner, T., & Stanton, P. (2004). Factors affecting the job stress and job satisfaction of Australian nurses: Implications for recruitment and retention. *Contemporary Nurse Journal*, *17*(3), 293-304.

Basikin, B. (2007, July). *Vigor, dedication and absorption: Work engagement among secondary school english teachers in Indonesia*. Paper presented at the AARE Conference, Fremantle, Perth, Western Australia.

Bates, S. (2004). Getting engaged. *HR Magazine*, *49*(42), 44-51.

Baumruk, R. (2004). The missing link: The role of employee engagement in business success. *Workspan, 47*, 48-52.

Beehr, T. A., Glaser, K. M., Canali, K. G., &Wallwey, D.A (2001). Back to basics: Re-examination of Demand-Control Theory of occupational stress. *Work & Stress, 15*(2), 115-130.

Beukes, I., & Botha, E. (2013). Organizational commitment, work engagement and meaning of work of nursing staff in hospitals. *South African Journal of Industrial Psychology, 39*(2), 1-10.

Bhatti, N., Hashmi, D. A., Raza, S. A., Shaikh, F. M., & Shafiq, K. (2011). Empirical analysis of job stress on job satisfaction among university teachers in Pakistan. *International Business Research, 4*(3), 264-270.

Blau, P. (1964). *Exchange and power in social life*. New Brunswick, New York: Transaction Publishers,.

Boyd, C. M., Bakker, A. B., Pignata, S., Winefield, A. H., Gillespie, N., & Stough, C. (2010). A longitudinal test of the job demands-resources model among

Australian university academics. *Applied Psychology: An International Review, 60*(1), 112-140.

Bratt, M., Broome, M., Kelber, S., & Lostocco, L. (2000). The influence of stress and nursing leadership on job satisfaction of pediatric intensive care nurses. *The American Journal of Critical Care, 9*(5), 307-317.

Brenninkmeijer, V., Demerouti, E., Blanc, P. M. L., & van Emmerik, I. J. H. (2010). Regulatory focus at work: the moderating role of regulatory focus in the job demands-resources model. *Career Development International, 15*(7), 708-728.

Brown, S. P., & Peterson, R. A. (1993). Antecedents and consequences of sales person job satisfaction: Meta-analysis and assessment of causal effects. *Journal of Marketing Research, 30*, 63-77.

Brummelhuis, L. L., Bakker, A. B., Hetland, J., & Keulemans, L. (2012). Do new ways of working foster work engagement? *Psicothema, 24*(1), 113-120.

Brunetto, Y., Shacklock, K., & Farr-Wharton, R. (2012, September). *Supervisor-subordinate relationships, accountability and wellbeing*. Paper presented at the BAM2012 conference: Management research revisited: Prospects for theory and practice. Retrieved from http://www98.griffith.edu.au/dspace/bitstream/handle/10072/53449/84677_1.pdf?sequence=1

Buitendach, J. H., & De Witte, H. (2005). Job insecurity, extrinsic and intrinsic job satisfaction and affective organisational commitment of maintenance workers in a parastatal. *South African Journal of Business Management, 36*, 27-37.

Burke, M. (2011). *Half of young Australian academics ready to quit, RSC*. Retrieved from http://www.rsc.org/chemistryworld/News/2011/October/06101104.asp

Burke, R. J., & Greenglass, E. R. (1994). Towards an understanding of work satisfactions and emotional well-being of school-based educators. *Stress Medicine, 10*(3), 177-184.

Burke, R. J., Koyuncu, M., Jing, W., & Fiksenbaum, L. (2009). Work engagement among hotel managers in Beijing, China: Potential antecedents and consequences. *Tourism Review, 64*(3), 4-18.

Buys, C., & Rothmann, S. (2010). Burnout and engagement of reformed church Ministers. *South Africa Journal of Industrial Psychology, 36*(1), 1-11.

Carlson, B. C., & Thompson, J. A. (1995). Job burnout and job leaving in public school teachers: Implications for stress management. *International Journal of Stress Management, 2*(1), 15-29.

Cavanaugh, M.A., Boswell, W.R., Roehling, M.V., & Boudreau, J.W. (2000). An empirical examination of self-reported work stress among U.S. managers. *Journal of Applied Psychology, 85*, 65-74.

Chandraiah, K., Agrawal, S. C., Marimuthu, P., & Manoharan, N. (2003). Occupational stress and job satisfaction among managers. *Indian Journal of Occupational and Environmental Medicine, 7*(2), 6-11.

Chang, H. H., Chuang, S., & Chao, S. H. (2011). Determinants of cultural adaptation, communication quality, and trust in virtual teams' performance. *Total Quality Management, 22*(3), 305-329.

Chen, C. F., Chang, S. C., & Myagmarsuren, O. (2011). Customer orientation, job demands-resources and job satisfaction: A cross-level perspective. *The 11th International DSI and the 16th APDSI Joint Meeting,* Taipei, Taiwan.

Cheung, S., Yiu, T., & Lam, M. (2013). Interweaving trust and communication with project performance. *Journal of Construction Engineering & Management, 139*(8), 941-950.

Chhetri, P. (2014). The role of cognitive and affective trust in the relationship between organizational justice and organizational citizenship behavior: A conceptual framework. *Business: Theory and Practice, 15*(2), 170-178.

Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011).Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology, 64*,89-136.

Chu, C. I., Hsu, H.M., Price, J. L., & Lee, J. Y. (2003). Job satisfaction of hospital nurses: An empirical test of a causal model in Taiwan. *International Nursing Review,50*, 176-182.

Chughati, F. D., & Perveen, U. (2013). A study of teachers workload and job satisfaction in public and private schools at secondary level in Lahore city Pakistan. *Asian Journal of Social Sciences & Humanities, 2*(1), 202-214.

Chughtai, A. A., & Buckley, F. (2011). Work engagement: Antecedents, the mediating role of learning goal orientation and job performance. *Career Development International, 16*(7), 684-705.

Chughtai, A. A., & Buckley, F. (2009). Linking trust in the principal to school outcomes. *International Journal of Educational Management, 23*(7), 574-589.

Chung, K. C., Song, J. W., Kim, H. M., Woolliscroft, J. O., & Quint, E. H. (2010). Predictors of job satisfaction among academic faculty: Do instructional and clinical faculty differ? *Biomedical Journal, 44*(10), 985-995.

Chung, N. G., & Angeline, T. (2010). Does work engagement mediate the relationship between job resources and job performance of employees? *African Journal of Business Management, 4*(9), 1837-1843.

Coetzer, C.F., & Rothmann, S. (2007). Job demands, job resources and work engagement of employees in a manufacturing organization. *Southern African Business Review, 11*(3), 17-32.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, New Jersey: Lawrence Erlbaum.

Colakoglu, U., Culha, O., & Atay, H. (2010). The effects of perceived organizational support on employees' affective outcomes: Evidence from the hotel industry. *Tourism and Hospitality Management, 16*(2), 125-150.

Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology, 92*(4), 909-927.

Comm, C.L., & Mathaisel, D. (2000). Assessing employee satisfaction in service firms: An example in higher education. *Journal of Business and Economic Studies, 6*(1), 43-53.

Cook, J., & Wall, T. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfillment. *Journal of Occupational Psychology, 53*, 39-52.

Crawford, E.R., Rich, B.L., Buckman, B., & Bergeron, J. (2014). The antecedents and drivers of employee engagement. In C. Truss, R. Delbridge, E. Soane, K. Alfes, & A. Shantz (Eds.). *Employee engagement in theory and practice* (pp. 57-81). Abingdon: Routledge.

Daly, C.J., & Dee, J.R. (2006). Greener pastures: Faculty turnover intent in urban public universities. *The Journal of Higher Education, 77*(5), 776-803.

De Braine, R., & Roodt, G. (2011). The job demands-resources model as predictor of work-based identity and work engagement: A comparative analysis. *South African Journal of Industrial Psychology, 37* (2), 1-11.

De Cuyper, N., & De Witte, H. (2006). Autonomy and workload among temporary workers: Their effects on job satisfaction, organizational commitment, life satisfaction, and self-rated performance. *International Journal of Stress Management, 13*(4), 441.

De Lange, A. H., De Witte, H., & Notelaers, G. (2008). Should I stay or should I go? Examining longitudinal relations among job resources and work engagement for stayers versus movers. *Work & Stress, 22*(3), 201-223.

De Frank, R. S., & Ivancevich, J. M. (1998). Stress on the job: An executive update. *Academy of Management Executive, 12*, 55-66.

Demerouti, E., & Bakker, A.B. (2011). The job demands-resources model: Challenges for future research. *South Africa Journal of Industrial Psychology, 37*(2), 1-9.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*, 499-512.

Demerouti, E., Bakker, A. B., De Jonge, J., & Janssen, P. P. M. (2001). Burnout and engagement at work as a function of demands and control. *Scandinavian Journal of Work Environment Health, 27*(4), 279-286.

Dikkers, J. S. E., Jansen, B. J. W., De Lange, E. H., Vinkenburg, C. J., & Kooij, D. (2010). Proactively, job characteristics, and engagement: A longitudinal study. *Career Development International, 15*(1), 59-77.

Dirks, K, T., & Ferrin, D. L. (2001). The role of trust in organizational settings. *Organization Science. 12*(4), 450-467.

Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology, 87*(4), 611-628.

Dirks, K. T. (1999). The effects of interpersonal trust on work group performance. *Journal of Applied Psychology, 84*(3), 445-455.

Doi, Y. (2005). An epidemiologic review on occupational sleep research among Japanese workers. *Industrial Health, 43*, 3-10.

Doney, P. M., & Cannon, J. P. (1997). An examination of the nature of trust in buyer-seller relationships. *The Journal of Marketing*, 35-51.

Durand, L. (2008). *Psychological empowerment, job satisfaction and work engagement of employees in a surface coatings manufacturer*. (Master dissertation, North-West University, 2008). Retrieved from http://hdl.handle.net/10394/1784

Emerson, R. M. (1976). Social exchange theory. *Annual Review of Sociology, 2*, 335-362.

Fard, H., Rajabzadeh, A., & Hasiri, A. (2010). Organizational trust in public sector: Explaining the role of manager's managerial competency. *European Journal of Economics, Finance and Administrative Sciences*, *25*, 29-43.

Ferreira, P., & Oliveira, E. R. D. (2014). Does corporate social responsibility impact on employee engagement? *Journal of Workplace Learning, 26*(3/4), 232-247.

Ferrin, P. D., Kim, L.H., Cooper, C.D., & Dirks, K.T. (2007). Silence speaks volumes: The effectiveness of reticence incomparison to apology and denial for responding to integrityand competence-based trust violations. *Journal ofapplied psychology, 92*(4), 893-908.

Fisher, D. C. (2003). Why do lay people believe that satisfaction and performance are correlated? Possible sources of a commonsense theory. *Journal of Organizational Behavior, 24*(6), 753-777.

Fourie, L., Rothman, S., & Van De Vijver, F. J. R. (2008). A model of work wellness for non-professional counselors in South Africa. *Stress and Health*, *24*(1), 35-47.

Frazer, L., & Lawley, M. (2000). *Questionnaire design & administration*. Australia: John Wiley & Sons.

Fried Y., & Ferris G. R. (1987). The validity of the job characteristics model: A review and meta-analysis. *Personnel Psychology*, *40*, 287-322.

Fried, Y., Shirom, A., Gilboa, S., & Cooper, C. (2008). The mediating effects of job satisfaction and propensity to leave on the stress-performance relationship: Combining meta-analysis and SEM. *International Journal of StressManagement, 15*, 305-328.

Fung, N. S., Ahmad, A., & Omar, Z. (2014). Role of work-family enrichment in improving job satisfaction. *American Journal of Applied Sciences, 11*(1), 96-104.

Gallup, R. (2013). *State of the American workplace employee engagement insights for U.S. business leaders*. Retrieved from http://www.gallup.com/strategicconsulting/163007/state-american-workplace.aspx.

Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. *The Journal of Marketing*, 1-19.

Gay, L. R., & Diehl, P. L. (1996). *Research methods for business and management*. Singapore: Prentice Hall.

Ghadi, M. Y., Fernando, M., & Caputi, P. (2013). Transformational leadership and work engagement: The mediating effect of meaning in work. *Leadership & Organization Development Journal, 34*(6), 532-550.

Gilbert, A. D. (2000). The idea of a university beyond 2000. *Policy*, *16*, 31-36.

Gilbert, J. A., & Tang, T. L. P. (1998). An examination of organizational trust antecedents. *Public Personnel Management, 27*(1), 321-338.

Gillespie, N.A., Walsh, M., Winefield, A.H., Dua, J., & Stough, C. (2001). Occupational stress in universities: Staff perceptions of the causes, consequences and moderators of stress. *Work & Stress, 15*, 53-72.

Goebel, D. J., Deeter-Schmelz, D., & Kennedy, K. N. (2013). Effective sales management: What do salespeople think? *Journal of Marketing Development and Competitiveness, 7*(2), 11-23.

Griffin W.R. (1998). Training your custodians. *School Planning and Management,1*(65), 1–3.

Hair, Jr., J. F., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, New Jersey: Pearson Prentice Hall.

Hair, Jr., J. F., Anderson, R. E., Tatham, R. L., & William, C. (1998). *Multivariate data analysis*. Upper Saddle River, New Jersey: Prentice Hall.

Hair, Jr., J. F., Money, A. H., Samouel, P., & Page, M. (2007). *Research methods for business*. Chichester, West Sussex: John Wiley & Sons Ltd.

Hakanen, J. J., Bakker, A. B., & Demerouti, E. (2005). How dentists cope with their job demands and stay engaged: The moderating role of job resources. *European Journal of Oral Sciences, 113*(6), 479-487.

Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology, 43*(6), 495-513.

Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The job demands-resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress, 22*(3), 224-241.

Hakanen, J. J., Perhoniemi, R., & Toppinen-Tanner, S. (2008). Positive gain spirals at work: From job resources to work engagement, personal initiative, and work-unit innovativeness. *Journal of Vocational Behavior, 73,* 78-91.

Halbesleben, J. R. B., & Buckley, M. R. (2004). Burnout in organizational life. *Journal of Management, 30*, 859-79.

Halbesleben, J. R. B., Harvey, J., & Bolino, M. C. (2009). Too engaged? A conservation of resources view of the relationship between work engagement and work interference with family. *Journal of Applied Psychology, 94*(6), 14-52.

Hallberg, U., Johansson, G., & Schaufeli, W. B. (2007). Type A behavior and work situation: Associations with burnout and work engagement. *Scandinavian Journal of Psychology, 48,*135–142.

Hamid, S. N. A., & Yahya, K. K. (2011). *Relationship between person-job fit and person-organization fit on employees' work engagement: A study among engineers in semiconductor companies in Malaysia*. Paper presented at the Annual Conference on Innovations in Business & Management, London, UK.

Hansen, T. (2012). The moderating influence of broad-scope trust on customer-seller relationships. *Psychology and Marketing, 29*(5), 350-364.

Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology, 87*(2), 268.

Hassan, A., & Ahmed, F. (2011). Authentic leadership, trust and work engagement. *International Journal of Human and Social Sciences, 6*(3), 164-171.

Hayati, D., Charkhabi, M., & Naami, A. (2014). The relationship between transformational leadership and work engagement in governmental hospitals nurses: A survey study. *Springer Open Journal*, 1-7.

Hayes, N. (2000). *Doing psychological research*. UK: Open University Press

Heider, F. (1958). *The psychology of interpersonal relations*. New York: John Wiley & Sons Ltd.

Henne, D., & Locke, E. A. (1985). Job dissatisfaction: What are the consequences? *International Journal of Psychology*, *20*, 221-240.

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44*, 513-524.

Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology*, *63* (6), 597-606.

Houston, D., Meyer, L. H., & Paewai, S. (2006). Academic staff workloads and job satisfaction: Expectations and values in academe. *Journal of Higher Education Policy & Management*, *28*(1), 17-30.

Hu, Q., Schaufeli, W.B., & Taris, T. W. (2013). Does equity mediate the effects of job demands and job resources on work outcomes? An extension of the job demands-resources model. *Career Development International, 18*, 357-376.

Huff, L., & Kelley, L. (2003). Levels of organisational trust in individualist versus collectivist societies: A seven nation study. *Organizational Science, 14*(1), 81-90.

Ibrahim, I., & Boerhaneoddin, A. (2010). Is job satisfaction mediating the relationship between compensation structure and organizational commitment? A study in the Malaysian power utility. *Journal of Global Business & Economics, 1*(1), 43-61.

Innocenti, L., Pilati, M., & Peluso, A. M. (2011). Trust as moderator in the relationship between HRM practices and employee attitudes. *Human Resource Management Journal, 21*(3), 303-317.

Inoue A., Kawakami N., Tsuno K., Shimazu A., Tomioka K., & Nakanishi, M. (2013). Job demands, job resources, and work engagement of Japanese employees: a prospective cohort study. *International Archives of Occupational & Environmental Health, 86*(4), 441-449.

Iqbal, T., Khan, K., & Iqbal, N. (2012). Job stress & employee engagement. *European Journal of Social Sciences, 28*(1), 109-118.

Ismail, N. N. H. N., Li. C. C., & Mamat, M. (2013). Innovativeness, job satisfaction, and job performance among academicians in Malaysian public universities. *Proceeding of the Global Conference on Business, Economics and Social Sciences*, 294-307.

Jap, S. D., Manolis, C., & Weitz, B. A. (1999). Relationship quality and buyer–seller interactions in channels of distribution. *Journal of Business Research, 46*(3), 303-313.

Jap, S. D., Manolis, C., & Weitz, B. A. (1999). Relationship quality and buyer–seller interactions in channels of distribution. *Journal of Business Research, 46*(3), 303-313.

Jarvenpaa, S. L., Shaw, T. R., & Staples, D. S. (2004). Toward contextualized theories of trust: The role of trust in global virtual teams. *Information Systems Research*, *15*(3), 250-267.

Jones, E. E. (1979). The rocky road from acts to dispositions. *American Psychologist, 34*, 107-117.

Jones, E. E., & Nisbett R. (1971). *The actor and the observer: Divergent perceptions of the causes of behavior*. New York: General Learning Press.

Jones, E.E., & Davis, K.E. (1965). From acts to dispositions: The attribution process in person perception. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology Vol. 2. (pp. 219-266).* New York: Academic Press.

Kahn, W., & Heapy, E.D. (2014). Relational contexts of personal engagement at work. In C. Truss, R.Delbridge, E. Soane, K. Alfes, & A. Shantz (Eds.) *Employee engagement in theory and practice* (pp. 163-179). Abingdon: Routledge.

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal, 33*(4), 692-724.

Karasek, R. A. (1985). *Job content questionnaire and user's guide.* Los Angeles: University of Mass Press.

Karasek, R. A., & Theorell, T. (1990). *Healthy work: Stress, productivity and the reconstruction of working life.* New York: Basic Books.

Karim, N. H. A. (2008). Investigating the correlates and predictors of job satisfaction among Malaysian academics librarians. *Malaysian Journal of Library & Information Science, 13*(2), 69-88.

Katerndahl, D., A., Parchman M., & Wood R. (2009). Perceived complexity of care, perceived autonomy, and career satisfaction among primary care physicians. *Journal of the American Board of Family Medicine, 22*, 24-33.

Kayatasha, D. P., & Kayatasha, R. (2012). A study of job satisfaction among teachers, higher secondary school of Nepal. *International Journal of Evaluation and Research in Education, 1*(1), 41-44.

Kelley, H. H. (1967). Attribution theory in social psychology. In D. Levine (Ed.), *Nebraska symposium on motivation* (pp. 192-238). Lincoln, NE: University of Nebraska Press.

Khuong, M. N., & Yen, N. H. (2014).The effects of leadership styles and sociability trait emotional intelligence on employee engagement. A study in Binh Duong City, Vietnam. *International Journal of Current Research and Academic Review, 2*(1), *121-136.*

Kimura, T. (2011). Empowerment, P-O Fit, and work engagement - A moderation model. *European Journal of Economics, Finance and Administrative Sciences,38*, 44-58.

Kinman, G. (2001). Pressure points: A review of research on stressors and strains in UK academics. *Educational Psychology, 21*, 473-492.

Ko, J. W., & Yom, Y. H. (2003). The role of social support in the relationship between job stress and job satisfaction/organizational commitment. *Journal of Korean Academy of Nursing, 33*(2), 265-274.

Konermann, J. (2012). *Teachers' work engagement: A deeper understanding of the role of job and personal resources in relationship to work engagement, its antecedents and its outcomes. (Doctoral thesis, University of Twente, 2012)* Retrieved from http://doc.utwente.nl/7900/l/thesis_J_Konermann.pdf

Korunka, C., Kubicek, B., Schaufeli, W. B., &Hoonakker, P. (2009). Work engagement and burnout: Testing the robustness of the job demands-resources model. *The Journal of Positive Psychology, 4*(3), 243-255.

Kotze, K., & Roodt, G. (2005). Factors that affect the retention of managerial and specialist staff: An exploratory study of an employee commitment model. *South Africa Journal of Human Resource Management, 3*, 48-55.

Koyuncu, M., Burke, R. J., & Fiksenbaum, L. (2006). Work engagement among women managers and professionals in a Turkish bank: Potential antecedents and consequences. *Equal Opportunities International, 25*(4), 299-310.

Kramer, R. M. (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual Review of Psychology,50*, 569-598.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychology Measurement, 30*, 607-610.

Kreuger, L. W., & Neuman, W. L. (2006). *Social work research methods: Qualitative and quantitative applications*. Boston: Pearson Education, Inc.

Krog, A. (2014). *The Relationship between organizational culture and work engagement: A multilevel investigation.* (Master Thesis University of Oslo, 2014). Retrieved from https://www.duo.uio.no/bitstream/handle/10852/39783/The-relationship-between-organizational-culture-and-work-engagement--A-multilevel-investigation.pdf?sequence=1

Kuhnel, J., Sonnentag, S., & Bledow, R. (2012). Resources and time pressure as day-level antecedents of work engagement. *Journal of Occupational and Organizational Psychology, 85*, 181-198.

Kuska, F. (2003). Employee satisfaction in higher education: The case of academic and administrative staff in Turkey. *Career Development International, 8*(7), 347-356.

Kyriacou, C., & Sutcliffe, J. (1978). Teacher stress: Prevalence, sources, and symptoms. *British Journal of Educational Psychology, 48*(2), 159-167.

Laschinger, H. K. S., Finegan, J., & Shamian, J. (2001). The impact of workplace empowerment and organizational trust on staff nurses' work satisfaction and organizational commitment. *Health Care Management Review 26*(3), 7-23.

Lease, S. H. (1999). Occupational role stressors, coping, support, and hardiness as predictors of strain in academic faculty: An emphasis on new and female faculty. *Research in Higher Education, 40*(3), 285-307.

Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of burnout. *Journal of Applied Psychology, 81*, 123-133.

Leedy, P. D., & Ormrod, J. E. (2005). *Practical research: Planning and design* (8th ed.). New Jersey: Pearson Educational International and Prentice Hall.

Leung. M., Zhang H., & Skitmore, M. (2008). Effects of organizational supports on the stress of construction estimation participants. *Construction Engineering and Management, 134*(2), 84-93.

Li, S., Li, X., & Shi, K. (2010).The influence of procedure justice on work engagement: The mediating role of organizational commitment Web society (SWS), 2nd Symposium on Conference Proceedings, Beijing, China, 632-636.

Lin, L., Oi-ling, S., Kan, S., & Xin-wen, B. (2009). *Challenge and hindrance job demands, job resource, and their relationships with vigor and emotional exhaustion*. Paper presented at the International Conference on Management Science & Engineering, Beijing, China.

Liu, J., & Ma, J. (2014). *Dampened regulates the activating potency of bicoid and the embryonic patterning outcome in Drosophila*. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/24336107

Llorens, S., Bakker, A. B., Schaufeli, W., & Salanova, M. (2006). Testing the robustness of the job demands-resources model. *International Journal of Stress Management, 13*(3), 378-391.

Locke, E.A. (1976). The nature and causes of job satisfaction. In Dunnette, M.D. (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297-1343). Chicago, IL: Rand McNally.

Lorente Prieto, L., Salonova-Soria, M., Martínez-Martinez, I., & Schaufeli, W. (2008). Extension of the job demands-resources model in the prediction of burnout and engagement among teachers over time. *Psicothema, 20*(3), 354-360.

Maaniemi, J. (2013). *Reflections of systemic justice? Employees' and supervisors' experiences of injustice in the performance appraisal and merit pay context*. (*Doctoral Thesis, Aalto University, 2013),* Retrieved from https://aaltodoc.aalto.fi/handle/123456789/8839

Mach, M., Dolan , S., & Tzafir, S. (2010). The differential effect of team members' truston team performance: The mediating role of team cohesion. *Journal of Occupational and Organizational Psychology, 83*, 771-794.

Malik, M. E., Nawab, S., Naeem, B., & Danish, R. Q. (2010). Job satisfaction and organizational commitment of university teachers inpublic sector of Pakistan. *International Journal of Business and Management, 5*(4), 17-26.

Mangundjaya, W.H. (2012). Are organizational commitment and employee engagement important in achieving individual readiness for change? *Humanitas, 9*(2), 185-192.

Maslach, C., & Leiter, M. P.(1997). *The truth about burnout: How organizations cause personal stress and what to do about it*. San Francisco: Jossey- Bass Publishers.

Maslach, C., & Leiter, M. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology, 93*(3), 498-512.

Maslach, C., Schaufeli, W.B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397-422.

Maslow, A. H. (1987). *Motivation and personality* (3rd ed.). New York: Addison Wesley.

Mauno, S., Kinnunen, U., & Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of Vocational Behavior, 70*(1), 149-171.

Mauss, M. (1954). *The gift: Forms and functions of exchange in archaic societies*. New York: Norton

May, D., Gilson, R., & Harter, L. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology, 77, 11-37*.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review, 20*, 709–734.

Mc Cauley, C. D., Ruderman, M. N., Ohlott, P. J., & Morrow, J. E. (1994). Assessing the developmental components of managerial jobs. *Journal of Applied Psychology, 79*, 544 -560.

Mc Clenahan, C. A., Giles, M. L., & Mallett, J. (2007). The importance of contextspecificity in work stress research: A test of the demand-control-support model in academics. *Work & Stress, 21*, 85-95.

Mc Knight, D.H., & Chervany, N. L. (2001). What trust means in e-commerce customer relationships: An interdisciplinary conceptual typology. *International Journal of Electronic Commerce, 6*, 2, 35-59.

Melchior, M. Caspi, A., Milne, B., Danese A., Poulton, R., & Moffitt, T. (2007). Work stress precipitates depression and anxiety in young, working women and men. *Psychological Medicine, 37*(8), 1119-1129.

Mertler, C. A. (2002). Job satisfaction and perception of motivation among middle school and high school teachers. *American Secondary Education. EBSCO, 31*(1), 43-53.

Metcalf, H., Rolfe, P., & Weale, M. (2005). *Recruitment and retention of academic staff in higher education.* UK*:* National Institute of Economic and Social Research.

Ministry of higher education and scientific research (MoHESR) - Jordan. (2011). Jordanian higher education sector. Retrieved from http://www.mohe.gov.jo

Mintu-Wimsatt, A., Garcia, R., & Calantone, R. (2005). Risk, trust and the problem solving approach: A cross cultural negotiation study. *Journal of Marketing Theory and Practice, 13*(1), 52-61.

Moorman, R. H. (1993). The influence of cognitive and affective based job satisfaction measures on the relationship between satisfaction and organizational citizenship behavior. *Human Relations, 46*, 759-776.

Murphy, G., Athanasou, J., & King, N. (2002). Job satisfaction and organizational citizenship behaviour: A study of Australian human-service professionals. *Journal of Managerial Psychology, 17*(4), 287-297.

Mustapha, N., & Ghee Y., G. (2013). Examining faculty workload as antecedent of job satisfaction among academic staff of higher public education in Kelantan, Malaysia. *Business and Management Horizons, 1*(1), 10-16.

Nadim, Z., S. (2013). The relationship between work engagement and job resources: An empirical study. *International Journal of Applied Research in Business Administration and Economics, 2*(1), 1-10.

Nahrgang, J. D., Morgeson, F. P., & Hofmann, D. A. (2011). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *Journal of Applied Psychology, 96* (1), 71-94.

Nguyen, A. N., Taylor, J., & Bradley, S. (2003). Relative pay and job satisfaction: Some new evidence, working paper 045, Department of Economics, Lancaster University Management School. Retrieved from http://mpra.ub.uni-muenchen.de/1382/1/MPRA_paper_1382.pdf

O'Brien, R. C. (2001). *Trust: Releasing the energy to succeed*. Wiley, Chichester: Jossey-Bass.

Olugbenga, J. L., Bello, Z. A., & Comfort, O. A. (2011). Nigerian agriculture workers' outcomes from perceived organizational support and protestant work ethics: Job satisfaction as a mediator. *South Africa Journal of Industrial Psychology, 37*(1), 1-8.

Omolayo, B. O., & Omole, O. C. (2013). Influence of mental workload on job performance. *International Journal of Humanities and Social Science, 3*(15), 238-246.

Oppenheim, A. N. (2000). Questionnaire design, interviewing and attitude measurement: (New ed.). London: Continuum.

Orgambídez-Ramos, A., Borrego-Alés, Y., &Mendoza-Sierra, I. (2014). Role stress and work engagement as antecedents ofjob satisfaction in Spanish workers. *Journal of Industrial Engineering and Management, 7*(1), 360-372.

Otken, A. B., & Cenkci, T. (2011). The impact of paternalistic leadership on ethical climate: the moderating role of trust in leader. *Journal of Business Ethics, 108*(4), 525-536.

Pallant, J. (2011). *SPSS Survival Manual: A step-by-step guide to data analysis using spss for windows (Version 19)* (4th ed.). Australia: Allan &Unwin.

Pallant, J., & Manual, S. S. (2001). *A step by step guide to data analysis using spss for windows version 15*. Philadelphia: Open University Press.

Pearson, C. A. L., & Chong, J. (1997).Contributions of job content and social information on organizational commitment and job satisfaction: An exploration in a Malaysian nursing context. *Journal of Occupational and Organizational Psychology, 70*, 357-379.

Perera, G. D. N., Khatibi, A., Navaratna, N., & Chinna, K. (2014). Job satisfaction and job performance among factory employees in apparel sector. *Asian Journal of Management Sciences & Education, 3*(1), 96-104.

Pienaar, J., Sieberhagen, C. F., & Mostert, K. (2007). Investigating turnover intentions by role overload, job satisfaction and social support moderation. *South African Journal of Industrial and Organizational Psychology, 33*(2), 62-67.

Podsakoff, N.P., LePine, J.A., & LePine, M.A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology, 92*, 438–454.

Qureshi, M. I., Jamil, Iftikhar, M., Arif, S., Lodhi, S., Naseem, I., & Zaman, K. (2012). Job stress, workload, environment and employees turnover intentions: Destiny or choice. *Archives Des Sciences, 66*(8), 230-241.

Rad, A. M. M., & Yarmohammadian, M. H. (2006). A study of relationship between managers' leadership style and employees' job satisfaction. *Leadership in Health Service, 19*(2), 11-28.

Ram, D. P., & Prabhakar, D. G. V. (2011). An enquiry into the mediatory role of employee engagement: Evidence from the hotel industry in Jordan. *Far East Journal of Psychology and Business, 5*(5), 41-59.

Rayton, B. A., & Yalabik, Z. Y. (2014). Work engagement, psychological contract breach and job satisfaction. *The International Journal of Human Resource Management*, *25*(17), 2382-2400.

Rea, J. (2011). *Australia's national tertiary education union*. Retrieved from http://www.rsc.org/chemistryworld/News/2011/October/06101104.asp

Reina, D., & Reina, M. (1999). *Trust and betrayal in the workplace: Building effective relationships in your organization*. San Francisco, CA: Berrett-Koehler.

Richman, A. (2006). Everyone wants an engaged workforce how can you create it?. *Workspan*, *49*(1), 36-39.

Roberts, D. R., & Davenport, T. O. (2002). Job engagement: Why it's important and how to improve it. *Employment Relations Today*, 21-29.

Rothman, S., & Baumann, C. (2014).Employee engagement: The effects of work-home/home-work interaction and psychological conditions. *South African Journal of Economic and Management Sciences, 17*(4), 515-530.

Rothmann, S., & Jordaan, G. (2006). Job demands, job resources and work engagement of academic staff in South African higher education institutions. *Journal of Industrial Psychology, 32*(4), 87-96.

Rothmann, S., & Joubert, J. (2007). Job demands, job resources, burnout and work engagement of managers at a platinum mine in the North West Province. *South African Journal of Business Management, 38*(3), 49-61.

Rotter, J. B. (1967). A new scale for the measurement of interpersonal trust. *Journal of Personality*, *35*, 651-665.

Rotter, J. B. (1980). Interpersonal trust, trustworthiness and gullibility. *.American Psychologist, 35*, 1-7.

Ryan, R. M., & Deci, E. L. (2000).Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology, 25*(1), 54-67.

Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology, 21*(7), 600-619.

Salanova, M., Agut, S., & Peiro, J. M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology, 90*(6), 12-17.

Salmela-Aro, K., Tolvanen, A., & Nurmi, J. E. (2009). Achievement strategies during university studies predict early career burnout and engagement. *Journal of Vocational Behavior, 75*(2), 162-172.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5th ed.)*.* England: Pearson Education Limited.

Schaufeli, W, B., & Bakkar, A., B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, *25*, 293-315.

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement, 66*(4), 701-716.

Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior, 30*(7), 893-917.

Schaufeli, W. B., Martinez, I. M., Pinto, A. M., Salanova, M., & Bakker, A. B. (2002). Burnout and engagement in university students: A cross-national study. *Journal of Cross-Cultural Psychology, 33*(5), 464-481.

Schaufeli, W. B., Salanova, M., Gonzalellez-Roma, V., & Bakker, A. B. (2002) The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies, 3*, 71-92.

Schaufeli, W. B., Taris, T. W., & Van Rhenen, W. (2008). Workaholism, burnout, and engagement: Three of a kind or three different kinds of employee well-being? *Applied Psychology: An International Review, 57*, 173-203.

Schaufeli, W.B., & Bakker, A.B. (2003). *UWES-utrecht work engagement scale: Test manual*. Department of Psychology, Utrecht University.

Shaufeli, W.B., & Salanova, M. (2007). Work engagement. *Managing Social and Ethical Issues in Organizations*, 135-177.

Schriesheim, C. A., Powers, K. J., Scandura, T. A., Gardiner, C. C., & Lankau, M. J. (1993). Improving construct measurement in management research: Comments and a quantitative approach for assessing the theoretical content adequacy of paper-and-pencil survey-type instruments. *Journal of Management, 19*, 385-417,

Sekaran, U. (2000). *Research methods for business*: New York: John Wiley & Sons, Inc.

Sekaran, U. (2003). *Research methods for business: A skill building approach* (4th ed.). New York: John Wiley and Sons.

Shahzad, K., Mumtaz, H., Hayat, K., & Khan, M. A. (2010). Faculty workload, compensation management and academic quality in higher education of Pakistan: Mediating role of job satisfaction. *European Journal of Economics, Finance and Administrative Sciences,* 27, 111-119.

Sharma, G. M., & Azmi, F. T. (2012).Job Satisfaction as a mediator in the relationship between job factors and organizational commitment: A study of b-school teachers .*Institute of Management Studies-Manthan, 7*(2), 75-86.

Shirom, A., Melamed, S., Rogowski, O., Shapira, I., & Berliner, S. (2009).Workload, control, and social support effects on blood lipids: A longitudinal study among

apparently healthy employed adults. *Journal of Occupational Health Psychology, 14*(4), 349-365.

Shirom, A., Toker, S., Alkaly, Y., Jacobson, O., & Balicer, R. (2011). Work-based predictors of mortality: A 20-year follow-up of healthy employees. *Journal of the Division of Health Psychology American Psychological Association, 30*(3) 268-275.

Shockley-Zalabak, P., Ellis, K., & Winograd, G. (2000). Organizational trust: What it means, why it matters. *Organization Development Journal, 18*(4), 35-48.

Shuck, M. B. (2010).*Employee engagement: An examination of antecedent and outcome variables* (*Doctoral thesis, Florida International University, 2010).* Retrieved from

http://digitalcommons.fiu.edu/cgi/viewcontent.cgi?article=1284&context=etd

Sims, H. P., Jr., Szilagyi, A. D., & Keller, R. T. (1976).The measurement of job characteristics. *Academy of Management Journal*, 195-212.

Singh, A. L., Tiwari, T., & Singh, I., L. (2010). Performance feedback, mental workload and monitoring efficiency. *Journal of the Indian Academy of Applied Psychology, 36*(1), 151-158.

Singh, S., N., & Bush, R. F. (1998). Research burnout in tenured marketing professors: An empirical investigation. *Journal of Marketing Education, 20*(1), 4-16.

Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education, 26*(4), 1059-1069.

Slåtten, T., & Mehmetoglu, M. (2011). Antecedents and effects of engaged frontline employees: A study from the hospitality industry. *Managing Service Quality, 21*(1), 88-107.

Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: A new look at the interface between nonwork and work. *Journal of Applied Psychology, 88*, 518-528.

Sonnentag, S., & Frese, M. (2009). Dynamic performance. In S. W. J. Kozlowski (Ed.), *Handbook of industrial and organizational psychologie; A volume in the library of psychology*. Oxford University Press.

Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes and consequences*. Thousand Oaks, CA, Sage Publications, Inc.

Srivastava, S. (2013). Job satisfaction and organizational commitment relationship: Effect of personality variables. *The Journal of Business Perspective, 17*(2) 159-167

Ssesanga, K., & Garrett, R. M. (2005). Job satisfaction of university academics: Perspectives from Uganda. *Higher Education Journal, 50*(1), 33-56.

Stander, M.W., & Rothmann, S. (2010). Psychological empowerment, job insecurity, and employee engagement. *South African Journal of Industrial Psychology, 36*(1), 1-8.

Steenland, K., Johnson, J., & Nowlin, S. (1997). A follow-up study of job strain and heart disease among males in the NHANES1 population. *American Journal of Industrial Medicine, 31*, 256-260.

Strom, D. L., Sears, K. L., & Kelly, K. M. (2013). Work Engagement: The roles of organizational justice and leadership style in predicting engagement among employees. *Journal of Leadership & Organizational Studies*, *10*(20), 1-12.

Suharti, L., & Suliyanto, D. (2012). The effects of organizational culture and leadership style toward employee engagement and their impacts toward employee loyalty. *World Review of Business Research, 2*(5), 128-139.

Susanj, Z., & Jakopec, A. (2012). Fairness perception and job satisfaction as mediators of relationship between leadership style and organizational commitment. *Journal of Psychological Topics, 21*(3), 509-526.

Taber, T. D., & Alliger, G. M., (1995). A task-level assessment of job satisfaction. *Journal of Organizational Behavior*, *16*(2), 101-121.

Taipale, S., Selander, K., Anttila, T., & Nätti, J. (2011). Work engagement in eight European countries: The role of job demands, autonomy, and social support. *International Journal of Sociology and Social Policy, 31*(7/8), 486-504.

Tanner, B. M., Jr. (2007). *An analysis of the relationships among job satisfaction, organizational trust, and organizational commitment in an acute care hospital. (Doctoral thesis, Saybrook University, 2007).* Retrieved from http://gradworks.umi.com/3266765.pdf

Taris, T.W., & Feij, J. A. (2004). Learning and strain among newcomers: A three-wave study on the effects of job demands and job control. *Journal of Psychology, 138*, 543-63.

Taylor, A. M. (2012)*. Cultivating an engaged workforce: The roles of leader personality, motivation, and leadership style.(Doctoral Thesis, University of South Florida,*

2012).   Retrieved   from

http://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=5433&context=etd

Tims, M., Bakker, A. B., & Xanthopoulou, D. (2011). Do transformational leaders

enhance their followers' daily work engagement? *The Leadership Quarterly*

Journal, 22(1), 121-131.

Tomic, M., & Tomic, E. (2011). Existential fulfillment, workload and work engagement

among nurses. *Journal of Research in Nursing, 16*(5), 468-479.

Tomlinson, E.C., & Mayer. R.C. (2009). The role of causal attribution dimensions in trust

repair. *The Academy ofManagement Review,34*(1), 85-104.

Tyler, T. R., & Wakslak, C. J. (2004). Profiling and police legitimacy: Procedural justice,

attributions of motive, and acceptance of police authority. *Criminology* 42(2),

253-281.

Tyler, T.R. (2003). Trust within organization. *Personnel Review*, *32*(5), 556-568.

Tzafrir, S. S., & Dolan, S.. L. (2004). Trust me: A scale for measuring manager-

employee trust. *Management Research, 2*(2), 115-32.

Ugwu, F.O., Onyishi, I. E., & Tyoyima, W. A. (2013). Exploring the relationship

between academic burnout, self-efficacy and academic engagement among

Nigerian college students. *The African Symposium, 13*(2), 37-45.

Ünüvar, T.G. (2006). *An integrative model of job characteristics, job satisfaction,*

organizational   commitment,   and   organizational   citizenship

behavior. (Unpublished Dissertation), The Graduate School of Social Sciences of

Middle East Technical University, Turkey.

Van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2008). Explaining the relationships between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. *Work & Stress, 22*(3), 277-294.

Van Doornen, L. J. P., Houtveen, J. H., Langelaan, S., Bakker, A. B., van Rhenen, W., & Schaufeli, W. B. (2009). Burnout versus work engagement in their effects on 24-hour ambulatory monitored cardiac autonomic function. *Stress and Health, 25*(4), 323-331.

Van Dyne, L., VandeWalle, D., Kostova, T., Latham, M.E., & Cummings, L.L. (2000). Collectivism, propensity to trust, and self-esteem as predictors of organizational citizenship in a non-work setting. *Journal of Organizational Behavior*, *21*, 3-23.

Van Wyk, R., & Adonisi, M**.** (2008). The role that entrepreneurial characteristics play in predicting job satisfaction. *South African Journal of Economic and Management Sciences, 11*(4), 391-407.

Vigoda-Gadot, E., & Talmud, I. (2010). Internal politics in academia: theoretical and empirical analysis of its relationship with social capital and job performance. *Journal of Applied Social Psychology, 40*(11), 2829-2861.

Vineburgh, J. H. (2010). *A study of organizational trust and related variables among faculty members at HBCUs.* (*Doctoral Thesis, university of Iowa)* Retrieved from http://ir.uiowa.edu/etd/614/

Visser, D., & Coetzee, S. (2005). Affective-cognitive consistency of attitude as a moderator of the job satisfaction-performance relationship. *South African Journal of Industrial Psychology, 31*(3), 62-69.

Wang, D., & Hsieh, C. (2013). The effect of authentic leadership on employee trust and employee engagement. *Social Behavior and Personality, 41*(4), 613-624.

Wang, S., & Huff, L. C. (2007). Explaining buyers' responses to sellers' violation of trust. *European Journal of Marketing, 41*(9/10), 1033-1052.

Waqas Raja, M. (2012). Does transformational leadership leads to higher employee work engagement. A study of Pakistani service sector firms. *International Journal of Academic Research*, *2*(1), 1-10.

Weigl, M., Hornung, S., Parker, S. K., Petru, R., Glaser, J., & Angerer, P. (2010). Work engagement accumulation of task, social, personal resources: A three-wave structural equation model. *Journal of Vocational Behavior, 77*(1), 140-153.

Weiner, B. (1980). *Human motivation*. New York: Holt, Rinehart & Winston.

Weiner, B. (1992). *Human motivation: Metaphors, theories, and research.* Newbury Park, CA: Sage.

Weiss, D.J., Dawis, R.V., England, G.W., & Lofquist, L.H. (1967). *Manual for the Minnesota satisfaction questionnaire*. Minneapolis: University of Minnesota.

Winefield, A.H., Boyd, C., Saebel, J., & Pignata, S. (2008). *Job stress in university staff: An Australian research study*. Bowen Hills, Quensland: Australian Academic Press.

Winefield, A.H., Gillespie, N.A., Stough, C., Dua, J., Hapuarachchi, J., & Boyd, C. (2003). Occupational stress in Australian university staff: Results from national survey. *International Journal of Stress Management*, *10*, 51-63.

Winter, R., Taylor, T., & Sarros, J. (2000). Trouble at Mill: Quality of academic worklife issues within a comprehensive Australian university. *Studies in Higher Education, 25*, 279-294.

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior, 74*(3), 235-244.

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management, 14, 121-141.*

Xu, J., & Thomas, H. C. (2011). How can leaders achieve high employee engagement? *Leadership & Organization Development Journal, 32*(4), 399-416.

Yang, M. L. (2012). Transformational leadership and Taiwanese public relations practitioners' job satisfaction and organizational commitment. *Social Behavior and Personality, 40*(1), 31-46

Yin, R. K. (1994). *Case study research* (5th ed.), Thousand Oaks, CA: Sage Publication, Inc.

Yousef, D. A. (2002). Job satisfaction as a mediator of the relationship between role stressors and organizational commitment. *Journal of Managerial Psychology, 17*(4), 250-266.

Zaheer, A., McEvily, B., & Perrone, V. (1998). Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization science*, 141-159.

Zainudin, A., Junaidah, H. A., & Nazmi, M. Z. (2010). Modeling job satisfaction and work commitment among lecturers: A case of UiTM Kelantan. *Journal of Statistical Modeling and Analytics*, *1*(2), 45-59.

Zaltman, G., & Moorman, C. (1988). The importance of personal trust in the use of research. *Journal of Advertising Research, 28*, 16-24.

Zand, D. E. (1972). Trust and managerial problem solving. *Administrative Science Quarterly*, 229-239.

Zapf, D., Knorz, C., & Kulla, M. (1996). On the relationship between mobbing factors, and job content, social work environment, and health outcomes. *European Journal of Work and Organizational Psychology, 5*(2), 215-237.

Zhao, X., Lynch, J. J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research,37*, 197-206.

Zikmund, W. G. (2003). *Business research methods* (7th ed.). Cincinnati, Ohio: Thomson/South-Western.