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IDENTIFYING EMPLOYEE ENGAGEMENT FACTORS IN THE OIL AND
ENERGY INDUSTRY IN SAUDI ARABIA

A Dissertation in Workforce Education & Development

by

Ali Habeeb Alkhalaf

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The dissertation of Ali H. Alkhalaf was reviewed and approved* by the following:

William J. Rothwell
Dissertation Advisor
Chair of Committee
Professor of Education
Program Coordinator of Graduate Program in
Workforce Education and Development

Judith A. Kolb
Associate Professor of Workforce Education and Development

Susan E. Cromwell
Director of Workplace Learning
Affiliate Assistant Professor of Education

Edgar P. Yoder
Professor of Agricultural Extension Education

Susan M. Land
Director of Graduate Studies for Learning and Performance Systems

*Signatures are on file in the Graduate School

Abstract

The oil and energy industry in Saudi Arabia is one of the largest employers of skilled workers in the country. Therefore, ensuring the continuous availability of such a unique workforce will have a positive impact on productivity and overall oil and energy organizations performance. Employees' job performance and turnover intention levels are critical to the oil and energy industry, so an understanding of such factors is of interest to human resources in such industries. Although there is a lack in studying work engagement in this population, the main goal of this study was to explore the relationship between work engagement, its antecedents and consequences, and the influence of work engagement on job performance and turnover intention. Four research questions were developed to fulfill the purpose of this research: (1) demographics and work engagement, (2) job resources and work engagement, (3) work engagement and job performance and with turnover intention, (4) all the ten research variables with the job performance and with turnover intention.

To answer the research questions, a web-based survey questionnaire was developed, translated into Arabic, and used in collecting data from employees. Work engagement was assessed using the Utrecht Work Engagement Scale (UWES-9). A total of 310 complete responses were used for data analysis.

Methods to analyze the data and answer the research questions included descriptive statistics, correlational research, multiple regression, and hierarchical multiple regression. The results demonstrate that (a) age and experience are the only demographic variables that are statistically significant predictors of work

engagement, (b) the independent variables of the job resources— autonomy, skill variety, and performance feedback—statistically prove a positive significant influence on the work engagement, (c) there is a statistically positive and significant correlation between job performance and work engagement, and (d) as expected, the results show a negative statistically significant correlation between turnover intention and work engagement. Finally, the hierarchical multiple regression analysis showed that among the 10 variables, employees' highest educational degree is the only variable that had a statistically significant influence on the job performance and only work engagement had a statistically significant influence on turnover intention.

TABLE OF CONTENTS

LIST OF FIGURES	x
LIST OF TABLES	xi
ACKNOWLEDGEMENTS.....	xii
Chapter One: Introduction	1
Historical Perspective	1
Statement of the Problem	8
Purpose of the Study	9
Significance of the Study	9
Research Questions	10
Limitations.....	11
Definition of Key Terms	11
Assumptions	13
Conceptual Research Framework	14
Chapter Summary.....	16
Chapter Two: Literature Review	18
Introduction	18
Work Engagement	19
Conceptualization and Definition of Work Engagement	21
Vigor	25
Absorption	25
Dedication	26
Work Engagement and other Related Concepts	26

Models of Work Engagement	29
Work Engagement and Demographics	31
Antecedents of Work Engagement	33
Job Resources	34
Significance of Job Resources on Work Engagement	42
Consequences of Work Engagement	49
Job Performance	49
Turnover Intention	54
Work Engagement and Turnover Intention	54
Work Engagement in the Petroleum Industry: Saudi Arabia as an Example	56
Work Engagement in Saudi Arabia.....	57
Measuring the Work Engagement	60
The Utrecht Work Engagement Scale (UWES)	61
The Shirom-Melamed Vigor Measure (SMVM)	61
Employee Engagement Interview (EEI)	62
The Gallup Workplace Audit (GWA)	62
The Maslach Burnout Inventory (MBI)	63
Chapter Summary.....	64
Chapter Three: Methodology.....	66
The Study Purpose	66
Research Questions	66
Research Methodology	67

Research Variables	67
Population, Sample, and Sampling Strategy Justification	69
Population	69
Sample	70
Justification for Snowball (Referral) Sampling	70
Sample Size	72
Instrumentation and Reliability	73
Work Engagement	73
Instrument for Job Resources	74
Instrument for Job Performance	76
Instrument for Turnover Intention	77
Translation of Instruments	79
Data Collection and the Research Process	80
Approval of the IRB	81
Human Subjects Review	81
Pilot Test	82
Data Collection Process	82
Implementing the Survey Questionnaire	82
Strategies to Increase the Response Rate	84
Data Analysis Plan	85
Chapter Summary	87
Chapter Four: Results	89
The Study Purpose	89

The Research Questions	90
Number of Participants	90
Profile of the Participants	92
Reliability, Linearity, and Normality.....	94
Reliability	94
Linearity.....	95
Normality	96
Influence of Demographic Factors on Work Engagement.....	97
Influence of Job Resource Factors on Work Engagement	100
Influence of Work Engagement with Job Performance and Turnover Intention.....	102
Block Regression Results for Job Performance and Turnover Intention	104
Turnover Intention.....	106
Research Findings	108
Summary of the Research Findings	108
Chapter Five: Summary, Conclusion, and Recommendation	111
Summary of the Research.....	111
The Study Purpose	111
Research Questions	111
The Research Process	112
Conclusions	113
Recommendations.....	119
For Scholars.....	119

For Human Resources Development.....	122
Limitations and Scholar’s Opinion about Data Collection	124
Chapter Summary.....	125
References	127
Appendix A: Questionnaires for Survey with Implied Informed Consent Form (The English version).....	146
Appendix B: Questionnaires for Survey with Implied Informed Consent Form (The Arabic version)	153
Appendix C: IRB Approval for Human Subjects Research.....	158

LIST OF FIGURES

Figure 1.1 Conceptual research framework	16
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LIST OF TABLES

Table 3.1 Variables Names, Response Options and Scale of Measurement	68
Table 3.2 Summary of Variables, Research Questions, and Item on Instrument	78
Table 3.3. Summary of Statistical Analysis Procedures Used in the Study.	86
Table 4.1 Profile of the Participants	93
Table 4.2 Summary of Reliability Results for Various Scales	95
Table 4.3 Summary Results for Normality Assessments.	97
Table 4.4 Work Engagement Descriptive Statistics for Age, Highest Educational Degree and Years of Work Experience.....	99
Table 4.5 Work Engagement Regressed on Three Demographic Variables. ...	100
Table 4.6 Pearson Correlations, Means and Standard Deviations for Job Resource Factors and Work Engagement.	101
Table 4.7 Work Engagement Regressed on Three Job Resources Variables..	102
Table 4.8 Pearson Correlations, Means and Standard Deviations for Job Performance Factors and Work Engagement.....	103
Table 4.9 Pearson Correlations, Means and Standard Deviations for Turnover Intention Factors and Work Engagement.....	104
Table 4.10 Hierarchical Regression Results for Job Performance.....	106
Table 4.11 Hierarchical Regression Results for Turnover Intention.....	107

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Chapter One

Introduction

Historical Perspective

Engaged employees tend to have a positive view of their work. They go to work happy, full of energy, enthusiasm, which ultimately translates to a higher level of achievement. They create positive feedback about their work and portray a positive image about their jobs in terms of appreciation, recognition, and success (Schaufeli & Bakker, 2004). Even if they get tired from work, they describe this tiredness as a pleasant state, since it is the result of a positive accomplishment. Work for engaged employees is fun (Gorgievski, Bakker, & Schaufeli, 2010). The importance of this engagement level in the workplace, however, has been at the center of many studies.

An employee's work-related feel of their work, regardless of its inherent positive or negative factors, is important to organizations because it quite possibly could influence organizational efficiency, organization output, and competitive advantage in the market. Therefore, it is important to inspire and enable employees to actively and consciously enhance their psychological connection with their work. In turn, the latter would undoubtedly support organizational goals to compete effectively and achieve their desired output. These support organizations since employees feel energetic, dedicated, and become engaged with their job (Bakker & Leiter, 2010). When this connection exists, employees devote more time and effort to, have a significant and

meaningful interest in, and fully engage in their work which support organizations' competitive advantage in the market (Bakker, Schaufeli, Leiter, & Taris, 2008).

Work engagement has received more attention since the last decade of the twentieth century. Scholars and practitioners, in particular, have shown interest in studying the importance of work engagement. Organizations expect their employees to be proactive, show initiative, engage in collaboration with their peers, take responsibility, and commit to performance with high-quality standards (Rothwell, Baumgardner, & Mayers, 2014). Bakker and Schaufeli (2008) added that organizations need employees who are energetic, dedicated, and absorbed in their work. Bakker and Schaufeli (2008) believed that work engagement was one way for organizations to achieve goals such as high productivity, increased profitability, low absenteeism, and low turnover rates.

Some of the literature has characterized work engagement with affective (or emotional), behavioral or physical, and cognitive components (Kahn, 1990; Kim, Kolb, & Kim, 2012; Macey & Schneider, 2008; Rich, Lepine, & Crawford, 2010; Saks, 2006; Shuck & Wollard, 2010). The first formal definition of work engagement was introduced in 1990 by William Kahn, and since its infancy, scholars have been meticulously researching the topic. Kahn (1990) introduced the idea of personal engagement, then defined it as "the harnessing of organization members' selves to their work roles" (1990, p. 694). Since then, scholars and practitioners have tried to conceptualize the idea of work engagement. Today, there is no universal agreement on the definition of work

engagement; rather, there is an agreement that two dimensions - energy and involvement, comprise work engagement (Bakker, Albrecht, & Leiterc, 2011).

The concept of work engagement is known by different terms, such as employee engagement, job engagement, role engagement, and active engagement. The most popular terms are employee engagement and work engagement (Bakker & Leiter, 2010; Kim, 2014; Shuck & Wollard, 2010), the latter of which was used for the purposes of this study. Work engagement is “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli, Salanova, González-Romá, & Bakker, 2002, p. 74). Three constructs which are vital to the success of work engagement are vigor, dedication, and absorption. Vigor is defined as “high levels of energy and mental resilience while working, the willingness to invest efforts in one’s work, and persistence even in the face of difficulties” (Schaufeli et al., 2002, p. 74). Dedication is defined as “a sense of significance, enthusiasm, inspiration, pride, and challenge” (Schaufeli et al., 2002, p. 74). Absorption is used to describe an employee as “being fully concentrated and deeply engrossed in one’s work, whereby time passes quickly and one has difficulties with detaching oneself from work” (Schaufeli et al., 2002, p. 75). In addition, Bakker and Demerouti (2008) found that an engaged-working environment is critical to organizational success.

An engaging work environment can be affected by critical factors that influence work engagement. These are antecedents of the work engagement itself. Information on these antecedents—described as any variable or construct

that influences work engagement—facilitates an understanding of the environment of work engagement. One of these antecedents includes job resources, which refers to the physical, social, or organizational features of the job that are functional in attaining work goals, or that inspire personal growth (Bakker & Demerouti, 2008). Job resources consist of autonomy, skill variety, performance feedback, and social support from colleagues. These factors, collectively and individually, can influence the employees' work engagement. Job resources encompass both intrinsic and extrinsic motivational roles. The intrinsic dimension fulfills basic human needs like the need for autonomy (Van den Broeck, Vansteenkiste, de Witte, & Lens, 2008). Moreover, skill variety encourages learning and increases job competence. The extrinsic dimension of job resources fosters the willingness to dedicate personal efforts and capabilities of doing the work tasks (Meijman & Mulder, 1998). For example, performance feedback and a supportive supervisor would influence an individual in achieving work objectives.

The noticeable effect of job resources on work engagement encouraged scholars to conduct empirical research to investigate the correlation between the two. For example, Hakanen, Schaufeli, and Ahola (2008) examined the job resources and work engagement of Finnish dentists in a longitudinal study and found that there is a positive relationship between job resources and work engagement. In addition, they can predict the employees' engagement through job resources. Several studies produced similar results. For example, Kim (2012) tested the influence of the job resources and employee work engagement in

South Korea and Schaufeli, Bakker, and Van Rhenen (2009) conducted another study in the Netherlands which discovered similar results. In a similar manner, this study examined the relationship between job resources and work engagement, specifically in the oil and energy industries in Saudi Arabia.

As the influence of job resource antecedents has shown, there are some consequences related to the level of work engagement. These consequences are the result of work engagement and may be positive or negative (Bakker & Bal, 2010; Halbesleben & Wheeler, 2008). Work engagement influences employees' job performance, turnover intention, productivity, profit, safety, physical and mental health, absenteeism, and job satisfaction (Bakker & Demerouti, 2009; Halbesleben & Wheeler, 2008; Kim, 2014; Koyuncu, Burke, & Fiksenbaum, 2006; Saks, 2006; Schaufeli & Bakker, 2004; Schaufeli, Bakker, Van Rhenen, 2009). The results of positive work engagement lead to organizations' desired outcomes, such as increasing job performance and decreasing turnover intention (Saks, 2006; Shuck, 2011; Shuck & Wollard, 2010).

One recognizable consequence related to the level of work engagement is job performance. Empirical research has shown that greater work engagement has a positive impact on job performance (Kim, 2014). For example, Bakker and Demerouti, (2009), and Schaufeli and Bakker (2004) showed that a higher level of work engagement leads to an increase in job performance. Therefore, as work engagement increases, job resources increase as well. Moreover, as employees become more engaged, their performance is expected to be better out of a desire to give back to their organizations. The study of work engagement factors— such

as vigor, for example—show that higher rates of engagement result in a more energetic employee. Consequently, this employee is likely to be more productive due to the positive associations with previously completed work. Factors such as absorption and dedication, mean that employees feel work passes quickly as they are become more engaged during work hours.

Work engagement could also enhance organizational outcomes such as profitability (Leiter & Bakker, 2010). Since engaged employees enjoy their work, and therefore enhance their job performance, their output possibly improved. This performance is the result of the energy, dedication, absorption, and focus that engaged employees feel in terms of their work. Furthermore, such employees concentrate their attention on their tasks, which could lead to high quality output (Leiter & Bakker, 2010).

This relationship between work engagement and job performance attracted the attention of many scholars and compelled them to conduct further research. For example, Xanthopoulou, Bakker, Heuven, Demerouti, & Schaufeli (2008) examined work engagement and job performance among flight attendants, and found a positive relationship between the two. In addition, they found work engagement mediates between job resources and job performance. Another study conducted by Bakker and Demerouti (2009) on 525 Dutch workers showed that work engagement led to an increase in job performance. The study of work engagement on job performance in the oil and energy industry in Saudi Arabia, examined the results of the influence of previous, similar studies.

Another consequence of work engagement is turnover intention. This was particularly interesting to scholars and practitioners because turnover intention is important to retain human capital within organizations. Decreasing the intention to leave within groups of employees is a goal of organizations, because of the costs associated with employee turnover. Furthermore, recruiting new employees takes time. In addition, new employees may need training, which costs organizations even more money. Therefore, it is important to study how work engagement might have an effect on employees' intent to leave their jobs in the near future (Carmeli & Weisberg, 2006).

Several scholars examined the relationship between work engagement and turnover intention. For example, Schaufeli and Bakker (2004) conducted research to examine the antecedents and consequences of burnout and engagement. In their study, 1698 Dutch workers participated. They found that turnover intention has a negative relationship with work engagement. That is, when work engagement increased, employees' intent to leave decreased. Another study, conducted by Saks (2006), was performed to examine the work engagement and turnover intention among 102 Canadian employees. The results of this study also showed a negative relationship between work engagement and turnover intention. These results convinced leaders of organizations that the way to keep their employees on staff was to enhance their employees' level of engagement. Such results urged the researcher examine the turnover intention and the work engagement in the oil and energy industry in Saudi Arabia.

In addition to work engagement, job resources, job performance, and turnover intention, this research studied the effect of three demographic factors on work engagement: age, highest educational degree, and years of work experience working in oil and gas.

The previous empirical research on work engagement, its antecedents, and consequences, urged the scholar to research these contexts in Saudi Arabia and in the oil and energy industries, in particular. Since the Saudi economy depends mainly on oil and energy, it is beneficial to find out more information about the work engagement in this context. Specifically, this research examined the context of work engagement as characterized by vigor, dedication, absorption, its antecedents, and its consequences in the work environment, as well as their effects on organizational output.

Statement of the Problem

William Kahn introduced the concept of work engagement in the United States in 1990. This concept of work engagement was tested, validated, and applied in many countries, such as: Finland, Greece, Spain, Sweden, Portugal, Netherland, Norway, Belgium, Australia, South Africa, Japan, China, Romania, Egypt, South Korea, Japan, Turkey, and Iran (Bakker & Leiter, 2010). However, to the best of this researcher's knowledge, work engagement had not been empirically researched in the oil and energy industry in Saudi Arabia. Therefore, a study of work engagement in the Middle East, especially in the Gulf Council Countries (GCC) and in Saudi Arabia, in particular, would be of interest. The purpose of this study was to identify critical demographics, the influence of job

resources (autonomy, skill variety, and performance feedback) on work engagement, the influence of work engagement on job performance, and turnover intention at the oil and energy industry in Saudi Arabia.

Purpose of the Study

The primary purpose of this study was to examine the influence of the demographic factors (age, highest educational degree, and years of work experience) and the influence of job resources (autonomy, skill variety, and performance feedback) on employees' self-reported work engagement. Additionally, the study examined the influence of work engagement on job performance and turnover intention in the oil and energy industry in Saudi Arabia. To accomplish this purpose, four research questions were developed.

Significance of the Study

Findings from this research have many benefits for both academia and the business world. Scholars will investigate empirical research in the hopes of finding a relationship between employees' demographics, as well as the job resources effect on employees' work engagement level in Saudi Arabia and the Gulf Council Countries GCC. This study was an opportunity to explore work engagement in the oil and energy sector in Saudi Arabia. In addition, it provides human resource development practitioners a solid research foundation for developing training programs and workshops in order to enhance employee work engagement in the oil and energy sector in Saudi Arabia. Moreover, HR departments in oil and energy companies will have an opportunity to understand the engagement antecedents and consequences for people who work in the

energy industry. This information would enhance petroleum industry effectiveness; because the oil industry has an issue with seasonal demand, which causes fluctuations in petroleum companies' situations. This might affect employee engagement, making it difficult to manage and attract talent to tough workplaces, offshore, and remote areas. Thus, studying and researching work engagement in oil and energy in Saudi Arabia would facilitate in developing strategies and policies that enhance oil and energy industry employees' work engagement.

Research Questions

This study was guided by four research questions:

- RQ 1. What is the influence of the demographic factors (age, gender, years of work experience, highest educational degree) on employees' work engagement in the oil and energy industry in Saudi Arabia?
- RQ 2. What is the influence on employees' work engagement of the three job resource factors:
 - Autonomy?
 - Skill variety?
 - Performance feedback?
- RQ 3. What are the relationships between employees' work engagement and:
 - Job performance
 - Turnover Intention
- RQ 4. What is the collective influence of performance feedback,

autonomy, skill variety, vigor, absorption, dedication, work engagement, gender, age, highest educational degree, and years of work experience on:

- job performance?
- turnover intention?

Limitations

This study had several limitations. First, this study used a snowball, or referral non-probability, sampling method. The participants were asked to forward the survey to their friends, then their friends were asked to forward the survey to friends in their network as well. This stipulation made it difficult to generalize the results. However, this was the only way to obtain a high response rate in Saudi Arabia. Usually, people do not participate in research unless it comes from a friend or a member of their family or tribe. Since the goal was to measure work engagement in the Middle East and in Saudi Arabia in particular, the referral sampling method was used to collect the data. This strategy provided information about work engagement in Saudi Arabia, even though sample representation was limited. Another limitation was the use of only a few antecedents and consequential variables.

Definition of Key Terms

Absorption. Absorption was defined as “being fully concentrated and deeply engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work” (Schaufeli et al., 2002, p. 75).

Autonomy. Autonomy referred to “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” (Hackman & Oldham, 1976, p. 258).

Dedication. Dedication was defined as “a sense of significance, enthusiasm, inspiration, pride, and challenge” (Schaufeli et al., 2002, p. 74).

Job resources. Job resources were defined as “those psychological, social, or organizational aspects of the job that (a) are functional in achieving work-related goals, (b) reduce job demands and the associated physiological and psychological costs, and (c) stimulate personal growth and development” (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007, p. 122). For example, autonomy, performance feedback, and skill variety are job resources.

Job performance. According to Demerouti and Cropanzano (2010), job performance comprises in-role performance and extra-role performance. **In-role performance** referred to “those officially required outcomes and behaviors that directly serve the goals of the organization” while **extra-role performance** referred to “discretionary behaviors on the part of an employee that are believed to directly promote the effective functioning of an organization without necessarily directly influencing an employee’s productivity” (Demerouti & Cropanzano, 2010, p. 148).

Performance feedback. Feedback referred to “the degree to which carrying out the work activities required by the job results in the individual

obtaining direct and clear information about the effectiveness of his or her performance” (Hackman & Oldham, 1976, p. 258).

Skill variety. Skill variety referred to “the degree to which a job requires a variety of different activities in carrying out the work, which involve the use of a number of different skills and talents of the person” (Hackman & Oldham, 1976, p. 257).

Turnover intention. Turnover intention refers to “conscious and deliberate willfulness to leave the organization” (Tett & Meyer, 1993, p. 262).

Vigor. Vigor was defined as “high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties” (Schaufeli et al., 2002, p. 74).

Work engagement. Work engagement was defined as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli et al., 2002, p. 74).

Assumptions

The UWES-9 instrument was assumed to be most effective in measuring the antecedents and consequences of work engagement in Saudi Arabia. Based on this study, and the validation in many cultures around the world, there are implications that it could translate to Saudi culture as well. It was also assumed that this study would have a high response rate since referral sampling methodology was used.

Conceptual Research Framework

This study focused on work engagement and its antecedents (i.e., job resources) and its consequences (i.e., job performance and turnover intention). In addition, this study examined three demographics factors influence on work engagement. In addition, this research was guided theoretically by the Job Demand-Resources Model (JD-R) and then empirically tested this theoretical framework in the oil and energy industry in Saudi Arabia.

A conceptual research framework guided this study. This model, which was developed by Bakker and Demerouti (2008) and used by Kim (2014), was adapted to guide this research. It was developed after conducting qualitative and quantitative research on the influence of job resources and personal resources on work engagement, as well as the influence of work engagement on job performance and turnover intention. This framework is illustrated in Figure 1.1.

The JD-R model was used to study the relationship between demand and resources on overall work engagement. When the job resources are high in relation to job demand, the work engagement becomes greater. On the other hand, when the job resources are low in relation to job demand, work engagement is reduced (Bakker & Demerouti, 2008). Therefore, this model explains the influence of job resources on work engagement and the output of work engagement such as job performance and turnover intention. Thus, when job resources are high, work engagement will be high, leading to the improvement of employees' job performance through the internal motivational

role. This will foster the employee's growth, learning, development, and external motivational role to attain work goals.

In this research, the theoretical model is examined through analysis of demographics, job resources, job performance, and turnover intention as well as their influences on the employee's relationship with work engagement. The JD-R model has been tested comprehensively by several empirical studies. The influence of job resources as antecedents to work engagement has been studied in the past. The impact of work engagement on job performance and employees' turnover intention has also been studied. Moreover, work engagement has been tested as a mediator between antecedents such as job resources and consequences of the work engagement such as job performance and turnover intention. For example, Schaufeli and Bakker (2004) examined the JD-R model comprehensively and found that work engagement mediated the impact of job resources on turnover intention. This was also tested simultaneously on four different samples of white-collar employees in four Dutch service organizations. Also, Hakanen, Bakker, & Schaufeli (2006) examined this model on 2000 Finnish teachers. This model has also been tested in different cultures such as a study conducted on South African educators (Jackson, Rothmann, & van de Vijver, 2006), Norwegian police officers (Richardsen, Burke, & Martinussen, 2006), Spanish and Dutch employees (Llo-rens, Schaufeli, Bakker, & Salanova, 2007), Pennsylvanian nurses (Baumgardner, 2014), and in South Korean among selected organizations (Kim, 2014). These research findings support the idea that job resources positively influence work engagement and predict future

employee engagement. The results also supported the idea related to the JD-R model, that work engagement has a positive correlation with employees' job performance and a negative correlation with employees' turnover intention. These previous empirical studies supported the JD-R model, consequently influencing said research to utilize this model as a theoretical framework and guide in order to answer the research questions.

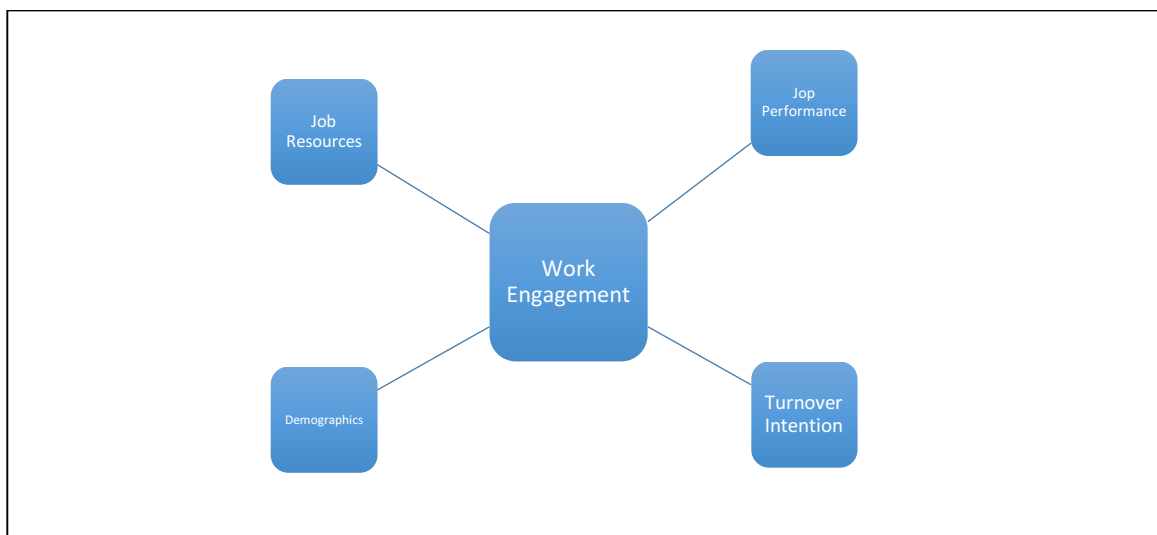


Figure 0.1 Conceptual research framework. Adapted from A. B. Bakker & E. Demerouti (2008), Towards a model of work engagement, *Career Development International*, 13, 218. Copyright 2008 by Emerald Group Publishing Limited.

Chapter Summary

This chapter started with a historical perspective to give a background about work engagement and its relation to job resources, job performance, and turnover intention. It discussed how the concept of work engagement was introduced by Kahn in 1990 as personal engagement. Then, the statement of the problem, which created the need for this study, was explained along with the

purpose of conducting a related study. After this, the significance of such a study was explained. Next, research questions were listed, followed by a description of the study's limitations. Furthermore, relevant definitions were stated, followed by a discussion of assumptions made during research. Finally, the study's conceptual framework was explicated.

Chapter Two

Literature Review

Introduction

Employee work engagement is vital to organizations. The concept of employee work engagement explains the feelings of energy and dedication employees experience in relation to their professional jobs (Bakker & Leiter, 2010). The relationship between physical, cognitive, and emotional elements and one's work has increased the attention of organizations: "firms claim that they have found conclusive and compelling evidence that work engagement increases profitability through higher productivity, sales, customer satisfaction, and employee retention" (Schaufeli & Bakker 2010, p. 11). Employee engagement has a positive, significant effect on employees' performance and financial returns, customer satisfaction, and employee retention (Baumruk, 2004; Richman, 2006; Buckingham & Coffman, 1999). Therefore, work engagement has attracted the attention of organization development practitioners (Saks, 2006). In addition, work engagement bears a relationship to the psychological state of employees, which compels academic scholars to research this concept.

Employees' psychological connection with their work has been acknowledged as critically important in the twenty-first century, because it has been found to impact behavioral outcomes (Bakker & Demerouti, 2008; Baumgardner, 2014; Kim, 2014). Academic scholars, "focused on understanding the antecedents to employee engagement in addition to defining and validating it as a psychological concept" (Park, 2015, p.20). Scholars also investigated the

consequences of the level of the work engagement. Finally, the effect demographics have on work engagement has been studied.

Work Engagement

Engaged employees tend to have a positive view of their work. They wake up in the morning feeling enthusiastic and exhibit a high level of energy about going to work (Bakker et al., 2008). These engaged employees go to work happy and are willing to achieve more. Moreover, such employees transfer their high energy to their work and create a motivational working environment. On behalf of their place of employment, they speak in the highest regard to their friends, which fosters a positive image of their work environment. Work engagement as it is related to well-being, should be motivationally affective, and lead to positive feelings about work. These engaged employees put their full energy toward solving problems and developing innovative strategies. They work long hours, but lack the obsession to work, which is a main characteristic of workaholics (Schaufeli et al., 2001). Engaged employees do not neglect their social life, and enjoy things other than work. They might also work as volunteers, and spend time on hobbies and socializing (Schaufeli & Salanova, 2008).

Work engagement is a positive relationship between the employee and his or her work, and is characterized by vigor, dedication, and absorption. It also has antecedents and consequences that need to be clarified and studied. Work engagement has been studied in different regions around the world, as well as, in different industries such as education, tourism, financial organizations, and the government and private sectors; however, according to the research, no studies

have been published about work engagement in the oil and energy industry in Saudi Arabia. Since oil and energy is a huge industry in this country, and the Saudi economy depends on oil production, it is worthwhile to study work engagement in this region. Therefore, the focus of this research was just that. However, the study of the construct of work engagement was characterized by several elements. Some of these were antecedents (e.g., job resources and personal resources) of work engagement, while others were consequences (e.g., job performance and turnover intentions) of work engagement.

The antecedents of work engagement are the drivers of work engagement. These antecedents are any variable or construct that influences the employees' work engagement. For example, job resources (such as autonomy, feedback, and skill variety) and personal resources (such as self-efficacy, optimism, and organizational based self-esteem), are represented as antecedents for work engagement (Bakker and Demerouti, 2008). These antecedents have been studied previously by scholars such as Bakker and Demerouti (2007) and Kim (2014). Their studies show that job resources and personal resources positively correlate with work engagement. Such studies will be discussed in more detail below. Job resources are those physical, social, or organizational characteristics of the job that play an important role in reducing job demands, facilitate the achievement of work objectives, which inspires personal growth, learning, and development (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004). Personal resources are "individuals' sense of their ability to

control and impact upon their environment successfully” (Xanthopoulou et al., 2007, p.124).

The consequences of the level of work engagement are job performance and turnover intention. Job performance and turnover intention are two examples of work engagement consequences (Bakker and Demerouti, 2008). Work engagement is “positively related to job performance” (Schaufeli & Bakker, 2003, p. 10). This positive relationship is reflected in employees’ work, and then toward their organization’s as well, which results in an increase in job satisfaction and decrease in turnover intention. Having a high level of work engagement also leads to “positive organizational behavior such as, personal initiative and learning motivation” (Schaufeli & Bakker, 2003, p. 10). Therefore, employee engagement is an important predictor of the consequences of employees’ job performance and intention to leave.

In summary, employees’ work engagement is an important concept to both practitioners and academics. Practitioners work to assess the employee work engagement to foster organizations’ competitive advantage in the market through employees’ productivity, customer satisfaction, and employee retention. Academics study work engagement to investigate the psychological state of the employees to explain their levels of energy and productivity in the workplace.

Conceptualization and Definition of Work Engagement

After searching the peer reviewed journals, it is clear that there is no agreement to describe engagement at work. For example, in related literature, labels such as work engagement, personal engagement, job engagement, role

engagement, active engagement, and employee engagement have been given. However, the literature did agree upon the meaning of engagement despite the differences in the term itself (Kim, 2014). There were several trials to summarize the trends in defining engagement at work, but the most popular among the researchers are Simpson (2009) and Shuck (2011). According to the latter, there are four trends in defining engagement at work: 1) personal engagement, 2) engagement as a positive antipode of burnout, 3) employee engagement, and 4) work engagement.

The first trend was defined after Kahn (1990) described the state of connection between the employees and their work in terms of personal engagement. Further, Kahn explained “how the psychological experiences of work and work contexts shape the process of people presenting and absenting themselves during task performance” (p. 3). He defined work engagement as a “harnessing of organization members’ selves to their work roles: in engagement, people employ and express themselves physically, cognitively, emotionally and mentally during role performances” (Kahn, 1990, p. 694). Therefore, he described psychological conditions that meaningfulness, safety, and availability in personal engagement. Psychological meaningfulness explains the feeling of having return on investments not only of physical, cognitive, or emotional energy, but all the while being emerged in their work. Psychological safety is being “able to show and employ one’s self without fear of negative consequences to self-image, status, or career” (p. 708). These are emphasized through the interaction within working context within organizations. Psychological availability is “having

the physical, emotional, or psychological resources to personally engage at a particular moment” (p. 714). These psychological conditions comprised the definition of personal engagement in Kahn’s description of the engagement in work.

The second trend is found in “burnout” literature. Work engagement is described as the positive antithesis of burnout (Maslach, Schaufeli, & Leiter, 2001) and is a direct opposite of burnout on a continuum (Schaufeli & Bakker, 2003). Burnout is characterized by exhaustion (draining of mental energy), cynicism (a negative attitude towards work, not necessarily with other people), and reduced professional efficacy (the belief that one is no longer effective in fulfilling one’s job responsibilities) (Maslach et al., 2001). Literature mentions that burnout and work engagement are distinct states where work engagement is negatively associated with burnout (Demerouti, Bakker, De Jonge, Janssen, & Schaufeli, 2001; Schaufeli & Bakker, 2004). Therefore, the two core symptoms of burnout, exhaustion and cynicism, are considered direct opposites of vigor and dedication (Schaufeli & Taris, 2005). Maslach et al. (2001) described six areas of work-life that lead to either burnout or engagement: workload, control, rewards and recognition, community and social support, perceived fairness, and values. They argued that work engagement is associated with a sustainable workload, feelings of choice and control, appropriate recognition and reward, a supportive work community, fairness and justice, and meaningful and valued work. Similar to burnout, engagement is expected to mediate the link between these six work-life factors and numerous work outcomes (Mehta & Mehta, 2013). Thus, the

definition associated with engagement at work can be understood from the explanation of the burnout, as it is the direct opposite of work engagement.

The third trend in describing the engagement at work is the Harter, Schmidt, & Hayes (2002). They defined engagement as “the individual’s involvement and satisfaction as well as enthusiasm for work” (p. 269). This trend investigated the relationship between employee satisfaction and employee engagement and business outcome as well as the influences on numerous organizational outcomes such as job and financial performance, turnover intention, customer satisfaction, and productivity (Bakker & Demerouti, 2009; Halbesleben & Wheeler, 2008; Harter et al., 2002).

The fourth trend in describing the engagement at work is based on Saks’ (2006) description of employee engagement as developed through a social exchange model that can “construct consisting of cognitive, emotional, and behavioral components” (p. 602), and it is “associated with individual role performance” (Saks, 2006, p. 602). In addition, engagement is a multidimensional concept which can be characterized as job engagement and organizational engagement. Engagement is not merely an attitude. It is the degree to which individuals are attentive to their work and absorbed in performing their roles (Saks, 2006).

In addition to these trends that have been discussed in the literature about the engagement at work, Schaufeli, Salanova, González-romá, and Bakker (2002) defined engagement as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al., 2002,

p. 74). Work engagement is also “directed toward desired organizational outcomes” (Shuck & Wollard, 2010, p.103). Engagement is characterized by energy, involvement, and efficacy (Bakker & Leiter, 2010; Maslach & Leiter, 1997). Moreover, employee engagement has been defined as an emotional and intellectual commitment to the organization (Baumruk, 2004; Richman, 2006; Shaw, 2005) or as the amount of discretionary effort exhibited by employees in their jobs (Frank, Finnegan, & Taylor, 2004; Mehta & Mehta, 2013). Furthermore, engaged employees are those active agents in organizations who have a high self-efficacy and generate positive feedback for themselves (e.g., Schaufeli & Bakker, 2004).

The main characteristics of work engagement are vigor, absorption, and dedication. These terms are discussed below.

Vigor

According to the *Merriam-Webster Dictionary*, vigor is “(1) active bodily or mental strength or force, or (2) active healthy well-balanced growth especially of plants” (Merriam-Webster, 2015). Vigor also “refers to high levels of energy and mental resilience while working, an employee’s willingness to make appreciable efforts in his or her job, and persistence in difficult situations” (Mauno, Kinnunen, & Ruokolainen, 2007, p.151; Schaufeli et al., 2002).

Absorption

According to the *Merriam-Webster Dictionary*, absorption is the “entire occupation of the mind” (Merriam-Webster, 2015). Also, absorption “refers specifically to total concentration on and immersion in work characterized by time

passing quickly and finding it difficult to detach oneself from one's work" (Mauno, Kinnunen, & Ruokolainen, 2007, p.151; Schaufeli et al., 2002). Absorption is further defined as "being fully concentrated and deeply engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work" (Schaufeli et al., 2002, p. 75).

Dedication

According to the *Merriam-Webster Dictionary*, dedication is "devoting or setting aside for a particular purpose" (Merriam-Webster, 2015). Also, dedication is characterized by a strong psychological involvement in one's work, combined with "a sense of significance, enthusiasm, inspiration, pride, and challenge" (Mauno et al., 2007, p.151; Schaufeli et al., 2002).

These three work engagement factors (vigor, dedication, absorption) may be influenced by employees' demographics, which led to the first research question mentioned in chapter one. Furthermore, this study examined the relationship between the aforementioned work engagement factors and job resource factors (autonomy, performance feedback, skill variety) in the second research question. Finally, this study examined the relationship between these work engagement factors, job performance, and turnover intentions in the third research question.

Work Engagement and other Related Concepts

The researcher carefully examined peer reviewed journals to fully understand and provide a broad overview of the concept of work engagement. Additionally, journals were reviewed to investigate the difference between work

engagement and other constructs that might look similar to work engagement, such as job satisfaction and organizational commitment. Some scholars have described work engagement as “old wine in a new bottle” (Macey & Schneider, 2008, p.10) because of its relation with and similarity to other terms such as job satisfaction, motivation, organizational commitment, and job involvement.

Because there is no agreement on one definition of work engagement, there perhaps may be confusion about the meaning of work engagement as opposed to these constructs. Scholars such as Saks (2006) and Schaufeli and Bakker (2010) believe work engagement must be distinguished from these constructs. The findings indicate that these constructs of job satisfaction, job involvement, and organizational commitment are close in meaning, but different than work engagement.

Job satisfaction is “the pleasurable emotional state resulting from the appraisal of one’s job as achieving or facilitating the achievement of one’s job values” (Locke, 1969, p. 316). Job satisfaction encompasses an affective and cognitive component, while work engagement encompasses cognition, emotion, and behavior. Job satisfaction is “concerned with the affect about or toward work” (Schaufeli & Bakker, 2010, p. 14). Job satisfaction is an attitude-related construct that deliberates an individual employee’s affect or emotion about or toward work, whereas work engagement deliberates employees’ moods at work (Schaufeli & Bakker, 2010). Work engagement is a motivational construct that refers to the investment of one’s own energy and covers high enthusiasm (dedication) and activation (vigor and absorption) (Schaufeli & Bakker, 2004), whereas job

satisfaction is rather a passive “contentment with, and positive feelings about, one’s job” (Judge & Kammeyer-Mueller, 2012, p. 347).

Organizational commitment is “the relative strength of an individual’s identification with and involvement in a particular organization” (Mowday, Steers, & Porter, 1979, p. 226). It is “a binding force between individual and organization” (Schaufeli & Bakker, 2010, p. 14). It is a psychological state of attachment and identification between the employees and their organization, an attitude-related construct that connects employees and their organization that induces the achievement of organizations’ goals. However, engagement is the psychological state that occurs when employees feel ownership, are absorbed with their roles, and are involved in the work role or in the work itself. Work engagement differs from organizational commitment in that organizational commitment focuses on employees’ attachment to their organizations (Meyer, Allen, & Smith, 1993), whereas work engagement refers to employees’ attachment to their job, rather than to the entire organization (Christian, Garza, & Slaughter, 2011; Macey & Schneider, 2008).

Furthermore, work engagement differs from work motivation because work engagement has not only a motivational element (dedication), but also cognitive (absorption) and affective (vigor) elements (Bakker & Demerouti, 2009). Job involvement is “the degree to which a person is identified psychologically with his work, or the importance of work in his total self-image” (Lodahl & Kejner, 1965, p. 24). Job involvement is a cognitive psychological identification with one’s job (Brown, 1996), which makes it different than work engagement, which describes

a cognitive level that expands to employees' self-concept and self-esteem (Brown, 1996; Christian et al., 2011; Macey & Schneider, 2008).

Work engagement, as it is related to well-being, should be motivationally affective and include positive feelings toward work. These engaged employees utilize all of their energy to solve problems and develop innovative services.

Models of Work Engagement

According to previous literature, there are two popular models used to depict work engagement. To begin, is the Job Demand Resource (JD-R) Model. This model illustrates the relationship between many factors while work engagement is the mediator. On the left side, antecedents of work engagement consist of resources and job demand. On the right side of the work engagement, outcomes or consequences of work engagement are depicted. The second model that expressed work engagement is the State Work Engagement (SWE). Both the JD-R model and the SWE, represent work engagement as a psychological state which impacts behavioral outcomes. Additionally, job resources, personal resources, and job demand are antecedents of work engagement in both models, JD-R and the SWE. Even though the JD-R model and the SWE model have the same antecedents, they are different in that the SWE model represents work engagement as a moment in (day-level or week-level) state or experience, while the JD-R model represents work engagement as a trait that is known as an average over-time assessment of experience.

Another work engagement conceptualization is Psychological Capital (PsyCap). This construct refers to:

An individual's positive psychological state of development that is characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals, and when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success (Luthans, Avey, Avolio, Norman, & Combs, 2006, p. 388).

This model has antecedents of work engagement similar to the personal resources of the JD-R model: efficacy, optimism, hope, and resiliency. This model also “plays in impacting work engagement indirectly through positive emotions” (Sweetman & Luthans, 2010, p. 58).

Even though these three models explain the work engagement, its antecedents, and consequences, the model that guided this research is the JD-R model. The research questions spoke on behalf of influence of the demographics and job resources as antecedents of work engagement. Additionally, job performance and turnover intention are consequences or outcomes of work engagement. Based on this JD-R model, UWES has been developed to measure the vigor, dedication, and absorption of the work engagement. UWES originally consisted of 17 items, and was then reduced to nine items based on empirical research. This is explained in more detail in chapter three.

Work Engagement and Demographics

There is some evidence in the literature that supports the idea that individual differences such as demographics influence work engagement (Baumgardner, 2014) and that psychological differences can also affect an individual's engagement (Kahn, 1990). A study by Robinson (2006) mentioned that individual differences—such as employees' personality and demographics, past experience, knowledge, expectations, and current needs, priorities, and interests—influence work engagement. Baumgardner (2014) studied the correlation between work engagement factors (vigor, dedication, and absorption) and employee demographics (age, gender, and highest educational degree). She developed an online web survey, and then conducted her study on nurses in Pennsylvania. The 1,900 nurses were randomly selected from the database of the Pennsylvania State Nurses' Association (PSNA). Out of those studied, 275 nurses took the survey with a response rate of 36.4 percent. Her research questions were:

- To what extent are vigor, dedication, and absorption correlated with the following factors: a. Demographic (Age, gender, and educational level), b. Factors related to their nursing position (years as an RN, years with current organization, organizational financial status, current position, current work status, and current primary work setting), c. Job satisfaction
- What are the self-described aspects of the job that positively and negatively affect nurse work engagement?

- What resources are most important to nurses and how do nurses describe the availability of these resources?
- What is the turnover intention of the nurse population surveyed?

She analyzed her data using descriptive and inferential statistics, utilizing Pearson correlation and regression. In regards to demographics' correlation with work engagement factors, her study found that age is a significant independent variable for overall work engagement, especially where absorption and dedication were considered. This was of positive significance, which means that the older the employee, the stronger the work engagement (Baumgardner, 2014).

Additionally, Goštautaitė (2015) conducted research to investigate the relationship between age and performance and age and work engagement. She conducted her study in two stages with the same sample. In the first stage, her study included 1,121 employees and 128 supervisors of those employees. The participants were people chosen randomly from mid-size financial organizations. She had 458 respondents with a response rate of 33%. She used UWES-9 to measure the work engagement. She analyzed her data using correlation and multiple regression. She had 14 hypotheses, one of which was about the positive relationship between age and work engagement, and this hypothesis was supported. These research studies support the notion that there is a positive relationship between age and employee engagement.

In the case of differences in levels of work engagement regarding age, Avery, McKay, and Wilson (2007) conducted a study on an aging workforce. The

study was conducted on 1,006 employees in the United Kingdom with a response rate of 22%; the data was collected by Gallup Organization in 2005. Gallup wanted to conduct a study utilizing telephone-administered surveys. Consequently, telephone numbers were randomly selected from a national phone directory, and calls were made. They analyzed the data using confirmatory factor analyses, utilizing LISREL 8.30, chi-square, root-mean-square error of approximation (RMSEA), and correlation. They found a difference in the level of work engagement among different age groups. Engagement was linked more closely to older employees than to younger employees. The relationship between older and younger coworkers also had a significant effect on job satisfaction. Thus, age is an important factor in studying work engagement.

Based on the studies discussed above, the present study added age as a demographic factor and evaluated its influence on work engagement. In addition, this study added the demographic factor and years of work experience to examine its influence on work engagement in the oil and energy industry in Saudi Arabia. This led to the first research question:

RQ1. What is the influence of the demographic factors (age, years of work experience, highest educational degree) on employees' work engagement in the oil and energy industry in Saudi Arabia?

Antecedents of Work Engagement

The JD-R model can explain the antecedents of work engagement (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Salanova, Agut, & Peiro,

2005; Schaufeli & Bakker, 2004). The job characteristics of the work environment can be divided into two categories: job demands and job resources (Bakker, Demerouti, & Schaufeli, 2003; Demerouti et al., 2001; Llorens, Bakker, Schaufeli, & Salanova, 2006). Job demands require physical and psychological efforts from an employee, as well as organizational features. These may have physiological and/or psychological costs, such as strain. On the other hand, job resources are physical, psychological, social, or organizational structures of employment that are functional in achieving work goals, reducing job demands and the physical and/or psychological costs associated with them, and inspiring personal growth and development (Bakker & Demerouti, 2007; Demerouti et al., 2001; Hobfoll & Shirom, 2001).

Besides the Job Demand Resource (JD-R) theory (Bakker & Demerouti, 2008), the conservation of resources theory (Hobfoll, 1989) and job characteristics theory (Hackman & Oldham, 1980) illustrate several types of job resources that affect work engagement. However, job resources and personal resources are the strongest predictors of work engagement (Hakanen & Roodt, 2010; Hakanen et al., 2006; Kim, 2014; Xanthopoulou et al., 2007). Therefore, this research focused only on job resources, work engagement antecedents, and left personal resources for additional research.

Job Resources

Resources are defined by Hobfoll (1989) as “those 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). Resources are additionally defined as “those entities that either are centrally valued in their own right, or act as means to obtain centrally valued ends” (Hobfoll, 2002, p. 307). These definitions are illustrated in the conservative resources theory (COR), which Hobfoll founded in 1989. This theory explains individuals’ behavior in terms of acquisition and accumulation of resources. A person’s motivation is governed by whether or not he or she has a high level of resources. Therefore, people are motivated to obtain, retain, foster, and protect those resources that are significant to them. Furthermore, Hobfoll (2002) exclaims that those people who have more resources are less liable to lose resources, and are more capable of managing resources. On the other hand, people who have fewer resources are more liable to resource loss, and have less capability of managing resources. As a result, the COR theory suggests that “people must invest resources in order to protect against resource loss, recover from losses, and gain resources” (Hobfoll, 2002, p. 349). Moreover, in order to adapt successfully in their environment, the COR theory identified four types of resources that individuals work to acquire and maintain: 1) objects such as a home, food, and tools; 2) conditions such as tenure, social support, and autonomy; 3) personal characteristics such as professional skills, efficacy, and beliefs; and 4) energies such as time, money, and knowledge. Having resources generates more resources, which creates resource caravans that lead to positive outcomes, which in turn may increase employees’ work engagement. Engagement might then be affected by the level of resources an employee has, in part because of the stress created by the threat

or fear of losing those resources. Thus, this relationship between engagement and resources can be explained by these four points: 1) people should bring in resources to prevent the loss of resources, 2) people with a greater collection of resources are less liable to resource loss, 3) people who do not have access to many resources are more liable to resources loss, and 4) having many resources would lead individuals to seek opportunities to risk resources to increase resource gains (Hobfoll & Shirom, 2001).

Having, obtaining, and accumulating resources coincides with a person's stress, according to the COR theory. For example, this stress happens when people's resources are threatened (lost), or when investing in these resources does not reach the expected level of return. Therefore, the COR theory suggests that in order to better deal with stress of this kind, people should invest in their resources and prevent themselves from losing resources as a consequence. Further, this investment in resources protects against future resource loss by way of accumulating more resources. This investment becomes more important when it is based on empirical research depicting a relationship between job resources and employees' work engagement. This relationship is a question that this research developed.

In addition to the COR theory, the job characteristics theory (Hackman & Oldham, 1980) and self-determination theory (Ryan & Deci, 2000) also illustrates the importance of resources in relation to people's jobs. The job characteristics theory mentions four job resources: skill variety, autonomy, task identity, and feedback. These job resources have motivational potential, and a strong

relationship with work engagement. Job resources can be found on the task level—such as skill variety, autonomy, and performance feedback—and can also be found at the interpersonal and social levels, such as supervisor and coworker support. Furthermore, these job resources can be found in day-to-day tasks, such as role clarity and participation in decision-making, as well as at the organizational level, including such items as salary, job security, and career opportunities. Job resources are defined as “those physical, psychological, social, or organizational aspects of the job that may (a) reduce job demands and the associated physiological and psychological costs, (b) are functional in achieving work goals, and (c) stimulate personal growth, learning and development” (Demerouti et al., 2001, p. 501). Job resources are vital, because they enable work goal achievement, growth, learning, and development. Also, job resources may lead to work engagement and enhance performance (Bakker & Demerouti, 2008; Schaufeli & Bakker, 2004).

It can be seen that these theories explain the relationship between resources, stress, and employees' work engagement. When individuals seek to acquire, maintain and preserve workplace resources, they also face stress related to the threat of loss of resources, and investment in resources without predicted returns (Hobfoll, 2002).

The literature has mentioned other theories about workplace engagement such as the job characteristics theory (Hackman & Oldham, 1980). This theory describes the motivational and wellness-promoting potential of job-related task resources. The job characteristics theory emphasizes the motivational potential

of job resources at the task level, including autonomy, feedback, and task significance. This theory agrees on a more general level with the conservation of resources (COR) theory (Hobfoll, 2002) in terms of illustrating that the primary individual motivation is directed towards obtaining and accumulating resources.

Another theory is the motivation-hygiene theory, which also underlines the importance of the job resources as a motivational factor in the workplace. Further, Fredrickson's (2001) broaden-and-build (BAB) theory of positive emotions highlights the importance of resources in the workplace. This theory claims that positive emotions have important effects on employees' personal resources and motivation. Positive emotions may lead people towards ideal work, creativity, and achievement motivation in the long run (Fredrickson, 2001). Therefore, in highly challenging work environments, job resources foster employees' engagement by facilitating success in work tasks. Also, employees maintain their level of engagement with the help of particular job resources that aid in managing stress.

The Job Demands-Resources (JD-R) theory also explains the relationship between job resources and work engagement. This model was developed with the intention to study job stress, including the Demand Control Model (DCM) by Karasek (1979). These models studied job stress caused by high job demands and low job control (job resources), stating that job stress can be low when job demands are balanced with job resources (job control) (Hakanen et al., 2006). Later, Bakker and Demerouti (2009) stated that the DCM has three weaknesses: 1) the DCM reduced the complex nature of working in organizations to two

variables, job demand and job control; 2) the static nature of the DCM; 3) job resources and job demands vary in content from one workplace to another. Therefore, Bakker and Demerouti (2007) modified the DCM to be a JD-R model. This JD-R model includes two specific sets of working conditions, job demands and job resources, and their prediction of employee work engagement.

The first of the JD-R model elements is job demands. Bakker, Hakanen, Demerouti, and Xanthopoulou (2007) defined job demands as “characteristics of the job that potentially evoke strain, in case they exceed the employee’s adaptive capability” (p. 275). Before they defined the JD-R model, they defined job demands as “those physical, social, or organizational aspects of the job that require sustained physical and/or psychological (i.e., cognitive and emotional) effort on the part of the employee, and are therefore associated with certain physiological and/or psychological costs” (Demerouti et al., 2001, p. 501). Job demands can include role ambiguity, role conflict, time, work pressure, and role overload.

The other element of the JD-R model is job resources. These resources refer to “those physical, psychological, social, or organizational aspects of the job that may (a) reduce job demands and the associated physiological and psychological costs, (b) are functional in achieving work goals, and (c) stimulate personal growth, learning and development” (Demerouti et al., 2001, p. 501). Job resources were already defined above, when the COR theory was discussed. In this model of JD-R, however, Schaufeli and Bakker (2004) proposed that high job demands with low job resources reduced work engagement while high job

resources with low job demands increased work engagement (Bakker & Demerouti, 2007).

Job resources are therefore a significant part of the JD-R theory (Bakker & Demerouti, 2008), which describes the relationship between job resources and employee well-being as well as the incorporation of employee well-being in work engagement (Hakanen & Roodt, 2010). In this model, job resources were the strongest predictor of work engagement, and led to engagement and positive outcomes (Schaufeli & Bakker, 2004), including dedication and extra-role performance (Bakker, Demerouti, & Verbeke, 2004), and were positively related to and influenced work engagement (vigor, dedication, and absorption).

Furthermore, job resources may have both intrinsic motivational potentials by facilitating learning or personal development, and extrinsic motivational potential by providing instrumental help or specific information for goal achievement (Schaufeli & Bakker, 2004). As such, they encourage employees to meet their goals. In turn, employees may become more committed and engaged in their jobs because they derive fulfillment from them (Hackman & Oldham, 1980).

Empirical studies have shown that job resources are important correlates of engagement (Halbesleben, 2010; Mauno et al., 2007; Saks, 2006), particularly under conditions of high job demands (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009b).

Job resources are the physical, social, psychological and/or organizational features of a job that (a) are useful in achieving work goals, (b) reduce job demands and the associated physiological and psychological costs, and (c)

inspire personal growth and development (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Resources can be located at these levels: the organization (such as salary and career opportunities), interpersonal and social relations (such as supervisor and coworker support), the organization of work (such as role clarity and/or participation in decision making), and the task level (such as autonomy, performance feedback, and skill variety) (Bakker et al., 2007).

Autonomy has been described as “the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling work, and in determining the procedures to be used in carrying it out” (Hackman & Oldham, 1976, p. 258; Kim, 2014). Performance feedback is described as “the degree to which carrying out the work activities required by the job results in the individual obtaining direct and clear information about the effectiveness of his or her performance” (Hackman & Oldham, 1976, p. 258). Hackman and Oldham (1976) refer to skill variety as “the degree to which a job requires a variety of different activities in carrying out the work, which involve the use of a number of different skills and talents of the person” (p. 257). These resources might affect employees’ work engagement. Consequently, the present study used the task level of job resources to study the relationship between work engagement factors and job resource factors (autonomy, performance feedback, and skill variety).

The Conservation of Resources (COR) theory and the Job Demand Resources (JD-R) theory emphasize that an increase of job resources increases work engagement. The COR theory asserts that individuals try to protect and accumulate resources and that resources tend to generate other resources,

which lead to positive outcomes (Hobfoll, 2002; Karatepe & Olugbade, 2009).

The JD-R model also reflects the fact that the presence of job resources enhances work engagement (Schaufeli & Bakker, 2004).

Significance of Job Resources on Work Engagement

Examining previous literature shows that job resources have a significant effect in predicting employees work engagement. For example, Kim (2014) conducted a study in South Korea in which he examined the job resources factors of autonomy, performance feedback, and skill variety and their relationship with work engagement factors (vigor, dedication, and absorption). He empirically examined the role of work engagement as a mediator between the antecedents and consequences in major organizations in South Korea. The purpose of his study was to examine “the structural relationships of work engagement between antecedent and consequent variables in the Korean major organizations contexts” (Kim, 2014, p.37). To meet his purpose, he developed three research questions:

RQ1. To what extent does each of the following: (1) job resources and (2) personal resources influence work engagement?

RQ2. To what extent does work engagement influence each of the following: (1) job performance and (2) turnover intention?

RQ3. To what extent does work engagement mediate the relationship between antecedents and consequences? (p.37)

Kim used the JD-R model to guide his research in solving the aforementioned research questions. He also used the UWES-9 to measure the

employees' level of engagement and adapted the job characteristics instrument developed by Hackman and Oldham (1976, 1980). The data was collected by sending a web-based questionnaire, which was translated into Korean, via an email, which included a hyperlink to an electronic survey. The email was sent to 2,600 employees randomly selected from major organizations in South Korea. The number of returned surveys was from a random 623, with a response rate of 24%. Some of those had missing data, but the complete surveys totaled 571 from employees working in a variety of jobs, in five major Korean organizations. The data was analyzed using structure equation modeling (SEM). The study found a statistically significant positive relationship between these job resource factors and work engagement. The personal resources also had a statistically significant positive relationship.

Empirical studies have shown that job resources have a positive impact on work engagement within the workplace (Bakker & Bal, 2010; Hakanen, Bakker, & Demerouti, 2005; Kim, 2014; Llorens et al., 2006; Richardsen et al., 2006; Salanova & Schaufeli, 2008; Schaufeli & Bakker, 2004; Schaufeli, Bakker, & Van Rhenen, 2009; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009a).

For example, a study conducted by Hakanen, Perhoniemi, and Toppinen-Tanner (2008) considered whether job resources lead to work engagement, which leads to personal initiative and work-unit innovation. The study was conducted on a two-wave, three-year panel design among 2,555 Finnish dentists. The researchers used a questionnaire survey. The questionnaire was posed to every working-aged member of the Finnish Dental Association ($N =$

4,531), covering 98% of all Finnish dentists. At the baseline, 71% ($N = 3255$) returned the questionnaire. The follow-up study 3 years later, had access to the address information of 3,035 first-phase respondents. In the follow-up, 84% ($N = 2,555$) returned the questionnaire Hakanen et al. (2008). The data was analyzed by using SEM, and found that their hypothesis was supported by the results which stated that positive and reciprocal cross-lagged associations were found between job resources and work engagement, and between work engagement and personal initiatives. They also found that personal initiatives had a positive impact on work-unit innovation over time.

Another study, conducted by Schaufeli and Bakker (2004), utilized a multiple sample approach in the Netherlands to examine the job demand and job resources and their relationship with burnout and engagement. The purpose of this study was to empirically examine the job resources as antecedents of burnout and engagement, in addition to the consequences of job burnout and work engagement. In addition, they tested the effect of job demand on job burnout and work engagement. To meet their purpose, they tested four hypotheses:

Hypothesis 1: A two-factor model that includes the core of burnout (exhaustion and cynicism), as well as an extended engagement factor (vigor, dedication, absorption, and efficacy) which is a better expression of the data than: (a) a one-factor model and (b) an alternative two-factor model that includes the original burnout (exhaustion, cynicism, efficacy) and engagement scales (vigor, dedication, absorption).

Hypothesis 2: Burnout mediates the relationship between high job demands and experienced health problems.

Hypothesis 3: Engagement mediates the relationship between job resources and (low) turnover intention.

Hypothesis 4: Various cross-links exist between the energetically- and motivationally-driven processes:

(a) Job demands and job resources are negatively related.

(b) Engagement and burnout are negatively related.

(c) Job resources are negatively related to burnout.

(d) Burnout is positively related to turnover intention.

(e) Health problems and turnover intention are positively related.

(Schaufeli & Bakker, 2004, p.299)

Schaufeli and Bakker (2004) collected their data from four independent occupational samples. The samples were collected randomly from the participants' organizations. The first sample was n=381 from an insurance company, with a response rate of 61%. The second sample was n= 202 from a large occupational health and safety service, with a response rate of 63%. The third sample was n=507 from a pension fund company, with a response rate of 83%. The fourth sample was n= 608 from a home-care institution, with a response rate of 47%; the reason that sample four had a lower response rate than the other samples was because sample four was administered by management, unlike the other samples that were administered by researchers. The total of participants of all the samples was n= 1,698. They sent paper-and-

pencil questionnaires and return envelopes to all employees at four organizations. The latter was accompanied by a letter to explain the goals of the study and emphasized the anonymity and confidentiality of the answers. The employees were asked to fill the questionnaires in private, and put it in a special box in their departments. The instrument that was used to assess the work engagement was UWES-17 to measure the vigor, dedication, and absorption. The instrument that was used to assess the performance feedback was Karasek's (1985). The data was analyzed using structural equation modeling (SEM). The study found that there is a statistically significant positive relationship between these job resources, including the performance feedback, and work engagement factors. In addition, the results were:

(1) burnout and engagement are negatively related, sharing between 10% and 25% of their variances;

(2) burnout is mainly predicted by job demands but also by lack of job resources, whereas engagement is exclusively predicted by available job resources;

(3) burnout is related to health problems, as well as to turnover intention, whereas engagement is related only to the latter;

(4) burnout mediates the relationship between job demands and health problems, whereas engagement mediates the relationship between job resources and turnover intention (Schaufeli & Bakker, 2004, p.293).

Similarly, Salanova and Schaufeli (2008) conducted a study in Spain to examine the mediating role of work engagement (vigor and dedication) among

job resources (performance feedback, job control, and skill variety). To meet their purpose, they tested three hypotheses:

- 1) Job resources are associated with high levels of work engagement.
- 2) In turn, work engagement is positively associated with proactive behavior, thus playing a full mediating role between job resources and proactive behavior.
- 3) The proposed full mediation model will be invariant across both national samples. (P.119).

Salanova & Schaufeli (2008) collected their study from two samples. They distributed questionnaires to 800 randomly selected employees from public and private Spanish organizations from different occupational sectors. The number of employees who returned the questionnaire was 624, with a response rate of 78%. Of these, there were 386 participants who used information computer technologies, 50% or more of their work time. Therefore, the number of the participants who were included in the study was $n= 386$. The questionnaires were accompanied by a letter to explain the goals of the study and emphasized the anonymity and confidentiality of the answers. The employees were asked to fill out the questionnaires, and return it either to the person whom administered the survey or to the research team.

The second sample was from the Netherlands and was comprised of $n= 338$ telecom managers. They distributed questionnaires to 420 managers, randomly selected employees from a large Dutch telecom company. The questionnaire was part of a voluntary, bi-annual physical and psychosocial

check-up program that was carried out by an occupational health and safety service. The questionnaire was mailed to their home addresses with pre-stamped return envelopes. The number of employees whom returned the questionnaire was 338, with a response rate of 80%.

The instrument used to assess the work engagement was UWES-17, which was utilized in order to measure the vigor, dedication, and absorption. The data were analyzed using SEM. The results of their study supported all of their hypothesis. The study also found that there is a statistically significant positive relationship between these job resources--including the feedback, job control, and variety--and work engagement factors.

These studies urged the researcher in the present study to examine the relationship between the three factors associated with job resources (autonomy, performance feedback, and skill variety) and the three factors associated with work engagement (vigor, dedication, and absorption) and to apply this examination to the oil and energy industry in Saudi Arabia. This determination led to the second research question:

- RQ2. What is the influence on employees' work engagement of the three job resource factors:
 - Autonomy?
 - Skill variety?
 - Performance feedback?

Consequences of Work Engagement

Job Performance

Job performance is hard to define due to the fact that employees may work many tasks, some of which are not even part of their official job descriptions (Demerouti & Cropanzano, 2010). However, job performance can be defined as “the level of productivity of an individual employee, relative to his or her peers, on several job-related behaviors and outcomes” (Babin & Boles, 1998, p. 82). Job performance conceptualization is categorized in four different ways: (a) overall performance (Bakker & Xanthopoulou, 2009; Medlin & Green, 2009; Salanova, Agut, & Peiro, 2005), (b) in-role performance (Halbesleben & Wheeler, 2008), (c) in-role and extra-role performance (Bakker & Bal, 2010; Bakker & Demerouti, 2009; Xanthopoulou et al., 2008), and (d) task performance and organizational citizenship behavior (Rich et al., 2010). Even though job performance has been classified in these four categories, the most popular terms used were: in-role and extra-role dimensions (Kim, 2014). The in-role performance is described as “those officially required outcomes and behaviors that directly serve the goals of the organization” and extra-role performance is described as “discretionary behaviors on the part of an employee that are believed to directly promote the effective functioning of an organization without necessarily directly influencing an employee’s productivity” (Demerouti & Cropanzano, 2010, p. 148). Christian and Slaughter (2007), in a meta-analytic study, discussed that little is known about work engagement as a determinant of performance outcomes. They also

mentioned that there is a need to study work engagement and its effect on job performance, including both in-role and extra-role performance.

One of the recent studies that has assessed the effect of the work engagement on job performance in terms of in-role and extra-role dimensions was conducted by Kim (2014). His research has been summarized in the previous section of this literature review concerning the significance of job resources. One of his research results is that there is a statistically significant relationship between work engagement and job performance. Therefore, when the level of work engagement increased, the employee's job performance increase as well.

Another study conducted by Bakker and Demerouti (2009) conceptualized job performance, including both in-role and extra-role performance. They empirically examined the relationship between work engagement and job performance. To meet their purpose, they tested three hypotheses:

H1. Empathic concern moderates the relationship between women's and men's work engagement. The crossover of engagement will be strongest when men are characterized by high (vs low) levels of empathic concern.

H2. Perspective taking moderates the relationship between women's and men's work engagement. The crossover of engagement will be strongest when men are characterized by high (vs low) levels of perspective taking.

H3. Work engagement is positively related to (colleague ratings of) in-role and extra-role performance. (p.224)

They used the UWES-9 to measure employee's level of engagement.

They used an instrument developed by Goodman and Svyantek (1999) to assess two types of performance, in-role and extra-role performance. The data were collected, via questionnaire, by nine psychology students of a Dutch university. Each student was asked to recruit 20 dual-earner couples as a requirement for their bachelor thesis. The couples were also given pre-stamped return envelopes. Out of the 180 packages that were distributed, 175 were returned completed with a response rate of 79%. The data were analyzed using structural equation modeling (SEM). The study found that:

The crossover of work engagement from women to men was strongest when men were high (vs low) in perspective taking (the spontaneous tendency of a person to adopt the psychological perspective of other people). Empathic concern did not moderate the crossover effect. In addition, men's work engagement was positively related to in-role and extra-role performance. (P.220)

Rich et al. (2010) conducted a study which examined the job engagement effects on job performance. They empirically examined the role of work engagement as a mediator between the antecedents and consequences on 245 firefighters and their supervisors. They tested the following hypotheses:

Hypothesis 1. Job engagement is positively related to task performance.

Hypothesis 2. Job engagement is positively related to organizational citizenship behavior.

Hypothesis 3. Perceived value congruence is positively related to job engagement.

Hypothesis 4. Perceived organizational support is positively related to job engagement.

Hypothesis 5. Core self-evaluations are positively related to job engagement.

Hypothesis 6a. Job engagement mediates the relationship between value congruence and task performance.

Hypothesis 6b. Job engagement mediates the relationship between value congruence and OCB.

Hypothesis 7a. Job engagement mediates the relationship between perceived organizational support and task performance.

Hypothesis 7b. Job engagement mediates the relationship between perceived organizational support and OCB.

Hypothesis 8a. Job engagement mediates the relationship between core self-evaluations and task performance.

Hypothesis 8b. Job engagement mediates the relationship between core self-evaluations and OCB.

Hypothesis 9. Job engagement mediates relationships among the antecedents and performance outcomes when job involvement, job satisfaction, and intrinsic motivation are considered as additional mediators. (p. 622)

They collected their data, via questionnaire, by visiting four fire stations during the working hours. The number of participants was 245 full-time firefighters and their supervisors. There is nothing about the response rate or

whether they collected their sample randomly or not. The data were analyzed using structural equation modeling (SEM). All the hypotheses were supported and the study found that there is a statistically significant positive relationship between work engagement and job performance.

The empirical studies discussed above have supported that there is a positive relationship between work engagement and job performance. Therefore, engaged employees allocate their cognitive, emotional, and physical resources to their work roles. In addition, engaged employees are more willing to devote their efforts to perform well in their work (Moliner, Martínez-Tur, Romos, Cropanzano, 2008).

Since the limited empirical research suggests that work engagement leads to better in-role and/or extra-role performances (Christian & Slaughter, 2007; Karatepe, 2011), these findings present an opportunity to further study this relationship between work engagement and job performance. Thus, the present study chose to analyze the relationship between work engagement and job performance (in-role and extra-role performance) in the oil and energy industry in Saudi Arabia. Also, to the researcher's knowledge, no empirical research has already been published pertaining to the relationship between work engagement and job performance in the oil and energy industry.

Bakker and Demerouti (2009) conducted their study of the relationship between work engagement and job performance in the Netherlands, and Kim (2014) conducted his study in Korea. Their results all showed that work engagement has significant implications and influences on employees' job

performance. The present study was conducted in Saudi Arabia, and by examining the relationship between work engagement and job performance, the findings of this study may add useful insights pertaining to the management and retention of engaged employees with highlighted performance within the oil and energy sector in Saudi Arabia. This focus led to the first part of the third research question:

RQ3a. What are the relationships between employees' work engagement and job performance?

Turnover Intention

Turnover intention can be defined as “conscious and deliberate willfulness to leave the organization” (Tett & Meyer, 1993, p. 262). It is an individual and subjective estimation of the possibility that the individual will leave his/her organization soon (Carmeli & Weisberg, 2006). Employee turnover intention is therefore a powerful predictor of employees' future behavior, engagement, and the strongest precursor to actual turnover (Carmeli & Weisberg, 2006; Egan, Yang, & Bartlett, 2004; Shuck, Reio, & Rocco, 2011).

Work Engagement and Turnover Intention

In the study conducted by Schaufeli and Bakker (2004), described above, they found that work engagement has a negative relationship with employee intention to leave. In addition, Kim's (2014) study, described above, showed that turnover intention is a major predictor of employees' actual turnover and that there is a negative relationship between employees' work engagement and their turnover intention in organizations. Both Schaufeli and Bakker (2004) and Kim

(2014) used UWES-9 to assess the work engagement. They also used the Colarelli (1982) instrument to measure employees' turnover intention.

Kim (2012) conducted another study to examine the structural relationships of work engagement between antecedents (i.e., job, psychological, and environmental conditions) and consequences (i.e., cooperation intention, organizational commitment, proactive behavior, and turnover intention). To meet his purpose, he developed four research questions:

RQ 1. To what extent does each of the following impact the level of work engagement: (1) job characteristics and (2) task interdependence?

RQ 2-1. To what extent does each of the following impact the level of work engagement: (1) trust in management / peers and (2) self-efficacy?

RQ 2-2. To what extent does each of the following impact the level of work engagement: (1) perceived organizational support and (2) team cohesiveness?

RQ 3. To what extent does work engagement influence each of the following: (1) cooperation intention, (2) organizational commitment, (3) proactive behavior, (4) turnover intention?

RQ 4. To what extent does work engagement mediate the effects of the antecedent variables on the consequent variables? (p.7)

Kim used the UWES-17 to measure employees' level of engagement. He used an instrument developed by Colarelli (1982) to assess employees' intention to leave. These instruments have been translated from their original English to Korean to be used in Korea. The data were collected via an online web survey by

sending questionnaire to the participants. He conducted the study on 1750 employees randomly selected from seven organizations, service, finance, construction, metal, food, and IT industries in Korea, and 612 returned back survey with a response rate of 34.9%. The data were analyzed using multiple regression analyses and structural equation modeling (SEM). The study found that there is a negative relationship between employees' work engagement and their turnover intention in organizations.

Since turnover intention is an important consequence of employees' work engagement, this study chose to investigate the influence of work engagement on employees' turnover intention in the oil and energy industry in Saudi Arabia. This led to the second part of the third research question:

RQ3b. What are the relationships between employees' work engagement and turnover intention?

Work Engagement in the Petroleum Industry: Saudi Arabia as an Example

Two major problems in the petroleum industry are seasonal demand and oil price fluctuations. These problems affect the attraction of talent to this industry, which may also affect work engagement. Employees do not feel that their jobs are secure due to fluctuations in oil prices. As a result, employee engagement has become an issue that needs to be investigated. The International Quality and Productivity Centre developed a survey to distribute to energy section employees in order to show that "retention and employee engagement [are] the top most HR challenges in the Middle East and North Africa (MENA) Region's Oil & Gas sector". This survey also revealed that 44% of

the respondents (from among 2,895 energy sector employees) chose retention and employee engagement as the topmost HR challenges in the oil and gas sector (Radda, Majidadi, & Akanno, 2015, p.105; Training, 2010). The same study found that employee engagement in the oil and gas sector revealed that work engagement affects nine organizational outcomes: “customer loyalty/engagement, profitability, productivity, turnover, safety incidents, shrinkage, absenteeism, patient safety incidents, and quality (defects)” (Radda, Majidadi, & Akanno, 2015, p. 20). Thus, job performance and turnover are two organizational outcomes that are affected by work engagement. Consequently, the present study chose to examine the relationship between work engagement factors and job performance and turnover intention, which led to the third research question.

Work Engagement in Saudi Arabia

According to Hofstede (2003), people bring their culture to work, which may affect the level of engagement in the workplace. Therefore, it is interesting to study the work engagement in Saudi Arabia. The researcher found few empirical work engagement studies based in Saudi Arabia. Work engagement, job performance, and turnover intention were studied in the existing empirical researches in Saudi Arabia, and these three contexts were further studied in this research.

One study was conducted on “Employee Engagement and Strategic Communication in Saudi Arabian Banks” (Ahmed & Aldakhil, 2012, p.14). The purpose of this study was to “examine the perceptions of individual employees on

communication and its impacts on employee engagement in banks” (Ahmed & Aldakhil, 2012, p.14). The researchers used a different, though similar, definition for work engagement from the one used in this study. They didn’t cite their definition source but defined work engagement as “the emotional connection (after getting to a high level of job satisfaction) that an employee feels for his organization that influences him to utilize more discretionary efforts to his work” (Ahmed & Aldakhil, 2012, p.14). The number of people who participated was 237 out of 250, all of whom were randomly contacted from local banks in Riyadh, the capital of Saudi Arabia. Ahmed and Aldakhil used a questionnaire, and the response rate was 94.8%. They analyzed their data using Pearson correlation and multiple regression. Their hypotheses were:

“H1. Communication is positively related to employees’ perceived level of comfort

H2. Employee engagement is positively related to employees’ perceived level of comfort

H3. Communication is positively related to employee engagement” (p. 17).

The results indicated that communication, leadership attention, and communication have positive relationships with employee engagement. Also, communication and leadership attention were strongly associated with employee job satisfaction and commitment in employee engagement.

Another study aimed to “investigate the impact of effective human resources management practices on the financial performance of the Saudi banks” (AL-Zahrani & Almazari, 2014, p.346). The research did not define employee engagement. They used a web questionnaire. The number of people

who participated was 175 participants out of 200 employees who were randomly selected from local banks in Riyadh. The study garnered a response rate of 87.5%. Only one hypothesis was related to employee engagement, and it was that “employee engagement positively affects the financial performance of the Saudi banks” (AL-Zahrani & Almazari, 2014, p.350). They analyzed their data using correlation and multiple regression. The result the researchers got in regard to employee engagement was that there was a negative correlation between employee engagement, the training and development process, and the selection and recruitment process.

Another study focused on “investigating the high turnover of Saudi nationals versus non-nationals in private sector companies using selected antecedents and consequences of employee engagement” (Moussa, 2013, p.41). They used the UWES-9 to assess work engagement. The researcher used a survey to collect data, and the number of participants was 104 employees out of 500 who were randomly chosen from the healthcare and information technology fields in Riyadh, Saudi Arabia. The research questions were about the relationship between some antecedent variables and employee engagement, and the relationship between employee engagement and consequences such as the intention to leave.

They analyzed their data using Pearson correlation and multiple regression. The results showed that job characteristics and rewards are the only two antecedents that have a positive relationship with employee engagement. These studies urged the present research to examine work engagement and its

relationship with demographics, job resources, job performance, and turnover intention. This led to the fourth research question:

RQ4. What is the collective influence of performance feedback, autonomy, skill variety, vigor, absorption, dedication, work engagement, age, highest degree earned, and years of work experience on job performance or turnover intention?

This researcher's review of the literature uncovered no work engagement study of the oil and energy industry in Saudi Arabia. Therefore, this study was the first to look at work engagement in Saudi Arabia and its oil and gas industry. Work engagement is a western idea, but it has been the subject of studies in other countries such as Korea, Japan, Turkey, and Iran. A study of work engagement in the Middle East, and especially in the Gulf Council Countries (GCC) and particularly in the Saudi Arabian oil and energy industry, would offer valuable insights pertaining to the management and retention of engaged employees. Therefore, this study examined work engagement in the oil and energy industry in Saudi Arabia.

Measuring the Work Engagement

Since work engagement benefits organizations by improving productivity, profitability, turnover, and performance, it is recommended to organizations to measure their employees' level of engagement frequently (Bakker and Demerouti, 2008). Measuring work engagement helps organizations discover which factors influence and drive employee engagement. In order to facilitate the measuring of work engagement, there are several designated instruments

designed to evaluate and measure the employee engagement level. For example, the Utrecht Work Engagement Scale (UWES), the Shirom-Melamed Vigor Measure (SMVM), Employee Engagement Interview (EEI), the Gallup Workplace Audit (GWA), and the Maslach Burnout Inventory (MBI).

The Utrecht Work Engagement Scale (UWES)

This instrument was developed in 2003 at the Utrecht University in the Netherlands by Wilmar Schaufeli and Arnold Bakker. It measures the three dimensions of work engagement: vigor, dedication, and absorption. Initially, this tool had 17 items to measure these dimensions, which were then reduced to 9 items. These items measured the dimensions using a seven-point Likert scale, starting from 0 “never” and going up to 6 “always or everyday”. This tool shows validity, variance, consistency, and stability. Therefore, this is the most popular tool and widely used internationally to measure work engagement. Thus, the researcher used this instrument, UWES-9, to assess the work engagement in oil and energy industry in Saudi Arabia.

The Shirom-Melamed Vigor Measure (SMVM)

This tool was developed by Shirom in 2005 as a 12-item questionnaire with a seven-point scale ranging from “never or almost never” to “always or almost always”. These items measure employees feeling in the past 30 work days. SMVM covers three characteristics of vigor that: physical strength, emotional energy, and cognitive liveliness. This instrument can provide information on employee engagement, job commitment, and satisfaction. It is easy to apply, analyze, and interpret. One of its issues is that some items may

vary within the same person within the time which raise a question about its precision.

Employee Engagement Interview (EEI)

This instrument is an interview-based process developed to assess employee engagement level. This assessment tool identified the items that enhance an employee's work engagement. It has open-ended questions combined with 1-10 rating scale. This instrument covers 17 different areas related to the employee engagement. This tool is easy to use and understand. It evaluates personal experience, feelings, and opinion. It provides descriptive data which needs qualitative data analysis skills. It also requires the absence of an employee from his/her work until the interview is finished.

The Gallup Workplace Audit (GWA)

This instrument measures the employees' engagement and workplace characteristics. It is designed to study the employee engagement relative to desirable organizational outcomes (Harter et al., 2002). This instrument is also called Q12 because it contains 12 items that measure the employees' perceptions of their work environment and quality of management in their organizations (Harter et al., 2002). It has 12 survey questions with a five-point Likert scale range from 5 "strongly agree" to 1 "strongly disagree" plus a sixth response, "don't know/doesn't apply," that is unscored. It is simple, short, and easy to use. It has a high reliability, and validity. However, it doesn't address the cultural issue since it is assumed that engagement is the same in every country. It is also not permitted for academic purposes.

The Maslach Burnout Inventory (MBI)

Burnout represents the opposite of the work engagement. Thus, the early trials measured the work engagement based on the job burnout. Job burnout is characterized by exhaustion (draining of mental energy), cynicism (a negative attitude towards work, not necessarily with other people), and reduced professional efficacy (the belief that one is no longer effective in fulfilling one's job responsibilities) (Maslach, Schaufeli, & Leiter, 2001).

Burnout and work engagement are independent states (Demerouti, Bakker, De Jonge, Janssen, & Schaufeli, 2001; Schaufeli & Bakker, 2004). Work engagement is negatively associated with burnout. Therefore, the two core symptoms of burnout, exhaustion and cynicism, are considered direct opposites of vigor and dedication (Schaufeli & Taris, 2005).

The popular instrument to measure burnout and its dimensions is the Maslach Burnout Inventory (MBI). MBI survey consists of 22 items to measure the three dimensions of the burnout: exhaustion, cynicism, and reduced professional efficacy. This survey uses a seven-point Likert scale from 0 "never" to 6 "every day". This tool is available in many languages but there is no Arabic translation available for this tool. Also, measuring the work engagement using this tool may lead to the assumption that having a low burnout level would correlate to a high work engagement according to Schaufeli and Bakker (2003). However, incorrect assumptions would lead to inaccurate work engagement results.

Chapter Summary

Employee work engagement is an important subject. It helps human resource professionals, scholars, and organizations understand the connection between employees and their work. While some organizations might confuse work engagement with job burnout or workaholism, this chapter distinguished those terms from each other.

Since Kahn (1990) defined work engagement as a positive energy, research has been directed toward this side either to define this term or to find out the difference between this term, workaholism, and job burnout. Scholars also identified the antecedents and consequences of the work engagement. The antecedents of work engagement included job resources and personal resources while the consequences of work engagement included job performance and turnover intention. In previous empirical research, a positive relationship between job resources and the work engagement was found. In this study, a positive relationship between work engagement and job performance has also been found. However, a negative relationship between work engagement and turnover intentions has been found as well.

The concepts of antecedents and consequences of work engagement have been studied in many different countries, such as France, Finland, the Netherlands, and Korea, but little research has been conducted in the Middle East and in Saudi Arabia in particular. What the researcher has found is that research on the concept of work engagement has been conducted in Saudi Arabia, but neither a study of the antecedents nor the consequences of the work

engagement has been conducted there. Furthermore, to the best of the researcher's knowledge, no published research has been conducted on the oil and energy industry in Saudi Arabia concerning this particular field of study. For this reason, the researcher chose to research this topic of antecedents, job resources, and consequences of work engagement--such as job performance and turnover intention--in the oil and energy industry in Saudi Arabia.

Chapter Three

Methodology

The Study Purpose

The primary purpose of this study was to examine the influence of the demographic factors (age, highest educational degree, gender, and years of work experience) and the influence of job resources (autonomy, skill variety, and performance feedback) on employees' self-reported work engagement. Additionally, the study examined the influence of work engagement on job performance and turnover in intention the oil and energy industry in Saudi Arabia. To accomplish that purpose four-research questions were developed.

Research Questions

Four research questions were developed for this study:

- RQ 1. What is the influence of the demographic factors (age, gender, years of work experience, highest educational degree) on employees' work engagement in the oil and energy industry in Saudi Arabia?
- RQ 2. What is the influence on employees' work engagement of the three job resource factors:
 - Autonomy?
 - Skill variety?
 - Performance feedback?
- RQ 3. What are the relationships between employees' work engagement and:
 - Job performance

- Turnover Intention
- RQ 4. What is the collective influence of performance feedback, autonomy, skill variety, vigor, absorption, dedication, work engagement, gender, age, highest educational degree, and years of work experience on:
 - job performance?
 - turnover intention?

Research Methodology

This study represents descriptive, correlational research using a cross-sectional survey approach (Suter, 2006, p. 310 – 312). Cross sectional studies are frequently used to collect information from respondents at a specific point in time. Correlational research approaches allow researchers to describe and examine the relationships between and among variables.

Research Variables

The dependent and independent variables in this study vary by research question as follows:

For the first research question, which examines the demographic factors and work engagement factors, the dependent variables are the three work engagement factor summated Likert values (vigor, dedication, and absorption), and the three independent variables are age, highest degree earned, and years of work experience

(vigor, dedication, or absorption) and age

(vigor, dedication, or absorption) and highest degree earned

(vigor, dedication, or absorption) and years of work experience

For the second research question, which examines the influence of the job resources on work engagement, the dependent variable is work engagement (vigor, dedication, and absorption subscales) and the independent variable is job resources (autonomy, skill variety, and performance feedback subscales).

The third research question, examines the relationships between work engagement and job performance and work engagement and turnover intention. The dependent variables are job performance and turnover intention and the independent variables are the three work engagement subscales which consists of vigor, dedication, and absorption. Table 3.1 summarizes the variables used in the analysis and indicates the response options and the type of data (scale of measurement) for the respective variables.

Table 0.1

Variables Names, Response Options and Scale of Measurement

Variable	Response Options	Type of Data
Gender	0= Male 1= Female	Categorical
Highest degree	0= High School 1= Diploma 2= company institute 3= Bachelor D 4= Masters D 5= PhD	Categorical
Age	0= ~ 29 years 1= 30 ~ 39 years 2= 40 ~ 49 years 3= 50 years ~	Categorical
Vigor	Likert scale from 0-6	Interval (Summated Likert score)

(continued)

Table 3.1

Variables Names, Response Options and Scale of Measurement

Variable	Response Options	Type of Data
Absorption	Likert scale from 0-6	Interval (Summated Likert score)
Dedication	Likert scale from 0-6	Interval (Summated Likert score)
Work Engagement	Mean of (vigor, absorption, dedication subscales)	Interval
Autonomy	Likert scale from 1-7	Interval (Summated Likert score)
Skill Variety	Likert scale from 1-7	Interval (Summated Likert score)
Performance Feedback	Likert scale from 1-7	Interval (Summated Likert score)
Job Resources	Mean of (autonomy, skill variety, performance feedback subscales)	Interval
Job Performance	Likert scale from 1-7	Interval (Summated Likert score)
Turnover Intention	Likert scale from 1-5	Interval (Summated Likert score)

Population, Sample, and Sampling Strategy Justification**Population**

Population is defined as, “an individual or group that represents all the members of a certain group or category of interest” (Urdan, 2010, p.1). The population of this study included employees of the oil and energy industry in

Saudi Arabia who were registered in LinkedIn as of December 31, 2015. The number of those employees is 77,534 (LinkedIn, 2015). This oil and energy industry sector included males and females working various positions and encompassed administrative jobs, office jobs, executives, field workers, maintenance people, offshore and onshore employees, upstream and downstream employees. Employees' education degree ranged from high school graduate, to a diploma graduate, to a company's institute graduates, to a bachelor degree, and finally to a master's and/or Ph.D. degree.

Sample

A sample is a selected group or a subset from a target population representing all members of a defined class (Urdan, 2010). Estimating sample size for a snowball sample, given a 95 percent confidence interval with a 5 percent margin of error for a population of 77,534, yields a sample of 383 (Montgomery & Runger, 2010). The sample for this study involved employees from different disciplines who were currently working in oil and energy industry, some of whom held managerial positions. The profile of the study participants is described in Table 4.1.

Justification for Snowball (Referral) Sampling

Snowball sampling, or referral sampling, is "the method [which] yields a study sample through referrals made among people who share or know of others who possess some characteristics that are of research interest" (Biernacki & Waldorf, 1981, p.5). Snowball sampling can also be defined as "a non-probabilistic form of sampling in which persons initially chosen for the sample are

used as informants to locate other persons having necessary characteristics making them eligible for the sample” (Bailey, 1994, p. 438).

This research used purposive snowball sampling or referral sampling to reach participants from the oil and energy industry in Saudi Arabia (Flannery, 1998; Kerlinger, 1973). This was done using a panel of people who are working in this industry sector. Those individuals on the panel agreed verbally or via written email to participate in the study and to help in finding/identifying additional participants. The panel individuals were currently working in the oil and energy industry in Saudi Arabia, and their occupations ranged from managers, supervisors, and various other staff; thus, representing a large network of individuals within the oil and energy sector. Panel members were asked to refer and forward the survey to their colleagues and friends from the target population based on criteria provided by the researcher (Flannery, 1998).

There is the possibility of bias using this method for identifying participants. The sample is developed based utilizing the knowledge and network of panel members. The panel members forwarded the questionnaire to their colleagues and their friends who are working in the oil and energy industry in Saudi Arabia. For this reason, complete knowledge of all potential participants (frame) in the target population is impossible to know. The survey may potentially reach people who don't work in the oil and energy industry in Saudi Arabia according to the definition used by the researcher. There is the potential for sample frame error (Trochim, 2005). Because of the way that participants have

been identified, the results should be generalized according to organizations for which participants are working.

Sample Size

Using a referral sampling approach, the researcher identified 40 initial participants and asked them to forward the survey to their respective work groups, network, colleagues, and friends who were currently working in this sector. Each of those 40 participants given instructions on the kind of people to forward the survey which resulted in forwarded the survey to 25 employees from their network. These instructions were as follows:

- a. Identify names and emails from their friends and colleagues who are working in the oil and energy industry in Saudi Arabia.
- b. Contact any colleagues who are potential participants, explain to them the study as well as the way it will be conducted, ensure their anonymity, and ask them if they agree to participate.
- c. Forward the survey to them when the data collection started.
- d. Send three reminders during the data collection period.

Therefore, the survey was sent to 1000 employees from the oil and energy industry in Saudi Arabia. The actual study participants totaled 350 (a response rate of 35%). There were 40 surveys completed by participants who are not working at the oil and energy industry, so the researcher disregarded their responses. The remaining 310 surveys that were utilized in the data analysis (usable response rate = 31%). The researcher attempted to reach as many female employees in this industry as possible, but a total of only 16 women

participated. The profile of the 310 study participants appears in Chapter 4 (Table 4.1).

Instrumentation and Reliability

Work Engagement

For this study, a quantitative approach was used to collect and analyze the data. Therefore, the UWES-9 survey instrument was used to measure employee self-reported work engagement.

The Utrecht Work Engagement Scale (UWES) was developed by Schaufeli and Bakker in 2002 at Utrecht University in the Netherlands. The UWES consisted initially of 24 items and subsequently was reduced to 17 items and finally to 9 items by Schaufeli, Bakker, & Salanova (2006). The main reason for shortening the UWES was to make it more convenient for respondents as longer surveys may lead to attrition (Schaufeli et al., 2006). The UWES is a self-report questionnaire developed to measure three aspects of work engagement: vigor, dedication, and absorption (Schaufeli et al., 2006). Schaufeli et al. (2006) conducted research on the development of a short questionnaire to measure work engagement—a positive work-related state of fulfillment that is characterized by vigor, dedication, and absorption. The data were collected from ten different countries and the number of participants was $N = 14,521$. The results showed that the 17-item UWES scale could be shortened to a 9-item scale (UWES-9).

The UWES-9 has nine items respectively, which measure each of their work engagement dimensions: three items to measure vigor; three items to

measure dedication; and three items to measure absorption (Schaufeli et al., 2006). According to Schaufeli et al. to assess structural validity, the factorial validity of the UWES-9 was demonstrated using confirmatory factor analyses, and the three scale summated scores were found to exhibit good internal consistency and test-retest reliability. The reliability values for Cronbach's alpha (internal consistency) for the total UWES-9 varied from .85 to .92 across all national samples. Regarding each dimension, Cronbach's alpha values for vigor ranged between .60 and .88; Cronbach's alpha for dedication ranged between .75 and .90; and Cronbach's alpha for absorption ranged between .66 and .86. Kim (2014) utilized the UWES-9 and obtained a very high reliability (Cronbach's Alpha = .94). Therefore, the UWES-9 scale was used in this study with a 7-point Likert response scale ranging from (0) never to (6) always.

Instrument for Job Resources

Job resources can be measured either on the organizational level or at the task level (Hakanen & Roodt, 2010). Measuring the job resources on the task level is more appropriate for this study. The task level job resources dimensions align with the objectives of this study, which examines the influence of the three dimensions of job resources on the employees' work engagement. The three job resources dimensions are autonomy, performance feedback, and skill variety.

According to Kim (2014), there are two instruments frequently used or modified in empirical studies to measure the relationships between job resources and work engagement. The first instrument is a job content instrument developed by Karasek (1985) and is utilized to assess autonomy and performance

feedback. The second instrument is a job characteristics instrument developed by Hackman and Oldham (1975, 1980). This instrument has five (5) dimensions and is typically utilized to assess autonomy, performance feedback, skill variety, task significance, and task identity. This research assesses the job resources influence on the employees' work engagement by utilizing three dimensions (autonomy, performance feedback, and skill variety) from the job characteristics instrument.

In order for the job characteristics instrument to be used in this study, the reliability of this study should be supported from other empirical studies. Saks (2006) reported the internal consistencies across the five dimensions of the job characteristics instrument had a Cronbach's alpha equal to 0.79. Saks (2006) conducted a study to test a model of the antecedents and consequences of job and organization engagements based on the social exchange theory. Saks found that job characteristics predict job engagement. Saks had 102 employees who participated and completed and completed the survey. The response rate was 85%.

Kim (2014) also reported the Cronbach's alpha value for each of the three dimensions of job characteristics: autonomy, .73; performance feedback, .73; and skill variety, .78 at a significance level 0.01. Kim (2014) conducted a web-based survey questionnaire translated into Korean and collected data from five major Korean organizations. A total of 571 employees participated in the study with a response rate of 24%. He used structural equation modeling (SEM) for his data analysis.

All three dimensions were measured with a 7-point Likert scale ranging from (1) strongly disagree to (7) strongly agree.

Instrument for Job Performance

This research used two dimensions of job performance to represent job performance: in-role and extra-role performance. These two dimensions have been selected for this study because they include outcomes and behaviors for organizational goals as well as proactive behaviors for the organizations and organizational citizenship behavior in the extra-role performance (Demerouti & Cropanzano, 2010; Kim, 2014).

Goodman and Svyantek (1999) developed an instrument to measure the task and contextual performance. Their study investigated the influence of person-organization fit on employees' task and contextual performance. The number of participants was 356 employees with a response rate of 62.1%. The Cronbach's alpha was 0.98. Several studies have used this instrument and showed good internal consistency for the in-role performance with the Cronbach's alpha ranging from .77 to .87. They also demonstrated good internal consistency for the extra-role performance with the Cronbach's alpha ranging from .69 to .77. Bakker, Demerouti, & ten Brummelhuis (2012) examined whether the relationships between work engagement and job performance are moderated by the extent to which individuals are inclined to be hardworking, careful, and goal-oriented. Using a sample of 144 employees from several occupations with a response rate of 72%, the Cronbach's alpha was $\alpha = .77$.

Kim (2014) used this Goodman and Svyantek (1999) instrument and obtained a Cronbach's alpha of .81 with a significance level of 0.01. Since this instrument showed good internal consistency, this study used it to measure the influence of work engagement on job performance. Each of those in-role and extra-role performance subscales had three items with a 7-point Likert response scale ranging from (1) strongly disagree to (7) strongly agree.

Instrument for Turnover Intention

Organizations can predict their employee future turnover intention by studying the relationship between employees' engagement and turnover intention. Employees' turnover intention is a powerful predictor of their behavior concerning their intention to leave (Carmeli & Weisberg, 2006; Shuck et al., 2011). Such information can help organizations with their workforce planning (Bakker & Demerouti, 2009). This study examines the influence of employees' self-reported work engagement on the employee's turnover intention.

To measure employees' turnover intention, many studies have used a scale developed by Colarelli (1982). For example, Shuck et al. (2011) examined the links between job fit, affective commitment, psychological climate, and employee engagement, as well as the dependent variables, discretionary effort, and intention to turnover. Shuck et al. (2011) collected data using a questionnaire that garnered 283 participants with a response rate of 27.3% and internal consistency $\alpha = 0.81$. Kim (2014) also used the same instrument and obtained an internal consistency of $\alpha = 0.71$ with a significance level 0.01. Due to this scale's relatively good internal consistency, my research used this instrument. Therefore,

a self-report questionnaire was used with a 5-point Likert scale ranging from (1) strongly disagree to (5) strongly agree.

Table 3.2 provides a summary of the variables found in each research question and the instrument items used to obtain information for each variable to address the respective research question.

Table 3.2

Summary of Variables, Research Questions, and Item on Instrument

Variable Name	Question	Item on Instrument
Vigor	To what extent is the domain of vigor correlated with demographic factors?	UWES-9: Q1, Q2, Q5
Dedication	To what extent is the domain of dedication correlated with demographic factors?	UWES-9: Q3, Q4, Q7
Absorption	To what extent is the domain of absorption correlated with demographic factors?	UWES-9: Q6, Q8, Q9
Job Resources	To what extent are work engagement factors (vigor, dedication, and absorption) influenced by job resources (autonomy, skill variety, and performance feedback)?	Job Resources (autonomy: A, Skill variety: B, performance feedback: C)
Job performance	To what extent do each of the work engagement factors influence job performance?	Job Performance: D
Turnover intention	To what extent do each of the work engagement factors influence turnover intention?	Turnover Intention: E

Translation of Instruments

To ensure the adequacy of the instruments' translation, the researcher used the back-translation process. This process is also known as double translation or forward and backward-translation (Kim, 2012; McGorry, 2000; Maneesriwongul & Dixon, 2004). The instruments were translated from their original English version to the Arabic language, the official language in Saudi Arabia. The instruments were translated by two PhD graduates from the Workforce Education and Development Department from the Pennsylvania State University who speak both English and Arabic fluently. Then, the Arabic version was translated back into English by two different human resource development (HRD) PhD candidates from the Pennsylvania State University. Then, the researcher checked for inconsistencies and discrepancies of translation by comparing both the English and the Arabic translation versions. When there were inconsistencies and discrepancies found in the translation, the researcher discussed the modifications with the two Ph.D. graduates who initially translated the instruments and made the modifications as agreed upon. Both the English and the Arabic versions have been examined by a statistician who hold Ph.D. degrees in operations research and business statistics from the University of Texas at Austin, USA. He teaches quantitative methods for management for both graduate and undergraduate students at the College of Industrial Management, King Fahd University of Petroleum and Minerals, Saudi Arabia. This includes business statistics, operations research/management science, and production

management. The translation was then checked by HRD professionals who are working in the HR departments of the oil and energy industry in Saudi Arabia.

Data Collection and the Research Process

The following steps were conducted to collect the data for this study:

- 1- Completed a survey questionnaire
- 2- Obtained approval from the Institutional Review Board (IRB) for the protection participants
- 3- Identified study participants (the researcher had friends who agreed to answer the survey questions—those friends agreed to send the survey to their friends and called them to make sure they answered the questions, leading to an expected total of around 383 respondents (Montgomery & Runger, 2010).
- 4- Instructions were given to those 40 main participants in order to forward the survey to the people who were eligible to take the survey.
- 5- Verified the eligibility of the respondents
- 6- Distributed electronic copies of the survey (a survey was created using a survey program such as Google forms; then an email impeded with a hyperlink was sent to participants, who were asked to forward that email to friends at the company—data were collected electronically)
- 7- Engaged respondents as research assistants (since the first people contacted to participate were friends of the researcher, they had already agreed to participate and agreed to contact their friends about participating, too—all participants received instructions and being asked to

ensure that they understood the research criteria so that they forwarded the survey to people who met the research criteria)

- 8- Controlling the sample size, the researcher tried to recruit at least 383 employees from the oil and energy industry in Saudi Arabia—that number was chosen because according to inferential statistics, a population with 77,534 employees would need at least 383 people to be accepted as a sample for a research study at 95 percent confidence level (Montgomery & Runger, 2010)

Approval of the IRB

The researcher submitted an application of Exempt Research from the IRB Committee Review Category 2 to the Office for Research Protection at the Pennsylvania State University to get an approval to conduct this research. This is a requirement according to Pennsylvania State University regulation prior to administering the survey questionnaire. This is mandatory to ensure the protection of human subjects in this study. Therefore, the university approved this research.

Human Subjects Review

To protect participants' rights and confidentiality, a consent form was obtained from the participants. They were asked to sign it to show their agreement to participate in the study. They were also asked whether they would agree to indicate their identity in the study. The data collected were stored in a safe place with access limited to the researcher and research committee members only.

Pilot Test

Pilot tests are used to refine research instruments and to find any gap in the data collection (Sampson, 2004). Therefore, pilot tests are used in order to decide whether the survey can address its purpose and provide the desired information (Gupta, Sleezer, & Russ-Eft, 2007). The pilot test also helps the researcher identify any barrier to data collection before conducting the survey on the target population (Marshall & Rossman, 2011). This study used a pilot to test a random sample from the target sample to make sure we received a good response rate. The pilot study tested for any technical issues in data collection since the data was collected through the internet. A sample of 40 employees completed the pilot survey, which is equivalent to 10.4 percent of the targeted sample. They were given the chance to express any problems with the survey. They were also given the chance to send their comments, recommendations, and suggestions about the survey to the researcher. After that, the researcher reviewed their responses to see if there is a need for a modification prior to launching the survey to the target population (Baumgardner, 2014).

Data Collection Process

Implementing the Survey Questionnaire

The research methodology and the survey implementation procedure followed and guided by Dillman, Smyth, & Melani (2011). First, as an initial step, the researcher identified 30 main participants who agreed to contact their friends and urge them to participate in this survey. The researcher knows some of those main participants personally and others were identified from the LinkedIn, where

they posted their resumes. The main participants are from different disciplines within oil and energy industry in Saudi Arabia. Some of them are working in the HR departments in their organizations, others are managers, supervisors, team leaders, and others are staff. Thus, they agreed to forward the researcher's invitation to participate in the study to others who they know very well. Each of these participants agreed to forward the survey to 25 of potential participants of their friends and follow up with them to make sure they filled the survey. Then, a message containing an invitation and a link to the survey was emailed and texted using smart phones (Dillman, Smyth, & Melani, 2011). The email also consisted of a cover letter, specific instructions, a statement of confidentiality, and a hyperlink to the survey questionnaire created by the Google forms which has a web survey system (see Appendices A and B). After a participant received the text message or received an email from the researcher or from the main panel experts and decided to participate, he/she was directed to the survey, which is available in the Google Form.

Providing both the purpose of the study as well as the researcher information—such as contact information— was important in acquiring consent concerning for the survey. The message emphasized the participants' anonymity and confidentiality in the consent letter that was attached to the questionnaire. Confidentiality and anonymity threats from collecting data using online method were explained to the participants.

The data collection process lasted six weeks, and gentle weekly emails and text messages were sent to the main participants (these messages also

asked them to remind their contacts to increase the response rate). The survey was sent to approximately 1,000 employees, and a total of 350 responses (response rate = 35 %) were collected through Google forms. There were 40 participants who worked for industries other than the targeted industry, so only 310 responses were analyzed. The profile of the participants is presented in Table 4.1.

Strategies to Increase the Response Rate

Dillman (2007) and Fowler (2014) indicated that to increase the response rate, the researcher needs to contact the respondents multiple times, provide incentives, and find an identifiable sponsor. Therefore, the researcher contacted the main participants (panel members) three times prior to launching the survey. The panel members were also contacted three times during the survey's open period to remind the main participants (panel members) to remind their friends and colleagues about the survey. In addition, Dillman (2007) and Fowler (2014) mentioned that potential respondents need to trust the source of the survey before they will open a survey. Therefore, the researcher contacted those main participants (panel members) and asked them to forward the survey to their contacts so that all potential participants trusted the source and would be more likely to open the survey email in order to participate. In addition, after a participant completed the survey, he/she received a thank you message with an embedded hyperlink directing them to a web page to voluntarily insert his/her contact information to be entered in a drawing for an Apple watch. This method ensured that the anonymity of the participants was maintained.

Data Analysis Plan

Data were analyzed in the following manner. Data were downloaded from the data collection website into IBM Statistical Package for the Social Sciences (SPSS version 23). The researcher followed the Huck (2012) and the sequence suggested by Morgan, Leech, Gloeckner and Barrett (2012) in completing an exploratory data analysis (EDA). EDA provides information needed by the researcher to assess and identify potential data problems including out of range values, outliers, non-normal distributions for interval scale variables, missing data issues or coding issues. This was accomplished using both tabular procedures (frequency, descriptive, means, standard deviation and skewness) and graphical procedures (boxplots and histograms) in SPSS. In addition, statistical assumptions (linearity, homogeneity of variance, and normality) were assessed. This data cleaning and screening process is critical before starting the actual statistical analyses outlined for each research question summarized in the table that follows.

Table 3.3. *Summary of Statistical Analysis Procedures Used in the Study.*

Research Question	Key Variable	Scale of Measurement	Statistical Technique
RQ1. To what extent is work engagement influenced by demographic (age, highest educational degree, and years of work experience)?	<u>Dependent</u> Work Engagement (Y)	Interval	One way ANOVA
	<u>Independent</u> Age (X ₁)	Nominal	
	Education (X ₂)	Nominal	
	Years of Experience (X ₃)	Nominal	
RQ2. To what extent do the job resource factors; autonomy, skill variety, and performance feedback, influence the work engagement?	Work engagement	Interval	Linear Regression
	Job resources	Interval	
RQ3. What are the relationships between the three work engagement factors (vigor, dedication, and absorption) and job performance, work engagement and turnover intention?	Work engagement (vigor dedication absorption)	Interval Interval Interval	Pearson Correlation
	Job performance	Interval	
	Turnover intention	Interval	
RQ4. What is the collective influence of performance feedback, autonomy, skill variety, vigor, absorption, dedication, years of work experience, highest degree earned, on job performance or turnover intention?	Age (X ₁)	Nominal	Multiple Regression
	Years of Experience (X ₂)	Nominal	
	Education (X ₃)	Nominal	
	Autonomy (X ₄)	Interval	
	Skill variety (X ₅)	Interval	
	Performance feedback (X ₆)	Interval	
	Vigor (X ₇)	Interval	
	Dedication (X ₈)	Interval	
	Absorption (X ₉)	Interval	
	Work engagement (X ₁₀)	Interval	
Job performance (Y ₁)	Interval		
Turnover intention (Y ₂)	Interval		

The assumptions of linearity and normality were assessed prior to using the regression analysis. The assumptions of univariate normality were also assessed in order to examine the skewness and kurtosis of the data. Moreover, box plots were assessed for outliers and a curve estimation procedure and ANOVA results were examined to ensure linearity between the predictor variables. As a result, the data for this research has a high level of linearity and normality (Tabachnick & Fidell, 2007).

Collinearity in the regression analysis was assessed using tolerance values, condition index values and normality plots after the regression analysis was conducted. Also, residual distribution normality was assessed using partial plots. As a result, the investigator determined collinearity was not an issue and the residuals were normally distributed using the guidelines established by Tabachnick and Fidell (2007).

Chapter Summary

This chapter described the methodology of this research. The purpose of the research restated again. Then four research questions were described. Then the research mentioned the populations that the employees from the oil and energy industry who are registered in LinkedIn website by December 31 2015 and working in Saudi Arabia. Then the sample from that population was stated equal to 383 participants. However, the number of participants was 350 with a response rate 35%. Some of the surveys received had missing data and others were from another industry so only 310 surveys were used in the data analysis. The researcher chose to use snowballing/referral sampling methodology in data

collection to get a high response rate. The snowball sampling methodology was explained in this chapter as well as the instruments that used in data collection. Then data was analyzed using Pearson correlation, One-way ANOVA, and multiple regressions. Finally, the chapter mentioned the human subject review to protect participants' rights and confidentiality.

Chapter Four

Results

This chapter presents the results of a quantitative analysis examining the influence of various factors on work engagement. The chapter first summarizes the overall study purpose followed by the four specific research questions (RQs). The second section defines the number of participants and is followed with a summary profile of the study participants. Then, the results of the four RQs are summarized in tables with descriptive narratives. First, the number of participants is illustrated. Then the profile of the participants is summarized. Prior to presenting the results to the four RQs, information is summarized regarding the reliability of the instrument, statistical assumption assessments regarding linearity, and normality of the data. The checks regarding linearity and normality of the data were made to assess whether Pearson correlations and ordinary least squares regression were appropriate to use with the data analyzed in the four RQs.

The Study Purpose

The primary purpose of this study was to examine the influence of the demographic factors (age, highest educational degree, and years of work experience) and the influence of job resources (autonomy, skill variety, and performance feedback) on employees' self-reported work engagement. Additionally, the study examined the influence of work engagement on job performance and turnover intention in the oil and energy industry in Saudi Arabia. To accomplish that purpose four-research questions were developed.

The Research Questions

- RQ 1. What is the influence of the demographic factors (age, gender, years of work experience, highest educational degree) on employees' work engagement in the oil and energy industry in Saudi Arabia?
- RQ 2. What is the influence on employees' work engagement of the three job resource factors:
 - Autonomy?
 - Skill variety?
 - Performance feedback?
- RQ 3. What are the relationships between employees' work engagement and:
 - Job performance
 - Turnover Intention
- RQ 4. What is the collective influence of performance feedback, autonomy, skill variety, vigor, absorption, dedication, work engagement, gender, age, highest educational degree, and years of work experience on:
 - Job performance?
 - Turnover intention?

Number of Participants

The survey was sent to 1000 participants through 40 purposive sampling friends' contacts in the oil and energy industry in Saudi Arabia. These 40 contacts, who were given specific instructions about to whom they should send

the survey, each forwarded the electronic survey to at least 25 of their known associates in the oil and energy industry in Saudi Arabia. The main contacts were asked to find employees of different genders, different age groups, different education and certification levels, and who have different years of work experience. Each one of those main contacts prepared a list of names and forwarded the survey to them. The researcher did his best to obtain a diverse group of participants and as large a response rate as possible to reflect the population. Some of those main contacts were females working in the oil and energy industry in Saudi Arabia. Those females were contacted and asked to forward the survey to their female friends and colleagues who work in the oil and energy industry. The researcher followed this methodology of contacting participants through main purposive sampling to increase the response rate and to get diversified participants. In order to increase the response rate, the researcher followed Dillman (2007) and Fowler (2014) advises to get more participants. They suggested finding a trusted sponsor so people motivated to open the survey email and participate. They also stated that adding an incentive can urge people to participate. Therefore, the researcher gave an Apple watch which randomly withdrawn post the end of the data collection. Additionally, the researcher contacted the main purposive sampling contacts three times and asked them to remind their friends and colleagues to take the survey.

An initial email was sent in April 2016. After two weeks, a follow up email was sent again asking individuals to participate. Then, at the beginning of May 2016, a second follow up reminder was sent. A final reminder email was sent at

the end of May 2016 informing that the survey will be closed on the fifth of June 2016. As a result, the number of participants was 310 with a response rate (31%).

Profile of the Participants

The study results are based on responses from 310 participants. The frequencies and percentages for the demographics variables are summarized in Table 4.1 the demographic information included participants' information regarding age, gender, highest education degree, and years of work experience in the oil and energy industry.

The number of participants was 310 participants. The missing data were from the demographics variables. After conducting the research in the first day, the researcher noticed that there are some missing data points for the demographics variables due to a problem in the form that collects the data. Even though the researcher conducted a pilot study and the form perfectly collected pilot study data, but when the researcher was collecting the actual study data, there were some missing data in the demographics due to a technical issue in the form. After that, the researcher corrected the technical issue in the form, and the form perfectly collected the required data.

There were 280 males, which represent 90.3% of the participants while 16 were females (5.2%). Due to this low percentage of the female participants in the study, the gender variable was not included in the data analysis for the four research questions. There were 98 (31.6%) aged less than or equal to 29 years old, 119 (38.4%) aged 30 to 39 years old, 35 (11.3%) aged 40 to 49 years old,

and 22 (7.1%) aged 50 years and above. For the highest educational degree of the participants, 31 (10%) were high school graduates, 35 (11.3%) completed a diploma, 16 (5.2%) completed a company institute certificate, 140 (45.2%) completed a bachelor degree, 44 (14.2%) completed in a master's degree, 8 (2.6%) PhD holders. The researcher recoded the education variable to be D_Education with two categories; less than four-years college degree with 82 participants (26.5%) and bachelor, masters, and PhD with 192 (61.9%) participants. The recoding of education was done so it could be used as a predictor variable in the regression data analysis for several of the research questions. For the years of work experience in the oil and energy industry variable, 18 (5.8%) reported less than a year, 58 (18.7%) 1 to 5 years, 84 (27.1%) 6 to 10 years, 55 (17.7%) 11 to 15 years, 21 (6.8%) 16 to 20 years, and 38 (12.3%) more than 20 years.

Table 4.1 *Profile of the Participants*

Variable	Value	Frequency	Percent
Gender	Male	280	90.3
	Female	16	5.2
	Missing	14	4.5
Age	Less than or equal to 29	98	31.6
	30 – 39 years	119	38.4
	40 – 49 years	35	11.3
	50 years and above	22	7.1
	Missing	36	88.4
Highest Educational Degree	High school	31	10.0
	Diploma	35	11.3
	Company Institute	16	5.2
	Bachelor Degree	140	45.2
	Master Degree	44	14.2
	PhD Degree	8	2.6
	Missing	36	11.6

(continued)

Table 4.1 *Profile of the Participants*

Variable	Value	Frequency	Percent
Recoded Education	LT 4 Yr College Degree	82	26.5
	BS, MS or PhD Degree	192	61.9
	Missing	36	11.6
Work Experience	Less than a year	18	5.8
	1 – 5 years	58	18.7
	6 – 10 years	84	27.1
	11 – 15 years	55	17.7
	16 – 20 years	21	6.8
	More than 20 years	38	12.3
	Missing	36	11.6

Reliability, Linearity, and Normality

The researcher analyzed the data to check whether the data met several statistical assumptions for Pearson correlation and multiple regression analysis. According to Huck (2012), during the data analysis the interval scale of measurement variable data, when appropriate, should be checked for reliability, normality, linearity, and outliers before conducting correlation or regression statistical tests. These checks are important because it provides information regarding the normality of the data distributions and to decide whether data transformations may be appropriate.

Reliability

To measure the reliability, Cronbach's alpha was used. Cronbach's alpha was used to measure the internal consistency of the summated Likert scale scores used in this study. The reliability results are summarized in Table 4.2. The results shown that work engagement has a Cronbach's alpha equal to .943 which means that the summated score generated from the UWES-9 instrument which

has been used here is reliable. For autonomy the Cronbach's alpha is equal to .776 which means this instrument yields an internally consistent summated score. For the performance feedback the Cronbach's alpha equaled .747 which means this instrument yields an internally consistent score. For skill variety the Cronbach's alpha equaled to .867, which means this instrument, yields an internally consistent summated score. For job performance the Cronbach's alpha equaled to .877, which means this instrument yields a reliable score. For turnover intention the Cronbach's alpha equaled to .801, which means this instrument yields a reliable score.

Table 4.2

Summary of Reliability Results for Various Scales

Scale	# of Items	Cronbach's Alpha	Mean	SD
Work engagement	9	.943	3.67	1.53
Autonomy	2	.776	4.452	1.59
Performance Feedback	2	.747	4.39	1.56
Skill variety	2	.867	5.36	1.50
Job Performance	6	.877	5.556	1.09
Turnover Intention	3	.801	2.905	1.15

Linearity

The Pearson correlation and multiple regression analyses assume linearity between interval scales of measurement variables. The assumption

checks showed there were acceptable levels of linearity between the variables and further there was no problem with multi-collinearity in the regression analyses as indicated by tolerance values greater than .10.

The linearity check for Pearson correlation was conducted for work engagement and performance feedback, between work engagement and autonomy, work engagement and skill variety, work engagement and job performance, and work engagement and turnover intention. Using the approach recommended by Garson (2005), I used the Curve Estimation program in SPSS to plot a linear and non-linear fit of the variables. Garson recommends that the R square values for the linear fit are compared with the R square value for the non-linear fit in addition to examining the graphs generated with both a linear fit curve plot and non-linear curve plot. Based on Garson's recommendations it was judged the linearity assumptions for both Pearson correlation and ordinary least squares multiple regressions were met.

Normality

The researcher assessed the skewness, kurtoses, and the histograms and box plots of the interval scale of measurement variables to assess normality. Normality was examined for work engagement, job performance, turnover intention, and job resources scales including autonomy, skill variety, and performance feedback. Using a variety of strategies for assessing the normality of these variables, the boxplots revealed skill variety has two major outliers and job performance has three major outliers. After further checking using Cook's measure of a case's influence on the results, all outliers had minimal influence

(Cook's values less than .015). Also, there are 310 observations which minimizes the influence of each case on the Pearson correlation and regression results regression (Field, 2009).

The researched judged the interval measurement variables were fairly normally distributed (Table 4.3).

Table 0.3

Summary Results for Normality Assessments. (Cases = 310)

Variable	Skewness Value	Kurtosis Value	Normality Assessment
Work engagement	.279	.957	Acceptable
Performance Feedback	-.275	.826	Acceptable
Autonomy	-.407	.592	Acceptable
Skill Variety	-1.118	.561	Acceptable
Job Performance	-1.328	2.008	Acceptable
Turnover Intention	.018	.845	Acceptable

Influence of Demographic Factors on Work Engagement

The first research question examined the collective influence of the employee's demographics on his self-reported work engagement.

RQ1. What is the influence of the demographics (age, years of work experience, and highest educational degree) on the work engagement in the oil and energy in Saudi Arabia?

Highest educational degree was recoded to be two categories instead of six categories as listed on the survey. The new recoded highest educational degree

completed is less than four years bachelor degree =0 and bachelor, masters, or PhD =1

In examining the demographic factors; age, gender, highest educational degree, and experience, it was decided to remove the gender variable was removed from the analysis there were only 16 females while as compared to 280 males. Therefore, the first research question measures the influence of age, highest educational degree, and years of work experience on employee self-reported work engagement in the oil and energy industry in Saudi Arabia.

Table 4.4 provides descriptive data for self-reported work engagement by the three demographic variables age, education and work experience. Overall the average frequency employees reported being engaged was mean = 3.73 (SD= 1.54). Employees 50 years and older reported the highest level of engagement (Mean = 4.55; SD = 1.22). Similarly, employees reporting they had 16-20 years of work experience or more than 20 years of work experience had similar levels of work engagement (Mean = 4.38 and 4.46 respectively). There were negligible differences in work engagement when examined by highest educational degree.

Table 4.4

Work Engagement Descriptive Statistics for Age, Highest Educational Degree and Years of Work Experience.

Variable	Cases	Mean Work Engagement	SD Work Engagement
Age			
LT or Equal 29 years	98	3.38	1.53
30 – 39 years	119	3.83	1.47
40 – 49 years	35	3.88	1.74
50 years and above	22	4.55	1.22
Total	274	3.73	1.54
D_Education			
LT a 4 year college degree	82	3.85	1.65
BS, MS or PhD degree	192	3.68	1.49
Total	274	3.73	1.54
Work Experience			
LT 1 year	18	3.90	1.66
1 – 5 years	58	3.86	1.41
6 – 10 years	84	3.21	1.53
11 – 15 years	55	3.59	1.50
16 – 20 years	21	4.38	1.41
More than 20 years	38	4.46	1.40
Total	274	3.73	1.54

Note: Work Engagement Response Scale:

0 = Never; 1 = A few times a year or less; 2 = Once a month or less; 3 = A few times a month;

4 = Once a week; 5 = A few times a week; and 6 = Daily.

To examine the collective influence of the demographic variables in explaining differences in work engagement multiple regression analysis was used. Table 4.5 summarizes the collective influence of the three demographic variables on work engagement. The results indicate age is the only significant demographic variable ($p = .017$) in explaining differences in work engagement when controlling for the influence of education and years of work experience.

Collectively the demographic variables explain about 4.4% (R square = .044) of the differences found in work engagement.

Table 0.5

Work Engagement Regressed on Three Demographic Variables. (Cases = 274)

Variable	B/SE B	Beta	t	p
Constant	3.61/.24		15.05	< .001
D_Education 0 =LT 4 Yr College Degree) 1 = Bs, MS or PhD Degree)	-.20/.20	-.06 -.06	-1.04	.316
Experience (Years)	.05/.11	-.05	-.47	.639
Age (Years)	.41/.17	.240	2.39	.017
Model Summary				
	F	4.15		
	df	3/270		
	Model sig	.007		
	R Square	.044		
	Adjusted R Square	.034		

Influence of Job Resource Factors on Work Engagement

The second research question examined the influence of three job resource factors on work engagement.

- RQ2. What is the influence of the three job resource factors autonomy, skill variety and performance feedback on work engagement:

By examining the Pearson correlation values, the three job resource variables are positively and significantly correlated with work engagement (Table

4.6). Autonomy has the highest correlation with work engagement ($r = .572$) followed by performance feedback ($r = .475$) and skill variety ($r = .390$).

Table 4.6

Pearson Correlations, Means and Standard Deviations for Job Resource Factors and Work Engagement. (Cases = 310)

Variable	Mean (SD)	Work		Performance	Skill
		Engagement	Autonomy	Feedback	Variety
Work	3.67 (1.53)	1.00			
Engagement					
Autonomy	4.45 (1.59)	$r = .572$	1.00		
Performance		$r = .475$	$r = .568$		
Feedback	4.39 (1.56)	$p = .001$	$p = < .001$	1.00	
Skill Variety	5.36 (1.50)	$r = .390$	$r = .524$	$r = .392$	
		$p = < .001$	$p = < .001$	$p = < .001$	1.00

Notes:

Work Engagement Response Scale:

0 = Never; 1 = A few times a year or less; 2 = Once a month or less; 3 = A few times a month;

4 = Once a week; 5 = A few times a week; and 6 = Daily.

Autonomy, Performance Feedback and Skill Variety Response Scale:

1 = Strongly Disagree; 2 = Disagree; 3 = Slightly Disagree; 4 = Neutral; 5 = Slightly Agree;

6 = Agree; and 7 = Strongly Agree.

To examine the collective influence of the job resources variables on work engagement, multiple regression analysis was used. Table 4.7 summarizes the collective influence of the three job resources variables on work engagement. The results indicate performance feedback ($p = .002$) and autonomy ($p = .000$) are the only significant job resources variables on work engagement when controlling for the influence of skill variety. Collectively the job resources

variables explain about 28.1% (R square = .281) of the differences found in work engagement.

Table 4.7

Work Engagement Regressed on Three Job Resources Variables. (Cases = 310)

Variable	B/SE B	Beta	t	p
Constant	.217/.387		.560	.576
Performance Feedback	.245/.078	.189	3.165	.002
Autonomy	.493/.081	.377	6.100	.000
Skill Variety	.069/.094	.043	.730	.466
Model Summary				
	F	39.872		
	df	3/306		
	Model sig	.000		
	R Square	.281		
	Adjusted R Square	.274		

Influence of Work Engagement with Job Performance and Turnover

Intention

The third research question assessed the relationship between employees' self-reported work engagement and two variables (self-reported job performance and turnover intention).

- RQ3. What are the relationships between the work engagement values and: job performance values and also between work engagement and turnover intention values.

The results (Table 4.8) indicate job performance and work engagement has a significant positive correlation ($r = .435$; $p < .001$). This means that higher levels of work engagement are moderately associated with higher job performance values. There is a negative relationship between work engagement and turnover intention ($r = -.311$; $p < .001$) in Table 4.9. This indicates that higher levels of work engagement are associated with lower levels of turnover intention. This relationship reflects a low moderate relationship (Hinkle, Wiersma, and Jurs, 2003).

Table 0.8

Pearson Correlations, Means and Standard Deviations for Job Performance Factors and Work Engagement. (Cases = 310)

Variable	Mean (SD)	Work Engagement	Job Performance	Turnover intention
Work Engagement	3.67 (1.53)	1.00		
Job Performance	5.56 (1.10)	$r = .435$ $p < .001$	1.00	
Turnover Intention	2.91 (1.15)	$r = -.311$ $p < .001$	$r = .018$ $p = .751$	1.00

Notes:

Work Engagement Response Scale:

0 = Never; 1 = A few times a year or less; 2 = Once a month or less; 3 = A few times a month;

4 = Once a week; 5 = A few times a week; and 6 = Daily.

Job Performance Scale

1 = Strongly Disagree; 2 = Disagree; 3 = Slightly Disagree; 4 = Neutral; 5 = Slightly Agree;

6 = Agree; and 7 = Strongly Agree.

Turnover Intention Scale

1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; and 5 = Strongly Agree.

Table 4.9

Pearson Correlations, Means and Standard Deviations for Turnover Intention Factors and Work Engagement. (Cases = 310)

Variable	Mean (SD)	Work Engagement	Job Performance	Turnover intention
Work Engagement	3.67 (1.53)	1.00		
Job Performance	5.56 (1.10)	r = .435 p = < .001	1.00	
Turnover Intention	2.91 (1.15)	r = - .311 p = < .001	r = .018 p = .751	1.00

Notes:

Work Engagement Response Scale:

0 = Never; 1 = A few times a year or less; 2 = Once a month or less; 3 = A few times a month;

4 = Once a week; 5 = A few times a week; and 6 = Daily.

Job Performance Scale

1 = Strongly Disagree; 2 = Disagree; 3 = Slightly Disagree; 4 = Neutral; 5 = Slightly Agree;

6 = Agree; and 7 = Strongly Agree.

Turnover Intention Scale

1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; and 5 = Strongly Agree.

Block Regression Results for Job Performance and Turnover Intention

The final analysis combined the demographic variables, job resource variables and work engagement factor into a sequential (hierarchical) regression analysis to determine the relative contribution of each block of variables when controlling for the influence of the variables in the other blocks.

- RQ4. What is the collective influence of performance feedback, autonomy, skill variety, work engagement, age, highest degree, and years of work experience on job performance or turnover intention?

The researcher identified three blocks of variables to measure the collective influence of seven independent variables on job performance. This represents a

sequential (block or hierarchical) regression. The first block consists of the demographic variables highest educational degree (dummy coded), years of work experience, and age. Block two consists of the three job resource factors, which includes performance feedback, skill variety, and autonomy in addition to the demographics. Block three has work engagement in addition to the three demographic variables and three job resources variables. The results are in Table 4.10.

The first block which includes three demographic variables explains 6% of the variability in the job performance scores. Of the three demographic variables, work experience is significant ($p = .045$) and education is close to being statistically significant ($p = .051$).

In block two, the three job resource variables (performance feedback, autonomy, and the skill variety) have been added. With the addition of the job resource variables the regression model explained 25.7% of the variance in job performance. The three job resource variables resulted in an increase of 20.1% more variance explained in job performance values. Autonomy (Beta = .189) and skill variety (Beta = .268) were both statistically significant ($p < .01$).

When the block three variable work engagement was added to the model the R square increased to .310. Work engagement added an additional 5.3% in explain differences in job performance values. In this final model three of the seven-predictor (explanatory) variables were statistically significant. The three were highest educational degree (Beta = .140), skill variety (Beta = .270) and work engagement (Beta = .275).

Table 0.10

Hierarchical Regression Results for Job Performance. (n = 310)

Variable	Model 1			Model 2			Model 3		
	B/SE B	Beta	p	B / SE B	Beta	p	B/SE B	Beta	p
Constant			.000			.000			.000
D_Education (0 =LT 4 Yr College Degree) (1 = Bs, MS or PhD Degree)		.11	.05		.12	.02		.140	.007
Experience (Years)		.201	.045		.126	.161		.151	.082
Age (Years)		.010	.921		- .005	.957		- .059	.498
Performance Feedback					.091	.159		.042	.507
Autonomy					.189	.006		.082	.238
Skill Variety					.268	.000		.270	.000
Work Engagement								.275	.000
Model Summary									
F			5.341			15.362			17.089
df			3/270			6/267			7/266
Model sig			.001			.000			.000
R Square			.056			.257			.310
Adjusted R Square			.046			.240			.292
R Square % Change			5.6%			20.1%			5.3%

Turnover Intention

For turnover intention the same process was used in identifying three blocks of variables to enter sequentially in the regression analysis. The results are in Table 4.11. When the three demographic variables were entered the

model resulted in a statistically non-significant ($p = .677$) explanation of turnover intention. None of these variables (age, education or years of work experience) have an influence on the turnover intention. Block two: included the three job resource variables (performance feedback, autonomy, and skill variety and resulted in a significant model ($p = .016$) with an R square of .057. Only autonomy shows statistical significance ($p < .001$) and has a beta value of $-.245$. In the final model work engagement was added and resulted in a significant regression model ($p = < .001$) with an R square value of .134. Work engagement is the only variable significant ($p = < .001$) in the final model with a beta value of $-.329$. The higher the level of work engagement, the lower the level of intention to leave.

Table 4.11

Hierarchical Regression Results for Turnover Intention. (n = 310)

Variable	Model 1			Model 2			Model 3		
	B/SE B	Beta	p	B / SE B	Beta	p	B/SE B	Beta	p
Constant						.000			.000
D_Education (0 =LT 4 Yr College Degree) (1 = Bs, MS or PhD Degree)		.009	.888	.017	.782			-.002	.968
Experience (Years)		.127	.218	.128	.207			.098	.315
Age (Years)		-.105	.308	-.077	.443			-.012	.900
Performance Feedback				-.040	.589			.020	.784
Autonomy				-.245	.001			-.117	.133
Skill Variety				.120	.098			.117	.093
Work Engagement								-.329	.000

(continued)

Table 4.11

Hierarchical Regression Results for Turnover Intention. (n = 310)

Variable	Model 1	Model 2	Model 3
Model Summary			
F	.508	2.673	5.860
df	3/270	6/267	7/266
Model sig	.677	.016	<.001
R Square	.006	.057	.134
Adjusted R Square	-.005	.035	.111
R Square % Change	.6%	5.1%	7.7%

Research Findings**Summary of the Research Findings**

This research used quantitative methodology to analyze the collected data and resolve the research questions. This was accomplished using both tabular procedures (frequency, descriptive, means, standard deviation, and skewness) and graphical procedures (boxplots and histograms) in SPSS. In addition, statistical assumptions (reliability, linearity, and normality) were assessed. The research used the Pearson correlation, linear and multiple regression to resolve the research questions.

The results of the reliability, linearity, and normality indicated that the instruments that were used are valid. The Cronbach's alpha equals (.943) and the instruments a linear and normal distribution, which can be used to measure variables such as work engagement, autonomy, skill variety, performance feedback, job performance, and turnover intention.

The results show that age and experience are statistically significant ($p < .05$) predictors of work engagement. Age was shown to positively correlate with work engagement, indicating that the older the employee, the more engaged

they were. Experience was also shown to correlate with work engagement, indicating that the more experience the employee had, the more engagement they demonstrated.

The results also indicated that the independent variables of the job resources— autonomy, skill variety, and performance feedback—have a statistically positive significance influence ($p < .05$) on the work engagement. Autonomy positively correlated with work engagement, indicating that the more sufficient the autonomy provided to the employees, the more engaged they were. Skill variety also positively correlated with work engagement, indicating that the more skill variety the employees had, the more engaged they were. In addition, performance feedback was shown to positively correlate with work engagement, indicating that the more feedback the employees got, the more engaged they were.

The research also examined the correlation between the job performance, which includes individual employees' in-role and extra-role performance, and work engagement. The results showed a statistically positive and significant correlation between job performance and work engagement, as expected. Job performance positively correlated with work engagement, indicating that the employees produce more and their job performance increased when they were more engaged.

The research also examined the correlation between the individual employee's intention to leave their organizations and work engagement. The result shows a negative statistically significant correlation between turnover

intention and work engagement as expected. Turnover intention negatively correlated with work engagement, indicating that the employee's intention to leave decreases when they were more engaged.

The last research question studied how the 11 independent variables which measured age, education, years of work experience, autonomy, skill variety, performance feedback, job resources, vigor, dedication, absorption, and work engagement impacted job performance. Of those 11 independent variables measured, in terms of the collective influence of all the research variables, the results show that employees' educational level had a statistically significant influence on the job performance.

The last research question also studied how the 11 independent variables which measured age, education, years of work experience, autonomy, skill variety, performance feedback, job resources, vigor, dedication, absorption, and work engagement impacted the employees' turnover intention. Of those 11 independent variables measured, in terms of the collective influence of all the research variables, the results also show only work engagement had a statistically significance influence on turnover intention.

Chapter Five

Summary, Conclusion, and Recommendation

This chapter summarizes the study in terms of the study purpose, the research questions, research process, and the research findings statistics analysis. It also illustrates the conclusion and some recommendations for scholars and for the human resources/organization development, and workplace learning and performance specialists. Moreover, this chapter states some self-reported limitations.

Summary of the Research

The Study Purpose

The primary purpose of this study was to examine the influence of the demographic factors (age, highest educational degree, and years of work experience) and the influence of job resources (autonomy, skill variety, and performance feedback) on employees' self-reported work engagement. Additionally, the study examined the influence of work engagement on job performance and turnover intention in the oil and energy industry in Saudi Arabia. To accomplish that purpose four-research questions were developed.

Research Questions

Four research questions were developed for this study:

- RQ 1. What is the influence of the demographic factors (age, years of work experience, highest educational degree) on employees' work engagement in the oil and energy industry in Saudi Arabia?
- RQ 2. What is the influence on employees' work engagement of the three

job resource factors:

- Autonomy?
 - Skill variety?
 - Performance feedback?
- RQ 3. What are the relationships between employees' work engagement and:
 - Job performance
 - Turnover Intention
 - RQ 4. What is the collective influence of performance feedback, autonomy, skill variety, vigor, absorption, dedication, work engagement, gender, age, highest educational degree, and years of work experience on:
 - job performance?
 - turnover intention?

The Research Process

The study started by identifying the research purpose. Then, based on the purpose, the research questions were developed. After that, the research framework was adapted from Schaufeli (2006) to guide the research. Instruments were then used to measure the research variables that have been translated from their original English version to the Arabic language, the official language of people in Saudi Arabia. The instruments were translated by HRD/OD PhD graduates from the Pennsylvania State University who speak both English and Arabic fluently. Then, the translation was sent to HRD professionals who are

working in the oil and energy industry in Saudi Arabia in the HR departments in these organizations. Two different HRD PhD candidates from Penn State then translated the Arabic version back into English. Next, a web survey was developed using Google Form, which generated a link to send to the participants. This hyperlink, along with a consent form that ensured the confidentiality and anonymity of the participants, was included in an invitation email. After that, the invitation email, along with these documents, were sent to the 40 main potential participants, who agreed to participate in the study and agreed to forward the research package to a network of people who were eligible to participate in the study. Each one of those 40 participants agreed to forward it to 25 employees from their respective networks. The researcher received 350 out of the 1,000 were sent out (a response rate of 35%). The number of the surveys that were used in this research was 310 due to the fact that some people who participated don't work in the oil and energy industry and some have missing data. The collected data was analyzed using descriptive and inferential statistics, specifically using the IBM package SPSS by following the sequence suggested by Morgan, Leech, Gloeckner and Barrett (2012) in completing an exploratory data analysis (EDA).

Conclusions

This research contributes to the literature by expanding knowledge on the antecedents of work engagement, demonstrating that job resources and demographics are important factors in terms of work engagement. Moreover, job

performance and turnover intentions are important consequences affected by the level of work engagement.

The first research question showed that age and experience have a statistically positive significance influence on work engagement. This result is consistent with the previous research (Avery et al., 2007; Baumgardner, 2014; Christian et al., 2011; Goštautaitė, 2015; James, McKechnie, & Swanberg, 2011; Schaufeli, Bakker, & Salanova, 2006; Siu et al., 2010). The previous research and this research found that age is positively correlated with work engagement; therefore, the older employees were more engaged. Based on the researcher experience, this result is expected because the older the employee is, the more experience and more respect from their colleagues an employee has, according to Saudi culture. According to the result from this study, this experience and respect leads to greater engagement.

The second research question was about the influence of the job resources variables on work engagement; autonomy, skill variety, and performance feedback showed that the job resources variables have a statistically positive significance influence on work engagement. Therefore, the more employees gained job resources in the oil and energy industry in Saudi Arabia, the more they felt engaged in their work. So, it is recommended for the oil and energy organizations to focus on providing employees with these job resources to increase their work engagement level. These results are consistent with the results from the previous research (Halbesleben, 2010; Kim, 2014; Saks,

2006; Schaufeli & Bakker, 2004; Schaufeli et al., 2009; Mauno et al., 2007; Xanthopoulou et al., 2007, 2009a).

These results also supported the JD-R model (Bakker and Demerouti, 2008). Bakker and Demerouti argued that these job resources variables are antecedents that lead to greater work engagement. This correlation has been tested by many scholars and they also found that these variables influenced work engagement. For example, Kim (2012) found—in his research mentioned in chapter two of this study—that these job resources variables (autonomy, skill variety, and performance feedback) were antecedents and influenced work engagement. So, the results from this research further support the strong correlation between the job resources and work engagement. Based on the researcher experience from working in this industry, and from a society where 80% of people are working in this industry, these variables strongly influence work engagement. For example, when an employee works in a field under a high temperature that reaches 122F but then gets a positive performance feedback, this affects his engagement in the future. Feedback is a “crucial component of the performance management process and a driver of employee engagement” (Mone & London, 2010, p. 86). Thus, feedback supports employee engagement when it is used to direct and improve employee performance (Mone & London, 2010). Managers should use the feedback in a manner that fosters engaged employees and motivates them to improve their performance (Mone & London, 2010). In fact, “giving and receiving feedback are important for engaging employees and are critical to effective performance management, although at

times this may be difficult to provide due to an employee's reaction or personality" (Mone & London, 2010, p. 102). In all, feedback and coaching create a community culture that engages employees to continue development and improve performance (Mone & London, 2010). In this way, those antecedents are a foundation for work engagement. Therefore, if the job resources are affected then the level of work engagement will be affected as well.

The third research question was about the relationship between the job performance and work engagement. The results showed that job performance had a positive correlation with work engagement, as expected. This is also supported by the JD-R Model. Bakker and Demerouti (2008) argue that job performance is influenced by work engagement. Therefore, when the work engagement is high, the employees are expected to perform better. This implies that the employees produce more and their job performance increases when they are more engaged. These results were consistent with the results from previous research (Bakker & Bal, 2010; Bakker & Demerouti, 2009; Christian & Slaughter, 2007; Karatepe, 2011; Kim, 2014; Moliner et al., 2008) which reported that work engagement improved job performance. These results suggest that organizations enhance their employees' engagement to see better performance and increased organizational output.

When the regression was calculated to check the collective influence of all the research variables on job performance in the fourth research question, the results showed that in addition to the work engagement, the education and the skill variety have a significant impact on the job performance. These results are

consistent with the results from previous research (Bakker & Demerouti, 2009; Bakker & Schaufeli, 2010). When we altered these three variables—employees' educational level, skill variety, and work engagement—the employees' job performance was affected. If they increased, then the employees performed better and vice versa. This also implied that job performance could be managed and enhanced by motivating employees to reach a higher education level, vary their skills, and increase their work engagement. Job performance can also be anticipated or predicted using a combination of these variables. These findings foster organizations' manpower planning or succession planning.

On the other hand, the turnover intention has a negative correlation with work engagement. This is also supported by the JD-R Model where Bakker and Demerouti (2008) argued that turnover intention decreased when the employee engagement increased, which implied that an employee's intention to leave decreased when they were more engaged. Therefore, enhancing work engagement for employees decreases their desire to leave their organizations in the oil and energy industry in Saudi Arabia. These results are consistent with the results from previous research (Kim, 2014; Koyuncu et al., 2006; Saks 2006; Shuck et al., 2011; Schaufeli & Bakker, 2004; Wefald, Reichard, & Serrano, 2011), which reported that the employees' intention to leave decreased among employees who reported a high work engagement level.

When the regression was calculated to check the collective influence of all the research variables on the turnover intention, the results showed that only the work engagement had a significant impact on the job performance. When we

combined the 11 research variables to examine their effect as one source of impact on the turnover intention, work engagement was the only factor that had a significant influence on the employees' intention to leave. These results are consistent with the results from previous research (Bakker & Demerouti, 2009; Bakker & Schaufeli, 2010) that reported a statistically significant influence of the work engagement on employees' intention to leave. Since work engagement has this influence on employees' deliberate and conscious willingness to leave, it is recommended that organizations manage their employees' retention through enhancing the work engagement level.

The research findings indicate that the age and the years of work experience have a statistically influence on work engagement. They also show a positive impact on the older and more experienced employees, who were more engaged. In addition, the research findings support the argument that the job resources are antecedents of work engagement. There was a positive correlation between job performance and work engagement, which supported the assumptions that engaged employees perform better. On the other hand, the research showed that turnover intention has a negative correlation with work engagement. So, the more engaged the employee, the less likely their intention to leave, which supported the assumption that job performance and turnover intention are consequences of work engagement.

Recommendations

For Scholars

These are some recommendations to the scholars based on this research study.

The researcher recommends to the scholars to do more research and examine the job resources, work engagement, job performance, and turnover intention—the components of the JD-R model— to validate the previous research results in the oil and energy industry in the Middle East and Saudi Arabia in particular. Validating the previous work engagement research on the oil industry in Saudi Arabia can benefit the HRD/OD consultants who intend to do business in Saudi Arabia. It could also confirm the relationship between work engagement and demographics, job resources, job performance, and turnover intention in the petroleum industry in Saudi Arabia.

The researcher recommends the Arabic scholars to translate the work engagement concept into Arabic and introduce the work engagement concept within the Middle East society. Based on researcher's experience by talking with many employees in Saudi Arabia, the conceptual meaning of the work engagement is confused with another terms that describe job satisfaction, workaholic, or job burnout. Research on work engagement in Arabic context might explain the concept of work engagement to the Middle Eastern people. Furthermore, this might clarify the distinction between work engagement and other terms such as job burnout, workaholic, and job satisfaction. The study also helps organizations develop a clear definition of work engagement. Clarifying the

meaning of work engagement as psychological state of the employees characterized by vigor, dedication, and absorption.

The researcher recommends to replicate this study in a longitudinal study design to get more reliable results. This longitudinal research would be helpful to understand how job resources factors such as autonomy, performance feedback, and skill variety influence work engagement across over time. Also, how the work engagement influence employees' performance and their turnover intention across over time.

Another study could be conducted on other factors used in the JD-R model framework, such as personal resources. Moreover, more research can be conducted on the other job resources factors. Social support and supervisor coaching are also important factors that should be included in future research about work engagement.

This research has been conducted in Saudi Arabia, so further research could be conducted in the other gulf countries such as Kuwait, Bahrain, United Arab Emirates UAE, Qatar, and Oman to see how work engagement impacts organizations in these countries. Moreover, similar research could be conducted in other Middle East countries to see how work engagement affects organizations in the Middle East.

As this research was conducted specifically within the petroleum and energy industry in Saudi Arabia, another similar study could examine other sectors in Saudi Arabia, such as work engagement in the public sector or the private sector in Saudi Arabia. In addition, research on work engagement in

Saudi Arabia can be conducted in other industries such as the dairy industry, banking, and family businesses. Moreover, it can be done in the field of education—whether general education or higher education—for both students and teachers, or even for principals.

The oil industry is a big and diversified industry. It encompasses oil exploration, operation, refinery, sales, maintenance, and safety. As such, the researcher recommends conducting an engagement study for each one of these sectors and, based on that, finding ways to deal with each sector separately in terms of work engagement before comparing it to the overall level of engagement throughout the whole company. This study could be done multiple times throughout the year so that the company can gauge its employees' level of engagement several times.

This study used quantitative methodology in analyzing the data. A qualitative study may be helpful in finding more in depth information about employee work engagement in the petroleum industry in Saudi Arabia. For example, an interview may be conducted to study work engagement or to study day to day engagement.

Work engagement implications could also be explored in terms of gender; studies may examine whether there are differences in engagement levels within a male dominated society like Saudi Arabia and within a male dominated industry like the oil and energy.

For Human Resources Development

In the modern of the business world, to compete effectively, organizations must not only hire the top talent, but they must also inspire and enable employees to apply their full capabilities toward their work. Modern organizations need employees who are psychologically connected to their work, are willing and able to invest themselves fully in their roles, and who are proactive, take responsibility, show initiative, and are devoted to high-quality performance standards. In short, organizations need employees who feel energetic about, dedicated to, and engaged with their work (Bakker & Leiter, 2010).

The engaged employees feel vigorous, dedicated, and absorbed in their work. Moreover, those employees also have a positive impact on the people around them. This creates a positive environment and “influence[s] one another’s experience of engagement” (Bakker & Demerouti, 2009; Bakker & Leiter, 2010, p. 5; Bakker, Van Emmerik, & Euwema, 2006). In addition, “colleagues as well are potential resources—as sources of knowledge, emotional support, materials that pertains to the engagement experience” (Bakker & Leiter, 2010, p. 5). Thus, engaged workers who communicate their optimism, positive attitudes, and proactive behaviors to their colleagues create a positive team climate, independent of the demands and resources to which they are exposed. This suggests that engaged workers influence their colleagues and consequently enable their group to perform better as a team (Bakker et al., 2006). Further, work engagement enhances the quality of work responsibilities, focus on the task on hand, and the experience of positive emotions; it also increases flexibility,

creativity, integration, and efficiency of thoughts (Bakker & Leiter, 2010).

Organizational success depends on an engaged working environment (Bakker & Demerouti, 2008), as engagement has been strongly related to creativity and guides employees to perform better.

The oil industry is a cyclical industry which is affected by the oil barrel price. Thus, when the barrel price goes up, the petroleum organizations hire more employees to produce and sell more. However, when the price goes down, organizations lay off employees. It stands to reason that they would want to retain the most engaged of their employees. Therefore, oil organizations should invest in work engagement assessment all the time.

Organizations in the oil industry can benefit from this study as they can learn which factors most affect employees' engagement, and then direct the HRD to focus on enhancement this factor. At the same time, they would learn the least impactful engagement factor and design, develop, and implement training programs to enhance employees' level of work engagement and achieve a high level of work engagement within these organizations.

Organizations should establish and implement policies that support, enhance, and facilitate work engagement. The results of this research it may be used to develop redesign strategies that create an engaged and productive workforce. Moreover, these organizations may focus on acquiring job resources, thus enhancing job performance and decreasing turnover intention based on the level of work engagement. This high level of engagement may result in the

retention of valued and talented employees, and give an organization a positive image.

This research could be a part of a training needs assessment project within the petroleum and energy industry in Saudi Arabia. Therefore, organizations can perform this work engagement research before they develop a training program within their respective organizations. Moreover, they can discover the real problems that obstacles to employees work engagement and focus their attention on any necessary modifications and training initiatives before they conduct a training program.

Limitations and Scholar's Opinion about Data Collection

The data of this study, like most empirical studies on work engagement, were collected using self-reported instruments that lead to a same source/common method bias which might affect the results of the research (Podsakoff, MacKenzie, Jeong-Yeon, & Podsakoff, 2003). This bias can be minimized by collecting data using external data from multiple sources (Karatepe, 2011). In order to minimize the bias, the study could also examine employees' behavioral indicators, which can be found in the company files. These can provide accurate data about the actual turnover and sickness absenteeism of the employees, which might relate to employees' work engagement levels.

This study collected data using referral/snowballing, nonprobability sampling. Therefore, the results of this research can't be generalized to the larger population. Therefore, the scholar suggests that this research be done using probability sampling. The population surveyed in this study included

employees from his potential friends' networks, so the respondents were limited to employees of the oil and energy industries in Saudi Arabia. Of those, the respondents were predominantly oil industry employees, and predominantly men. There were 280 males, which represent 90.3% of the participants while 16 were females (5.2%). Due to this low percentage of the female participants in the study, the gender variable was not included in the data analysis. The lack of diversity among the respondents limits the generalization of the results across the larger population of employees working in oil and energy industries. In addition, the sample size wasn't large enough to represent the entire population of employees working in the oil and energy industries in Saudi Arabia due to the sampling process followed. The researcher followed the Dillman Total Design Method (TM) (Dillman, Smyth, & Melani, 2011) and sent the invitation pages, including a hyper link of the survey, using email and text messages. Choosing another method to increase the response rate is recommended for future data collection. Likewise, adding more rewards would increase the response rate (Dillman, Smyth, & Melani, 2011).

Chapter Summary

This chapter summarized the overall research. The research procedure was summarized, then the research purpose and the research questions were presented, eventually followed by the findings summary. After that, the research variables and the research findings were discussed in terms of previous similar studies. This research found that age and years of work experience are the demographic factors that have a significant influence on employees' work

engagement in the oil and energy industry in Saudi Arabia. This chapter also discussed the discovery that the job resources variables — autonomy, skill variety, and performance feedback—are antecedents of work engagement levels, and have a positive significant influence on the employee engagement within the oil industry in Saudi Arabia. In addition, job performance, which is one consequence of work engagement, has a positive significant correlation with work engagement and the other consequences of work engagement is turnover intention has a negative significant correlation with work engagement. Additionally, of the 11 variables whose influences on job performance were examined, the employees' highest educational level, skill variety, and their level of engagement had a significant influence on job performance. Of these variables, only work engagement had a significant influence on the employees' intention to leave. These results are consistent with previous research. This chapter then summarized some academic and practical implications of this research. Finally, future research recommendations were suggested, followed by a discussion of self-reported limitations.

References

- Ahmad, A., & Aldakhil, A. M. (2012). Employee engagement and strategic communication in Saudi Arabian banks. *IBIMA Business Review*, 13-21.
- Al-Zahrani, A. A., & Almazari, A. A. (2014). The impact of affective human resources management practices on the financial performance of the Saudi banks. *Review of Integrative Business & Economics*, 3(1), 327-336.
- 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.
- Babin, B. J., & Boles, J. S. (1998). Employee behavior in a service environment: A model and test of potential differences between men and women. *The Journal of Marketing*, 77-91.
- Bailey, K. D. (1994). *Typologies and taxonomies: An introduction to classification techniques* (Vol. 102). Sage.
- Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European journal of work and organizational psychology*, 20(1), 4-28.
- Bakker, A. B., & Bal, P. M. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology*, 83(1), 189-206.
doi:10.1348/096317909X402596
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement.

Career Development International, 13(3), 209-223.

doi:10.1108/13620430810870476

- Bakker, A. B., & Demerouti, E. (2009). The crossover of work engagement between working couples: A closer look at the role of empathy. *Journal of Managerial Psychology*, 24(3), 220-236. doi:10.1108/02683940910939313
- Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2003). Dual processes at work in a call center: An application of the job demands–resources model. *European Journal of Work and Organizational Psychology*, 12, 393–417.
- Bakker, A. B., Demerouti, E., & ten Brummelhuis, L. L. (2012). Work engagement, performance, and active learning: The role of conscientiousness. *Journal of Vocational Behavior*, 80(2), 555–564.
- Bakker, A. B., & Leiter, M. P. (Eds.). (2010). *Work engagement: A handbook of essential theory and research*. Psychology Press.
- Bakker, A. B., & Xanthopoulou, D. (2009). The crossover of daily work engagement: Test of an actor-partner interdependence model. *Journal of Applied Psychology*, 94(6), 1562-1571. doi:10.1037/a0017525
- 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. doi:10.1002/hrm.20004
- 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(2), 274.
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work

- engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), 187-200.
- Bakker, A. B., van Emmerik, H., & Euwema, M. C. (2006). Crossover of burnout and engagement in work teams. *Work and occupations*, 33(4), 464-489.
- Baumgardner, C. Z. (2014). *Critical demographic and workplace factors that influence work engagement in nursing practice in Pennsylvania* (Doctoral dissertation). Retrieved November 25, 2015, from <https://etda.libraries.psu.edu/paper/20203/>
- Baumruk, R. (2004). The missing link: the role of employee engagement in business success. *Workspan*, 47(11), 48-52.
- Biernacki, P., & Waldorf, D. (1981). Snowball sampling: Problems and techniques of chain referral sampling. *Sociological methods & research*, 10(2), 141-163.
- Brown, S. P. (1996). A meta-analysis and review of organizational research on job involvement. *Psychological Bulletin*, 120(2), 235-255.
- Buckingham, M. C., & Coffman, C. (1999). *First, break all the rules: What the world's greatest managers do differently*. New York, NY: Simon & Shuster.
- Carmeli, A., & Weisberg, J. (2006). Exploring turnover intentions among three professional groups of employees. *Human Resource Development International*, 9(2), 191–206. doi: 10.1080/13678860600616305
- Christian, M. S., & Slaughter, J. E. (2007, August). *Work engagement: A meta-analytic review and directions for research in an emerging area*. Paper presented at the 66th annual meeting of the Academy of Management,

Philadelphia, PA.

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(1), 89-136.

Colarelli, S. M. (1982). *Methods of communication and job information, reactions to the job, and job survival: A field experiment* (Doctoral dissertation).

Retrieved from

<http://ezaccess.libraries.psu.edu/login?url=http://search.proquest.com.ezaccess.libraries.psu.edu/docview/303071954?accountid=13158>

Dillman, D. A. (2007). *Mail and internet surveys: The tailored design method*. (2nd ed.). Hoboken, NJ: Wiley & Sons, Inc.

Dillman, D. A., Smyth, J. D., & Melani, L. (2011). *Internet, mail, and mixed-mode surveys: the tailored design method*. Toronto: Wiley & Sons.

Demerouti, E., & Cropanzano, R. (2010). From thought to action: Employee work engagement and job performance. In A. B. Bakker, & M. P. Leiter. (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 147-163). New York, NY: Psychology Press.

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

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499- 512. doi:10.1037/0021-9010.86.3.499

- Egan, T. M., Yang, B., & Bartlett, K. R. (2004). The effects of organizational learning culture and job satisfaction on motivation to transfer learning and turnover intention. *Human Resource Development Quarterly*, 15(3), 279–301. doi:10.1002/hrdq.1104
- Field, A. P. (2009). *Discovering statistics using SPSS: And sex and drugs and rock 'n' roll* (3rd Edition). London: UK. Sage Publications, Ltd.
- Flannery, K. A. (1998). *Outsourcing training: A survey of decision makers regarding the influence of selected organizational factors and their effect on decisions to outsource training* (Doctoral dissertation, Pennsylvania State University).
- Fowler, F. J. (2014). *Survey research methods*. (5th ed.). Thousand Oaks, CA: SAGE Publications.
- Frank, F.D., Finnegan, R.P., & Taylor, C.R. (2004). The race for talent: Retaining and engaging workers in the 21st century. *Human Resource Planning*, 27(3), 12-25.
- Fredrickson, B.L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56, 218–226.
- Garson, G. D. (2005). Structural equation modeling example using WinA-MOS (webpage). Retrieved from <http://faculty.chass.ncsu.edu/garson/PA765/structur.htm>
- Goodman, S. A., & Svyantek, D. J. (1999). Person-organization fit and contextual performance: Do shared values matter. *Journal of Vocational Behavior*, 55(2),

254–275. doi:10.1006/jvbe.1998.1682

Gorgievski, M. J., Bakker, A. B., & Schaufeli, W. B. (2010). Work engagement and workaholism: comparing the self-employed and salaried employees. *The Journal of Positive Psychology, 5*(1), 83–96.

doi:10.1080/17439760903509606

Goštautaitė, B., & Bučiūnienė, I. (2015). *Age, work engagement and individual work performance: the influence of work design* (Doctoral dissertation, ISM University of Management and Economics).

Gupta, K., Sleezer, C. M., & Russ-Eft, D. F. (2007). *A practical guide to needs assessment (2nd ed)*. San Francisco, CA: Pfeiffer.

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance, 16*(2), 250–279. doi:10.1016/0030-5073(76)90016-7

Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.

Hakanen, J. J., & Roodt, G. (2010). Using the job demands-resources model to predict engagement: Analysing a conceptual model. In A. B. Bakker, & M. P. Leiter. (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 10- 24). New York, NY: Psychology Press.

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.

doi:10.1111/j.1600- 0722.2005.00250.x

- 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., 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*(1), 78-91.
- 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.
- Halbesleben, J. R. B. (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. In A. B. Bakker, & M. P. Leiter. (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 10- 24). New York, NY: Psychology Press.
- Halbesleben, J. R. B., & Wheeler, A. R. (2008). The relative roles of engagement and embeddedness in predicting job performance and intention to leave. *Work & Stress, 22*(3), 242-256. doi:10.1080/02678370802383962
- 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), 268-279.

- Hinkle, D., Wiersma, W. & Jurs, S. (2003). *Applied statistics for the behavioral sciences*. Boston: Houghton Mifflin Co.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American psychologist*, 44(3), 513-524.
doi:10.1037/0003-066X.44.3.513
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, 6(4), 307-324. doi:10.1037/1089-2680.6.4.307
- Hobfoll, E.E., & Shirom, A. (2001). Conservation of resources theory: Applications to stress and management in the workplace. In R.T. Golembiewski (Ed), *Handbook of Organizational Behavior* (pp. 57–81). New York: Marcel Dekker.
- Hofstead, G. (2003). What is culture? A reply to baskerville. *Accounting, Organizations and Society*, 28(7), 811-813.
- Huck, S. W. (2012). *Reading statistics and research 6th Ed*. Boston, MA: Pearson
- Jackson, L.T.B., Rothmann, S. & Van de Vijver, A.J.R. (2006). A model of work-related well-being for educators in South Africa. *Stress and Health*, 22(4), 263–274.
- James, J. B., McKechnie, S., & Swanberg, J. (2011). Predicting employee engagement in an age-diverse retail workforce. *Journal of Organizational Behavior*, 32(2), 173-196. doi: 10.1002/job.681
- Judge, T. A., & Kammeyer-Mueller, J. D. (2012). Job attitudes. *Annual Review of Psychology*, 63(1), 341-367.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and

- disengagement at work. *Academy of Management Journal*, 33(4), 692-724. doi:10.2307/256287
- Karasek, R. A. (1985). *Job content instrument: Questionnaire and user's guide* (Rev. 1.1). Los Angeles, LA: University of Southern California.
- Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24(2), 285-308.
- Karatepe, O. M. (2011). Do job resources moderate the effect of emotional dissonance on burnout? A study in the city of Ankara, Turkey. *International Journal of Contemporary Hospitality Management*, 23(1), 44-65.
- Karatepe, O. M., & Olugbade, O. A. (2009). The effects of job and personal resources on hotel employees' work engagement. *International Journal of Hospitality Management*, 28(4), 504-512.
- Kerlinger, F. (1973). *Foundations of behavioral research* (2nd ed.). New York: Holt, Rinehart and Winston.
- Kim, H. M. (2012). *The structural relationships of work engagement with its antecedents and consequences in the Korean business organization context* (Doctoral dissertation).
- Kim, W. (2014). *An Examination of Work Engagement in Selected Major Organizations in Korea: Its Role as a Mediator Between Antecedents and Consequences* (Pennsylvania) (Doctoral dissertation). Retrieved November 25, 2015, from <https://etda.libraries.psu.edu/paper/20601/>

- Kim, W., Kolb, J. A., & Kim, T. (2012). The relationship between work engagement and performance: A review of empirical literature and a proposed research agenda. *Human Resource Development Review*, 12(3), 248-276. doi:10.1177/1534484312461635
- 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. doi:10.1108/02610150610706276
- Leiter, M. P., & Bakker, A. B. (2010). Work engagement: Introduction. In A. B. Bakker, & M. P. Leiter. (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 10-24). New York, NY: Psychology Press.
- LinkedIn. (2015). www.LinedIn.com
- Llorens, S., Bakker, A. B., Schaufeli, W. B., & Salanova, M. (2006). Testing the robustness of the job demands-resources model. *International Journal of Stress Management*, 13(3), 378-391. doi:10.1037/1072-5245.13.3.378
- Llorens, S., Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2007). Testing the robustness of the job demands-resources model. *International Journal of Stress Management*, 13, 378–391.
- Locke, E. A. (1969). What is job satisfaction? *Organizational Behavior and Human Performance*, 4(4), 309-336. doi:10.1016/0030-5073(69)90013-0
- Lodahl, T. M., & Kejner, M. (1965). The definition and measurement of job involvement. *Journal of Applied Psychology*, 49(1), 24-33.
- Luthans, F., Avey, J. B., Avolio, B. J., Norman, S. M., & Combs, G. M. (2006).

- Psychological capital development: Toward a micro-intervention. *Journal of Organizational Behavior*, 27(3), 397-393. doi: 10.1002/job.373
- Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1(1), 3-30. doi:10.1111/j.1754-9434.2007.0002.x
- Maneesriwongul, W. & Dixon, J. K. (2004). Instrument translation process: A methods review. *Journal of Advanced Nursing*, 48(2), 175-186. doi:10.1111/j.1365-2648.2004.03185.x
- Marshall, C., & Rossman, G. B. (2011). Managing, analyzing, and interpreting data. *Designing Qualitative Research*, 5, 205-227.
- Maslach, C., & Leiter, M. P. (1997). *The truth about burnout: How organizations cause personal stress and what to do about it* (1st ed.). San Francisco, CA: Jossey-Bass.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual review of psychology*, 52(1), 397-422.
- 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. doi:10.1016/j.jvb.2006.09.002
- McGorry, S. Y. (2000). Measurement in a cross-cultural environment: Survey translation issues. *Qualitative Market Research*, 3(2), 74-81. doi:10.1108/13522750010322070
- Medlin, B., & Green, K. W., Jr. (2009). Enhancing performance through goal setting, engagement, and optimism. *Industrial Management & Data*

Systems, 109(7), 943- 956. doi:10.1108/02635570910982292

Mehta, H. C., & Mehta, J. B. (2013). *Strongman: The extraordinary life of Hun Sen*. Singapore: Marshall Cavendish Editions.

Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. D. Drenth & H. Thierry (Eds.), *Handbook of work and organizational psychology* (Vol. 2, pp. 5–33). Hove, England: Psychology Press.

Merriam-Webster. (2015). www.Merriam-Webster.com

Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4), 538-551.

Moliner, C., Martínez-Tur, V., Romos, J., Cropanzano, R. (2008). Organizational justice and extra role customer service: The mediating role of well-being at work. *European Journal of Work and Organizational Psychology*, 17(3), 327–348.

Mone, E.M. & London, M. (2010). *Employee engagement through effective performance management: A practical guide for managers*. New York:NY, Routledge.

Montgomery, D. C., & Runger, G. C. (2010). *Applied statistics and probability for engineers*. John Wiley & Sons.

Moore, J.W & Hagedorn, J. (2001). *Female gangs: A focus on research*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.

Morgan, G. A., Leech, N. L., Gloeckner, G. W., & Barrett, K. C. (2012). *IBM*

SPSS for introductory statistics: Use and interpretation. Routledge.

Moussa, M. N. (2013). Investigating the high turnover of Saudi nationals versus non-nationals in private sector companies using selected antecedents and consequences of employee engagement. *International Journal of Business and Management*, 8(18), p.41.

Mowday, R.T., Steers, R.M., & Porter, L.W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14, 224-247.

Park, M. J. (2015). *The relationship of change readiness and work engagement in manufacturing organizations in south-central Pennsylvania* (Doctoral dissertation, The Pennsylvania State University).

Podsakoff, P. M., MacKenzie, S. B., Jeong-Yeon, L., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.

Radda, A. A., Majidadi, M. A., & Akanno, S. N. (2015). Employee engagement in oil and gas sector. *Studies*, 4(3).

Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *The Academy of Management Journal*, 53(3), 617-635. doi:10.5465/AMJ.2010.51468988

Richardsen, A. M., Burke, R. J., & Martinussen, M. (2006). Work and health outcomes among police officers: The mediating role of police cynicism and engagement. *International Journal of Stress Management*, 13(4), 555-574. doi:10.1037/1072-5245.13.4.555

- Richman, A. (2006). Everyone wants an engaged workforce how can you create it? *Workspan*, 49, pp.36-39.
- Robinson, I. (2006). *Human resource management in organisations*. London: CIPD.
- Rothwell, W. J., Baumgardner, C., & Myers, J. (2014). *Creating engaged employees: It's worth the investment*. American Society for Training and Development.
- 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.
doi:10.1108/02683940610690169
- Salanova, M., & Schaufeli, W. B. (2008). A cross-national study of work engagement as a mediator between job resources and proactive behavior. *The International Journal of Human Resource Management*, 19(1), 116-131. doi:10.1080/09585190701763982
- 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), 1217-1227. doi:10.1037/0021-9010.90.6.1217
- Sampson, H. (2004). Navigating the waves: The usefulness of a pilot in qualitative research. *Qualitative Research*, 4(3), 383-402.

- Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In A.B. Bakker & M. P. Leiter, (Eds.), *Work engagement: A handbook of theory and research*. (pp. 10-24). New York, NY: Psychology Press/Taylor & Francis Group.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293-315. doi:10.1002/job.248
- Schaufeli, W. B., & Bakker, A. B. (2003). *Utrecht work engagement scale: Preliminary manual*. Department of Psychology, Utrecht University, The Netherlands. Retrieved from http://www.wilmarschaufeli.nl/publications/Schaufeli/Test%20Manuals/Test_manual_UWES_English.pdf
- Schaufeli, W. B., & Salanova, M. (2008). 18 Enhancing work engagement through the management of human resources. *The individual in the changing working life*, 380.
- Schaufeli, W. B., & Taris, T. W. (2005). The conceptualization and measurement of burnout: Common ground and worlds apart the views expressed in Work & Stress Commentaries are those of the author (s), and do not necessarily represent those of any other person or organization, or of the journal. *Work & Stress*, 19(3), 256-262.
- 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. doi:

10.1177/0013164405282471

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. doi: 10.1002/job.595

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two-sample confirmatory factor analytic approach. *Journal of Happiness Studies, 3*(1), 71-92. doi:10.1023/A:1015630930326

Schaufeli, W.B., Taris, T., LeBlanc, P., Peeters, M., Bakker, A.B., & de Jonge, J. (2001). Work and health: The quest for the engaged worker. *Psychology, 36*, 422-428.

Shaw, K. (2005). An engagement strategy process for communicators. *Strategic Communication Management, 9*(3), 26-29.

Shuck, B. (2011). Four emerging perspectives of employee engagement: An integrative literature review. *Human Resource Development Review, 10*(3), 304-328. doi:10.1177/1534484311410840

Shuck, B., Reio, T. G. Jr., & Rocco, T. S. (2011). Employee engagement: An examination of antecedent and outcome variables. *Human Resource Development International, 14*(4), 427-445. doi:10.1080/13678868.2011.601587

Shuck, B., & Wollard, K. (2010). Employee engagement and HRD: A seminal review of the foundations. *Human Resource Development Review, 9*(1),

89-110. doi:10.1177/1534484309353560

- Simpson, M. R. (2009). Engagement at work: A review of the literature. *International Journal of Nursing Studies*, 46, 1012-1024.
doi:10.1016/j.ijnursetu.2008.05.003
- Siu, O.-I., Lu, J.-f., Brough, P., Lu, C.-q., Bakker, A. B., Kalliath, T., . . . Lo, D. (2010). Role resources and work–family enrichment: The role of work engagement. *Journal of Vocational Behavior*, 77(3), 470-480.
- Suter, W. N. (2006). *Introduction to educational research: A critical thinking approach*. Thousand Oaks, CA: Sage Publications, Inc.
- Sweetman, D., & Luthans, F. (2010). The power of positive psychology: Psychological capital and work engagement. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of theory and research*. (pp. 54-68). New York, NY: Psychology Press/Taylor & Francis Group.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. (5th ed.). Boston, MA: Pearson.
- Tett, R., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention and turnover: path analyses based on meta-analytic findings. *Personnel Psychology*, 46(2), 259-293.
- Training. (2010). *MENA's oil & gas sector looks to retain employees*. Available at: <http://www.trainingmag.com/article/menas-oil-gas-sector-looks-retain-employees> Accessed: 6th May, 2015
- Trochim, W. M.(2005). *Research methods: The concise knowledge base*. Cincinnati, OH: Atomic Dog Publishing.

- Urduan, T. C. (2010). *Statistics in plain english*. (3rd ed). London, England: Taylor & Francis.
- 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.
- Wefald, A. J., Reichard, R. J., & Serrano, S. A. (2011). Fitting engagement into a nomological network: The relationship of engagement to leadership and personality. *Journal of Leadership & Organizational Studies*, 1-16.
doi:10.1177/1548051811404890
- 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(2), 121-141.
doi:10.1037/1072-5245.14.2.121
- Xanthopoulou, D., Bakker, A. B., Heuven, E., Demerouti, E., & Schaufeli, W. B. (2008). Working in the sky: A diary study on work engagement among flight attendants. *Journal of Occupational Health Psychology*, 13(4), 345-356. doi:10.1037/1076-8998.13.4.345
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009a). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology*, 82(1), 183-200. doi:10.1348/096317908X285633
- Xanthopoulou, D., Bakker, A., Demerouti, E., & Schaufeli, W. (2009b). Reciprocal

relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, 74(3), 235.

doi:10.1016/j.jvb.2008.11.003

Appendix A

Questionnaires for Survey with Implied Informed Consent Form

(The English version)

Implied Informed Consent Form for Social Science Research

The Pennsylvania State University

Title of Project

Identifying Employee Engagement Factors in the Oil and Energy Industry in Saudi Arabia

Principal Investigator

Ali H. Alkhalaf

Phone: (+1) (814) 777-2209

Email: aha10@psu.edu

Advisor

Dr. William J. Rothwell

310B Keller Building, University Park, PA 16802

Phone: (+1) (814) 863-2581

Email: wjr9@psu.edu

Purpose of the Study

The purpose of this study was to identify critical demographics, the influence of job resources (autonomy, skill variety, and personal feedback) on work engagement, the influence of work engagement on job performance, and turnover intention at the oil and energy industry in Saudi Arabia.

Procedures to be followed

You will be asked to answer 27 questions on this survey.

Duration

It will take about 10 minutes to complete the survey.

Statement of Confidentiality

Your participation in this research is confidential. However, your confidentiality will be kept to the degree permitted by the technology used. No guarantees can be made regarding the interception of data sent via the Internet by any third parties. The data will be stored and secured in a password-protected file. In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared because your name is in no way linked to your responses.

Right to Ask Questions:

Please contact Ali H. Alkhalaf at +1-814-777-2209 or aha10@psu.edu with questions or concerns about this study.

Voluntary Participation:

Your decision to be in this research is voluntary. Your employer will not know whether or not you have chosen to participate in the study. You can stop at any time. You do not have to answer any questions you do not want to answer. Refusal to take part in or withdrawal from this study will lead to no penalty or loss of benefits that you would otherwise receive.

You must be 18 years of age or older to take part in this research study. Completion and return of the survey implies that you have read the information in this form and consent to take part in the research. Please print off this form for your records or future reference.

Section 1. The Work Engagement

The purpose of this survey was to assess self-reported views and attitudes about the employee's career in the oil and energy industry in Saudi Arabia. The information gathered may influence the thinking of organizational leaders, educators, and legislators. All responses remained anonymous. There was no obligation to answer any of the questions. Participants read each item and selected the response that best reflected how they felt. The following represents the Work Engagement Survey including the demographic items included in the study.

Age:

- Less than or equal to 29 years;
- 30 ~ 39 years;
- 40 ~ 49 years;
- 50 years and above

Gender: ___ Male ___ Female

Educational Level: ___ Doctoral; ___ Master's Degree; ___ Bachelor's Degree; ___ Diploma; ___ The company institute certificate; ___ High School

Years of Experience in the oil and energy sector:

- Less than a year
- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- More than 20 years

In this section, you are asked to give responses according to the items provided. Directions for your response are given prior to each question set.

These nine statements were about how the employee felt at work. S/he read each statement carefully and decided if they had ever felt that way about their job. If they had never had that feeling, they choose a '0' (zero) in the space after the statement. If they had this feeling, they indicated how often they had it by choosing the number (from 1 to 6) that best described how frequently they had felt that way.

	Almost never	Rarely	Sometimes	Often	Very Often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day
1	At my work, I feel bursting with energy.					
2	At my job, I feel strong and vigorous.					
3	I am enthusiastic about my job.					
4	My job inspires me.					
5	When I get up in the morning, I feel like going to work.					
6	I feel happy when I am working intensely.					
7	I am proud of the work I do.					
8	I am immersed in my work.					
9	I get carried away when I am working.					

Section 2. Job Resources

2.1. The Following statements in this section are about your autonomy in your work. Please indicate your level of agreement with each statement

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1- My job gives me complete responsibility for deciding how and when the work is done.							
2- My job denies me any chance to use my personal initiative or judgment in carrying out the work.							
3- My job gives me considerable opportunity for independence and freedom in how I do the work							

2.2.The Following statements in this section are about your performance feedback in your work. Please indicate your level of agreement with each statement

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1- My job is set up so I get constant "feedback" about how well I am doing.							
2- Just doing the work required by the job provides many chances for me to figure out how well I am doing							
3- My job itself provides very few clues about whether or not I am performing well							

2.3.The Following statements in this section are about your skill variety in your work. Please indicate your level of agreement with each statement

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1- My job requires me to do many different things, using a number of different skills and talents							
2- My job requires me to use a number of complex or high-level skills							
3- My job is quite simple and repetitive							

Section 3. Job Performance

The following statements in this section are about your job performance. Please indicate your level of agreement with each statement

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1- I achieve the objectives of the job							
2- I fulfill all the requirements for my job							
3- I perform well in the overall job by carrying out tasks as expected.							
4- I willingly attend functions not required by the organization, but helps in its overall image.							
5- I take initiative to orient new employees to the department even though not part of my job description							
6- I help other employees with their work when they have been absent							

Section 4. Turnover Intention Instrument

The following statement in this section are about your turnover intention. Please indicate your level of agreement with each statement

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1- I frequently think of quitting my job					
2- I am planning to search for a new job during the next 12 months					
3- If I have my own way, I will work for this organization one year from now.					

Thank you for your participation

Appendix B

Questionnaires for Survey with Implied Informed Consent Form

(The Arabic version)

اندماج أو ارتباط الموظف بعمله في قطاع النفط والطاقة في المملكة العربية السعودية

نموذج الموافقة المسبقة بالمشاركة في بحوث العلوم الاجتماعية جامعة ولاية بنسلفانيا
عنوان البحث: تحديد عوامل اندماج و ارتباط الموظف بعمله في قطاع النفط والبتروكيماويات والكهرباء والطاقة
في المملكة العربية السعودية

الباحث الرئيسي: علي حبيب الخلف

Ali H. Alkhalaf

Phone: (+1) (814) 777-2209

Email: aha10@psu.edu

Ali2alkhalaf@gmail.com

الهدف من الدراسة: الغرض الرئيسي من هذه الدراسة يهدف إلى التعرف على تأثير العوامل الديموغرافية
الدرجة (العمر والتعليم والمساواة بين الجنسين) وتأثير الموارد الوظيفية (التحكم الذاتي، وتنوع المهارات، وردود
الفعل الشخصية Personal feedback) على اندماج وارتباط الموظفين بعملهم . بالإضافة إلى ذلك تناولت
الدراسة تأثير الارتباط بالعمل على الأداء الوظيفي والرغبة في الاستقالة من الوظيفة في صناعة النفط والطاقة
في المملكة العربية السعودية.

الإجراءات الواجب اتباعها: سوف يتطلب منك الإجابة عن ٢٧ سؤال في هذا الاستبيان

المدة: الإجابة عن هذا الاستبيان تستغرق ١٠ دقائق من وقتك

بيان السرية: مشاركتكم في هذا البحث هي سرية. سيتم تخزين البيانات وتأمينها في ملف محمي بكلمة مرور.
ومع ذلك، ستبقى سرية لدرجة ما تسمح به التكنولوجيا المستخدمة. لا شيء مضمون بشأن اعتراض البيانات
المرسلة عبر الإنترنت من قبل أي طرف ثالث. في حال وجود أي نشر أو عرض لنتائج البحث، لن يتم مشاركة
معلوماتكم الشخصية لأنه لا يوجد طريقة لربط الأسماء بالأجوبة المعطاة.

الحق في طرح الأسئلة: الرجاء توجيه أسئلتكم أو ملاحظتكم الى علي حبيب الخلف على التلفون او الإيميل
المشاركة اختياريه: قرار مشاركتكم في هذا البحث هو اختياري. ولن يعلم رئيسك في العمل ما إذا كنت قد اخترت
المشاركة في هذه الدراسة أولا. يمكنك التوقف في أي وقت تشاء. أنت غير مضطر بالإجابة على أية أسئلة قد لا
ترغب في الإجابة عليها. رفض المشاركة أو الانسحاب من هذه الدراسة ليس له اي تبعات.

لا بد الا يقل عمرك عن ١٨ سنة لتتمكن من المشاركة في هذه الدراسة

استكمالك وإعادتك لهذا الاستبيان يعني أنك قد قرأت المعلومات الواردة في هذا النموذج والموافقة على المشاركة
في هذا البحث. يرجى طباعة هذا النموذج والاحتفاظ به في سجلاتك للرجوع إليه في المستقبل.

القسم الاول: الاندماج والارتباط بالعمل

يحتوي هذا القسم على تسع نقاط تدور حول شعورك خلال وقت دوامك الرجاء قراءة كل نقطة بعناية وبعدها اختيار
ما يصف شعورك وقت الدوام مع ملاحظة ان صفر يعني انك لم تشعر بهذا الشيء خلال الدوام وأما الأرقام من ١-
٦ تعني عدد المرات التي شعرت بهذه الطريقة. حسب الجدول التالي:

كل يوم	بضع مرات في الأسبوع	مرة واحدة في الأسبوع	مرات قليلة في الشهر	مرة في الشهر او اقل	بضع مرات في السنة او اقل	ولامر ة		
6	5	4	3	2	1	0		
								1 في عملي، أشعر بطاقة عالية
								2 في وظيفتي، اشعر بالقوة والنشاط
								3 أشعر بالحماس في عملي

كل يوم	بضع مرات في الأسبوع	مرة واحدة في الأسبوع	مرات قليلة في الشهر	مرة في الشهر او اقل	بضع مرات في السنة او اقل	ولامر ة		
6	5	4	3	2	1	0		
								4 وظيفتي تلهمني
								5 عندما أستيقظ في الصباح اشعر برغبة الذهاب للعمل
								6 أشعر بالسعادة عندما أعمل بشكل مكثف
								7 أنا فخور بوظيفتي
								8 أنا مستغرق في أداء عملي
								9 لا أشعر بمرور الوقت أثناء أداء عملي

القسم الثاني: قسم الموارد الوظيفية

العبارات التالية في هذا القسم حول التحكم الذاتي الخاص في عملك. (يرجى الإجابة حسب ما يتفق مع رأيك)

أعارض بشدة	اعارض	أعارض قليلا	محايد	موافق قليلا	موافق	موافق بشدة	
							وظيفتي تعطيني المسؤولية الكاملة في تحديد موعد وكيفية أداء عملي
							وظيفتي تمنعني من استخدام مبادرتي الشخصية والتحكم في أداء عملي
							وظيفتي تعطيني فرصة كبيرة من الاستقلال والحرية في كيفية أداء عملي

العبارات التالية في هذا القسم عن الملاحظات حول أدائك في عملك. (يرجى الإجابة حسب ما يتفق مع رأيك)

أعارض بشدة	اعارض	أعارض قليلا	محايد	موافق قليلا	موافق	موافق بشدة	
							عملي مصمم بحيث أحصل على ملاحظات متواصلة حول أدائي
							مجرد القيام بالعمل المطلوب مني يعطيني فرص متعددة لمعرفة صحة ما أقوم به
							وظيفتي تحتوي على دلالات قليلة أو محدودة لمعرفة مستوى أدائي

العبارات التالية في هذا القسم حول مهاراتك المتعددة في عملك.
(يرجى الإجابة حسب ما يتفق مع رأيك)

أعارض بشدة	اعارض	أعارض قليلا	محايد	موافق قليلا	موافق	موافق بشدة	
							وظيفتي تتطلب مني القيام بأشياء كثيرة مختلفة، وذلك باستخدام عدد من المهارات والمواهب المختلفة
							وظيفتي تتطلب مني استخدام عدد من المهارات المعقدة أو المتقدمة
							وظيفتي بسيطة جدا ومهامها متكررة

القسم الثالث: الأداء الوظيفي

الأداء الوظيفي العبارات التالية في هذا القسم حول أدائك الوظيفي. (يرجى الإجابة حسب ما يتفق مع رأيك)

أعارض بشدة	اعارض	أعارض قليلا	محايد	موافق قليلا	موافق	موافق بشدة	
							أنجز أهداف وظيفتي
							أقوم بالوفاء بجميع متطلبات وظيفتي
							أقوم بأداء جيد في عملي بشكل عام من خلال تنفيذ المهام كما هو متوقع
							أبادر لحضور مهام غير مطلوبة من قبل الشركة، ولكنها تساعد في (تحسين) الصورة العامة للشركة
							اتخذ المبادرة لتعريف الموظفين الجدد بالقسم على الرغم من كونه ليس جزء من مهامي الوظيفية
							أساعد غيري من الموظفين في عملهم عندما يكونوا غائبين

القسم الرابع: التفكير في الاستقالة

التفكير في الاستقالة العبارات التالية في هذا القسم حول التفكير في الاستقالة
(يرجى الإجابة حسب ما يتفق مع رأيك)

أعارض بشدة	اعارض	محايد	موافق	موافق بشدة	
					كثيرا ما أفكر في ترك وظيفتي
					أنا أخطط للبحث عن وظيفة جديدة خلال الأشهر ال ١٢ القادمة
					إذا كان باختيارى، سأعمل لهذه الشركة عام واحد من الآن

أعارض بشدة	اعارض	محايد	موافق	موافق بشدة	أعارض بشدة	
		٥٠ سنة فما فوق	بين ٤٠ و ٤٩ سنة	بين ٣٠ و ٣٩ سنة	أقل من او يساوي ٢٩	العمر
				أنثى	ذكر	الجنس
				ميداني	مكتبي	عملي
		أخرى	Supervisor , Team Leader, مشرف, رئيس فريق	Manager مدير	Executive تنفيذي	طبيعة عملي
دكتوراه	ماجستير	بكالوريوس	معهد الشركة	دبلوم	الثانوية	المستوى التعليمي
أخرى الرجاء اكتب اسم القطاع				الكهرباء والطاقة	البترو	الشركة التي اعلم بها من قطاع
أكثر من ٢٠ سنة	٢٠-١٦ سنة	١٥-١١ سنة	١٠-٦ سنين	٥-1 سنوات	أقل من سنة	عدد سنوات الخبرة في قطاع النفط والبتروكيماويات والكهرباء والطاقة
						الجنسية

أشركم على مشاركتكم
Ali Alkhalaf
ali2alkhalaf@gmail.com

Appendix C

IRB Approval for Human Subjects Research

PENNSSTATE



IRB Program
Office for Research Protections

Vice President for Research
The Pennsylvania State University
205 The 330 Building
University Park, PA 16802

Phone : (814) 865-1775
Fax: (814) 863-8699
Email : orp protections@psu.edu
Web : www.research.psu.edu/orp

EXEMPTION DETERMINATION

Date: January 21, 2016

From: Courtney Whetzel, IRB Analyst

To: Ali Alkhalaf

Type of Submission:	Initial Study
Title of Study:	Identifying Employee Engagement Factors in the Oil and Energy Industry in Saudi Arabia
Principal Investigator:	Ali Alkhalaf
Study ID:	STUDY00004171
Submission ID:	STUDY00004171
Funding:	Not Applicable
Documents Approved:	<ul style="list-style-type: none">• HRP-591 Protocol for HumanSubjectResearch_01192016.pdf (0.03), Category: IRB Protocol• Arabic questionnaireWorkEnginoilandenergy01172016.doc x (0.02), Category: Data Collection Instrument• English version questionnaire (0.03), Category: Data Collection Instrument

The Office for Research Protections determined that the proposed activity, as described in the above-referenced submission, does not require formal IRB review because the research met the criteria for exempt research according to the policies of this institution and the provisions of applicable federal regulations.

VITA
Ali Alkhalaf

Education

The Pennsylvania State University, University Park August 2011-May 2017

- Ph.D. (Major: Workforce Education and Development)
- Emphasis (Human Resource Development and Organization

Development)

The Pennsylvania State University, University Park January 2010-June

2011

- Master in Workforce Education and Development
- Emphasis (Human Resource Development and Organization

Development)

King Fahd University of Petroleum and Minerals, Dahrán, Saudi

Arabia September 1997- January 2004

- Bachelor Degree in Management Information Systems

Publications

- Rothwell, W.J., Graber, J., Dubois, D.D., Zaballero, A.G. Haynes, C., Alkhalaf, A.H., & Stager, J. (2014). *The Competency toolkit (2nd Ed.)*, Volume I and Volume II. Amherst, MA: HRD Press.
- Alkhalaf, A. (2014). Identifying mobile learning challenges at male high schools in Saudi Arabia from the teachers' point of view. *International Journal of Learning and Teaching*, 6(1).
- Rothwell, W., Alkhalaf, A. H., Welch, S. (2012, March). The difference between training and organization development (OD). *People Manager*, pp. 19, 23.

Conferences

- Alkhalaf, A. H., Zaballero, A., & Alzahmi, R. A. (2015, November). Talent pipeline management: Attracting, developing, and retaining talents to meet future drilling challenges. *Paper presented at the Abu Dhabi International Petroleum Exhibition and Conference*. Abu Dhabi, UAE. Society of Petroleum Engineers.
- Zaballero, A.G., Alkhalaf, A.H., Alzahmi, R. A., & Rothwell, W. (2015, April). Bridging the talent gap of the energy industry: Developing a transnational competency-based system. *Paper presented at the International Academic Forum 2015 Official Conference Proceedings*. Abu Dhabi, UAE.
- Alkhalaf, A. H. (2013, October). Identifying mobile learning challenges at male high schools in Saudi Arabia from the teachers' point of view. Paper presented at *2013 Intellectbase International Consortium Academic Conference*. Atlanta, GA: Intellectbase International Consortium.
- Zaballero, A.G., Alkhalaf, A.H., Jones, M. & Welch, S. (2013, February). Case study of an organizational diagnosis: Retention and employee satisfaction within a personal care home. *Paper presented at the Academy of Human Resource Development 2013 Annual Conference*. Washington DC.