Work Engagement: Testing and Extending Job Demands-Resources Theory with Religiosity, Training and Development, and Supervisor Support; Implications for Human Resource Management Practices

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I dedicate this research to:

The source of inspiration, to the soul of my beloved father

The source of strength, my beloved mother

The source of encouragement, my lovely wife

My dear brothers and sisters

The source of happiness, my lovely children Salma and Mohammad

Conferences

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Abstract

Work engagement continues to capture attention amongst academics and practitioners alike and is perceived to be a mechanism by which it is possible to achieve desirable outcomes for both employees and organisations. However, the role that religiosity plays in enhancing work engagement is often neglected in the existing literature; something the current research aims to address. The current study contributes to this important gap by demonstrating the role that religiosity plays in facilitating work engagement. Theoretically underpinned by job demands-resources theory, the main aim of the current study is to examine the role of religiosity on work engagement, and in doing so examine the effect of training and development and supervisor support in enhancing engagement levels. It also investigates the association between work engagement and the outcome variables namely affective commitment and turnover intention. In addition, this thesis aims to investigate the moderating role of workload on the association between the independent variables (i.e. religiosity, training and development, and supervisor support), and work engagement. A related aim is to examine work engagement as a mediator on the relationship between the predictors and the outcomes.

Drawing on a sample of 383 employees from the telecom sector in Jordan, the findings of the present study show that the three antecedents have a strong influence in enhancing work engagement, and that work engagement in turn, has a positive influence on affective commitment and also plays a role in reducing turnover intention. Additionally, work engagement mediated the association between the predictors (religiosity, training and development, and supervisor support), and the outcomes i.e. affective commitment and turnover intention. Furthermore, the present thesis shows that the categorisation of job demands into challenge and hindrance demands is not as straightforward as proposed, and

instead it relies on the professional sector, this is because workload undermined the association between religiosity and work engagement. However, workload did not moderate the association between training and development and work engagement, or the association between supervisor support and work engagement. The results contribute to the work engagement literature and suggest that both HR practitioners and line managers can recognise religiosity as an important personal resource to enhance engagement at work and employee wellbeing.

Table of Contents

List of Tables

List of Figures

List of Abbreviations

JD-R Theory	Job Demands-Resources Theory
MBI-GS	Maslach-Burnout Inventory-General Survey
UWES	Utrecht Work Engagement Scale
GWA	Gallup Workplace Audit
SET	Social Exchange Theory
HRD	Human Resource Development
HRM	Human Resource Management
HPWS	High Performance Work Systems
OC	Organisational Commitment
MVA	Missing Value Analysis
EM	Expectation Maximisation
EFA	Exploratory Factor Analysis
SD	Standard Deviation
VIF	Variance Inflation Factor
AVE	Average Variance Extracted
CFA	Confirmatory Factor Analysis
KMO	Kaiser–Meyer–Olkin
IV	Independent Variable
DV	Dependent Variable

CHAPTER ONE: INTRODUCTION

1.1 Introduction

This chapter introduces the background to the study incorporating the aims and objectives and the importance of the study. The chapter is structured as follows. First, it discusses the background to the research. Second, it offers the main aim of the thesis as well as the research objectives and questions. Third, the importance of the study is discussed. The context of the research is summarised and the structure of the thesis is given.

1.2 Background to the research

In today's competitive marketplace, and due to the increasing changes in the business environment, organisations need to find new ways to enhance the performance of their employees. In this respect, Bakker and Schaufeli (2008, p. 147) note that "more than ever before, managers would agree that employees make a critical difference when it comes to innovation, organisational performance, competitiveness, and thus ultimately business success". One of the important ways to promote the performance of the employees is through work engagement (Bakker & Schaufeli, 2008; Bakker & Demerouti, 2008; Kim, Kolb, & Kim, 2013).

Work engagement is a construct that has received much interest among academics and practitioners and is perceived to be a mechanism by which it is possible to achieve desirable outcomes for both employees and organisations (Banihani & Syed, 2017; Bhatnagar, 2012; May, Gilson, & Harter, 2004; Rana, 2015; Saks, 2006). This significant role is deemed fundamental in both achieving and then sustaining competitive success (Gruman & Saks, 2011;

Saks, 2006). Furthermore, the growing interest in scholarship on work engagement has been largely driven by calls to focus on more positive states at work instead of concentrating on negative outcomes such as dysfunction and stress (Bakker & Schaufeli, 2008; Schaufeli & Bakker, 2004; Seligman & Csikszentmihalyi, 2000). Therefore, the increasing interest in work engagement is in accordance with the positive psychology movement (Seligman & Csikszentmihalyi, 2000) and positive organisational behaviour which refers to "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace" (Luthans, 2002, p. 59).

Previous research shows a positive connection between work engagement and the performance of the firm. For example, Macey, Schneider, Barbera, and Young, (2009) drawing on a sample of 65 companies in diverse sectors show that companies that show high engagement levels had higher profitability than others. Similarly, Gallup investigated the relationship between work engagement and business unit outcomes in 26 states finding that work engagement is positively linked with higher profitability and better productivity (Harter, Schmidt, Killham, & Agrawal, 2009). In addition, Harter, Schmidt, Asplund, Killham, and Agrawal, (2010) show that work engagement is connected with positive organisational outcomes including more sales, customer loyalty, and profit. In contrast, studies indicate that employees who are disengaged cost annually the German, Asian, and the Australian economies about $263, $2.5, and $4.9 billion respectively (Meere, 2005 cited in Shuck, Reio, & Rocco, 2011).

Additionally, academics are also increasingly interested in this field of research (e.g. Bakker, 2018; Bakker & Demerouti, 2008; Bakker & Sanz-Vergel, 2013; Basit, 2019; Saks, 2006; Schaufeli, Salanova, González-Romá, & Bakker, 2002; Sonnentag, 2011). As mentioned

earlier, this increasing interest has been driven by calls to focus more on human strengths instead of concentrating on negative results such as stress, which is in line with the positive psychology movement and positive organisational behaviour. According to Bakker and Demerouti (2008), engaged workers display greater levels of performance because they frequently practice better health, experience positive emotions, leverage their resources better, and they share their passion for work with other employees.

Although work engagement has received considerable attention, further studies are needed to uncover the antecedents and outcomes of this construct. In addition, the majority of previous research in work engagement has been conducted in European and English-speaking countries (Abu Bakar, Cooke, & Muenjohn, 2018; Kim *et al.*, 2013). As such, further research is needed in different cultural contexts. Furthermore, previous studies (Bailey, Madden, Alfes, & Fletcher, 2017; Wollard & Shuck, 2011) demonstrate that engagement research needs more work on the antecedents of work engagement. Therefore, this study sheds light on an under-explored area by empirically examining the role of religiosity on enhancing work engagement in the context of the Job Demands-Resources (JD-R) theory. Hence, greater attention will be directed towards those variables which have not yet been explored in the literature and which require further attention. In doing so, the current thesis contributes to previous work engagement studies by investigating the influence of religiosity as a personal resource on promoting work engagement. Moreover, this thesis will examine other antecedents and outcomes which appear in the literature on work engagement as requiring more consideration. This study also responds to previous calls to examine the moderating role of workload in JD-R theory. Overall, this thesis contributes to the previous studies on work engagement by

empirically investigating the associations between the variables in the research model in the context of Jordan, a Middle Eastern country and developing economy.

1.3 Research aim

The main aim of this thesis is to replicate and extend JD-R theory using the Jordanian context. This will be done by: (1) examining the role of religiosity on work engagement, (2) investigating the effect of training and development and supervisor support in enhancing engagement levels in the context of Jordan, and (3) determining whether workload moderates the relationship between certain antecedents and work engagement. It also investigates the association between work engagement and organisational outcomes namely, affective commitment and turnover intention. A related aim is to examine the association between the antecedents (i.e. religiosity, training and development, and supervisor support) and organisational outcomes, i.e. affective commitment and turnover intention during work engagement as a mediator.

1.4 Research objectives

For the purpose of achieving the research aims, four objectives were developed:

1. To investigate the relationship between the antecedents (religiosity, training and development, and supervisor support) and work engagement.
2. To examine whether workload moderates the association between the antecedents (religiosity, training and development, and supervisor support) and work engagement.
3. To examine the association between work engagement and outcome variables (affective commitment and turnover intention).

4. To investigate whether work engagement mediates the association between the antecedents (religiosity, training and development, and supervisor support) and the consequences (affective commitment and turnover intention).

1.5 Research questions

In light of the research aims and objectives, this study explores the following questions:

1. What is the role of antecedents; religiosity, training and development, and supervisor support on work engagement?
2. Does workload act as a moderator on the association between the antecedents; religiosity, training and development, and supervisor support and work engagement?
3. What is the effect of work engagement on the outcomes, i.e. affective commitment and turnover intention?
4. Does work engagement mediate the association between the antecedents; religiosity, training and development, and supervisor support and the outcomes; affective commitment and turnover intention?

1.6 Importance of the study

Work engagement is a variable that has received much interest recently among academics and practitioners given its presumed positive effects in organisations. The emergence of this construct is in line with the idea that modern firms focus on and pay more attention to human capital than in the past (Bakker & Schaufeli, 2008; Schaufeli, 2014). In this respect, Schaufeli (2014, p. 17) notes that "modern organisations need employees who are able and willing to invest in their jobs psychologically". This is the idea upon which the construct of work engagement is based.

The motivation for this thesis is to contribute to and enrich existing understanding by exploring the factors that play a role in the promotion of engagement in the workplace, as well as how work engagement, in turn, influences important organisational outcomes. The study is important as it aims to make theoretical and practical contributions to the field of human resource management. As such, this thesis will focus on studying work engagement which has an impact on the desired results for both employees and organisations. Additionally, since this topic is relatively new, the current study seeks to address a number of gaps in the work engagement literature in an attempt to extend existing understanding in the field.

This study contributes to knowledge by responding to the following calls from previous research. The first research gap was identified by Abu Bakar *et al*. (2018) who called for further testing of the JD-R model noting a possible extension through a consideration of religiosity as one of the personal resources. In addition, Abu Bakar *et al.*'s (2018) study is limited to managers who may show higher engagement levels than non-managerial employees. Without investigating the role of the job and personal resources on the engagement of other groups of workers, especially who are at lower levels, they were unable to ascertain the impact of religiosity at other levels within the workforce. Thus, the present study will address this limitation through testing the effect of religiosity on work engagement from the perspective of lower level employees. Moreover, this thesis responds to a call from Aladwan, Bhanugopan, and Fish, (2013) to investigate the association between religiosity and turnover intention through the mediation of work engagement.

Since Kahn's seminal work (1990s), many studies have investigated the role of antecedents in enhancing work engagement. However, Bailey *et al.*'s (2017) review of the literature on work engagement showed that few studies have investigated the role of training and development

opportunities aimed at improving work engagement. In addition, Jehanzeb and Mohanty (2018) recommend that this relationship needs to be conducted in the context of developing countries. The current study will examine the role of training and development opportunities on enhancing work engagement in the Jordanian context. As such, the emerging country context of this research is thus of particular interest.

This thesis also responds to Bakker and Demerouti (2017) who called for more research into the moderators of the job demands-resources relationship. They also asked whether workload affects this relationship and, as such, this thesis considers workload as a moderator variable. Furthermore, there is a shortage of research that concerns commitment in the Middle East in general and in Jordan in particular (Aladwan, Bhanugopan, & D'Netto, 2015). Hence, this thesis addresses this gap by considering affective commitment as an outcome.

From an empirical view, the majority of previous research in work engagement has been conducted in European and English-speaking nations (Abu Bakar *et al*., 2018), and many of these studies used JD-R theory. Thus, many scholars have recommended that engagement research should be conducted in different cultural contexts (e.g. Bakker & Demerouti 2017; Conway, Fu, Monks, Alfes, & Bailey, 2016; Bailey *et al.*, 2017; Kim *et al*. 2013; Knight, Patterson, & Dawson, 2017). As a result, research is needed in different cultural contexts (e.g. developing and non-Western economies) to extend theoretical development and to explore generalisability (Kim *et al*. 2013). The present study responds to the aforementioned calls by testing and extending JD-R theory in the context of Jordan. Few studies, if any, have used the JD-R model to study engagement in Jordan particularly in the Jordanian telecommunication sector. Thus, the present study contributes to this empirical gap in the work engagement

literature by testing and extending JD-R theory by considering religiosity as one of the personal resources.

1.7 Research context

The purpose of this section is to provide background information regarding the context of the current thesis, i.e. Jordan.

1.7.1 Jordan (history, geography, population, and religion)

Jordan has a significant position in the Middle East connecting Asia, Europe, and Africa (Abu Tayeh, 2007; Jordan Tourism Board, 2019). The important location of this land has encouraged various civilisations to settle in it and Jordan has been under the sovereignty of diverse civilisations (e.g. Romans, Greeks, and Nabateans). Abu-Tayeh (2007) mentions that for many centuries, the country stayed under the supremacy of Islamic as well as Arab dynasties, and from 1516-1918, it was under the rule of the Ottoman empire.

In 1920, Jordan was considered by the League of Nations as being under the British mandate, and was named as the "Emirate of Trans-Jordan" in 1921 (Abu-Tayeh, 2007). However, in 1946, the mandate of Great Britain finished and the nation obtained its independence (Abu-Tayeh, 2007; Singh, Darwish, & Anderson, 2012) and was named "The Independent Hashemite Kingdom of Trans-Jordan". After that, it became "The Hashemite Kingdom of Jordan" in 1950.

Jordan's position lies at the western end of the Middle East, and it covers about 89.342 sq. km (Jordan Tourism Board, 2019). It has a strategic and significant geographical location in the Middle East linking Asia, Europe, and Africa (Abu-Tayeh, 2007; Jordan Tourism Board,

2019). This strategic location is bordered Syria to the north, Iraq to the east, Saudi Arabia to the south, and the West Bank to the west.

Owing to its strategic position, Jordan connects together three continents and this gives it a substantial role for transportation and trade across different countries and thus it links the south to the north and the west to the east (Jordan Tourism Board, 2019). Figure 1.1 below shows the map of Jordan.

Figure 1. 1 The map of Jordan

The population was 10,309,000 at the end of 2018 and has increased significantly as a result of the influx of refugees from surrounding neighbours such as Syria (Department of Statistics, 2019). As a result of the Arab Spring, states like Syria, Egypt, and Libya made notable political changes to the region of the Middle East. Despite these massive changes, Jordan has remained fairly stable (Darwish & Singh, 2013; Tobin, 2012). Table 1.1 represents the population of Jordan by gender for the years 2010-2018.

Table 1. 1 Population of Jordan by gender for the years 2010-2018

Year	Male	Female	Total
2010	3,448,000	3,250,000	6,698,000
2011	3,704,900	3,288,100	6,993,000
2012	3,934,800	3,492,200	7,427,000
2013	4,298,800	3,815,200	8,114,000
2014	4,664,300	4,139,700	8,804,000
2015	5,061,000	4,498,000	9,559,000
2016	5,188,000	4,610,000	9,798,000
2017	5,323,000	4,730,000	10,053,000
2018	5,458,000	4,851,000	10,309,000

Source: Department of Statistics, (2019), Jordan

In terms of age structure, 34.4% of the people are under 15 years old, 19.8% are aged 15 to 24, 37.7% are aged 25-54, 4.4% are 55-64 and people aged 65 years or older constitute 3.7 per cent of the population (Department of Statistics, 2019).

Jordan is classified according to the World Bank as a "lower middle income" state (Ali, Raiden, & Kirk, 2013). Jordan has limited natural resources such as oil and gas which to some extent could influence the economy of the country. Nevertheless, it is considered as one of the "better-performing" states in the Middle East (United Nations Development Programme, 2012).

Jordan is deemed as one of the world's modern nations. In 2018, 91 per cent of the Jordanian population was urban (World Factbook, 2019). Despite the fact that the state has limited resources, previous research (Alwraikat & Simadi, 2001) shows that in comparison to other Arab nations e.g. UAE, Jordan is considered a more modernised country. In a similar vein, among the Middle Eastern countries, Jordan has a high-ranking in the standards of living in the region (Wilson, 2005), and according to the Arab Reform Initiative (2014), Jordan is ranked as the second in the Arab Democracy Index of nine Arab nations in terms of legal reforms and the progress the country has made. In this respect, the state established a modern infrastructure, improved the education system, offered better health care, and facilities in Al-Aqaba port (Wilson, 2005). These endeavours, in turn, indicate the efforts made by the country in an attempt to improve the quality of living for the Jordanian population.

The official and main language of the state is Arabic, and English is the second language. It's considered a Muslim state, and a large percentage of the population is Muslim from the Arab Sunni group. The second article of the constitution of Jordan mentions that "Islam is the country's religion and its official language is Arabic". In terms of ethnicity, Jordanians are predominantly a mixture of ethnic Jordanian, Palestinian, Syrian, and Iraqi. Other small ethnic groups are represented and these include Chechens, Circassians, and Armenians. According to the Jordan Tourism Board (2019), over 92% of Jordanians are Sunni Muslims and around a further 6% are Christian. The greatest part of the Christian community belongs to the Greek Orthodox Church, and there are small populations of Druze and Shi'a.

King Abdullah II has made the virtuous Islamic rules of tolerance, harmony, peace, and justice the foundation for the reality of Jordan and its future. The people of Jordan accept and respect each other irrespective of their religious background. In the Holy month of Ramadan, 2004,

King Abdullah II launched the "Amman Message" amid the participation of prominent Muslim scholars which aims to elucidate the values and principles that reflect the Islamic religion such as tolerance, respect, mercy, freedom of belief, sincerity, compassion, and justice. These values are the core of good Muslim individuals and societies.

According to Abbasi, Rehman, and Bibi, (2010), Islam signifies obedience and surrender to Allah and it also means peace. Islamic teachings (Quran and Hadith of Prophet Muhammad - PBUH) guide Muslims not only in their worship but also in every aspect of their lives (Syed & Ali, 2010). Oneness and unity of Allah, daily prayer (five times), alms, fasting (the month of Ramadan), and pilgrimage are the five fundamental pillars of the Islamic religion. Oneness of Allah indicates a submission to Allah, prayer is an obligation and connection between Muslims and Allah, alms demonstrate a commitment to help others and signify a social and moral responsibility from rich individuals toward the poor, fasting gives an opportunity to practice self-discipline and to think of those in need, and pilgrimage helps to strengthen the relationship between a Muslim and Allah by obeying His commands, and it reflects the equality of Muslims irrespective of their colour, race, wealth, or social status by wearing simple white clothes i.e. *Ihram* (Ali, 2005).

Quran and Hadith (the main Islamic sources) guide the attitudes and behaviours of Muslims through offering a moral framework (Metcalfe, 2008). Islam asserts to treat individuals in the workplace on the basis of fairness and equality. It also encourages Muslims to behave ethically such as honesty and cooperation, and avoid any kind of exploitation, injustice, and inequality (Rice, 1999). According to Ali (1988), in Islam, work is regarded a virtue as it helps to meet basic needs for humans, preserves an individual's dignity, promotes self-esteem, and the need to achieve balance in one's life, both individually and socially. Similarly, work is important in

Islam because it assists individuals to take responsibility and uncover and develop themselves, which, in turn, leads to further enhancement of society (Syed & Ali, 2010). Not only does Islam value work, but it also encourages Muslims to exert their effort and perform better at work. For instance, God says in the Quran (9:105) "And say: Work (righteousness): Soon will Allah observe your work, and His Messenger, and the Believers". God also says in the Quran (16:97) "Whoever works righteousness, man or woman, and has Faith, verily, to him will We give a new Life, a life that is good and pure and We will bestow on such their reward according to the best of their actions" (Khalifa, 2001). Additionally, Prophet Muhammad said: "God bless the worker who learns and perfects his profession", and one of the religious duties is to perform the work perfectly (Ali, 2009). It might, therefore, be argued that being religious plays a role in enhancing work engagement and subsequent organisational outcomes (Abu Bakar *et al.*, 2018).

1.7.2 The telecommunication sector in Jordan

The history of the telecommunications industry in Jordan began in 1921 (Telecommunication Regulatory Commission, 2019). In 1961, the telephone system was first operated using an automatic switch service. Recognising the importance of telecommunications, the government took control of the industry in 1971 and a rapid expansion of the industry began. It continued to expand further when the government allowed private companies to enter the market and by 2004, full competition of the market had taken place. This allowed a competitive environment with cheaper prices and greater access to telecommunications for the citizens of Jordan.

The telecommunications sector in Jordan is one of the most significant sectors in the kingdom, because it plays an important role in accelerating the development of the state as well as helping

to create both diverse and new jobs. Added to that, this sector is involved in other vital sectors in the country such as education, health, and tourism due to the role it plays in enhancing the performance of these sectors (Telecommunication Regulatory Commission, 2019). Therefore, the telecommunication sector has become the main driver of the economy in Jordan as indeed it is in different countries around the world. Owing to the growing rate of internet penetration as well as the expansion of new technologies, the sector is anticipated to continue to grow and thus contribute to an even larger proportion of the economy of the state (Information and Communications Technology Association, 2019).

The economic reforms that have been declared by King Abdallah II in order to make the state more attractive for foreign investment, coupled with Jordan's stability in the Middle Eastern region make the Jordanian telecommunication sector instrumental in enhancing the Jordanian economy (Ministry of Information and Communications Technology, 2019).

The telecommunications sector offers different services to the Jordanian market such as a mobile network service, internet services, and fixed line network services. In 2018, the number of fixed line users was 319,000. According to the mobile service, the number of subscribers was 8,731,000 which represents 85 per cent of the population, and the number of internet subscribers was 7,870,000 which constitutes 76.5 per cent of the population (Telecommunication Regulatory Commission, 2019). This shows the importance of the rapidly growing sector and that the development of the whole sector will play a significant role in the improvement of the Jordanian economy.

The present study focuses on this sector as it is considered as one of main pillars for enhancing the Jordanian national economy (Hardan & Shatnawi, 2013). In addition, according to the Arab Advisors Group (2015), the Jordanian telecommunication sector is ranked as the second most

competitive market in the Middle East. As telecommunications is part of the service sector which often requires a high concentration of high performing individuals, people are regarded as an important asset and thus the enhancement of employees working in this sector will further develop their job performance, which, in turn, leads to meeting the desired organisational outcomes. In addition, as one of the most vital sectors in the kingdom, the development of this sector will further boost the economy of the state. It is hoped that the current thesis will provide a richer understanding of approaches to boosting the levels of employees' engagement in the telecommunication sector. It is also hoped that this thesis will extend the existing understanding by shedding light on the factors that could have an important role in facilitating work engagement in Jordan, a Middle Eastern nation and developing economy.

1.8 The structure of the thesis

This study consists of seven chapters. The introduction chapter provides a general idea of the study by discussing the study background, the research aims, objectives, and questions. This chapter further discusses the importance of this thesis as well as presenting an overview of the context of the study.

Chapter two offers a detailed review of the existing literature. It first discusses the definition of work engagement. This is followed by a discussion of the uniqueness of the concept of work engagement from others related constructs. Then, the chapter addresses and discusses the main theories in the work engagement literature, i.e. engagement theory, social exchange theory, and JD-R theory, and provide justifications for using JD-R theory to guide the research. After that, it introduces the antecedents and outcomes of work engagement together with discussing the moderating role of workload in the JD-R theory.

Chapter three derives hypotheses and develops the conceptual model. It starts with demonstrating the association between the variables and discusses the findings of previous studies in order to develop the research hypotheses. Based on the development of the hypotheses and thus the links between variables, the conceptual model is formulated.

Chapter four illustrates the research methodology. The chapter begins with discussing the research philosophy and provides justification for the use of a positivist philosophy. Secondly, it discusses the research design by addressing the methodological choice, the research strategy, method of data collection, and time horizon. It then describes the process of questionnaire development, the measurement scales, the translation of the questionnaire, and the pilot study.

After that, the chapter discusses the population and sample of the study. This is followed by describing the data collection, data analysis procedures. and ethical considerations.

Chapter five describes the analysis of the data and presents the findings of the study and the results of hypothesis testing.

Chapter six discusses the findings in relation to the objectives of the study as well as the review of the work engagement literature.

Lastly, chapter seven incorporates a general overview of this thesis and demonstrates the theoretical contributions and practical implications. Conclusions and limitations of the study are discussed and recommendations for future research are given.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter commences by critically discussing the different definitions of the concept of work engagement in the literature. The second section of this chapter demonstrates how work engagement is unique and independent from other concepts. The third section discusses theoretical approaches to work engagement. The fourth section demonstrates the role of religiosity as a personal resource that needs to be tested empirically with work engagement along with a set of antecedents and outcomes that the literature suggests need more attention. Lastly, a conclusion for the chapter is presented.

The review of the work engagement literature in this chapter helps in determining the theoretical contribution of this thesis and also in developing the research model. In this context, this study will extend the extant literature by addressing and testing religiosity in the job demands-resources framework in the context of Jordan. In addition, this thesis will complement Abu Bakar *et al*.'s (2018) qualitative work by testing the effect of religiosity on work engagement. Furthermore, other antecedents and consequences will be addressed in the research model that are noted in the work engagement literature as requiring more consideration.

2.2 Work engagement definition

Work engagement is becoming an area of increased attention among practitioners and academics (Rana, 2015). However, several definitions of engagement have been proposed and the chapter discusses the various definitions in order to work towards a justification of the definition adopted in the present study.

The notion of “engagement” was initially coined by Kahn (1990) to demonstrate the disengagement and engagement of employees in the workplace. Kahn (1990, p. 694) defines personal engagement as "the harnessing of organisation members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances". According to Kahn’s definition, employees who are engaged are those who are present at their work and linked to their work role cognitively, physically, and emotionally. This construct presents three kinds of engagement namely, physical, emotional, and cognitive.

Physical engagement represents the effort exerted of the employee in order to accomplish his/her work. This energy helps to bring oneself in a role (May *et al.,* 2004). Cognitive engagement denotes the extent that a worker sees that his/her work is enjoyable and motivating (May *et al.,* 2004). Emotional engagement refers to the employee’s feelings regarding his/her job. In this respect, Kahn proposed three psychological conditions that influence employee engagement. These conditions are psychological meaningfulness, safety, and availability. Kahn (1990, p. 705) writes that psychological meaningfulness denotes a “sense of return on investments of self in role performances”. Psychological safety is defined as “sense of being able to show and employ self without fear of negative consequences to self-image, status, or

career" (Kahn, 1990, p. 705). Psychological availability means "the sense of having the physical, emotional, or psychological resources to personally engage at a particular moment" (Kahn, 1990, p. 714). Kahn argues that these psychological conditions are the techniques that enhance the levels of engagement by which an employee becomes emotionally, physically, and cognitively engaged in role performance. On the other hand, disengaged employees are those who behave in a way that promote a lack of connection at work and withdrawal from the work role. However, Kahn's work is qualitative in nature and his study does not provide a measurement for the construct. Consequently, Schaufeli (2014) mentions that this approach is occasionally adopted in the quantitative research.

Maslach, Schaufeli, and Leiter, (2001) provided another perspective in the literature and considered engagement as the opposite of burnout. Job burnout as defined by Maslach (2003, p. 189) is "a psychological syndrome that involves a prolonged response to stressors in the workplace". Maslach and Leiter (1997) found that the concept burnout is considered as "an erosion of engagement". In this context, what appeared as challenging, important, and meaningful work became unfavourable, unsatisfying, and pointless (Maslach *et al.,* 2001). Maslach *et al.* (2001) mention that job engagement is characterised by three dimensions namely; energy, efficacy, and involvement. On the contrary, dimensions arising from burnout perspective as the opposite of engagement will be exhaustion, inefficacy, and cynicism respectively.

Exhaustion "refers to feelings of being overextended and depleted of one's emotional and physical resources" (Maslach *et al.,* 2001, p. 399). Cynicism means "a negative, callous, or an excessively detached response to various aspects of the job" (Maslach *et al.,* 2001, p. 399). Whereas the definition of inefficacy comes from "feelings of incompetence and a lack of

achievement and productivity at work" (Maslach *et al.,* 2001, p. 399). In relation to Maslach and Leiter (1997), burnout and engagement are the negative and positive ends of the same scale. More precisely, engagement is categorised by energy, efficacy, and involvement, and these are thought to be the direct antithesis of the burnout dimensions exhaustion, inefficacy, and cynicism, respectively (Schaufeli, 2014). In this respect, this school of thought assumes that when employees are not engaged, they will experience burnout. The flaw in this approach is considering that engagement is the direct opposite of burnout. In this regard, studies reveal that even though a worker is not suffering from burnout, he/she could still possibly be disengaged (Freeney & Tiernan, 2006; Schaufeli, 2014; Schaufeli & Bakker, 2004; Schaufeli & Salanova, 2011; Schaufeli *et al.,* 2002). In addition, Schaufeli *et al.* (2002) report that work engagement is an independent and separate construct and not precisely the antithesis of burnout. They further argue that different measurements are needed to assess both constructs. Accordingly, engagement is constructed in its own right (Bakker, Emmerik, & Euwema, 2006; Schaufeli *et al.,* 2002). As such, this approach does not reflect the real meaning of engagement.

As a result of the criticisms of the approach by Maslach *et al.* (2001), Schaufeli *et al.* (2002) developed a new scale in order to measure engagement. Maslach and Leiter (1997) assessed engagement as the antithesis of burnout by using the dimensions of "Maslach-Burnout Inventory-General Survey (MBI-GS)" (i.e. exhaustion, inefficacy, and cynicism). More precisely, Maslach and Leiter (1997) argue that "engagement is characterised by energy, involvement, and efficacy which are considered the direct opposites of the three burnout dimensions exhaustion, cynicism, and lack of professional efficacy, respectively" (cited in Schaufeli *et al.,* 2002, p. 73). Schaufeli *et al.* (2002) criticise Maslach *et al.*'s (2001) approach and mention that it is unreasonable to study and measure both engagement and burnout

empirically by using (MBI-GS), because engagement has been constructed in its own right and also is a separate concept and not precisely the reverse of burnout. However, Cole, Walter, Bedeian, and O'Boyle's, (2012) meta-analysis reveals that the dimensions of both burnout and engagement are highly negatively correlated, and the dimensions of these concepts offer comparable patterns of association with antecedents and consequences, thus Cole and colleagues argue that these constructs are not separate. In contrast, Halbesleben's (2010) meta-analysis reveals that the correlations between these two constructs fall in the range of –.24 to –.65 Accordingly, Schaufeli and Salanova (2011) report that these constructs are empirically distinct, where the correlation between them is not very close to -1.0. In addition, a recent meta-analysis carried out by Goering, Shimazu, Zhou, Wada, and Sakai, (2017) shows that burnout and engagement are distinct constructs. They further mention that "burnout and engagement are moderately, negatively related constructs with distinct nomological networks" (Goering *et al.,* 2017, p. 31). Crawford, LePine, and Rich, (2010) support this view and conclude that engagement is not the direct opposite of burnout.

Furthermore, studies have pointed out that even though a worker is not suffering from burnout they could still be disengaged (Freeney & Tiernan, 2006; Schaufeli, 2014; Schaufeli & Bakker, 2004). Alternatively, according to Schaufeli *et al.* (2002), engagement could be measured independently and set out as a distinct construct. Schaufeli *et al.* (2002, p. 74) defined work engagement as "a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption". Schaufeli *et al.* (2002) observe that engagement is a continual and pervasive affective cognitive state not a temporary state. In this definition, engagement is operationalised with the "Utrecht Work Engagement Scale (UWES)" and comprises three main factors (i.e. vigour, dedication, and absorption). Vigour, however, reflects using a high amount

of energy and psychological resilience while performing the work task, the readiness to exert effort in the workplace, and persistence to deal with difficulties during work (Schaufeli *et al.*, 2002).

The second element of this definition is dedication. According to Schaufeli *et al.* (2002, p. 74), dedication "is characterised by a sense of significance, enthusiasm, inspiration, pride, and challenge". The third factor of this definition is absorption, which reflects upon "being fully concentrated and greatly engrossed in one's work, a situation where time passes quickly and one has difficulties with detaching oneself from work" (Schaufeli *et al.*, 2002, p. 75). Absorbed workers are those who are completely focused and happily immersed in their work.

Another approach to explain engagement proposed by Harter, Schmidt, and Hayes (2002, p. 269) is one which views engagement as an "individual's involvement and satisfaction with as well as enthusiasm for work". Harter and colleagues defined employee engagement by relying on the items of the "Gallup Workplace Audit (GWA)" that was designed by the Gallup organisation. The 12 items (Q12) that were used by Harter *et al.* (2002) were established to measure the perceptions of employees towards work characteristics instead of assessing the concept of work engagement. However, there are conceptual overlaps in this definition with job satisfaction (Schaufeli & Bakker, 2010). Even though Harter and colleagues' work has established worthwhile connections between engagement and the outcomes of business units, the 12 items adopted by Harter and colleagues do not measure the engagement itself, instead, these items assess the perceptions that workers have of job resources (Schaufeli & Bakker, 2010). In this context, Harter *et al.* (2002) further mention that the 12 items gauge the antecedents of work engagement. Added to that, Harter e*t al.* (2002) show recognition of the overlaps and stated that the 12 of the 13 items describe the variation in job satisfaction.

Furthermore, Schaufeli (2014, p. 19) mentions that "the Q12 was first and foremost designed as tool for management to improve jobs so that employees would be more satisfied". Based on this, it appears that there are obvious conceptual overlaps between this definition of work engagement and other linked concepts specifically job satisfaction. Consequently, this school of thought does not provide a clear and precise definition of the construct of work engagement.

"Self-engagement" as suggested by Britt, Castro, & Adler, (2005) is another view of engagement. Self-engagement is defined as "individuals feeling a sense of responsibility for and commitment to a performance domain so that performance matters to the individual" (Britt *et al.*, 2005, p. 1476). Britt *et al.* (2005) argue that the concept of self-engagement was adopted and developed from the "Triangle Model of Responsibility" (Schlenker *et al.*, 1994). However, this approach only focuses on the dimension of responsibility in order to measure engagement. But being responsible about work does not mean that an employee is enthusiastic to accomplish their work. Accordingly, this school of thought does not describe engagement in a sufficient manner by focusing only on the responsibility dimension to define it. In addition, the definition of the construct as suggested by Britt and colleagues overlaps with the concept of commitment. Thus, this approach does not identify engagement as an independent and distinct construct.

Saks (2006) proposes an alternative approach (i.e. the multidimensional standpoint) to define engagement. Saks (2006) outlines the construct of employee engagement as "a distinct and unique construct that consists of cognitive, emotional, and behavioural components that are associated with individual role performance" (p. 602). In this regard, Shuck (2011) mentions that the definition proposed by Saks (2006) is comparable to that of Kahn (1990) because they both indicate that engagement comprises behavioural, emotional, and cognitive elements. Saks (2006) distinguishes between two dimensions in order to measure the construct of employee

engagement; job and organisational engagement. Consequently, Saks (2006) proposes two scales; the first scale for job engagement and the other for organisational engagement.

The results of Saks' work show that job engagement is predicted by job characteristics, while procedural justice refers to it being an antecedent of organisational engagement. Furthermore, perceived organisational support anticipated both job and organisational engagement. In this context, Schaufeli (2014) argues that although the two scales namely, job and organisational engagement are moderately linked, they both appear to have various antecedents and outcomes. As a result, Bailey *et al.*'s (2017) literature review shows that only six studies used this measurement in studying work engagement.

Overall, one can see that different scholars have defined work engagement in several ways and that there is no agreement on one definition for the construct. Nevertheless, in the current thesis, the definition proposed by Schaufeli *et al.* (2002) will be used for the following reasons. Firstly, in their definition, Schaufeli *et al.* (2002) mention that engagement is not precisely burnout's exact opposite, but rather it is a distinct and independent motivational construct. Secondly, Schaufeli *et al.*'s definition is helpful in distinguishing engagement from other related constructs (Salas-Vallina, López-Cabrales, Alegre, & Fernández, 2017; Wefald & Downey, 2009a). Thirdly, this definition is related to Kahn's conceptualisation of engagement (Mackay, Allen, & Landis, 2017; Schaufeli, 2014; Welch, 2011). Fourthly, this perspective is the most popular one in the work engagement literature and it has been employed widely among scholars (Agarwal, Datta, Blake-Beard, & Bhargava, 2012; Bakker & Demerouti 2008; Bakker, Tims, & Derks, 2012; Chughtai & Buckley, 2009; Knight *et al.*, 2017; Mackay *et al.*, 2017; Matsuo, 2019; Yalabik, Rayton, & Rapti, 2017; Yalabik, Van Rossenberg, Kinnie, & Swart, 2015). Fifthly, the popularity of its measurement in the engagement studies (Bakker &

Demerouti, 2017; Bailey *et al.,* 2017; Kim *et al.,* 2013; Viljevac, Cooper-Thomas, & Saks, 2012), and this measurement (i.e. UWES) has been validated in different countries, including Cameroon (Karatepe & Ngeche, 2012), Japan (Shimazu *et al.,* 2008), Netherlands (Bakker *et al.,* 2012), Finland (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007), Spain (Llorens, Schaufeli, Bakker, & Salanova, 2007), China (Lu, Wang, Lu, Du, & Bakker, 2014), South Africa (Storm & Rothmann, 2003), and Turkey (Karatepe & Demir, 2014).

2.3 Work engagement and related constructs

Work engagement is criticised for being used imprecisely and overlapping with other concepts including job involvement and organisational commitment (Gupta & Kumar, 2012). Part of the problem encountering the construct is due to the lack of validity and the theoretical base of the definitions (e.g. Harter *et al.,* 2002) which, in turn, results in increasing the possibility of the overlap between this concept and other established ones (Gupta & Kumar, 2012; Little & Little, 2006). Another reason for the criticism of the concept is because work engagement and other constructs such as organisational commitment and job involvement all relate to employees being attached positively to work (Hallberg & Schaufeli, 2006). Therefore, work engagement faces criticism as a seemingly repackaged construct taken from other established concepts. Based on this, it should be clarified as to whether work engagement is or is not indeed a standalone construct or merely another rehash of current concepts (Macey & Schneider, 2008; Hallberg & Schaufeli, 2006; Christian, Garza, & Slaughter, 2011; Wefald & Downey, 2009b).

According to Saks (2006), work engagement is considered to be connected yet still independent and separate from other concepts in the arena of organisational behaviour.

Hallberg and Schaufeli (2006, p. 119) report that “for work engagement to be considered a valid contribution to this research field, its ability to discriminate against other, adjacent constructs must be established”. Therefore, the following subsections will demonstrate how work engagement is independent and distinct from other concepts namely, job involvement, organisational commitment, workaholism, and job satisfaction.

2.3.1 Work engagement and job involvement

Job involvement and work engagement probably share comparable some conceptual space (Shuck, Adelson, & Reio, 2017) and the engagement concept could be closely linked to job involvement (May *et al.,* 2004). Job involvement is termed as "a cognitive or belief state of psychological identification" (Kanungo, 1982, p. 342). It denotes the cognitive belief that work may fulfil salient needs (Brown, 1996 cited in Christian *et al.,* 2011). However, May *et al.* (2004) argue that work engagement varies from job involvement as the latter refers to the outcome of a cognitive judgment on the abilities of one’s employment to satisfy one’s needs which is also an integral part of an individual’s self-image. On the other hand, work engagement is interested in how the persons employ themselves during the performance of their work. Added to that, work engagement includes the active use of behaviours and emotions together with the cognitions (May *et al.,* 2004).

In addition, other studies show that work engagement and job involvement are conceptually different in the following ways. Firstly, job involvement is thought of as an aspect of work engagement but not equivalent to engagement (Christian *et al.,* 2011; Macey & Schneider, 2008; Salanova, Agut, & Peiró, 2005; Shuck *et al.,* 2017). Secondly, job involvement denotes the extent that job status is consistent with a person’s identity. It, therefore, does not signify

job tasks but instead other conditions of work comprising the extent to which a job can satisfy a person's needs (Christian *et al.,* 2011; May *et al.,* 2004). Thirdly, Maslach *et al.* (2001) mention that job involvement excludes engagement dimensions (i.e. energy and effectiveness). They agreed that job involvement is a facet of work engagement and they further stated that engagement gives a broad view of the relationship between a person and his/her work.

Empirical evidence, however, demonstrates that both work engagement and job involvement are independent and separate constructs. In this context, Hallberg and Schaufeli's (2006) empirical study reveals that no correlations were found between health issues and job involvement. On the contrary, it showed that work engagement is primarily linked to lack of health complaints, as reflected by a strong, consistent correlation coefficient. Further, Hallberg and Schaufeli's (2006) study showed that positive job characteristics are seen as less significant for job involvement than for work engagement.

2.3.2 Work engagement and organisational commitment

Organisational commitment according to Allen and Meyer (1990) is a concept that comprises three main components namely, "affective, continuance, and normative commitment". Affective commitment relates to a person's emotional attachment to his/her firm. Continuance commitment relates to considering the social and economic costs of leaving a firm. Normative commitment relates to "employees' feelings of obligation to remain with the organisation" (Allen & Meyer, 1990, p. 1). However, based on an examination of the construct, Robinson, Perryman, and Hayday, (2004) show that the component of organisational commitment that overlaps most closely with engagement is affective commitment.

Christian *et al.* (2011) indicate that work engagement is a distinct concept and also it differs from affective commitment conceptually in two ways. Firstly, affective commitment signifies the employees' emotional attachment to organisational values (Brooke, Russell, & Price, 1988 cited in Christian *et al.,* 2011; Allen & Meyer, 1990). Work engagement, however, links employees with the work itself (Maslach *et al.,* 2001; Schaufeli & Bakker 2010). Secondly, engagement is a wider concept where it comprises a total investment of oneself in the work in terms of emotional, physical, and cognitive energies (Christian *et al.,* 2011). In contrast, affective commitment signifies the emotional attachment of a person and his/her identification with the organisation as a whole. In this respect, Macey and Schneider (2008) indicate that commitment is considered to be an aspect of engagement but not exactly the same as engagement.

Empirically, the distinction between the two concepts is further confirmed. Hallberg and Schaufeli (2006) show that both concepts are related but do not overlap and the constructs are distinct from each other. In their empirical study, Hallberg and Schaufeli (2006) found that the correlations between the concepts varied between .35 and .46, indicating from 12% to 21% shared variance. Therefore, these constructs are treated as empirically distinct (Harter & Schmidt, 2008).

2.3.3 Work engagement and workaholism

A workaholic employee is described as one who "feels driven or compelled to work, not because of external demands or pleasure in work, but because of inner pressures that make the person distressed or guilty about not working" (Spence & Robbins, 1992, p. 161). Furthermore, Schaufeli, Shimazu, and Taris, (2009a) conceptualise workaholism as "the tendency to work

excessively hard and being obsessed with work, which manifests itself in working compulsively" (p. 322). In this context, a workaholic employee is one who spends an excessive amount of time on his/her job. In addition, these employees work harder than others whilst also doing more than required to meet organisational requirements (Van Beek, Taris, & Schaufeli, 2011).

Conversely, work for engaged employees is fun not an addiction and they feel happily engrossed (Bakker, Schaufeli, Leiter, & Taris, 2008; Converso, Sottimano, Molinengo, & Loera, 2019; Zeijen, Peeters, & Hakanen, 2018). Similarly, Bakker (2009) mentions that workers who are engaged do not find work an addiction, instead they enjoy other interests away from work. He further mentions that as distinct from workaholics, those employees who are engaged do not feel the need to work hard as a result of a powerful and compulsive internal drive, but rather because work is fun for them. Furthermore, engaged workers lack the compulsive inner drive to complete their job tasks, instead they work hard and show higher levels of dedication because they like and enjoy their work (Schaufeli & Bakker, 2010). This according to Taris, Schaufeli, and Shimazu, (2010) means that engaged workers are drawn to work for the reason that they enjoy the work itself, while workaholics find it necessary to work as they are bound to follow their obsession.

Schaufeli, Taris, and Van Rhenen's (2008) empirical study, however, investigated both work engagement and workaholism in order to make sure that both concepts are distinct. Their findings reveal that engaged managers experience good mental health, whereas mental health is negatively connected to workaholism. In addition, work engagement is connected to good social relationships, while workaholism is connected to poor relationships (Schaufeli *et al.*, 2008). Furthermore, the findings show that engaged managers get satisfaction from their work

tasks (Schaufeli *et al.*, 2008). In a similar vein, Taris *et al.* (2010) indicate that engaged workers have a tendency to exert effort voluntarily. Taris *et al.* (2010) further report that workaholism is considered as being intrinsically bad whilst work engagement is considered as being intrinsically good.

2.3.4 Work engagement and job satisfaction

There is a debate in the literature regarding the possibility of overlap between job satisfaction and work engagement. Weiss (2002) defines Job satisfaction as ‘‘a positive (or negative) evaluative judgment one makes about one’s job or job situation’’ (p. 175). Various scholars have mentioned that both work engagement and job satisfaction are related but independent concepts (Christian *et al.*, 2011; Warr & Inceoglu, 2012). However, Wefald and Downey (2009a) report that the main dissimilarity between work engagement and job satisfaction is that engagement stresses cognitive facet of involvement with work, whilst satisfaction concerns with feelings about the work.

Further differences between the constructs have been revealed in past studies in that work engagement indicates activation such as energy and enthusiasm, whereas satisfaction is closely relating to satiation (Christian *et al.*, 2011; Macey & Schneider, 2008). Using this, the term engagement encompasses positive feelings like satisfaction, and also invokes a sense of energy and enthusiasm in work experiences (Warr & Inceoglu, 2012). Furthermore, work engagement is labelled as an employee’s experiences resulting from the work, while “job satisfaction is an evaluative description” of the characteristics of the job and its conditions (Christian *et al.*, 2011, p. 97). In addition, engagement is considered as more than just gaining satisfaction from the work or simple loyalty to the organisation (Pitt- Catsouphes & Matz-Costa 2008 cited in

Rigg, 2013). Instead, engagement is about employees' passion and enthusiasm in addition to the readiness a person has to immerse themselves in the work in order to help the organisation achieve its goals (Rigg, 2013). Consequently, work engagement could be considered as a stronger indicator of job performance than job satisfaction (Rich, LePine, & Crawford, 2010).

To conclude, scholars have attempted to show that work engagement is a related but a distinct and independent motivational construct from others namely, job satisfaction, job involvement, workaholism, and organisational commitment (e.g. Bakker *et al.*, 2011; Christian *et al.*, 2011; Saks; 2006; Shuck *et al.*, 2017; Warr & Inceoglu, 2012; Macey & Schneider, 2008).

2.4 Theoretical approaches to work engagement

In the literature on work engagement, scholars have conceptualised engagement in various ways. The main approaches that have been suggested are Kahn's (1990) approach, social exchange theory (Saks, 2006), and job demands-resources (JD-R) theory (Bakker & Demerouti, 2008). In his qualitative work, Kahn (1990) addresses the three psychological conditions of meaningfulness, safety and availability. These conditions (in relation to Kahn) help in enhancing engagement in the workplace. Social exchange theory (SET), however, focuses on the "norm of reciprocity" (Gouldner, 1960). That is, when firms give the needed resources to their employees, then employees feel obliged to reciprocate in the same way and return the favour to the firm such as being engaged (Saks, 2006). JD-R theory is the third approach to study and understand work engagement and Bakker and Demerouti (2008) suggest a general model of work engagement. This model clarifies how working conditions may affect engagement at work (Llorens *et al.*, 2007). The JD-R model categorises the characteristics of working environments under two main headings i.e., job resources and job demands (Bakker, Demerouti, & Euwema, 2005; Bakker, 2011; Xanthopoulou *et al.*, 2007b). In addition, Bakker and Demerouti (2008) utilise Xanthopoulou *et al.*'s (2007a) study, which extended the JD-R model. In this respect, Xanthopoulou and colleagues show that along with the job resources, personal resources can also boost engagement. These approaches are discussed in more detail in the next sections.

2.4.1 Kahn's (1990) approach

Kahn (1990) initially introduced the term "engagement" in his seminal work (Rich *et al.,* 2010; Kim *et al.,* 2009; Christian and Slaughter, 2007; Harter *et al.,* 2002; Saks, 2006; Shuck, 2011; Welch, 2011). In his theory-generating study, Kahn's (1990) work was constructed on the premise that individuals employ themselves (i.e. psychologically present) to varying degrees when they perform their role or activity. Basically, Kahn's (1990) research centred on understanding the facets that affect an employee's engagement or disengagement at work.

Kahn (1990) conducted interviews with counsellors in a summer camp and employees from an architecture company in order to understand their experience and why they are engaged or disengaged at work. In this context, Kahn (1990) characterised the way people see themselves in their role as either personal engagement or disengagement. As such, personal engagement was defined by Kahn as "the harnessing of organisation members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances" (Kahn, 1990, p. 694). An engaged worker is more likely to express his/her self in their work by being cognitively vigilant, emotionally attached, and physically involved (Kahn, 1990). In contrast, personal disengagement according to Kahn refers to an employee who behaves in a way that promotes a lack of connection at work and withdrawal from the work role (Kahn, 1990). Disengaged employees detach and separate themselves from the work roles emotionally, physically, and cognitively.

Grounded on qualitative data, Kahn (1990) explored the conditions that make people engaged or disengaged at work. These conditions are called the psychological conditions that affect engagement at work. Three psychological states were proposed namely, psychological

meaningfulness, safety, and availability. According to Kahn (1990), employees question themselves on three points in order to see if they are willing to be emotionally, cognitively, and physically engaged or disengaged at work. These questions are: Firstly, "How meaningful is it for me to bring myself into this performance?" Secondly, "How safe is it to do so?" and thirdly, "How available am I to do so?"

Psychological meaningfulness, however, reflects "a feeling that one is receiving a return on investments of one's self in a currency of physical, cognitive, or emotional energy" (Kahn, 1990, pp. 703-704). Consequently, Kahn (1990) argues that there are three main aspects that influence psychological meaningfulness; work interactions, role characteristics, and task characteristics. When the work is challenging, rewarding, and worthwhile, an employee will find his/her work meaningful (Brown & Leigh, 1996). Psychological safety means "feeling able to show and employ one's self without fear of negative consequences to self-image, status, or career" (Kahn, 1990, p. 708). According to Kahn (1990), the components that influence psychological safety are management style, interpersonal relationships, organisational norms, and group and intergroup dynamics. Where employees feel capable to express themselves at work, they feel safe and where there is a safe working environment people comprehend boundaries considered as acceptable behaviour (May *et al.*, 2004). In contrast, workers do not feel safe enough to be personally engaged at work when the work tasks are unclear (Kahn, 1990). However, the third psychological state is psychological availability which means "the sense of having the physical, emotional, or psychological resources to personally engage at a particular moment" (Kahn, p. 714). Here, the influencers of psychological availability are emotional energy, physical energy, insecurity, and external activities. When employees had sufficient resources for their jobs this was seen to improve confidence in their work which

strengthened their capacity to immerse themselves in their jobs (CHEN, Zhang, & Vogel, 2011).

Drawing on Kahn's (1990) conceptualisation of engagement by addressing the three psychological conditions, May *et al.* (2004) investigated these conditions empirically and tested Kahn's psychological conditions based on an employee sample taken from an insurance firm in the U.S. Results showed that all the psychological states of meaningfulness, availability, and safety were positively linked to work engagement. May and colleagues' show that work role fit as well as job enrichment were positively connected to psychological meaningfulness which leads to engagement being enhanced. The support of the supervisor and co-workers were positive predictors of psychological safety. However, psychological availability was associated positively with resources available. The findings of May *et al.* (2004) show that the strongest psychological state came from meaningfulness connected to engagement.

Saks (2006), however, reports that even though Kahn (1990) coined the term "engagement" and proposed the psychological conditions that enhance engagement he does not interpret fully why those workers react to these states with different degrees of engagement. Furthermore, Kahn's (1990) study is qualitative and does not provide a way of measuring the construct. Consequently, Schaufeli (2014) mentions that this school of thought is occasionally used in quantitative research. As a result, other models have emerged in the literature to study and understand work engagement drawing on other approaches (Mcbain, 2006) and have been used in quantitative research. These theories are social exchange theory (Saks, 2006), and JD-R theory (Bakker & Demerouti, 2008). Despite the fact that both of these approaches provide measurement for the construct, JD-R theory is considered as the most influential theoretical

perspective in the work engagement literature (Schaufeli & Taris, 2014; Knight *et al.*, 2017), and the JD-R model has received empirical evidence from previous studies (Bakker & Demerouti, 2017). The next sections discuss these two approaches.

2.4.2 Social exchange theory (Saks, 2006)

Social exchange theory (SET) has been adopted by previous studies to understand work engagement (Agarwal *et al.*, 2012; Alfes, Shantz, Truss, & Soane, 2013a; Alfes, Truss, Soane, Rees, & Gatenby, 2013b; Bal, De Cooman, & Mol, 2013; Saks, 2006; Biswas, Varma, & Ramaswami, 2013; Brunetto *et al.*, 2013; Downey, Werff, Thomas, & Plaut, 2015; Rayton, & Yalabik, 2014). Social exchange reflects "the voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others" (Blau, 1964, p. 91). Similarly, Aryee, Budhwar, and Chen, (2002) mention that social exchange indicates that when a person does a favour, he/she expects that this favour in the future will be returned. Consequently, social exchange focuses on the exchange of resources between two parties and Saks (2006) adopts this theoretical perspective in order to explain work engagement.

Saks (2006) argues that social exchange theory (SET) explains that obligations to others arise from a succession of interactions by those reliant upon reciprocal interdependence. SET also draws attention to the fact that these connected processes have the ability to create better social relationships (Cropanzano & Mitchell, 2005). Similarly, Banihani, Lewis and Syed (2013) report that maintaining high quality relationships among individuals needs the exchange of favours in relation to both cost and effort and, as such, the process is fundamentally linked to human perceptions of the costs that are tolerated and the benefits that are gained. The main

pillar of SET is that relationships develop over a period of time into commitment, loyalty, and trust so long as both parties are obliged to observe the exchange rules (Cropanzano & Mitchell, 2005). These exchange rules commonly encompass mutual payment rules whereby one party's actions lead to other party to give a reciprocal response (Saks, 2006). In terms of an exchange relationship, exchanges developed in the workplace can be categorised as an economic or social exchange (Aryee *et al.,* 2002). In this way, when workers obtain socioemotional and economic resources from their employers they feel as though they have an obligation to respond similarly and pay their organisation back (Cropanzano & Mitchell, 2005). While economic resources are considered as tangible resources such as financial incentives, socioemotional resources, in contrast, reflect the intangible aspects such as respect, support, and recognition (Anand, Vidyarthi, Liden, & Rousseau, 2010; Cropanzano & Mitchell, 2005; Zhou, Wang, Chen, & Shi, 2012).

Gouldner (1960) shows that in social exchange the "norm of reciprocity" is a central issue. He argues that due to an unspecified nature, persons must respond to the norm of reciprocity in a moral manner and he further argues that "you should give benefits to those who give you benefits" (Gouldner, 1960, p. 170). However, because of individual differences, not all individuals will respond to the norm of reciprocity in the same degree (Cropanzano & Mitchell, 2005). One of the ways employees respond to the organisation based on the norm of reciprocity is by being engaged. In this context, staff will choose to be engaged within the organisation to varying levels and in response to different received resources they obtain from their organisations (Saks, 2006). In a similar vein, Saks (2006, p. 603) reports that "the amount of cognitive, emotional, and physical resources that an individual is prepared to devote in the

performance of one's work roles is contingent on the economic and socioemotional resources received from the organisation".

When individuals, however, believe that costs and benefits are unequal, relationships may be negatively affected (Banihani *et al.*, 2013). As a result, social exchanges are sometimes recognised as unfair, particularly when one party or possibly both feel a sense of dissatisfaction that will ultimately endanger the durability of the relationship (Zhang & Epley, 2009). This dissatisfaction may in turn lead to exhaustion in one's emotions resulting in negative behaviours and attitudes (Bakker, Schaufeli, Sixma, Bosveld, & Van Dierendonck, 2000). Furthermore, this kind of dissatisfaction from unjust social exchange practices can lead to physical problems such as illness (Siegrist, 2005).

According to Saks (2006), SET offers a theoretical underpinning and helps to clarify why employees determine to become engaged or not in the workplace and the level to which they become engaged. For instance, when organisations give socioemotional and economic resources, employees feel obliged to reciprocate and return the favour to the organisation through engagement (Saks, 2006). When firms do not give their employees the needed resources, employees respond by becoming disengaged at work (Banihani *et al.*, 2013). Nevertheless, not all employees react to the reciprocity rule in the same level due to the differences in their personality (Eisenberger, Cotterell, & Marvel, 1987).

Saks' (2006) findings, however, have shown that some kinds of resources do not enhance engagement levels. Furthermore, Saks showed that recognition and reward are not associated with work engagement which appears inconsistent with employing SET to clarify work engagement (Banihani *et al.*, 2013). In addition, SET does not interpret how personal resources, like organisational-based self-esteem and optimism, are seemingly connected with

work engagement (Bakker *et al.,* 2008; Bakker, 2009; Mauno, Kinnunen, & Ruokolainen, 2007; Xanthopoulou *et al.,* 2007a; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009a, Banihani *et al.,* 2013). This limitation of SET has been considered in JD-R theory. In this context, Xanthopoulou *et al.* (2007a) extended the JD-R model by revealing that personal resources play a role in predicting engagement.

2.4.3 Job demands-resources (JD-R) theory

Job demands-resources framework (JD-R) is the most influential theoretical perspective in the engagement literature as the majority of engagement studies use this framework (Bakker & Demerouti, 2017; Bailey *et al.,* 2017; Knight *et al.,* 2017; Lesener, Gusy, & Wolter, 2019). The JD-R model according to Llorens *et al.* (2007) clarifies how working conditions may affect work engagement.

Building on the JD-R model, and drawing on (Bakker & Demerouti, 2007), Bakker and Demerouti (2008) suggest that work engagement antecedents and outcomes can be arranged in a general model of work engagement (see Figure 2.1). There are two basic assumptions for this model. The first is that job resources (e.g. autonomy) begin a motivational path leading to work engagement, and that work engagement accordingly leads to better performance (Bakker & Demerouti, 2008; Bakker & Demerouti, 2007; Bakker, Demerouti, & Schaufeli,2003a; Hakanen, Schaufeli, & Ahola, 2008; Mauno *et al.,* 2007; Bakker *et al.,* 2005; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Schaufeli & Bakker, 2004; Llorens *et al.,* 2006). Secondly, this model assumes that job resources increase in importance and add to their motivational potential when workers are faced with greater demands in their jobs (Bakker & Demerouti, 2008; Bakker, Van Veldhoven, & Xanthopoulou, 2010; Hakanen *et al.,* 2006;

Schaufeli & Bakker, 2004). Furthermore, Bakker and Demerouti (2008) use the study by Xanthopoulou *et al.* (2007a), which extended the JD-R model by showing that personal resources can also enhance engagement along with the job resources.

Under the JD-R model, the kinds of resources are twofold namely, "job resources and personal resources" (Bakker & Demerouti, 2008). These personal and job resources play a role in enhancing work engagement, which in turn has a positive influence on the performance of the job (Bakker *et al.,* 2008; Demerouti & Bakker, 2011). In addition, Bakker and Demerouti (2008, p. 218) state that "employees who are engaged and perform well are able to create their own resources, which then foster engagement again over time and create a positive gain spiral". In this context, JD-R theory is influenced by conservation of resources (COR) theory (Bakker & Demerouti, 2008; Bakker *et al.,* 2007; Schaufeli & Taris, 2014). According to Hobfoll (2002, p. 312), COR theory suggests that "people seek to obtain, retain, and protect resources and that stress occurs when resources are threatened with loss or lost or when individuals fail to gain resources after substantive resource investment". Furthermore, Hobfoll (2002) states that resource availability is likely to create other resources, which in turn, leads to positive results. Thus, as a motivational construct, work engagement may lead to a positive spiral of resources along with predicting good health (Mauno *et al.,* 2007).

However, under the JD-R model, since individual work environments are different, the characteristics of the job may be classified under two main headings namely, job demands and job resources (e.g. Bakker *et al.,* 2005; Bakker *et al.,* 2003a; Demerouti *et al.,* 2001; Mauno *et al.,* 2007; Bakker, 2011). These are discussed below.

2.4.3.1 Job demands

Job demands are facets of a job requiring sustained mental or physical energy and are thus connected with physical or mental costs (Bakker, Demerouti, & Verbeke, 2004; Bakker *et al.*, 2005; Demerouti *et al.,* 2001; Gordon *et al.,* 2018; Xanthopoulou *et al.,* 2007b). However, the findings of previous work on the relation between job demand and work engagement are inconsistent (Cole *et al.,* 2012). Whereas some research found no association between job demand and engagement (Gan & Gan, 2014; Schaufeli & Bakker, 2004), others show positive connection between them (De Braine, & Roodt, 2011). In an attempt to resolve this inconsistency, previous studies have distinguished between two kinds of job demands known as challenge and hindrance demands (Crawford *et al.* 2010; LePine, Podsakoff, & LePine, 2005; Cavanaugh, Boswell, Roehling, & Boudreau, 2000; Podsakoff, LePine, & LePine, 2007). Challenge demands are categorised as those promoting opportunities for workers' learning and growth and are positively linked to work engagement (Crawford *et al.* 2010). In contrast, hindrance demands are those that can derail personal development and goal achievement (Cavanaugh *et al.*, 2000) and are linked with low motivation (Lepine *et al.*, 2005). In this context, Van den Broeck, De Cuyper, De Witte, & Vansteenkiste, (2010) argue that even though being exposed to challenge demands needs energy, it also holds potential benefits, and this categorisation of challenge and hindrance demands may not be the same for each profession (Demerouti & Bakker, 2011). Likewise, Bakker and Sanz-Vergel (2013) criticise this taxonomy of challenge and hindrance job demands and argue that it is not straightforward and it could depend on the professional sector.

Crawford *et al.*'s (2010) meta-analysis based on 64 samples, has shown that the connection between job demand and engagement is dependent upon the kind of demand. These findings

show that the association between hindrance demand and engagement is negative, while challenge demand is positively related to engagement. Similarly, using 101 samples, Lepine *et al.*'s (2005) meta-analysis of two-dimensional demands (i.e. challenge and hindrance demands) was conducted with regards to demands' relationships with motivation, strains, and performance. The findings reveal that hindrance demands had both a direct and indirect negative influence on performance when taking into account motivation and strains. In contrast, challenge demands had a positive influence on performance both directly and indirectly during motivation.

2.4.3.2 Job resources

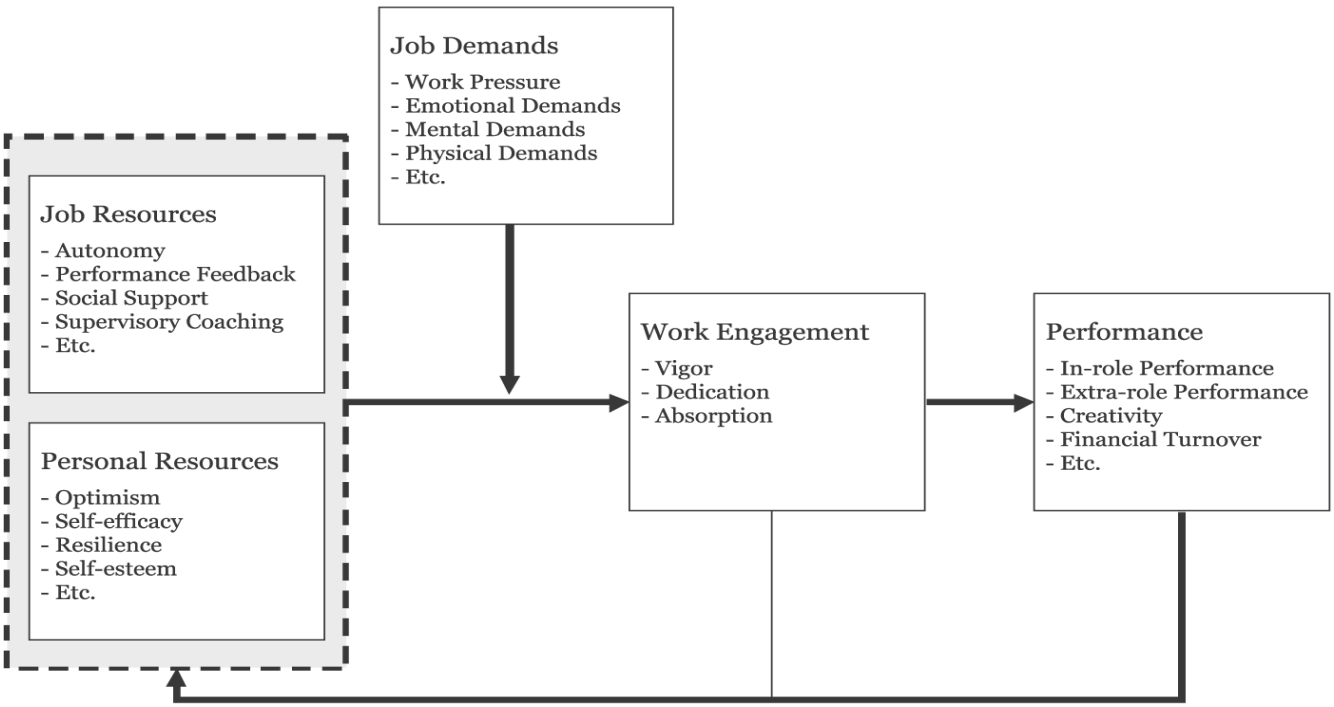
The concept of job resources concerns those facets that help to enhance learning and development and employee growth, and also to accomplish work goals (Bakker, 2018; Bakker & Demerouti, 2007; Qian, Yang, Wang, Huang, & Song, 2017; Schaufeli & Bakker, 2004). In this context, the presence of job resources is significant and plays an important role in performing the work task. This includes enhancing personal development, thus leading to greater work engagement (Bakker & Demerouti, 2008; Schaufeli *et al.*, 2009a; Schaufeli & Bakker, 2004).

It would be expected that job resources play a motivational role whether that be intrinsic or extrinsic (Bakker & Demerouti, 2008). In relation to an intrinsic motivational role, Deci and Ryan (1985) argue that job resources need to meet the basic needs for humans for example, the need for relatedness (cited in Bakker & Demerouti, 2008). For an extrinsic motivational role, a resourceful working environment helps to enhance the desire to accomplish the work task and this will be enhanced when, for example, there is participation in decision making

(Schaufeli & Bakker, 2004; Bakker & Demerouti, 2008). In both cases, whether via fulfilment of basic needs for humans or by the accomplishment of work goals through, for example, goal clarity or performance feedback, the results are positive and lead to employees becoming more engaged (Schaufeli & Bakker, 2004).

Xanthopoulou and colleagues extended the JD-R model by revealing that personal resources also predict work engagement. The meaning of personal resources in this case relates to positive evaluations of self that are connected to how resilient an employee feels in regards to his/her ability to successfully control the work environment (Bakker & Demerouti, 2008; Hobfoll, Johnson, Ennis, & Jackson, 2003; Xanthopoulou *et al.,* 2007a). Personal resources could be classed as organisational-based self-esteem, resilience, self-efficacy, and optimism (Bakker & Demerouti, 2008). Consequently, both personal and job resources can lead to work engagement, and work engagement then leads to positive outcomes (Bakker & Demerouti, 2008). The JD-R model of work engagement according to Bakker and Demerouti (2008, p. 218), is described below in Figure 2.1

Figure 2. 1 The Job Demands-Resources Model



Source: Based on Bakker & Demerouti (2007)

The JD-R model has been criticised as it is considered to be a transactional model which means that it is unable to describe motivation and behaviour in difficult circumstances like nurses in hospitals (Bargagliotti, 2012). According to Bailey *et al.* (2017), the JD-R model does not address issues of diversity. In addition, Saks and Gruman (2014) argue that even though both job demands (i.e. challenge demand) and job resources influence worker engagement, there are other influences upon engagement. Similarly, Crawford *et al.* (2010, p. 844) argue that "a limitation of the job demands–resources model is that it does not include all relevant predictors of employee engagement".

Despite criticisms surrounding the use of JD-R model, this model, however, has earned support from various empirical research (e.g. Agarwal & Farndale, 2017; Bakker & Demerouti, 2007; Conway *et al.*, 2016; Gawke, Gorgievski, & Bakker, 2017; Simbula, Guglielmi, & Schaufeli, 2011; Xanthopoulou *et al.*, 2009b; Xanthopoulou, Bakker, Heuven, Demerouti, & Schaufeli, 2008; Van Wingerden, Derks, & Bakker, 2017). Furthermore, the JD-R model has been used in several occupational groups including but not limited to school teachers (Bakker *et al.*, 2007), fast food chain employees (Xanthopoulou *et al.*, 2012), bank employees (Cooke, Cooper, Bartram, Wang, & Mei, 2016), and health care employees (Mauno *et al.*, 2007). In this context, Bakker and Demerouti (2017) state that JD-R theory still inspires researchers and the majority of engagement research have adopted this theory to understand engagement (Bailey *et al.*, 2017; Dicke, Stebner, Linninger, Kunter, & Leutner, 2018; Knight *et al.*, 2017; Lesener *et al.*, 2019; Schaufeli & Taris, 2014).

Based on the review of literature on work engagement since Kahn's (1990) seminal work, there is increasing attention because of work engagement's presumed link to positive outcomes. For example, previous studies pointed out that work engagement is connected to job satisfaction (e.g. Paek, Schuckert, Kim, & Lee, 2015; Kamalanabhan, Sai, & Mayuri, 2009), enhanced organisational citizenship behaviour (Alfes *et al.*, 2013a; Rurkkhum & Bartlett, 2012), organisational commitment (Gupta, 2017), and job performance (e.g. Alessandri, Consiglio, Luthans, & Borgogni, 2018; Yalabik, Popaitoon, Chowne, & Rayton, 2013). Similarly, Saks and Gruman (2011a) mention that work engagement is considered as an important variable that help to enhance job performance. Furthermore, the growing attention on work engagement was largely driven by calls to focus on positive states at work instead of concentrating on the negative results such as malfunctioning and stress (Schaufeli & Bakker, 2004; Seligman &

Csikszentmihalyi, 2000; Bakker & Schaufeli, 2008). In this context, Seligman and Csikszentmihalyi (2000, p. 5) report that "the aim of positive psychology is to begin to catalyse a change in the focus of psychology from preoccupation only with repairing the worst things in life to also building positive qualities''. Due to the fact that work engagement is a comparatively new topic, the increasing interest from researchers has resulted in further development of work engagement. Table 2.1 shows some of the influential studies in the area.

It appears from the table that recent studies have focused on the contextual and cultural aspects that may enhance work engagement in the workplace. This is in line with the recommendation that engagement research needs to be conducted in various cultural contexts (e.g. Bailey *et al.*, 2017; Kim *et al*. 2013). In this respect, Abu Bakar *et al.*'s (2018) qualitative work revealed that religiosity has a substantial role in enhancing work engagement. Moreover, they extended JD-R theory by addressing religiosity as a personal resource that helps to enhance engagement at work. Therefore, the present study will empirically investigate this relationship in the Jordanian context. In doing so, the current thesis responds to a call from Abu Bakar *et al.* (2018) to empirically examining the relationship between religiosity and work engagement. In addition, this study will address other antecedents and outcomes of work engagement which previous studies have identified as requiring more attention. The next sections discuss these variables and provide justifications for choosing them in the present study.

No.	YEAR	Author and Journal	Description	Methodology and sample
1	1990	Kahn **(Academy of Management Journal). 4***	The study explained the nature of personal engagement & disengagement. It also describes the three psychological conditions (meaningfulness, safety, availability) found to influence those behaviours.	Qualitative and grounded theory. Interviews conducted with counsellors in summer camp and employees in architecture firm.
2	2001	Rothbard **(Administrative Science Quarterly). 4***	The study examined both the depleting and enriching processes that link engagement in one role to engagement in another.	Questionnaire used to collect data from a sample of 1310 employees at a large public university. 790 questionnaires were returned.
3	2002	Schaufeli, Salanova, Gonzalez-Roma & Bakker. **(Journal of Happiness Studies). 1***	This study defined engagement as a positive, fulfilling, work-related state of mind. Examining the relationship between burnout and engagement. Testing the internal consistencies of the three scales and the factor structure using CFA.	Questionnaire sent to 314 undergraduate students (sample 1), and 619 employees from private and public companies (sample 2).
4	2002	Harter, Schmidt & Hayes **(Journal of Applied Psychology). 4***	This study investigated the relationship at the business-unit level between employee satisfaction–engagement and the business-unit outcomes of customer satisfaction, profit, productivity, employee turnover, and accidents.	Meta-analysis, Based on 7,939 business units in 36 companies.
5	2003	Sonnentag **(Journal of Applied Psychology). 4***	The study investigated work-related outcomes of recovery during leisure time. It examined the influence of recovery periods on work engagement and proactive behaviour during the subsequent work day.	Survey sent to 425 employees of six public organisations. 147 returned (34.6% response rate).
6	2004	May, Gilson, & Harter **(Journal of Occupational and Organizational Psychology). 4***	The study examined the impact of three psychological conditions (meaningfulness, availability & safety) on employees' engagement.	Survey sent to 270 employees and managers at all department in the administration division at an insurance firm in the USA.
7	2006	Saks **(Journal of Managerial Psychology). 3***	The study investigated the antecedents and consequences of job and organisation engagements drawing on social exchange theory.	Survey was completed by 102 employees working in different jobs and organisations.

No.	YEAR	Author and Journal	Description	Methodology and sample
8	2007	Mauno, Kinnunen, & Ruokolainen. **(Journal of Vocational Behavior). 4***	The study examined the experience of work engagement and its antecedents. Job demands measured (i.e. job insecurity, time demands at work, and Work-to-family conflict). Job and personal resources measured (i.e. job control, perceived management quality, and organisation-based self-esteem).	Questionnaire used to collect data in 2003 (T1) and 2005 (T2) from a public health care organisation. The questionnaire sent to 1600 employees at (T1) and 735 returned (46% response rate). At T2, questionnaire sent to the 735 employees who responded at T1 and who were still employed (n=623), 409 returned the questionnaire (65.7% response rate).
9	2009b	Xanthopoulou, Bakker, Demerouti, Schaufeli **(Journal of Occupational and Organisational Psychology). 4***	The study examined how daily fluctuations in job resources are related to employees' levels of personal resources, work engagement, and financial returns.	Questionnaire sent to 45 employees working in three branches of a Greek fast-food company. 42 returned (93% response rate).
10	2010	Rich, LePine, & Crawford. **(Academy of Management Journal). 4***	The study examined the antecedents and outcomes of engagement. The results revealed that engagement mediates relationships between value congruence, perceived organisational support, and core self-evaluations, and two job performance dimensions: task performance and organisational citizenship behavior.	Questionnaire was completed by 245 firefighters and their supervisors.
11	2011b	Saks and Gruman. **(Journal of Managerial Psychology). 3***	This study examined the relationship between socialisation tactics and newcomer engagement and the mediating role of person-job (PJ) and person-organisation (PO) fit perceptions, emotions, and self-efficacy.	Questionnaire was completed by 140 co-op university students at the end of their work term at a large Canadian University.
12	2013a	Alfes, Shantz, Truss & Soane. **(International Journal of Human Resource Management). 3***	This study posits that the effect of perceived HRM practices on both outcome variables is mediated by work engagement, while the relationship between engagement and both outcome variables is moderated by leader–member exchange and perceived organisational support.	Questionnaire was completed by 297 employees in a large UK organisation.

No.	YEAR	Author and Journal	Description	Methodology and sample
13	2017	Banihani, & Syed. **(International Journal of Human Resource Management). 3***	This study integrated gender into the notion of work engagement by exploring the factors that affect the genderedness of work engagement. It used engagement theory and gendered organisation theory to expose the gendered nature of work engagement.	Interviews were conducted with 36 employees from the telecommunication sector in Jordan.
14	2018	Abu Bakar, Cooke, & Muenjohn. **(International Journal of Human Resource Management). 3***	This study focused on the relevant factors that may affect work engagement in the Malaysian context. It provides evidence that religiosity plays a significant role in work engagement.	Semi-structured interviews were conducted with 41 mid-ranking managers from the finance sector in Malaysia.

***refers to the rank of the journal in the CABS list

Table 2. 1 Influential studies in work engagement

2.5 Antecedents of work engagement

As a result of the increasing interest from academics and practitioners, it is important to determine the drivers that play a role in enhancing engagement in the workplace. In their review of the literature, Wollard and Shuck (2011) outline the key predictors of work engagement and found that 13 out of 21 antecedents were confirmed by some empirical evidence. For instance, Rich *et al.* (2010) found that three antecedents (i.e. perceived organisational support, value congruence, and core self-evaluations) predict engagement. However, the present thesis aims to investigate the relationship between three antecedents namely, religiosity, training and development, and supervisor support and work engagement. The following sections will discuss these antecedents and will provide justifications for including them.

2.5.1 Religiosity

The research stream on human resource management and its relation to organisational outcomes has overlooked the effect of religion in the workplace (Assouad & Parboteeah, 2018; Mellahi & Budhwar, 2010; Tracey, 2012). Kutcher, Bragger, Rodriguez-Srednicki, and Masco, (2010) mention that although religion is considered as an important part of one's personal identity, its influence in the workplace is ignored. The practices of religious groups may derive from shared beliefs but these are often developed in specific contexts (Bouma, Haidar, Nyland, & Smith, 2003). In this respect, "religious people pray, attend a place of worship, in some cases fast and engage in socially beneficial actions that directed by their religion" (Osman-Gani, Hashim, & Ismail, 2013, p. 362).

One of the reasons why scholars are reluctant to study and investigate the influence of religion in the workplace is noted by Tracey (2012, p.89), "perhaps it is considered too far removed from the commercial organisations". Another reason could be the doubt surrounding the effect of religion on the individual's behaviour at work (Mellahi & Budhwar, 2010). However, Bloom's (2012) work reveals that religion is considered as a solution to the dilemma of gathering together a group of individuals; religious practices and beliefs help to enhance collaboration and emotions and to stimulate compassion for others. He also mentions that religious conviction influences people's behaviour. It follows from this that religion provides guidance in the way in which people live. In a similar vein, Lynn, Naughton, and VanderVeen, (2011) indicate that even though religiosity can greatly affect the behaviour of individuals, few studies have been directed towards integrating the practices and beliefs of religious individuals with work. According to McDaniel and Burnett (1990), religiosity denotes a belief in God and an adherence to act and behave in accordance with God's principles.

Previous literature has attempted to distinguish between religiosity and spirituality. According to Ashmos and Duchon (2000), spirituality signifies a feeling of interrelatedness of individuals for each other both inside and outside the workplace. In contrast, religiosity refers to the belief in God and the adherence to act and behave in accordance with God's principles (McDaniel & Burnett, 1990). However, Gümüsay (2018, p. 8) mentions that religiosity can form spirituality, "as it may be a source of specific spiritual practices, values, and beliefs".

Religion is also defined as a structured and systematic system of rituals, practices, and beliefs designed for the purpose of enabling proximity to God (Koenig, Koenig, King, & Carson, 2012). Koole, McCullough, Kuhl, and Roelofsma, (2010) accordingly note that religion assists self-regulation in an implicit manner amongst people who are obligated to their religion, which

in turn helps them to strive for high standards as well as preserve emotional well-being. In addition, prayer as a way of meditation can enhance one's ability to cope (Baker, 2008). Similarly, Parboteeah, Paik, and Cullen, (2009) state that religion is considered as an effective aspect which helps to enhance work values. In addition, Fredrickson, Cohn, Coffey, Pek, and Finkel, (2008) have shown that the regular practice of meditation (on a daily basis) enhances the feelings of positive emotions which then produce an increase in personal resources such as autonomy and personal growth. Based on the abovementioned definitions of religion and religiosity, religion is treated here as a belief in a supreme being which has an influence on an individual's attitudes and behaviours, and these attitudes and behaviours express a person's faith values. Religiosity is treated as the extent of an individual's devotion to live his/her life (including in the workplace) based on their religious beliefs.

The role of religiosity appears further in business ethics research, which demonstrates the influence of religiosity in the lives of individuals (including in the actual work environment) and on ethical behaviour. Unethical behaviours can lead to devastating effects on organisations and their employees and as such, religiosity is seen to be key to understanding the antecedents of ethical behaviour (Conroy & Emerson, 2004). Religiosity, in this regard, helps to avoid such behaviours by providing guidance to individuals to avert unethical behaviour like injustice and harmful actions that have a negative influence on other parties. In this respect, Conroy and Emerson (2004) show that religiosity is negatively related to unethical behaviour such as fraud and bribes. Similarly, Longenecker, McKinney, and Moore, (2004) reveal that being religious helps to minimise unethical actions such as providing misleading information and fraud. Even though the level of religiosity varies from one individual to another, it was found that those who follow the principles of their religion were more inclined to regard themselves as behaving

ethically than others (Phau & Kea, 2007). This is due to the idea that religion reinforces social solidarity, to some extent, through offering standards that help to diminish conflict as well as reducing unethical behaviour through imposing sanctions (Kennedy & Lawton, 1998). Islamic teachings (Quran and Hadith of Prophet Muhammad - PBUH) impel Muslims to avert engaging in unethical conduct such as laziness, being unproductive, and incivility (Abeng, 1997). These teachings (Quran and Hadith) also encourage them to be involved in activities that please God like being productive, ethical, sincere, and responsible (Abbasi *et al.,* 2010). According to Abeng (1997), the faith-work relationship in the Quran is given more importance and is also mentioned in many verses. For example, God says in the Quran (62:10) "When the prayer has been concluded, disperse within the land and seek from the bounty of Allah, and remember Allah often that you may succeed". This means that after completing worship in congregation, Muslims are instructed to continue their work (Abeng, 1997). This, in turn, shows the importance of work and being productive in Islam.

Consumer behaviour is another area of research which shows that religiosity plays a significant role in determining the buying decisions of consumers. Religious consumers attempt to follow the principles and values of their religion, which therefore, has an influence on their purchasing choices (Wilkes, Burnett, & Howell, 1986). For instance, loyal Mormons are unlikely to purchase alcoholic beverages and tobacco products (Wilkes *et al.*, 1986). Likewise, these products are prohibited in Islam. Furthermore, Muslims are obliged to only consume halal food which is based on the principles of Shariah (Ahmed, Najmi, Faizan, & Ahmed, 2019). Additionally, Islamic teachings guide individuals to spend moderately not extravagantly (Alam, Mohd, & Hisham, 2011). Not only does the Islamic religion provide guidance on how Muslims live their lives or their drinking and eating, but it also encourages them to deal with

businesses that work in accordance with Shariah law. For example, a study by Abou-Youssef, Kortam, Abou-Aish, and El-Bassiouny, (2015) in Egypt shows that religious Muslim consumers prefer to deal with Islamic banks. Similarly, Souiden and Rani (2015) reveal that as the level of religiosity of Muslims increases the more they inclined to deal with Islamic banks. Accordingly, the influence of religion on consumer behaviour, to some extent, relies on the nature of the religion's practices and beliefs and the degree to which the followers of that religion embrace those practices and beliefs (Sood & Nasu, 1995). Religion is, therefore, considered to be one of the important aspects that has an impact on an individual's shopping behaviour (Essoo & Dibb, 2004), and it also helps individuals to interpret and understand their lives and gives them meaning and purpose to their existence (Petersen & Roy, 1985).

The influence of religion in the workplace has been receiving more attention from management scholars (Gundolf & Filser, 2013). Bouma *et al*. (2003) indicate that religion may relate directly to work. In a similar vein, Davidson and Caddell (1994) mention that religion has an impact on the way individuals think about work. Furthermore, employees are continually looking to find meaning in their jobs (Garcia-Zamor, 2003). In this context, considering work as meaningful is an essential characteristic of religiosity (Abu Bakar *et al*., 2018). In addition, "religion is a pervasive subject that – through its tenets – tends to influence somewhat people's (including managers') behaviours, perceptions, and decisions" (Vasconcelos, 2009, p. 931).

Religion has a significant role in the shaping of people's lives. For example, almost 82% of people around the world consider that religion accounts for an important part in their life (Crabtree, 2009 cited in Sedikides, 2010). However, Bueckert, Hill, Parisotto, and Roberts, (2017) mention that Western societies (e.g. Canada) are managed by secular laws. In contrast, most of the Arab countries (e.g. Jordan) are managed by religious laws (Mayer, 1987).

Similarly, Budhwar, Pereira, Mellahi, and Singh, (2018) report that the bulk of the Middle Eastern countries are religious countries. In this context, religion is considered as a significant regulator of people's life (Metcalfe, 2008). Consequently, religion is considered to act as a good tool that helps to maintain strong relationships in the workplace and focusing on one's life and work and the purposes therein (Kutcher *et al.,* 2010). Abu Bakar *et al.* (2018) argue that work conduct that is stimulated to a certain extent by religion could promote engagement at work and thus improve work performance. Abu Bakar and colleagues reveal that being religious stimulates work engagement because work is considered as a form of worship to God. Furthermore, by thinking of work as a kind of worship, this helps in enhancing happiness at work thus boosting engagement (Abu Bakar *et al.,* 2018). In addition, Abu Bakar and her colleagues report that being religious assists in enhancing engagement as employees will be morally obligated to God. As such, the current thesis will investigate the influence of religiosity on work engagement. In this study, religiosity is considered as a personal resource in the JD-R model. Whereas most studies on religiosity have been conducted in Western countries (see Tracey, 2012 for a detailed review), this study enlarges the extant literature by investigating the concept of religiosity in Jordan.

The next section is dedicated to exploring the literature surrounding training and development and justifies selecting this variable as an antecedent in the JD-R model.

2.5.2 Training and development

Training is a core element of HRD that has a vital role in the performance of employees as it enhances the skills needed to accomplish work tasks effectively (Aguinis & Kraiger, 2009). It provides employees with the skills, knowledge, and abilities needed to improve their work

performance. Training represents a "systematic development of knowledge, norms, concepts or attitudes that result in performance improvement, and become part of the learning process and organisational change, employee evaluation and career development" (Tasca, Ensslin, Ensslin, & Alves, 2010, p. 632). Furthermore, training reflects "a planned intervention that is designed to enhance the determinants of individual job performance" (Campbell & Kuncel, 2001, p. 278). According to Pugh, Dietz, Wiley, and Brooks, (2002), training offers employees the skills and knowledge they need for the purpose of carrying out the job tasks in an efficient manner.

Training could be an effective solution to tackle the lack of performance in organisations (Gruman & Saks, 2011). In this context, if employees do not have sufficient information or skills needed to do their tasks efficiently this will influence organisational performance by, for example, harming customer satisfaction, taking more time to accomplish tasks, and employees could be reluctant to know whether they are doing their work correctly or not. Consequently, training plays a significant role in enhancing the confidence levels of employees as they acquire the knowledge and skills needed to succeed. In a similar vein, when employees receive training on a continuous basis, they will be more secure regarding their capability to accomplish their work tasks and thus may decrease nervousness and also enhance feelings of availability (Gruman & Saks, 2011). Furthermore, training programmes are particularly significant for new employees because because they provide the skills needed to perform their job (Albrecht, Bakker, Gruman, Macey, & Saks, 2015). Albrecht and colleagues further indicate that these programmes provide new employees with the skills, abilities, and knowledge necessary to accomplish their work tasks. This also enhances their availability in the workplace (Albrecht *et al.,* 2015).

According to Schmidt (2007), the feelings of employees about the training opportunities that are provided by their employers have an impact on their performance. That is, when employees receive training programmes on a continuous basis, they will feel more satisfied and will acquire the skills and knowledge needed to accomplish their job tasks. Therefore, this will lead to a benefit for both the employee and the organisation.

Previous studies point out that there is a connection between training programmes and the performance of the organisation. For example, Harrold's (2000) study cited in Jacobs and Washington (2003) suggests that in the Honeywell Company, productivity improved by $2 billion as a result of conducting training programmes for employees. Training also has an impact on employee retention and helps to retain workers within the organisation (Aguinis & Kraiger, 2009). In this context, Koster, de Grip, and Fouarge, (2011) show that perceived support in employee development is connected negatively with intention to leave, and job satisfaction mediates this relationship.

Providing employees with sufficient training and development opportunities plays a role in enhancing their engagement levels (Schaufeli & Salanova, 2008). Alfes *et al.*'s (2013b) study points out that HRM practices as well as line managers are associated with work engagement. Furthermore, engagement has a strong connection to individual performance. Cooke *et al.* (2016) have shown that worker resilience mediated the connection between HPWS and engagement. Drawing on social exchange theory, Shuck, Twyford, Reio, and Shuck, (2014) reveal that the association between HRD practices and intention to quit is partially mediated by work engagement. Furthermore, Heffernan and Dundon (2016) show that the association between HPWS and work pressure, affective commitment, and job satisfaction is mediated by organisational justice. Recently, Bailey *et al.*'s (2017) review of the literature on work

engagement has shown that very few studies have investigated the role of training and development opportunities aimed at improving work engagement. Therefore, the current study will examine the role of training and development opportunities on enhancing work engagement in the Jordanian context.

The third antecedent in the model of the present study is supervisor support.

2.5.3 Supervisor support

The role of supervisors is very significant in forming the work environment and providing feedback to workers (Griffin, Patterson, & West, 2001). Supervisor support concerns whether employees feel that supervisors encourage and support them to perform their job tasks (Burke, Borucki, & Hurley, 1992 cited in Babin & Boles, 1996). Further, Hsu (2011, p. 235) defines supervisor support as "the perception of employees regarding their relationship with their supervisor and how well they can rely on the supervisor to care for their individual concerns". Supervisor support is also termed as the level to which the workers perceive that their efforts are appreciated and their line-managers care about them (Rhoades & Eisenberger, 2002).

Interpersonal relationships are an important aspect in organisations which lead to improving the organisation's way of working methods, thus enhancing overall effectiveness (Duffy, Ganster, & Pagon, 2002). In this context, supervisor support is considered as one of the significant resources within the organisation which helps to enhance employee's self-esteem and may help them to deal with stress in the workplace (Guchait, Paşamehmetoğlu, & Dawson, 2014; Nahum-Shani, Henderson, Lim, & Vinokur, 2014). Similarly, Park and Jang (2015) mention that supportive supervisors play a role in enhancing job autonomy for employees which leads to improve employees' mental health. Furthermore, supervisor support comprises

help and motivates subordinates to accomplish their work tasks, guide and direct them, and treat them fairly when evaluating their performance (Liaw, Chi, & Chuang, 2010).

Supervisor undermining, however, demonstrates a collection of undesirable behaviours from supervisors that incorporate criticism along with other activities hindering a worker's ability to obtain his/her goals (Vinokur & Van Ryn, 1993). These behaviours have deleterious effects on both the happiness and health of workers, and can result in negative outcomes comprising depression, emotional exhaustion, and poor health (Nahum-Shani *et al.,* 2014). In this respect, Herschcovis and Barling's (2010) meta-analytic review reveals that supervisor aggression had powerful adverse effects on behavioural outcomes namely, work performance, organisational deviance and interpersonal deviance, rather than co-worker aggression. Consequently, when supervisors mistreat their subordinates, they act in ways that might affect the performance of the organisation such as dealing with customers in a negative way.

Bhatnagar (2014) shows that the connection between supervisor support and outcomes is fully mediated by rewards and recognition and the psychological contract. In addition, Hsu (2011) found that supervisor support has an influence on job satisfaction. Furthermore, supervisor support moderates the connection between the antecedent and the outcome. Moreover, Kuvaas and Dysvik (2010) point out that the connection between investment in employee development and its outcomes is moderated by supervisor support.

According to Saks (2006), and based on data from 102 workers in diverse professions and organisations in Canada, supervisor support had no statistically significant effect on both job and organisational engagement. Similarly, Menguc, Auh, Fisher, and Haddad, (2013) found that supervisor support had no influence on work engagement. However, based on a survey of 1039 nurses in Australia, Holland, Cooper, and Sheehan, (2017) showed that supervisor

support is positively related to work engagement and this association is mediated by trust in the supervisor.

The JD-R model posits that job resources (e.g. supervisor support) have an influence on and play a role in predicting work engagement. This in turn has a desirable effect on performance. According to Bakker and Demerouti (2017), the relation between support from the supervisor and workload needs further attention, specifically, for employees at the lower levels. Therefore, the present study will examine this relationship in the Jordanian telecom sector from the perspective of employees at the lower level. As the authors stated, there is a necessity to examine the moderators for job demands-resources relationship. They also asked whether workload affects this relationship. Hence, drawing on the JD-R model (Bakker & Demerouti, 2008), this thesis considers workload as a moderator variable. The next section will explore the extant literature on workload.

2.6 The moderating role of workload in the JD-R model

Workload denotes "how much work there is to be done in given amount of time" (Van Veldhoven *et al.,* 2002 cited in Van Woerkom, Bakker, & Nishii, 2016, p. 142). Spector and Jex (1998, p. 358) also define workload as "the sheer volume of work required of an employee". As stated earlier, the literature has distinguished between two kinds of demands namely, hindrance and challenge (e.g. Lepine *et al.,* 2005). Whereas the former can derail personal development and goal achievement (Cavanaugh *et al.,* 2000; Crawford *et al.,* 2010) and is linked with low motivation (Lepine *et al.,* 2005), the latter, however, promotes scope for workers to learn and grow. It enhances employees' abilities and confidence by giving them the experience to better deal with their work tasks. This classification of job demands helps to

clarify the inconsistency of the findings about the relationship between demand and engagement (Crawford *et al.,* 2010). In contrast, Demerouti and Bakker (2011) indicate that the classification of challenge and hindrance demands is not the same for each occupation. In a similar vein, Bakker and Sanz-Vergel (2013) criticise this categorisation of job demand into challenge and hindrance demands and argue that this classification is not straightforward as it depends on the occupational sector.

According to Crawford *et al.* (2010), workload is considered as a challenge demand as this kind of demand will help employees to enhance their capabilities to accomplish their work tasks effectively and leads to a benefit for the worker in the future. In their study, Crawford *et al.* (2010) reveal that challenge demand (i.e. workload) was positively linked to work engagement. Similarly, Van den Broeck, Vansteenkiste, De Witte, and Lens, (2008) show that the association between workload and both vigour and need-satisfaction was positive.

According to the JD-R theory (Bakker & Demerouti, 2008), job demands act as a moderator of the relationship between both job and personal resources on the one hand, and work engagement on the other. As mentioned earlier, Bakker and Demerouti (2017) indicate that there is a necessity to examine the moderators for the job demands-resources relationship. They also asked whether workload affects this relationship. Hence, this thesis considers workload as a moderator variable on the connection between the predictors (i.e. religiosity, training and development, and supervisor support) on the one hand, and work engagement on the other.

2.7 Outcomes of work engagement

Work engagement has attracted much interest recently from practitioners and academics because of its presumed positive effects on employees and organisations (Banihani *et al.,* 2013;

Bhatnagar, 2012; Rana, 2015; Saks, 2006; May *et al*., 2004). It has a significant role in an organisation's success and helps to achieve sustainable competitiveness (Gruman & Saks, 2011). Leiter and Bakker (2010, p. 3) indicate that "the energy and focus inherent in work engagement allow employees to bring their full potential to the job". Furthermore, engaged employees have a greater level of performance because they practice positive emotions, engaged workers also practice better health, they are capable of generating resources and share their passion of work with other employees (Bakker & Demerouti, 2008). Previous studies showed positive links between work engagement and the consequences. For instance, Yalabik *et al.* (2013) reveal that work engagement is connected positively with job performance and linked negatively with intention to quit. The present study aims to examine the relationship between work engagement and two outcome variables namely, affective commitment and turnover intention. Justification for choosing these two variables in the present study is given below.

2.7.1 Affective commitment

Meyer and Allen (1991) conceptualise organisational commitment (OC) as a concept comprising the following dimensions: "affective, continuance and normative" commitment. However, affective commitment is considered as the most valuable indicator that reflects the employee's attachment to the organisation (Solinger, Van Olffen, & Roe, 2008; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). Similarly, Mercurio (2015) mentions that affective commitment is considered as the crucial element of OC. Consequently, affective commitment will be considered as an outcome in the current thesis.

Affective commitment refers to "an employee's emotional attachment to, identification with, and involvement in the organisation" (Meyer & Allen, 1991, p. 67). The benefits of affective commitment tend to be greater and better than of continuance and normative commitment (Meyer & Smith, 2000; Vandenberghe, Bentein, & Panaccio, 2017). Affective commitment results from the employees' feelings that the organisation cares about them and treats them equally, and improves their capability (Luchak & Gellatly, 2007). Jena, Bhattacharyya, and Pradhan, (2017) mention that an examination of the antecedents of affective commitment is important in order to determine the techniques that could lead to enhance the commitment levels of the employees.

Engaged workers, however, are happy with their work and they are committed to their firms (Bakker & Schaufeli, 2008; Llorens *et al.,* 2006; Yalabik *et al.,* 2015). Saks (2006) and Brunetto, Teo, Shacklock, and Farr-Wharton, (2012) show that work engagement is positively connected with affective commitment Other studies, however, have considered affective commitment as a predictor of work engagement. For instance, Shuck *et al.* (2011) found that affective commitment is significantly linked to work engagement. However, in his review of the commitment literature, Mercurio (2015) mentions that the primary question for future research is to pay more attention and focus on identifying the antecedents that enhance affective commitment levels.

Based on the above argument, and due to the lack of studies that concern commitment in Jordan (Aladwan *et al.,* 2015) the present thesis investigates the role of work engagement in enhancing affective commitment in the Jordanian context. The next section explores the extant literature of the second outcome variable in the present study namely, turnover intention.

2.7.2 Turnover intention

Turnover intention is important due to the significant consequences that it generates for organisations (Pitts, Marvel, and Fernandez, 2011). Turnover intention is an employee's "conscious and deliberate wilfulness to leave the organisation" (Tett & Meyer, 1993, p. 262). Similarly, Carmeli and Weisberg (2006, p. 193) define it as "a conscious and deliberate desire to leave the organisation within the near future". Furthermore, Schyns, Torka, and Gössling, (2007, p. 660) define turnover intention as "an employee's intention to voluntarily change jobs or companies". In this respect, Tett and Meyer (1993, p. 262) state that turnover intention is related to "the termination of an individual's employment with a given company".

An increasing voluntary turnover rate is expensive for organisations and has a negative impact on organisational effectiveness (Zheng & Lamond, 2010; Han, Bonn, & Cho, 2016). Turnover imposes substantial expenses on organisations, such as the cost of recruitment, advertising and the cost of training new employees (Pitts *et al.,* 2011). Previous studies propose that the performance of the organisation will be improved when there are stable human resources (Meier & Hicklin, 2007 cited in Pitts *et al.,* 2011). Pitts *et al.* (2011) mention that there are many aspects that could lead to turnover such as the shortage of opportunities for development, race and ethnicity, and low levels of empowerment and autonomy.

Employees who experience higher engagement levels, however, are less likely to withdraw from the organisation (Vance, 2006 cited in Juhdi, Pa'wan, & Hansaram, 2013; Saks, 2006). Previous studies reveal that work engagement is linked negatively to intention to quit (e.g. Karatepe & Avci, 2017; Memon *et al.,* 2018; Schaufeli & Bakker 2004). In a similar vein, the findings of Alfes *et al.* (2013a) show that work engagement is negatively associated with

turnover intentions. In addition, De Lange, De Witte, and Notelaers, (2008) longitudinal research examined the relationships among predictors like autonomy, work engagement and actual turnover over time and showed that lower levels of engagement in the workplace, departmental resources, and autonomy anticipated future turnover.

According to Aladwan *et al.* (2013), there are insufficient studies that examine turnover intention in the Middle Eastern countries in general, and in Jordan in particular. They further mention that research is needed to examine the effect of variables such as religiosity on turnover intention. Therefore, the present thesis is seeking to address this gap in the literature through investigating the relationships between the antecedents (i.e. religiosity, training and development, and supervisor support) and turnover intention in the mediation of work engagement in the Jordanian telecom sector.

2.8 Chapter summary

This chapter has presented a review of the work engagement literature that helps to enhance the understanding of the construct. This is done by critically discussing the definition of the concept and Schaufeli *et al.*'s (2002) definition is adopted. The distinction between work engagement and other familiar concepts is critically evaluated and reveals that work engagement is a unique and standalone term. Furthermore, the theoretical approaches to work engagement have also been explored.

This chapter has also demonstrated the need to empirically examine the role of religiosity on enhancing work engagement in a Middle Eastern country. In other words, this study will extend the extant literature by addressing and testing religiosity in the job demands-resources framework in the context of Jordan. In addition, this thesis will complement Abu Bakar *et al.*'s

(2018) qualitative work through empirically examining the effect of religiosity on work engagement. Moreover, other variables are also addressed and discussed in this chapter which the literature suggests need more attention (i.e. training & development, supervisor support, workload, affective commitment, and turnover intention).

The next chapter will discuss the hypotheses and conceptual model development.

CHAPTER THREE: HYPOTHESES AND CONCEPTUAL MODEL DEVELOPMENT

3.1 Introduction

This chapter reviews the existing work engagement literature for the purpose of building the conceptual model and the development of research hypotheses. Drawing on the research questions and based on the extant literature on work engagement, this chapter demonstrates the association between the variables of the study for the purpose of developing the research model and develop the hypotheses. In addition, this chapter will offer the justifications for the selected variables and the reason behind choosing them in the present thesis.

This chapter is structured as follows. Firstly, it demonstrates the relationship between the antecedents namely, religiosity, training and development, and supervisor support and work engagement. Secondly, it discusses the moderating effect of workload on the link between the antecedents and work engagement. After that, the relationship between work engagement and the outcome variables i.e. affective commitment and turnover intention is presented. Fourthly, the mediating role of work engagement between the predictors and the outcome variables is explained. A conceptual model is derived.

3.2 The predictors of work engagement

This thesis addresses three predictors of work engagement namely, religiosity, training and development, and supervisor support. These relationships are discussed below.

3.2.1 The association between religiosity and work engagement

According to McDaniel and Burnett (1990), religiosity denotes a belief in God and the adherence to act and behave in accordance with God's principles. Lynn *et al.* (2011) argue that even though religiosity can greatly affect the behaviour of individuals, very few studies have been directed towards integrating religious beliefs and behaviour at work. In a similar context, Bloom (2012) points out that religion is considered as a solution to the dilemma of gathering together a group of individuals; religious practices and beliefs help to enhance collaboration and emotions and to stimulate compassion for others. He also states that religious conviction influences people's behaviour. It can be taken from this that religion delivers guidance in the way in which people live.

As stated earlier in chapter two, the majority of the research on human resource management and its relation to organisational outcomes has ignored the influence of religion in the workplace. Accordingly, the effect of religion is overlooked in the literature (Assouad & Parboteeah, 2018; Mellahi & Budhwar, 2010; Tracey, 2012). One of the reasons why scholars may be reluctant to study and investigate the influence of religion in the work setting is as noted by Tracey (2012, p.89), "perhaps it is considered too far removed from the commercial organisations". Another reason could be the doubt surrounding the influence of religion on an individual's behaviour at work (Mellahi & Budhwar, 2010). However, Bouma *et al.* (2003) argue that religion may relate directly to work.

There is increasing attention from management scholars on the influence of religion in the work setting (for a detailed review see Gundolf & Filser, 2013). For example, based on Osman-Gani *et al.*'s (2013) survey of different categories of the workforce which investigated the effect of religiosity on employee performance in Malaysia, their findings show that religiosity positively affected employee performance. Furthermore, Bhuian, Sharma, Butt, and Ahmed, (2018) show that religiosity moderates the association between the antecedents, i.e. environmental attitude and environmental concern, and the outcome, i.e. pro-environmental consumer behaviour.

In addition, Kutcher *et al.* (2010) reveal that a negative connection between religiosity and stress and burnout, and a positive association between religiosity and job satisfaction as well as organisational citizenship behaviour. Added to that, the findings of Parboteeah *et al.*'s (2009) study which were based on a survey of 44,030 participants in thirty-nine countries demonstrate that religiosity has a positive influence on work values.

According to Garcia-Zamor (2003), a larger number of employees are looking to find meaning in their jobs. In this context, considering work as meaningful is an essential characteristic of religiosity (Abu Bakar *et al.*, 2018). This in turn, may has an influence on employee wellbeing and their motivation at work.

In the context of work engagement literature and in relation to JD-R theory (Bakker & Demerouti, 2008, 2017), Abu Bakar *et al.* (2018) argue that work conduct that is stimulated to a certain extent by religion could promote engagement at work and thus improve work performance. Abu Bakar and colleagues argue that being religious assists in promoting engagement at work as employees will be morally obligated to God. In addition, by thinking of work as a kind of worship, this helps in enhancing happiness at work thus boosting

engagement (Abu Bakar *et al.*, 2018). In line with the above discussion, and in response to a call from (Abu Bakar *et al.*, 2018) who mention that there is a necessity to empirically examine the relationship between religiosity and work engagement, this thesis posits the following:

H1: There is a positive association between religiosity and work engagement.

3.2.2 The association between training and development and work engagement

Training and development programmes for employees can be considered as one of the main priorities for organisations for the purpose of being able to survive in today's competitive environment. Providing employees with such opportunities has an impact in their work performance. In this context, Aguinis and Kraiger (2009) argue that training practice is a core element of HRD that plays a significant role on the performance of employees as it enhances the skills needed to effectively fulfil their job tasks. In a similar vein, Jehanzeb and Mohanty (2018) mention that training and development is one of the crucial functions in human resource management. It delivers employees with opportunities to develop knowledge, skills, and abilities they need to advance their work performance.

According to Pugh *et al.* (2002), training and development practices refer to providing workers with the knowledge and skills they need to accomplish their job tasks in an efficient way. When workers have been offered the opportunity to take these programmes, they will be able to better deal with their work tasks and also it may enhance their loyalty to the organisations they are working for.

Similarly, Gruman and Saks (2011) report that when employees obtain training opportunities on an ongoing basis, they will be more confident regarding their competence to accomplish their tasks. This in turn, results in positive outcomes for both employees and employers.

However, providing employees with adequate training and development opportunities is not only helpful in solving the lack of performance that results, for example, from the shortage of skills in the short term, but also enhancing their capabilities to better deal with the changing work environment and market needs (Elnaga & Imran, 2013).

However, offering employees with adequate training and development opportunities may boost their engagement levels (Schaufeli & Salanova, 2008). Going back to Kahn's (1990) work, one of the psychological conditions namely, psychological availability is closely related to training and development opportunities (Gruman & Saks, 2011). That is, training opportunities are considered as one of the significant resources that make employees feel psychologically available at work (Gruman & Saks, 2011) and this has an influence in enhancing engagement at work. Likewise, according to Bakker (2017), training and development is a pivotal job resource which helps in consolidating work engagement.

Previous studies, however, show that HRM practices are positively associated with work engagement. For example, based on a sample of 297 workers in a service firm in the UK, Alfes *et al.* (2013a) show that HRM practices were positively linked with work engagement. In addition, Huang, Ma, and Meng, (2018) reveal that high performance work systems (HPWS) positively and significantly relate to work engagement and that this association is mediated by job satisfaction and positive mood. Furthermore, Shuck *et al.* (2014) support the positive link between HRD and work engagement.

Recently, in their systematic review of the work engagement literature, Bailey *et al.* (2017) mention that very few studies have investigated the influence of training and development opportunities on enhancing engagement levels. Bailey and colleagues conclude that more research is needed. In addition, Jehanzeb and Mohanty (2018) recommend that this relationship

needs to be conducted in the context of developing countries. As such, the emerging country context of this research is of particular interest.

In relation to the above discussion and in response to Bailey *et al.* (2017) and Jehanzeb and Mohanty (2018), the present thesis hypothesises:

H2: There is a positive association between training and development and work engagement.

3.2.3 The association between supervisor support and work engagement

Supervisor support is termed as the extent to which workers perceive that their efforts are appreciated and their line-managers care about them (Rhoades & Eisenberger, 2002). According to Darvishmotevali (2019, p. 36), "supervisors have very significant role to create a safe workplace for employees, since they are close to the actual work being done and can identify and solve employees' safety and security concerns". In addition, supervisors may assist workers to develop favourable attitudes regarding their firm. In this context, supervisor support plays a vital role and is considered to be a substantial factor which helps in enhancing employee wellbeing, and may lead to desirable outcomes to the organisations (Cole, Bruch, & Vogel, 2006; Li, Kim, & Zhao, 2017; Ng & Sorensen, 2008; Shanock & Eisenberger, 2006; Yang, Lei, Jin, Li, Sun, & Deng, 2019).

Previous studies show that supervisor support benefits both workers and organisations. For instance, it was found that supervisor support has an effect on enhancing job satisfaction (e.g. Karatepe & Kilic, 2007; Qureshi *et al.,* 2018), enhanced organisational citizenship behaviour (Yadav & Rangnekar, 2015), improved organisational commitment (Kang, Gatling, & Kim, 2015), quality of working life (Rathi & Lee, 2017), and enhanced mental health (Park & Jang, 2015).

The lack of support from a supervisor may result in negative consequences such as employees may experiencing burnout (Maslach *et al.,* 2001). Similarly, Ng and Sorensen (2008, p. 259) argue that "perceptions of a lack of supervisor support may adversely affect not only employees' work attitudes but also employees' evaluations of the support provided by the organisation". As such, when supervisors mistreat their subordinates, they will act in a way that might affect the performance of the organisation such as dealing with customers in a negative way. Additionally, employees who experience a shortage of support from their supervisor may become disengaged.

According to Kahn (1990), when employees observe that their supervisors are supporting them, this will let them feel psychologically safe at work. This, in turn, leads to enhanced engagement (Kahn, 1990). May *et al.* (2004), however, empirically examined Kahn's (1990) model of engagement and revealed that supervisor support is associated with psychological safety, which helps in demonstrating a safe workplace that encourages workers to take risks at work which eventually boosts the levels of engagement (May *et al.*, 2004). In a similar vein, Harter *et al.* (2002) report that support from a supervisor is considered to be one of the pivotal factors that assists in enhancing engagement.

In relation to JD-R theory (Bakker & Demerouti, 2008, 2017), job resources (e.g. supervisor support) begin a motivational path which leads to work engagement. This, in turn, leads to better performance (Bakker & Demerouti, 2007, 2008, 2017; Mauno *et al.,* 2007; Bakker *et al.,* 2003a). A meta-analysis conducted by Crawford *et al.* (2010) reveals that there is a positive association between supervisor support and work engagement. Added to that, Ling Suan and Mohd Nasurdin's (2016) study in Malaysia and based on a data gathered from 438 employees reveals that supervisor support associated positively with work engagement. In contrast, Saks

(2006) study and based on data from 102 workers in diverse professions and organisations in Canada found that supervisor support had no statistically significant effect on both job and organisational engagement. Additionally, Menguc *et al.* (2013) show that supervisor support had no influence on work engagement. Accordingly, the findings of previous research on the association between supervisor support and work engagement are inconsistent (Hidayah Ibrahim, Suan, & Karatepe, 2019). As such, Hidayah Ibrahim *et al.* (2019, p. 692) mention that "the relationship between the two constructs is not straightforward in every occupation". In relation to the discussion above, the present thesis posits:

H3: There is a positive association between supervisor support and work engagement.

3.3 The moderating role of workload on the association between the predictors and work engagement

Spector and Jex (1998, p. 358) define workload as "the sheer volume of work required of an employee". According to the JD-R theory (Bakker & Demerouti, 2008), job demands (e.g. workload) moderate the association between both job and personal resources on the one hand, and work engagement on the other. The reason behind choosing workload in the current thesis is due to the fact that the population in Jordan has increased dramatically as a result of the increasing numbers of refugees from surrounding countries such as Syria (Department of Statistics, 2019). This in turn, has resulted in an increasing number of customers that employees have to deal with.

The results of previous work on the association between job demand and work engagement are inconsistent (Cole *et al.*, 2012). According to Schaufeli and Bakker (2004, p. 296), "although job demands are not necessarily negative, they may turn into job stressors when meeting those

demands requires high effort and is therefore associated with high costs that elicit negative responses such as depression, anxiety, or burnout". In this context, the literature has distinguished between two kinds of demands i.e. hindrance and challenge (LePine *et al.,* 2005; Crawford *et al.,* 2010). Whilst the former can derail personal development and goal achievement (Cavanaugh *et al.,* 2000; Crawford *et al.* 2010) and is connected with low motivation (Lepine *et al.,* 2005), the latter, on the other hand, provides scope for workers to learn and grow (Crawford *et al.* 2010). It enhances employees' abilities and confidence by giving them the experience to better deal with their work tasks. By using 101 samples, Lepine *et al.*'s (2005) meta-analysis of two-dimensional demands (i.e. challenge and hindrance demands) was conducted with regards to demands' relationships with motivation, strains, and performance. The findings reveal that hindrance demands had both a direct and indirect negative influence on performance, when taking into account motivation and strains. In contrast, challenge demands, however, had a positive influence on performance both directly and indirectly during motivation.

On the other hand, Demerouti and Bakker (2011) mention that the distinguishing of challenge and hindrance demands may not be the same for each job. In a similar vein, Bakker and Sanz-Vergel (2013) criticise this classification of job demands into challenge and hindrance demands and argue that this categorisation is not straightforward and it could depend on the occupational sector. Whilst Crawford *et al.* (2010) considered work pressure to act as challenge demand and emotional demands to act as hindrance, Bakker and Sanz-Vergel (2013) contradict this classification and conclude that more research is needed.

Furthermore, Crawford *et al.* (2014, p. 67) demonstrate that even though workload involves the possibility of raising expectations and boosting meaningfulness in the workplace, "there

comes a point where work demands can overwhelm individuals' capacity and trigger negative emotions that make them feel unable to adequately deal with these demands". For instance, Bakker *et al.* (2006) show that the engagement level fell among police officers who recognised that their job tasks were complicated.

In addition, Bakker and Demerouti (2017) mention that there is a necessity to examine the moderators for job demands-resources relationship. They also asked whether workload affects this relationship. Therefore, this thesis posits:

> *H4: Workload moderates the association between religiosity and work engagement, such that the positive association between religiosity and work engagement is stronger at higher levels of workload than at lower levels of workload.*
>
> *H5: Workload moderates the association between training and development and work engagement, such that the positive association between training and development and work engagement is stronger at higher levels of workload than at lower levels of workload.*
>
> *H6: Workload moderates the association between supervisor support and work engagement, such that the positive association between supervisor support and work engagement is stronger at higher levels of workload than at lower levels of workload.*

3.4 The outcomes of work engagement

The current thesis addresses two dependent or outcome variables of work engagement namely, affective commitment and turnover intention.

3.4.1 The association between work engagement and affective commitment

The interest among scholars in studying work engagement is increased because it perceived to be a mechanism by which it is possible to achieve desirable outcomes for both employees and organisations (Banihani & Syed, 2017; Bhatnagar, 2012; May *et al.*, 2004; Rana, 2015; Saks, 2006; Sonnentag, 2011). In this respect, Bakker and Demerouti (2008) mention that engaged employees have greater level of performance for the following reasons. Engaged employees frequently practice better health, practice positive emotions, are capable of using their resources, and they share their passion of work with other employees. "These positive experiences and emotions are likely to result in positive work outcomes" (Saks, 2006, p. 607). Accordingly, one of the positive outcomes that may result from having engaged workers is being committed to their organisations (Bakker & Schaufeli, 2008; Gupta, 2017; Llorens *et al.*, 2006; Saks, 2006; Yalabik *et al.,* 2015). Based on this, the present thesis argues that as the level of engagement in the workplace increases, this in turn may play a role in facilitating and enhancing the employees' commitment to their firms.

As mentioned in chapter two, Meyer and Allen (1991) conceptualised organisational commitment as a concept comprising the three dimensions namely, "affective, continuance and normative" commitment. However, among these three aspects of commitment, affective commitment is considered as the most valuable indicator that reflects the employees' attachment to the organisation (Solinger *et al.*, 2008; Meyer *et al.*, 2002). Likewise, Mercurio (2015) mentions that affective commitment is considered as the crucial element of organisational commitment. As such, it was selected for the current thesis.

Affective commitment refers to "an employee's emotional attachment to, identification with, and involvement in the organisation" (Meyer & Allen, 1991, p. 67). However, some prior research (e.g. Shuck *et al.,* 2011; Yalabik *et al.,* 2013) has positioned affective commitment as a predictor of work engagement. Other studies, on the other hand, have treated affective commitment as an outcome (e.g. Basit, 2019; Lee & Ok, 2016; Richardsen, Burke, & Martinussen, 2006; Saks, 2006). For instance, Saks (2006) shows that both job and organisational engagement were positively connected to organisational commitment. In addition, Basit (2019) revealed a positive connection between work engagement and affective commitment, and that work engagement mediates the connection between the antecedent and the outcomes. However, in his review of the commitment literature, Mercurio (2015) mentions that the principal question for upcoming research is to focus more on identifying the antecedents that enhance affective commitment levels.

In line with the above reasoning, and in response to a call from Aladwan *et al.* (2015) who mention that there is a deficiency of research that concerns commitment in the Middle East in general and in Jordan in particular, the present thesis hypothesises the following:

H7: There is a positive association between work engagement and affective commitment.

3.4.2 The association between work engagement and turnover intention

Turnover intention has received much attention due to the serious consequences that turnover may have on organisations (Aladwan *et al.*, 2013; Carmeli & Weisberg, 2006; Cho, Johanson, & Guchait, 2009; Holtom, Mitchell, Lee, & Eberly, 2008; Joe, Hung, Chiu, Lin, & Hsu, 2018; Karatepe & Shahriari, 2014; Naidoo, 2018; Pitts *et al.*, 2011). In this respect, Aladwan *et al.* (2013, p. 408) mention that "employee intention to quit is widely researched due to its

importance to organisational success and labour productivity. Not only does intention to quit indicate an unfavourable working climate, but it may also result in the loss of an experienced employee and good customer relationships".

According to Carmeli and Weisberg (2006, p. 193), turnover intention is termed as "a conscious and deliberate desire to leave the organisation within the near future". Similarly, Schyns *et al.* (2007, p. 660) define turnover intention as "an employee's intention to voluntarily change jobs or companies".

There are different kinds of losses that can result from high levels of voluntary turnover in organisations. Firstly, turnover creates significant costs such as the cost of recruitment and advertising and the cost of training new workers (Pitts *et al.*, 2011). These issues take time to be accomplished, which may influence the performance of the organisations. Secondly, when employee turnover levels are high, this could influence the effectiveness and efficiency of the firm through, for example, providing low quality of services for clients (Trevor & Nyberg, 2008). Consequently, this could lead to adversely influencing the satisfaction of the customers (Aladwan *et al.*, 2013). Added to that, Lutgen-Sandvik, Hood, and Jacobson, (2016) argue that "high turnover intention can seriously hurt workplace morale and prohibit employees from developing any commitment or identification toward their organisation" (cited in Lin, Tsai, & Mahatma, 2017, p. 1717). Accordingly, it is crucial to determine the factors that play a role in reducing workers' intention to leave their firm.

Previous studies, however, have shown that there are different factors that influence employees' turnover intention. These factors encompass job satisfaction (e.g. Egan, Yang, & Bartlett, 2004; Valentine, Godkin, Fleischman, & Kidwell, 2011), transformational leadership (Ariyabuddhiphongs & Kahn, 2017), organisational commitment (Schwepker, 2001),

perceived organisational support (Cho *et al.*, 2009), quality of work life (Jabeen, Friesen, & Ghoudi, 2018), employee empowerment (Kim & Fernandez, 2017), HPWP (Gkorezis, Georgiou, & Theodorou, 2018), flexible work arrangements (Azar, Khan, & Van Eerde, 2018), and resilience (Dai, Zhuang, & Huan, 2019).

In relation to the work engagement literature, previous studies provide evidence which demonstrates that workers who are engaged are less likely to willingly leave their firm (Agarwal & Gupta, 2018; Bhatnagar, 2012; Saks, 2006; Sheehan, Tham, Holland, & Cooper, 2019; Shuck *et al.*, 2011; Karatepe & Avci, 2017). For example, Agarwal and Gupta (2018) based on a sample of 1302 managers in Indian firms show that work engagement is strongly and negatively connected with intention to quit. Likewise, Karatepe and Avci (2017) drawing on data collected from nurses working in Cyprus reveal that engagement is linked negatively with intention to turnover. In addition, based on a data gathered from 283 employees, Shuck *et al.* (2011) reveal that work engagement is negatively and strongly linked to intention to leave.

According to Aladwan *et al.* (2013), there is a lack of studies that investigated turnover intention in the Middle Eastern states in general, and in Jordan in particular. In relation to the above discussion, and in response to a call from Aladwan *et al.* (2013), the present thesis posits the following:

H8: There is a negative association between work engagement and turnover intention.

3.5 The mediating role of work engagement between the predictors and outcomes

Empirical evidence has supported the idea that work engagement mediates the association between the antecedents and consequences (Shantz, Alfes, Truss, & Soane, 2013; Sheehan *et*

al., 2019; Saks, 2006; Sonnentag, Mojza, Demerouti, & Bakker, 2012). Shantz *et al.* (2013), for example, reveal that work engagement mediates the connection between the antecedents (i.e. task significance, task variety, feedback, and autonomy) and the outcomes such as task performance. In addition, Saks (2006) shows that both job and organisational engagement mediated the association between the antecedents and consequences such as job satisfaction. Moreover, Alfes *et al.* (2013a) reveal that work engagement mediated the association between HRM practices and organisational citizenship behaviour and turnover intention. Added to that, Rich *et al.* (2010) drawing on a data collected from 245 firefighters reveal that engagement mediates the connection between three predictors namely, perceived organisational support, value congruence, and core self-evaluations, and two criterion variables i.e. organisational citizenship behaviour and task performance.

According to JD-R theory (Bakker & Demerouti, 2008, 2017), work engagement mediates the association between both job and personal resources and the outcomes. That is, work engagement is the mechanism by which the predictor variables are connected with the outcomes. As mentioned in chapter two, JD-R theory has gained support from various empirical research (e.g. Agarwal & Farndale, 2017; Bakker & Demerouti, 2007; Conway *et al.*, 2016; Gawke *et al.*, 2017), and previous studies provide support for this theory which shows that work engagement acts as a mediator on the association between a set of predictors and outcome variables (e.g. Bakker & Demerouti, 2008; Johnson & Jiang, 2017; Schaufeli & Bakker, 2004; Sulea, Virga, Maricutoiu, Schaufeli, Zaborila Dumitru, & Sava, 2012). For instance, Johnson and Jiang (2017) reveal that the association between meaningful work and. "work-to-life enrichment" is mediated by work engagement.

Despite the fact that prior research has supported the mediating role of work engagement among different antecedents, the present study, offers a way of extending the JD-R model further. That is, in addition to the use of job resources i.e. training and development and supervisor support, the present thesis, however, further extends the JD-R model by addressing and empirically investigating the role of religiosity as a personal resource in this model, and in this way, the present thesis complements previous work by Abu Bakar *et al.* (2018).

Furthermore, previous studies in the engagement literature that used JD-R theory have ignored the role of personal resources in predicting work engagement (Agarwal & Gupta, 2018). In addition, the majority of research to-date has addressed very limited personal resources including, self-efficacy, self-esteem, resilience, and optimism (Cooke *et al.*, 2016; Xanthopoulou *et al.*, 2007a). By focusing on investigating the role of religiosity as a personal resource in predicting work engagement in the context of JD-R theory greater attention will be directed towards those variables which have not been explored within the literature. As mentioned above, JD-R theory (Bakker & Demerouti, 2008, 2017) assumes that work engagement acts as a mediator on the connection between both personal and job resources on the one hand, and the outcome variables on the other. In line with the above discussion, the present thesis proposes the following six hypotheses:

H9: Work engagement will mediate the association between religiosity and affective commitment.

H10: Work engagement will mediate the association between religiosity and turnover intention.

H11: Work engagement will mediate the association between training and development and affective commitment.

H12: Work engagement will mediate the association between training and development and turnover intention.

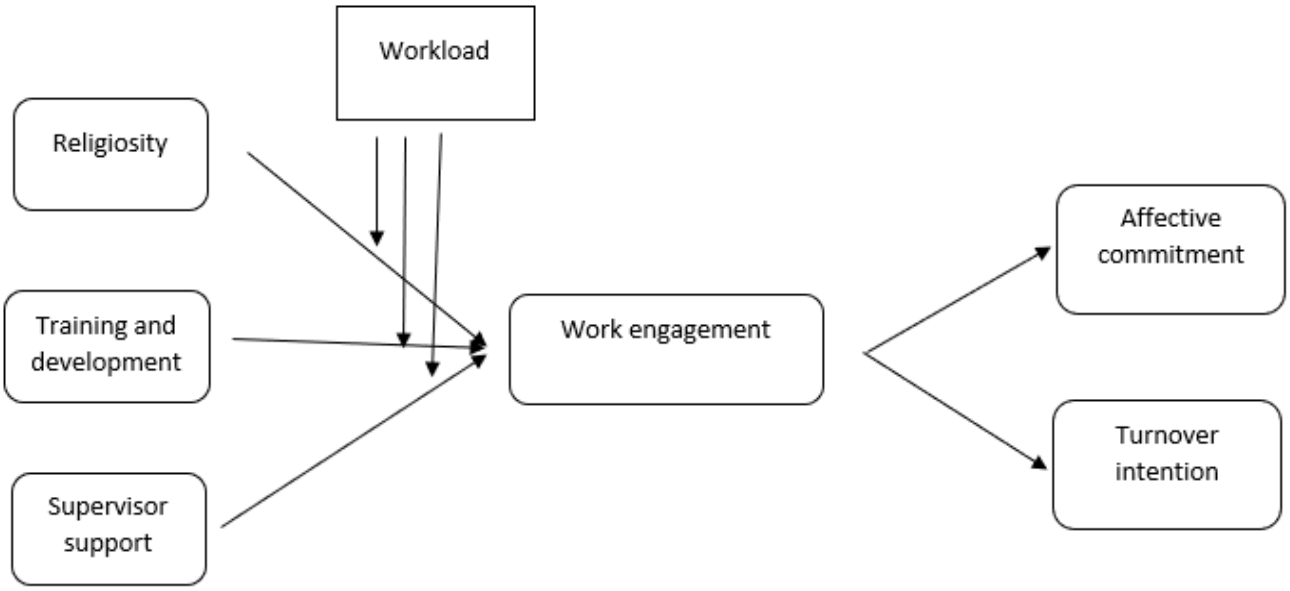
H13: Work engagement will mediate the association between supervisor support and affective commitment.

H14: Work engagement will mediate the association between supervisor support and turnover intention.

3.6 Research model and the study hypotheses

Drawing on the reviewed literature, the following conceptual model is formulated below in Figure 3.1.

Figure 3. 1 Research model



In relation to the reviewed literature and the above research model, the following 14 hypotheses have been developed below in Table 3.1.

Table 3. 1 Study hypotheses

No.	Study hypotheses
H1	*There is a positive association between religiosity and work engagement.*
H2	*There is a positive association between training and development and work engagement.*
H3	*There is a positive association between supervisor support and work engagement.*
H4	*Workload moderates the association between religiosity and work engagement, such that the positive association between religiosity and work engagement is stronger at higher levels of workload than at lower levels of workload.*
H5	*Workload moderates the association between training and development and work engagement, such that the positive association between training and development and work engagement is stronger at higher levels of workload than at lower levels of workload.*
H6	*Workload moderates the association between supervisor support and work engagement, such that the positive association between supervisor support and work engagement is stronger at higher levels of workload than at lower levels of workload.*
H7	*There is a positive association between work engagement and affective commitment.*
H8	*There is a negative association between work engagement and turnover intention.*
H9	*Work engagement will mediate the association between religiosity and affective commitment.*
H10	*Work engagement will mediate the association between religiosity and turnover intention.*
H11	*Work engagement will mediate the association between training and development and affective commitment.*
H12	*Work engagement will mediate the association between training and development and turnover intention.*
H13	*Work engagement will mediate the association between supervisor support and affective commitment.*
H14	*Work engagement will mediate the association between supervisor support and turnover intention.*

3.7 Chapter summary

The variables of interest for this thesis are religiosity, training and development, supervisor support, work engagement, workload, affective commitment, and turnover intention. Based on the research model in Figure 3.1, and in relation to the JD-R theory, religiosity, training and development, and supervisor support are considered as predictors, work engagement is a mediator, workload is the moderator variable, and both affective commitment and turnover intention are the dependent variables. The next chapter presents the research methods used.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 Introduction

This chapter illustrates the research philosophies and determines the philosophical position and the methodology employed in the current thesis. As such, it encompasses the subsequent sections. Firstly, it discusses research philosophy and it justifies the philosophy utilised. Secondly, an explanation of the research design for the purpose of justifying the strategies and methods utilised in this thesis is presented. Thirdly, the process of questionnaire development is described and the measurement scales used are identified. This is followed by a discussion of the population, the sampling technique and the sample size. Procedures for data collection and analysis are presented. Ethical considerations and a summary of the chapter are offered.

4.2 Research philosophy

A research philosophy includes significant assumptions about how the researcher perceives the world (Saunders, Lewis, & Thornhill, 2009). In this context, Easterby-Smith, Thorpe, and Jackson (2012) state that understanding research philosophy is an important issue for three reasons. Firstly, it can assist in identifying and explaining the research design. Secondly, having a knowledge of philosophy helps the researcher to identify research designs which are suitable to adopt in comparison to other approaches. Thirdly, it may help the researcher to identify and understand other designs that are not within his/her familiarity. However, there are different standpoints regarding the way to define research and how to conduct it. From this point, it is important that the researcher has considered the suitable paradigm to be adopted when designing his or her study. Saunders *et al.* (2009, p.118) define paradigm as "a way of

examining social phenomena from which particular understandings of these phenomena can be gained and explanations attempted". Likewise, paradigm is defined as "a world view, a general perspective, and a way of breaking down the complexity of the real world" (Patton, 1975, p.15). However, Guba (1990) argues that paradigms respond to three primary questions:

1- Ontological: "What is the nature of reality?"
2- Epistemological: What is the nature of the relationship between the researcher and the research?
3- Methodological: How should we discover and find the knowledge?

4.2.1 Ontology

Ontology largely surrounds "the nature of reality" (Guba, 1990, p. 18). It is also defined as the view of how the researcher realises reality (Wahyuni, 2012). Ontology represents the scholars' standpoint that will guide the research (Whitehead, 2007). This gives rise to questions from norms that scholars have about the way they understand the world (Saunders *et al.,* 2009). However, some scholars (e.g. Saunders *et al.*, 2009; Morgan & Smircich, 1980) have differentiated between two types of ontology namely, objectivism and subjectivism. The next sections explain these two facets of ontology for the purpose of determining the suitable one to be utilised in this study.

4.2.1.1 Objectivism

The objectivist view of social science emerged from the natural sciences where because of the high levels of success from this method, social science scholars adopted this standpoint in order to objectively examine social science entities (Holden & Lynch, 2004). Objectivism is an

ontological view that implies that social phenomenon exists in reality outside social researchers (Saunders *et al.,* 2009; Greener, 2008). In a similar vein, Jonassen (1991) mentions that objectivism embraces the viewpoint that there is an external reality and the researcher is independent from the research. In this respect, the scholar will be able to conduct the study without bias (Ponterotto, 2005). In addition, an objectivist view of the social world recognises reality as a "concrete structure" and assumes that knowledge can be acquired through observation and statistical tools and techniques, and this helps to examine the relationships between concepts (Morgan & Smircich, 1980). However, the objectivist viewpoint is criticised because it arises from the natural sciences and as such it is considered not appropriate to be used in social sciences due to the complexity of the interactions amongst social actors (Cohen, Manion, & Morrison, 2007). Conversely, Holden and Lynch (2004) state that much management research follows the assumption that there is an objective reality and this reality can be found and informed to others. As this thesis focuses on examining the relationships between concepts, an objectivist ontology will be adopted for the current thesis.

4.2.1.2 Subjectivism

Subjectivism is an ontological position that assumes that social actors' attitudes and perceptions have an impact in forming the social phenomena (Saunders *et al.,* 2009). Subjectivists assume that reality is affected by the communication between the researcher and his/her respondents, hence, it is socially constructed (Ponterotto, 2005). In a similar vein, subjectivists recognise that reality is not independent, rather, it is constructed in people's minds (Greener, 2008). In addition, when the researcher focuses on the details of a phenomenon, this provides a good opportunity to understand the reality (Remenyi, Williams, Money, Swartz, 1998). Therefore, this view is connected with the philosophy of social constructivism

(Saunders *et al.,* 2009). By following the philosophy of social constructivism, subjectivists assume that it is crucial for the researcher to study and understand the subjective meanings of the individual's actions so that these actions can be understood (Creswell, 2014; Saunders *et al.,* 2009). Opposite to objectivism, subjectivism does not separate the researcher from the research and there is a high interaction between the researcher and the respondents.

4.2.2 Epistemology

Epistemology focuses on what can be considered as acceptable knowledge in an area of research (Bryman & Bell, 2007; Saunders *et al.,* 2009). It is also defined as the theory of knowledge and "how we know what we know" (Creswell, 2003; Creswell, 2014). Tashakkori and Teddlie (1998) define epistemology as the relationship between the researcher and the research. In addition, epistemology is regarded as the way of judging knowledge in a domain of research (Johnson & Duberley, 2000). The next sections discuss the most common epistemological philosophies employed in management research namely, positivism and social constructivism, i.e. interpretivism (Goulding, 2002; Ngulube, 2015). Both positivism and social constructivism are explained in this chapter as the two dominant philosophies, which can be employed to investigate the reality of a situation. This will help to determine the most appropriate philosophy for the present study.

4.2.2.1 Positivism

Positivism is a philosophical position that signifies the use of natural scientific approaches to the research of social sciences (Burrell & Morgan, 2016; Greener, 2008; Saunders *et al.,* 2009). This philosophy was first advocated in the nineteenth century by the French philosopher Auguste Comte (Easterby-Smith *et al.,* 2012) who argued that reality is external and objective.

A positivist school of thought tends to link to quantitative methods; here the emphasis is on observable phenomena that can be measured objectively. Since the nineteenth century, positivism has been widely utilised in social science research by the use of statistical techniques and tools to explain the relationships between concepts. It suggests an objective way in which the researcher is independent from what is being studied (Ponterotto, 2005; Vieira, 2010; Remenyi *et al.,* 1998), and the reduction of bias (Saunders *et al.,* 2009). Knowledge according to this philosophy is deemed to be discovered and confirmed during observations and measurements of certain phenomena.

Easterby-Smith *et al.* (2012, p. 22) state that "the key idea of positivism is that the social world exists externally, and that its properties should be measured through objective methods, rather than being inferred subjectively through sensation, reflection or intuition". In this context, theory is investigated in a deductive manner by using formal statistical tools to test hypotheses and examine the association between variables (Creswell, 2014; Wood & Welch, 2010). Similarly, Chen and Hirschheim (2004) mention that this philosophy is concerned with the hypothetic-deductive way to test theories, and this approach should allow either confirmation or rejection of the proposed hypotheses and seek for generalisable findings. In this respect, the social scholar under the positivist philosophy plays a role as an observer of an external reality (Cohen *et al.,* 2007).

However, the positivist philosophy has been criticised in that it restricts the interaction between the researcher and the respondents where this interaction will help to understand human behaviour (Cohen *et al.,* 2007). In other words, researchers in this philosophy isolate themselves from the field of research that they are doing (Perry, Riege, & Brown, 1999). In addition, scholars (e.g. Benton & Craib, 2011; Clarke, 2009) argue that the relationships

between social scientists and the field they study are different from those between natural scientists and the subjects they are studying.

In contrast, Johnson, Onwuegbuzie, and Turner, (2007) posit that one of the strengths for adopting a positivist philosophy is that study findings can be generalised and also can be replicated on various contexts. In addition, positivists observe, using scientific tools and techniques, as neutral bystanders, that permits them to override or minimise potential human biases so that they can present reality and note bare facts (Wicks & Freeman, 1998; Check & Schutt, 2011). Similarly, when the researcher is independent from what is being observed, he/she will be in a place to observe the phenomenon objectively and draw conclusions from scientific measurements without bias (Bryman & Bell, 2007).

4.2.2.2 Social constructivism

Social constructivism is a philosophy that advocates that "reality is not objective and exterior, but is socially constructed and given meaning by people" (Easterby-Smith *et al.*, 2012, p. 23). Social constructivists consider that individuals try to understand the world and where those individuals establish their interpretation of the world based on subjective meanings from the experience they gained (Creswell, 2014). In this respect, Robson (2011) argues that meaning is constructed by the interaction between the scholar and the social world. Social constructivism, also called interpretivism, concentrates on the way that the social world is interpreted by the people who engaged in it (Robson, 2011).

Whilst a positivist philosophy advocates that the scholar has to be separate from the inquiry, there is an agreement among social constructivists that the researcher is part of the research and also the social scientist is interacting with the participants. In a similar vein, Whitehead

(2007) states that a social constructivist approach includes a dialogue between the social scientist and the research participants in order to create a meaningful reality in a cooperative manner. This interaction will help the researcher to understand the variances of human behaviour in terms of their feelings and their way of thinking (Saunders *et al.*, 2009). Added to that, Easterby-Smith *et al.* (2012) state that social constructivists follow inductive reasoning where thoughts are influenced by collecting valuable data during the interaction with participants. Here, in inductive reasoning the researcher begins with gathering data, then the ideas and notions arise which leads to theory development (Robson, 2011).

Despite the fact that social constructivism provides the opportunity to gain in-depth knowledge and more enriched comprehension of phenomena, it can be difficult to produce generalisable findings. In addition, Biedenbach and Müller (2011) argue that a social constructivist philosophy aligned with qualitative data can be considered to some extant limited and context-bound.

4.2.2.3 The choice of philosophy

The way of choosing the research philosophy for this study is affected by the objectives and questions of the research. Based on the above discussion, and due to the purpose of this research of examining the relationships amongst different variables, the present thesis adopts a positivist philosophy. Furthermore, Bryman (2016) argues that the role of research is to test theories and also deliver outcomes for the development of laws. This is clearly the aim of quantitative studies. In this context, Benbasat, Goldstein, and Mead (1987) mention that no one research philosophy is better than any other philosophy, each one has its advantages and disadvantages. Similarly, Saunders *et al.* (2009, pp. 108-109) argue that there is no one

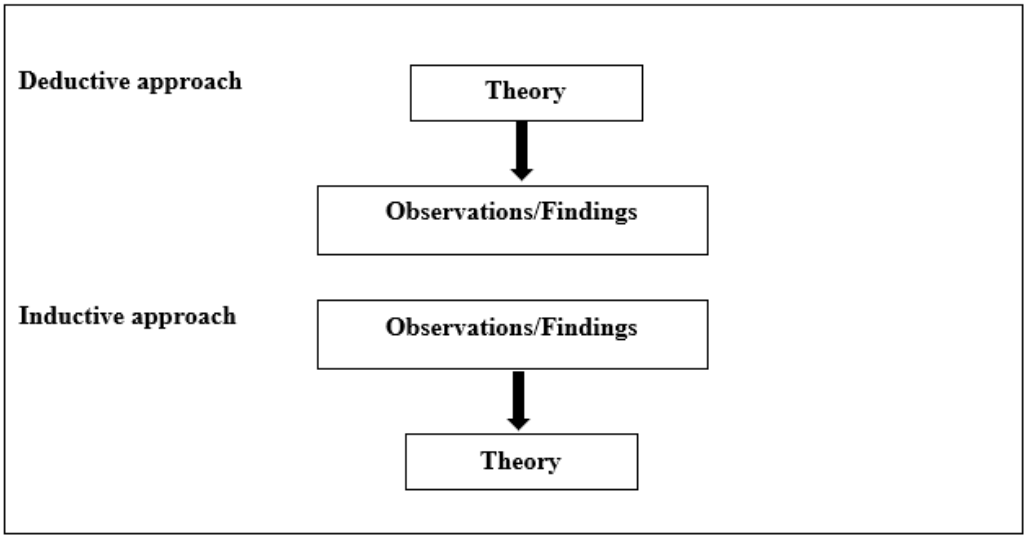
research philosophy better than the other, rather, "they are better at doing different things. As always, which is better depends on the research questions you are seeking to answer". Therefore, the philosophy that will be adopted in this thesis is influenced by the research objectives and questions. Based on this argument, positivism is chosen as the most suitable mechanism to objectively measure engagement, reduce bias and produce generalizable results. Social constructivism, in contrast, would arguably not achieve this as it is too imprecise and open to subjective interpretation.

4.2.3 Deductive and inductive reasoning

After determining the philosophical position for the present study, it is vital to choose the suitable research approach that will be used. There are two kinds of research approaches that are commonly utilised in research, the inductive approach and deductive approach (Saunders *et al.,* 2009; Gray, 2013; Bryman & Bell, 2015). The selection of appropriate reasoning style is essential as it helps to answer the research questions and assists in deriving conclusions.

In deductive reasoning (theory testing), the researcher begins with a theory, then deduces hypotheses in order to examine and test the chosen theory (Walliman, 2015). In contrast, in inductive reasoning (building theory), the scholar begins with details such as gathering data through interviews and observation which leads to generating theory (Greener, 2008). Figure 4.1 signifies the difference between the deduction and induction reasoning.

Figure 4. 1 Deductive and Inductive Reasoning



Source: Adapted from Bryman (2016, p. 23).

Gray (2013) states that testing hypothesis in the deductive style gives the researcher the ability to explain the associations between concepts that form the theory. After that, the theory could be modified or confirmed. This implies that the deductive approach is suitable for quantitative research, where the main goal is to examine the relationship amongst the study variables. In contrast, the inductive approach is suitable for qualitative studies where the main purpose is to develop an understanding of certain phenomenon (Saunders, Lewis, & Thornhill, 2012, 2016). Table 4.1 outlines the distinction between deductive and inductive approaches.

Table 4. 1 Distinction between deductive and inductive approaches

Deduction emphasises	Induction emphasises
• scientific principles • moving from theory to data • the need to explain causal relationships between variables • the collection of quantitative data • the application of controls to ensure validity of data • the operationalisation of concepts to ensure clarity of definition • a highly structured approach • researcher independence of what is being researched • the necessity to select samples of sufficient size in order to generalise conclusions	• gaining an understanding of the meanings humans attach to events • a close understanding of the research context • the collection of qualitative data • a more flexible structure to permit changes of research emphasis as the research progresses • a realisation that the researcher is part of the research process • less concern with the need to generalise

Source: Adapted from Saunders et al. (2009, p. 127).

According to the present thesis, the aim is to test and extend the JD-R theory in the Jordanian context. As such, hypotheses are developed for the purpose of examining the relationship among the variables of the study. Therefore, the present study has adopted the deductive approach as this approach will help to achieve the aim of the study and answer the research questions, and it helps to generalise the findings.

After picking out the research approach, the next section discusses the research design.

4.3 Research design

The concept of research design considers the plans and procedures that are embraced in order to achieve the objectives of the study (Bellini, 2017). In a similar vein, research design is termed as an overall plan of how a researcher goes about answering the research questions (Saunders *et al.,* 2012). However, the selection of each element of the research design is significant as this selection has an influence on the study outcomes (Miller & Salkind, 2002). In this context, the choice of each component of the research design is affected by the questions that the current thesis is willing to answer.

In the research design process, the researcher determines the most appropriate methodological choice. The next step is selecting the suitable research strategy, method of collecting data, and time-span, and provide justifications for the selection. The next section will focus on the first element of the research design namely, the methodological choice.

4.3.1 Methodological choice

In management research, the two research methodologies that are widely used among scholars are quantitative and qualitative methodologies (Saunders *et al.,* 2009). The selection of either a quantitative or qualitative methodology is essential in the process of research design. In order to choose the most suitable methodology to be adopted in the present thesis, it is crucial to understand the characteristics of each one. Quantitative research focuses primarily on the use of numerical data for the purpose of testing a theory by adopting the deductive approach (Saunders *et al.,* 2009). In other words, the essence of quantitative methodology is the examination of the relationships between concepts (Punch, 2003). In contrast, qualitative methodology "usually emphasises words rather than quantification in the collection and

analysis of data" (Bryman & Bell, 2015, p. 392). Furthermore, qualitative research focuses on human feelings about a certain phenomenon and provides deeper understanding of individual behaviours, and this methodology follows the inductive approach (Creswell, 2009).

Even though the qualitative research offers in-depth understanding of individual feelings and behaviours, the generalisation of the findings is limited (Steckler, McLeroy, Goodman, Bird, & McCormick, 1992; Creswell, 2003, 2009; Williams, 2007). Conversely, the use of quantitative methodology enhances the opportunity to generalise the findings of the study to the wider population and helps in reducing bias (Cooper & Schindler, 2008; Yilmaz, 2013).

The current thesis aims to test and extend JD-R theory in the Jordanian context and examine the relationship between variables that comprise this theory using deductive reasoning. Accordingly, this thesis embraces the quantitative method as this is best aligned to the objectives of the study. Furthermore, this methodology will increase the possibility of generalising the results to the wider population and reduce the researcher's bias. In addition, the present thesis will contribute to the current literature through complementing qualitative work during the examination of the extended JD-R theory with religiosity empirically (see Abu Bakar *et al.*, 2018 for a review). Moreover, the investigation of the associations between the antecedents and outcomes of work engagement in Jordanian telecom sector will be important to the study population because the findings of this study will help this sector to develop insights regarding the importance of work engagement in enhancing the levels of employees' commitment and minimise turnover intention.

The review of the work engagement literature in Chapter 2 showed that the majority of the studies in this field adopted a quantitative method (see Bailey *et al.*, 2017 for a review), which resulted in a considerable development of the field during the investigation of the predictors

and outcomes of work engagement. Therefore, in line with previous studies in work engagement and based on the research questions and objectives of this study, the present study adopts a quantitative method.

4.3.2 Research strategy

The selection of the appropriate research strategy is guided by the research objectives and questions. According to Saunders *et al.* (2012), research strategy refers to a plan of action that helps to answer the questions of the study. However, in order to answer the questions of the research, there are different research strategies that can be embraced, such as, surveys, case studies, experiments, ethnography, grounded theory, and action research (Saunders *et al.*, 2012).

In the present study, a survey strategy is utilised. The justification for the selection of this strategy is due to the nature of the research questions. A survey strategy is considered as the most frequently used strategy in quantitative studies and it helps to save time and cost (Saunders *et al.*, 2012). In addition, this strategy commonly employs questionnaires for the purpose of reaching a large sample (Saunders *et al.*, 2009). Furthermore, it gives the researcher the ability to gather data from a larger sample size which, in turn, enhances the opportunities to generalise the findings of the study (Easterby-Smith, Thorpe, & Jackson, 2015). Moreover, this strategy collects data that help to examine and clarify the relationship amongst different variables (Gray, 2013; Saunders *et al.*, 2016).

4.3.3 Method of data collection

Regarding the method of collecting data, the main aim of the current thesis is to replicate and extend the JD-R theory in the Jordanian context. This will be done by exploring the relationship

amongst the following variables (i.e. religiosity, training and development, supervisor support, workload, work engagement, affective commitment, and turnover intention). A self-administered questionnaire was used to survey the Jordanian telecom field so as to reach generalisable findings during the examination of the association between the study variables.

The rationale behind employing this method is the necessity to examine a larger sample size for the purpose of generalising the results of the research. Added to that, self-administered questionnaires are considered to be more suitable for participants because they can be completed at the speed the participants want and the time they want (Bryman, 2016). Furthermore, the use of a self-administered questionnaire enables the researcher to collect data from different geographical locations, reduces the researcher bias, and provides anonymity for the respondents in answering the questions (Phellas, Bloch, & Seale, 2011). Therefore, when the subject field under investigation is deemed sensitive, this kind of data collection methods is considered appropriate.

4.3.4 Time horizon

Research can be classified in terms of time namely, cross-sectional and longitudinal studies. The former focuses on gathering data from respondents at a certain point of time, whilst the latter entails collecting data from the participants over time (Robson & McCartan, 2016; Bryman, 2016; Collis & Hussey, 2014; Greener, 2008; Saunders *et al.*, 2009). In the present study, cross sectional design is adopted. The reason for adopting this is that it helps to meet the research objectives where this thesis is focusing on examining the relationship between the study variables (Bryman, 2016). Another reason for utilising a cross-sectional design is the limited period of time to complete the study (Greener, 2008; Saunders *et al.*, 2016).

4.4 The process of questionnaire development

This section illustrates the procedure employed in the development of the questionnaire. This procedure encompasses the scales adopted in the present study, the process of translating the questionnaire, the pilot study and the questionnaire final layout.

4.4.1 Measurement scales

Work engagement

Work engagement was measured with the "Utrecht Work Engagement Scale" (UWES-17) developed by (Schaufeli *et al.*, 2002). The work engagement scale consists of three sub-scales namely; vigour, dedication and absorption. In relation to the first dimension (i.e. vigour), it consists of 6 items, the second dimension (i.e. dedication) consists of 5 items, and the third sub-scale comprising 6 items. Previous studies showed that the internal consistency (Cronbach alpha) for the UWES was higher than 0.80 (e.g. Chughtai & Buckley, 2009; Nerstad, Richardsen, & Martinussen, 2010; Soane, Shantz, Alfes, Truss, Rees, & Gatenby, 2013). The items were rated on a 5-point Likert scale range from (1) "strongly disagree" to (5) "strongly agree". Examples of the questions are "At my work, I feel bursting with energy", "I find the work that I do full of meaning and purpose", and "When I am working, I forget everything else around me".

Religiosity

Religiosity was measured with the five items scale established by Kashif, Zarkada, & Thurasamy (2017). One item, "I regularly pray five times a day" was reworded to "I connect to God by praying" for the purpose of using the scale to measure religiosity from both Muslims

and Christians. Items (e.g. “I have a great sense of God’s presence”) were assessed on a 5-point Likert scale range from (1) “strongly disagree” to (5) “strongly agree”.

Training and development

Training and development were measured using the scale developed by Edgar and Geare (2005) with five items. Respondents were asked to indicate their responses on a 5-point Likert scale range from (1) “strongly disagree” to (5) “strongly agree”. Samples of the training and development items are “This organisation has provided me with training opportunities enabling me to extend my range of skills and abilities” and “I get the opportunity to discuss my training and development requirements with my employer”.

Supervisor support

The concept of supervisor support was assessed based on the four items measurement scale established by Rhoades, Eisenberger, and Armeli, (2001). Respondents were asked to report their responses on a 5-point Likert scale ranging from (1) “strongly disagree” to (5) “strongly agree”. Previous literature (e.g. Saks, 2006) showed high reliability for this scale (Cronbach alpha of 0.89). Examples of the scale items are “My supervisor cares about my opinions” and “My supervisor strongly considers my goals and values”.

Workload

Workload was assessed using a five-item scale developed by Spector and Jex (1998). This measurement scale has been utilised in previous studies (e.g. De Cuyper *et al.*, 2010; Mäkikangas & Kinnunen, 2003) and showed high internal consistency (Cronbach alpha). Participants were asked to report their responses on a 5-point Likert scale ranging from (1)

"never" to (5) "always". Example scale items are "How often does your job require you to work very hard?" and "How often does your job require you to work very fast?".

Affective commitment

Affective commitment was assessed by the eight items scale established by Allen and Meyer (1990) and extensively used in the literature. For instance, Kooij and Boon (2018) reported high reliability (0.87) and Demirtas and Akdogan (2015) reported a Cronbach alpha of 0.85. Participants were asked to report their responses on a 5-point Likert scale ranging from (1) "strongly disagree" to (5) "strongly agree". Example scale items are "I would be very happy to spend the rest of my career with this organisation", "I enjoy discussing my organisation with people outside it" and "I think that I could easily become as attached to another organisation as I am to this one" (reverse scored).

Turnover intention

Turnover intention was assessed based on the three items scale developed by O'Driscoll and Beehr (1994). Previous studies (e.g. Cennamo & Gardner, 2008) have used this measurement scale and reported high reliability (Cronbach alpha of 0.89). Participants were asked to report their responses on a 5-point Likert scale ranging from (1) "strongly disagree" to (5) "strongly agree". Example scale items are "I am planning to look for a new job over the next 12 months" and "I would actively search for a new job outside this organisation".

Control variables

Some variables could be related to the research variables under investigation and therefore, may influence the findings of the study. As such, demographic variables were controlled as previous studies demonstrate that some of the demographic variables are connected with work

engagement. For example, Ling Suan and Mohd Nasurdin (2016) reveal that gender acts as a moderating variable on the association between support from supervisor and work engagement, and that this association was stronger for male than for female. Consequently, gender will be considered as a control variable.

In addition, in relation to age, Kim and Kang (2017) show that age is linked to work engagement. Based on a sample of workers in the U.S., they reveal that older staff are more engaged in the workplace. Accordingly, age will be treated as a control variable. Furthermore, tenure was used as a control variable because past studies demonstrate that there is a significant association between tenure and work engagement. Hidayah Ibrahim *et al.* (2019), for instance, show that tenure is linked to work engagement and that workers with longer tenure are more engaged at work. Marital status is used as a control variable because previous literature (Othman & Nasurdin, 2013) demonstrates that marital status is connected with work engagement, and educational level is also treated as control variable as it could influence the engagement levels (Mauno *et al.*, 2007; Othman & Nasurdin, 2013). Overall, in line with prior work engagement studies (e.g. Mauno *et al.*, 2007; Agarwal *et al.*, 2012), and in order to "rule out alternative explanations" (Agarwal *et al.*, 2012, p. 216), the abovementioned variables were controlled.

4.4.2 The questionnaire translation

This thesis employed existing measurement scales. Due to the fact that all of these scales are in the English language, and while the current research focuses on studying the telecom sector in Jordan, the questionnaire was translated into Arabic.

The translation of the questionnaire took place based on the following steps: Firstly, the author translated the questionnaire into the Arabic language (his first language). Secondly, the translated version was sent by the author to three bilingual experts fluent in both Arabic and English to ensure that all the questionnaire items reflect the real meaning of the original ones. Some improvements to the questionnaire items were made based on the feedback received from the experts. Thirdly, both the original version and the translated one were compared for the purpose of ensuring that the change of the language of the measurement tools did not affect the meaning of the survey items. After that, a pilot study was conducted through distributing the questionnaire to employees working in two private sectors in Jordan (i.e. the telecom sector and the banking sector) for the purpose of testing the comprehension of the questionnaire items and the reliability of the scales.

4.4.3 Pilot study

4.4.3.1 Pilot survey

A pilot study was conducted to enhance the questionnaire and to discover the reliability of the scales being employed. In this context, 60 questionnaires were distributed and 42 were completed with 70% response rate. The reason for distributing 60 questionnaires is based on the literature. In this respect, Johanson and Brooks (2010) suggested that 30 respondents are considered as an acceptable sample size for the purpose of conducting the pilot study.

The survey comprised 47 items namely; work engagement (17 items), religiosity (5 items), training and development (5 items), supervisor support (4 items), workload (5 items), affective commitment (8 items), and turnover intention (3 items).

The questionnaire was distributed to employees from both the telecom and banking sectors in September 2018. Since this thesis studies work engagement in the telecom sector, employees who work in this sector and who were involved in the pilot study were excluded from the data collection for the main study.

Benefits from the pilot study were that the comments received from the participants helped in enhancing the coherence of the items along with making the language easier for some items. For example, the language was simplified for two items of the affective commitment scale such as "I think that I could easily become as attached to another organisation as I am to this one" (reverse scored). Table 4.2 illustrates the reliability of scales that resulted from the pilot study.

Table 4. 2 Reliability of the measurement scales

Measurement scales	Cronbach's Alpha
Work Engagement	.810
Religiosity	.890
Training and Development	.668
Supervisor Support	.829
Affective Commitment	.670
Turnover Intention	.869
Workload	.764

The table above shows that all the measurement scales (with exception of training and development and affective commitment) offer acceptable reliabilities where their Cronbach's alpha exceed the threshold value of .70 (Nunnally, 1978). Based on the comments received from participants, some modifications were made to the scale items. As such, the language was

simplified for item (4) in the training and development scale as well as items (4) and (7) in the affective commitment scale, and the layout of the questionnaire was improved.

4.4.4 The survey questionnaire final layout

The front page in the survey explained the aim of the current study and clarified the instructions to the respondents. The respondents were encouraged to participate by assuring them that their responses will be handled anonymously and will stay confidential and it will be also only utilised for academic purposes. In addition, the names of the respondents and their organisations will not be identified in this thesis. Respondents were advised that they had the choice to determine whether to complete the survey or not. Furthermore, the participants had the choice to drop if they wish at any stage.

The first section of the survey contained demographic variables; qualification, tenure, age, marital status, gender, and religion. This is followed by the items of the measurement scales (i.e. work engagement, religiosity, training and development, supervisor support, workload, affective commitment, and turnover intention).

Overall, the important aspects in the development of the questionnaire have been addressed such as providing clear instructions, the ethical considerations, and other questions in an attempt to verify the reliability and validity of the data.

4.4.5 Likert scales

Likert scales are used in the survey as it offers the participants the opportunity to report their responses and the extent to which they agree or disagree with the statements presented. Different Likert scales can be used to record the responses of the participants such as 5- and 7-

point Likert scales. In this context, Dawes (2008) revealed that "the 5- and 7-point scales produced the same mean score as each other, once they were rescaled" (p. 61). Regarding the present research, a 5-point Likert scale is utilised because its straightforward and more obvious (Van Doesum, Van Lange, & Van Lange, 2013), and it helps to minimise the confusion for the participants.

According to Schmee and Oppenlander (2010), in a 5-point Likert scale, the respondents record their responses with 1, 2, 3, 4, and 5. Whereas 1 and 5 refer to the two extremes, 3 reflects a neutral standpoint. The graph of a 5-point Likert scale with its anchors is based on the following:

Strongly disagree	**Disagree**	**Neither**	**Agree**	**Strongly agree**
1	**2**	**3**	**4**	**5**

4.5 Population and sample

4.5.1 The study's population

The unit of analysis in the present thesis is lower level staff working in the Jordanian telecommunication sector. According to the Ministry of Information and Communications Technology (2019), the Jordanian telecommunication sector consists of three main operators. These companies were designated as the study population. The rationale behind choosing this sector is based on the following: Firstly, it is considered as one of main pillars that enhancing the Jordanian national economy (Hardan & Shatnawi, 2013). Secondly, according to the Arab

Advisors Group (2015), the Jordanian telecommunication sector is ranked as the second most competitive market in the Middle East. Thirdly, scholars have recommended that engagement research is needed in various cultural contexts and sectors (e.g. Bailey *et al.*, 2017; Kim *et al.*, 2013). Fourthly, few studies, if any, have used JD-R model to conduct an engagement study in Jordan, particularly, the Jordanian telecommunication industry. According to the Telecommunication Regulatory Commission (2019), the population of the present thesis is 4045. However, the focus on lower level employees is influenced by the literature. As mentioned earlier, this thesis will complement Abu Bakar *et al.* (2018) by examining the link between religiosity and work engagement empirically. Added to that, Abu Bakar *et al.*'s (2018) study is limited to managers who may show higher engagement levels than employees. They further mention that without investigating the role of the religiosity on work engagement of other groups of workers, especially at the lower level, they were unable to ascertain the impact of religiosity on other positions within the workforce. Accordingly, the present study will address this limitation by investigating the role of religiosity from the perspective of lower level employees in the Jordanian telecommunication industry.

4.5.2 Sampling technique

A non-probability sampling technique was used. This sampling technique was utilised because the probability of any respondent being chosen was not known (Saunders *et al.*, 2009). In contrast, Rajalakshmi and Gomathi (2015, p. 296) state that "when elements in the population have a known chance of being chosen as subjects in the sample, we resort to a probability sampling design". Beneath a non-probability sampling protocol there are various kinds of sampling such as, convenience, snowball, and quota sampling (Greener, 2008). A convenience sampling technique was adopted in this study to obtain an adequate sample size in a short time

and low cost, and also it helps to gather beneficial data which would be difficult to collect using other sampling protocols (Baran & Jones, 2016). According to Greener (2008, p. 48), this sampling protocol "is chosen for ease or convenience rather than through random sampling". Similarly, Black (2009) states that participants in the sample are picked out on the basis of the researcher's convenience in which he/she chooses respondents that are nearby, willing to participate and easily available. Consequently, employing convenience sampling may be flawed as it may not represent the whole population (Saunders *et al.,* 2009). In order to minimise this concern, the questionnaires were distributed to different geographical locations in Jordan in order to enhance the external validity (Cohen *et al.,* 2007).

4.5.3 Sample size

One of the critical issues facing researchers is determining the suitable sample size for their studies. Saunders *et al*. (2009) argue that a larger sample size enhances the opportunity for the researchers to generalise their results. According to Israel (1992), an appropriate sample size could be determined based on different strategies. These strategies are: using a sample size of studies similar to the study you plan; using the whole population as a sample when the population is small; employing formulas to determine a sample size; or using published tables.

Cohen *et al.* (2007) mention that at least thirty respondents for each variable within the entire model of the study can be considered as an adequate sample size. However, other scholars published tables to be used as a rule of thumb. As an example, Saunders *et al*. (2009) suggest a guide for an appropriate size of the sample for various population sizes. Saunders and colleagues recommend that if the population of the study is 5000, then the number of respondents required is 357 at 95% level of confidence, 5% margin of error.

Since the population of the current study is 4045 (Telecommunication Regulatory Commission, 2019), and the valid questionnaires received are 383. It can be argued that the sample size obtained is adequate and enables generalisation from the study.

4.6 Data collection procedure

The self-administered questionnaire was distributed to employees working in the telecommunication sector. Based on an initial contact that was made with human resource departments in the telecom companies by means of personal visits and phone calls, the questionnaires were distributed by the researcher in the north, south, and middle of Jordan from October to November 2018. After discussing the way of distributing the questionnaires, telephone calls were made with these departments in an attempt to enhance the response rate. After that, questionnaires were gathered manually.

A total of 700 questionnaires were distributed out of which 394 questionnaires were received. 11 of the returned questionnaires were excluded since they were not fully completed. Consequently, 383 valid questionnaires were used in the analysis of the main study with a 54% response rate.

4.7 Procedures for data analysis

This section discusses the phases in the analysis of data. Firstly, the data was entered and coded. Secondly, the data was checked in order to determine any missing values. Thirdly, descriptive statistics such as standard deviations and means were presented. Fourthly, the reliability and validity of the measurement tools are offered. Finally, hypothesis testing is discussed.

4.7.1 Data coding

All variables included in the survey were named and coded. This includes all items of the scales along with the demographic data. In order to analyse the data, the thesis variables were entered into SPSS, and the reverse-scored items were handled.

4.7.2 Missing data

Missing data is considered as one of the most common issues in survey research (Bennett, 2001; Karanja, Zaveri, & Ahmed, 2013). There are different methods that could be employed to handle missing data such as listwise deletion, pairwise deletion, and imputation methods (Baraldi & Enders, 2010; Karanja *et al.,* 2013; Peng, Harwell, Liou, & Ehman, 2006). Missing data was checked prior moving to the data analysis. A small proportion of missing values existed so imputation of missing values was employed by using the "missing value analysis" (MVA) method which is available in SPSS. More precisely, the "expectation maximisation" (EM) technique was used to handle missing data. This technique is recommended to deal with missing values in prior research (e.g. Karanja *et al.,* 2013).

4.7.3 Descriptive statistics

Descriptive statistics are utilised to describe as well as summarise information regarding a sample prior carrying out an inferential analysis (Weiss & Hassett, 2016). They offer a detailed outline about the sample together with providing information regarding the evaluation of the respondents for each variable used in the study such as mean and standard deviation. Furthermore, descriptive statistics provide some facts regarding the study sample such as the respondents qualifications, age, gender, and marital status.

In addition, other tests were employed for the purpose of examining the data. To examine the normal distribution, the tests of Skewness and Kurtosis were employed. Multicollinearity testing is discussed in the next chapter in more detail.

4.7.4 Validity and reliability

4.7.4.1 Validity

Content validity, construct validity, and external validity were evaluated. Sekaran (2003) argues that external validity focuses on the generalisability of the results to the entire population. Construct validity and content validity are considered as kinds of validity that help to investigate the validity of the instrument itself (Sekaran, 2003).

4.7.4.1.1 Content validity

According to Sekaran (2003, p. 206), content validity "ensures that the measure includes an adequate and representative set of items that tap the concept". It can be assessed through a panel of experts in the field of study (Saunders *et al.,* 2009; Sekaran, 2003). The questionnaire was sent to three academics who are experts in the field of the study in order to assure that the measurement scales utilised in the survey questionnaire are measuring what they were intended to gauge. The questionnaire was revised based on their comments which are primarily focused on the language of the items. The experts agreed that the items really measure the concepts. In addition, content validity was assessed during the pilot study. This was done by asking the respondents to leave comments if they have any suggestion for the improvement of the questionnaire. Beneficial comments were received from the participants which assisted in further improving the coherence of the items along with making the language easier for some questions.

4.7.4.1.2 Construct validity

Construct validity denotes to "the extent to which your measurement questions actually measure the presence of those constructs you intended them to measure" (Saunders *et al.*, 2009, p. 373). Sekaran (2003, p. 207) mentions that construct validity "testifies to how well the results obtained from the use of the measure fit the theories around which the test is designed". However, for the purpose of establishing construct validity, two tests can be employed namely, convergent and discriminant validity (Sekaran, 2003). These are examined in the next chapter.

4.7.4.1.3 External validity

As mentioned earlier, external validity signifies the degree to which the findings of a study can be generalised to the whole population (Sekaran, 2003). According to Koburtay and Syed (2019), the use of a convenience sampling protocol helps in enhancing the external validity by generalising the results of the study to the entire population. Based on this, the use of convenience sampling in the present thesis supported the external validity. This is further confirmed by distributing the survey questionnaire to the north, south, and middle of the context of the study i.e. Jordan. As such, it can be said that the external validity is established in the present study.

4.7.4.2 Reliability

Reliability tests are employed for the purpose of verifying the internal consistency of the instruments utilised in the survey. This was carried out by computing Cronbach's alpha for all of the measurement scales and the results are shown in the next chapter.

4.7.5 Hypotheses testing

Drawing on the theoretical hypotheses that have been developed in chapter three, multiple regression analysis was adopted for the purpose of examining the relationships between the IV's i.e. religiosity, training and development, and supervisor support and the mediator i.e. work engagement. Since there is one mediator variable in the conceptual model, a simple regression analysis was used in order to examine the association between work engagement and the DV's i.e. affective commitment and turnover intention.

Furthermore, hierarchical multiple regression was used to investigate the moderation relationship. However, for mediation analysis a joint significance test was used to examine mediation (MacKinnon, Fairchild, & Fritz, 2007). According to MacKinnon *et al.* (2007), two conditions should be met in order to establish mediation. Firstly, the route from the IV or predictor to the mediator has to be significant. Secondly, the route from the mediator variable to the DV or outcome has to be significant. Accordingly, mediation occurs if these two conditions are achieved.

4.8 Ethical considerations

This study followed the ethical guidelines provided by the University of Huddersfield. The names of the participants and organisations are not identified in this thesis or in any publication. It was clearly stated in the questionnaire that involvement in the study was entirely voluntary, and that respondents were free to withdraw their participation at any stage if they wished before the data had been analysed.

In addition, anonymity was given to the respondents and in the cover letter of the questionnaire respondents were informed that the data would be utilised only for academic purposes.

Furthermore, informed consent was gained from the participants. The ethical approval to carry out this study was obtained from the research ethics committee in the business school. This ethical approval is shown in Appendix A.

4.9 Chapter summary

This chapter has illustrated the research philosophy and the methodology adopted in the current thesis and justified the use of positivist philosophy. Since this research focuses on examining the relationships amongst different variables drawing on JD-R theory to produce generalisable findings, quantitative methods were utilised. Accordingly, the methods and techniques used were discussed and justifications for the choices were given. Lastly, the procedures for data collection and data analysis were given. The subsequent chapter discusses the analysis of the data and gives the results of the research.

CHAPTER FIVE: DATA ANALYSIS

5.1 Introduction

This chapter delivers a detailed description of data analysis of the thesis variables namely, religiosity, training and development, supervisor support, work engagement, workload, affective commitment, and turnover intention, and offers the findings of the study. This chapter starts with providing a description to the sample of the study. This is followed the descriptive statistics such as standard deviations and means. After that, multicollinearity and normal distribution are offered.

In addition, the reliability analysis of the measurement scales is presented. Next, the validity of these instruments is discussed. This is done by examining the construct validity for each measurement scale based on investigating the exploratory factor analysis (EFA), convergent validity, and discriminant validity. This is followed by delivering the correlation coefficients of the study variables.

The next section covers hypotheses testing and is followed by the results of the hierarchical multiple regression for testing moderation. After that, the results of the regression analysis that demonstrate the relationship between work engagement and the outcome variables are presented. Next, the mediation analysis is offered. Finally, a summary of the chapter is offered.

5.2 Description of sample

A total of 383 respondents involved in the survey questionnaire.

The majority of participants had bachelor's degrees (66.3%). This is followed by those who held master's degrees; 74 participants (19.3%). Participants involved the survey were 68.9% male and 31.1% female. Moreover, 220 respondents were 25-34 years old (57.4%), and 82 of them were 35-44 years old (21.4%).

In terms of tenure, 159 respondents had tenure between 6 and 10 years (41.5%), and 28.5% had 5 years or less (109 respondents). In addition, 226 participants were single (59%), and 153 were married (39.9%), and only 4 respondents categorised themselves as other (1%). Lastly, concerning religion, 96.9% and 2.1% of the participants were Muslims and Christians respectively, and only .5% of the respondents considered themselves as other.

Table 5.1 below demonstrates the demographic details of the participants.

Table 5. 1 Demographic details of participants

	Number of participants	% of participants
Qualification		
High school	7	1.8
Diploma	43	11.2
Bachelor	254	66.3
Master	74	19.3
PhD	3	.8
Age		
18–24	57	14.9
25–34	220	57.4
35–44	82	21.4
45 or more	21	5.5
Gender		
Male	264	68.9
Female	119	31.1
Tenure		
5 or less	109	28.5
6–10	159	41.5
11–15	76	19.8
16–20	20	5.2
21 or more	19	5.0
Marital status		
Single	226	59.0
Married	153	39.9
Other	4	1.0
Religion		
Islam	371	96.9
Christianity	8	2.1
Other	2	.5

5.3 Descriptive statistics

Table 5.2 illustrates the descriptive data for all the constructs including minimum and maximum values, standard deviations (SD), and mean.

Table 5. 2 Descriptive statistics for the study variables

	N	Minimum	Maximum	Mean	SD
Work engagement	383	2.24	5.00	3.990	.497
Religiosity	383	1.00	5.00	4.238	.619
Training and development	383	2.00	5.00	3.901	.484
Supervisor support	383	2.00	5.00	3.869	.517
Affective commitment	383	1.88	5.00	3.849	.511
Turnover intention	383	1.00	5.00	2.161	.653
Workload	383	1.00	5.00	3.796	.752
Valid N (listwise)	383				

5.4 Multicollinearity

According to Madansky (2012, p. 201), the concept of multicollinearity denotes "the existence of a perfect linear relationship among the regression's independent variables". In this respect, two statistical tests were utilised to test for the presence of multicollinearity namely "variance inflation factor" and tolerance value (Doğan, 2013; Hair, Wolfinbarger, Money, Samouel, & Page, 2015; Saunders *et al.* 2009).

As a rule of thumb, the tolerance value must be greater than .10. Whereas VIF must be less than 10 (Moss & Moss, 2010). Regarding the current research, the values of both tolerance as well as VIF demonstrate that multicollinearity does not exist. This is confirmed due to the

results of these values in this thesis fall within the satisfactory range (Okazaki, 2006; Tosun, 2002). Table 5.3 shows the tolerance values and VIF.

Table 5. 3 Multicollinearity statistics

	Multicollinearity statistics	
	Tolerance	**VIF**
Work engagement	.66	1.51
Religiosity	.94	1.06
Training and development	.76	1.30
Supervisor support	.74	1.34

5.5 Normal distribution: Skewness and Kurtosis tests

It is important in business and management research to determine whether data is normally distributed or not. This is because statistical testing relies on the extent to which variables are distributed normally. Consequently, this section focuses on evaluating the normality of the distribution for all of the study variables.

In order to assess normality, two tests were utilised namely skewness and kurtosis (Bachman, 2004; Hair, Black, Babin, & Anderson, 2014; Pallant, 2007; Sheskin, 2003). According to Pallant, (2007), "the skewness value provides an indication of the symmetry of the distribution. Kurtosis, on the other hand, provides information about the 'peakedness' of the distribution" (p. 56). However, if the values of both skewness and kurtosis are equal to zero, then the distribution of the data is completely normal (Pallant, 2007).

According to Remenyi, Onofrei, and English, (2011), if the values of skewness ranged between (-1 to +1), then the data is distributed normally. On the other hand, Brooks (2014) argues that if the values of kurtosis fall within (-3 to +3), this means that the data is distributed normally.

In relation to the present thesis, both tests of skewness and kurtosis reveal that all of the thesis variables are normally distributed. The values of both skewness and kurtosis are offered in Table 5.4.

Table 5. 4 The values of Skewness and Kurtosis

Variable	Skewness	Kurtosis
Work engagement	-.29	.95
Religiosity	-.58	.93
Training and development	-.64	1.95
Supervisor support	-.87	1.82
Affective commitment	-.88	1.98
Turnover intention	.68	1.85
Workload	-.75	1.52

5.6 Reliability analysis

The reliability of measurement scales needs to be assessed in order to demonstrate its internal consistency (Churchill, 1979). Reliability was tested by computing Cronbach's alpha for all of the measurement scales used. Alpha for the variables exceeded the acceptable threshold value of .70 (Nunnally, 1978). As such, the reliability of the scales used is confirmed.

Table 5.5 below shows the alpha values.

Table 5. 5 Reliability of the measurement scales for all variables

Measurement scales	Cronbach's Alpha
Work engagement	.938
Religiosity	.901
Training and development	.765
Supervisor support	.727
Affective commitment	.885
Turnover intention	.852
Workload	.896

5.7 Validity analysis

The validity of the employed scales was assessed using three types of validity namely, construct validity, content validity, and external validity. However, in the methodology chapter, two of these types namely, external validity and content validity have been illustrated and established.

5.7.1 Construct validity

Construct validity is termed as "the extent to which your measurement questions actually measure the presence of those constructs you intended them to measure" (Saunders *et al.,* 2009, p. 373). In this context, establishing construct validity is important as this helps to demonstrate that a group of items really signify the theoretical construct they were intended to gauge (Hair *et al.,* 2014).

Sekaran (2003), however, indicates that for the purpose of establishing construct validity, two tests can be utilised i.e. convergent and discriminant validity. Convergent validity refers to different measures of the same construct correlating highly with each other. Discriminant

validity is shown when scales that should have no relationship with each other are in fact not correlated (Straub, Boudreau, & Gefen, 2004).

In addition, exploratory factor analysis (EFA) is employed in order to "assess and verify the factors for each variable" (Koburtay & Syed, 2019, p. 11). As such, in order to establish construct validity, the present thesis uses EFA to demonstrate the factors for each construct. This is followed by demonstrating the convergent validity through investigating the AVE "average variance extracted". After that, discriminant validity was verified through computing the square root of AVE and compare it with the correlations of the study variables.

5.7.1.1 Exploratory factor analysis (EFA)

Factor analysis is "a method of grouping together variables which have something in common" (Cohen *et al.*, 2007, p. 560). There are two main categories for factor analysis i.e. "exploratory factor analysis" (EFA) and "confirmatory factor analysis" (CFA) (Williams, Onsman, & Brown, 2010). Whilst CFA is commonly employed in order to assert or confirm the structure of a scale (Hair *et al.*, 2014), EFA is utilised to "identify the factor structure or model for a set of variables" (Bandalos, 1996 cited in McPherson, Siebert, & Siebert, 2017, p.241). Given that EFA is commonly used in social sciences (Wahab, Zainol, Bakar, Ibrahim, & Minhaj, 2016), it is used here in order to evaluate and further verify the factor structure of the study variables. Despite the fact that established scales were used, it is important to examine the factor structure in a new data set. In this respect, DiIorio, (2006, p. 273) mentions that EFA is "used to assess the validity of an already developed scale when data are collected from another sample or from another population".

According to Koburtay and Syed (2019), EFA typically uses four indicators namely, (1) Kaiser–Meyer–Olkin (KMO), (2) Bartlett's test, (3) percentage of variance, and (4) factor loadings. KMO should be above .50 (Williams *et al.,* 2010). Bartlett's test ($p < 0.001$) (Chen, Jackson, & Huang, 2006). In relation to the percentage of variance, it must be more than 50% (Williams *et al.,* 2010), and factor loading must be higher than 40% (Hair, Black, Babin, & Anderson, 2006 cited in Thakur, 2013).

The results of these tests are based on the following. In relation to KMO, the findings reveal that all of the variables exceeded the threshold value of 50%, thus demonstrating the adequacy of the sample. According to Bartlett's test, the results of all of the constructs manifest significant values ($p < 0.001$), therefore, achieving the second condition. Regarding the percentage of variance, all of the findings are greater than the cut-off point of 50%. Finally, in relation to the factor loading, all of the items that comprised the variables of the current thesis exceeded the cut-off point of .40, hence, meeting the last condition.

In general, the EFA results show the suitability of the scales used in the study. Whilst some previous research used the scale of work engagement as a three-factor scale (e.g. Yalabik *et al.,* 2017), other studies, on the other hand, employed it as a one-factor measurement scale (e.g. Agarwal *et al.,* 2012; Chughtai & Buckley, 2009; Soane *et al.,* 2013; Wang & Hsieh, 2013). Regarding the current research, the results of the EFA reveal that work engagement is best treated as one-factor scale. As such, based on the findings of the EFA, and in line with the majority of previous studies in work engagement (e.g. Chughtai & Buckley, 2009; Soane *et al.,* 2013), the 17 items of the work engagement scale were aggregated in the current research to compose a single factor scale in order to gauging the overall level of work engagement. The

values for all of the study variables are offered in Appendix B. The next section will discuss the convergent validity.

5.7.1.2 Convergent validity

Convergent validity is defined as "the degree to which items within a single construct are highly correlated" (Lu & Yang, 2014, p. 328). In a similar vein, Yang and Lin (2014) define convergent validity as the degree to which the questions that gauge a particular construct are intended to be connected are in fact connected. Convergent validity can be established by checking the average variance extracted (AVE) of a scale (Korda, & Snoj, 2010; Martínez, 2010). As a rule of thumb, AVE should be greater than .50 (Hair *et al.*, 2014; Lee, Cheung, & Chen, 2005; Martínez, 2010) and all AVE values exceeded the cut-off point of .50. Therefore, convergent validity was confirmed. Table 5.6 demonstrates the values of AVE.

Table 5. 6 Average variance extracted (AVE)

Variable	AVE value
Work engagement	.505
Religiosity	.723
Training and development	.517
Supervisor support	.552
Affective commitment	.563
Turnover intention	.771
Workload	.707

5.7.1.3 Discriminant validity

Discriminant validity denotes to how the questions that gauge different concepts are separate from each other (Straub *et al.*, 2004). According to Sambharya (2000, p. 165), this type of

validity denotes to "the extent to which a concept differs from other concepts". In a similar vein, Kashif *et al.* (2017, p. 437) define discriminant validity as "the extent to which a construct differs from other constructs within the established model". For the purpose of verifying discriminant validity, previous studies suggest employing the values of AVE to establish discriminant validity (Fornell & Larcker, 1981 cited in Wu & Wang, 2007). This is done by checking the square root of the AVE value. In this context, if the square root of the AVE for a variable is greater than the correlation between that variable and all other ones, then discriminant validity is confirmed. Results show that the value of the square root of the AVE is higher than the correlation with other constructs, thus discriminant validity is confirmed, see Table 5.7

Table 5. 7 Discriminant validity of the constructs

	Variable	1	2	3	4	5	6	7
1	Work engagement	***.710***						
2	Religiosity	.209	***.850***					
3	Training and development	.451	.113	***.719***				
4	Supervisor support	.466	.005	.365	***.743***			
5	Affective commitment	.466	.254	.295	.299	***.750***		
6	Turnover intention	-.305	-.326	-.216	-.176	-.522	***.878***	
7	Workload	.273	.168	.231	.052	.174	-.147	***.841***

Note: The values of the square root of AVE are in bold

5.8 Correlation coefficients

Correlation coefficients are used to determine the direction and strength of the association between the study variables (Hair *et al.,* 2014; Saunders *et al.,* 2009) and the "Pearson correlation coefficient" was utilised.

Given that the 99% confidence level (*p< 0.01)* is the most frequently used in order to identify the significance of correlation coefficients, this confidence level was used. The values of the correlation analysis range within the categorisation of -1 and +1 (Saunders *et al.,* 2009). Whilst -1 signifies a perfect negative association, plus one (+1), on the other hand, reflects a positive full relationship (Hair *et al.,* 2014; Saunders *et al.,* 2009; Sekaran & Bougie, 2016). However, the value of zero shows no association between two constructs (Hair *et al.,* 2014; Saunders *et al.,* 2009).

Work engagement was positively and significantly linked with religiosity (r = .209, *p<0.01*). In addition, work engagement was significantly and positively correlated with training and development (r = .451, *p<0.01*), supervisor support (r = .466, *p<0.01*), and affective commitment (r = .466, *p<0.01*). On the other hand, work engagement was negatively and strongly connected with turnover intention (r = -.305, *p<0.01*). Religiosity showed a small correlation with training and development (r = .113, *p<0.05*), weakly correlated with affective commitment (r = .254, *p<0.01*), and weakly correlated with workload (r = .168, *p<0.01*).

Religiosity was negatively correlated with turnover intention (r = -.326, *p<0.01*). Affective commitment was positively and significantly correlated with training and development (r = .295, *p<0.01*), and supervisor support (r = .299, *p<0.01*). Table 5.8 below shows the results of the correlation analysis.

Table 5. 8 Correlations among the study variables

	Variable	1	2	3	4	5	6	7
1	Work engagement	1						
2	Religiosity	.209**	1					
3	Training and development	.451**	.113*	1				
4	Supervisor support	.466**	.005	.365**	1			
5	Affective commitment	.466**	.254**	.295**	.299**	1		
6	Turnover intention	-.305**	-.326**	-.216**	-.176**	-.522**	1	
7	Workload	.273**	.168**	.231**	.052	.174**	-.147**	1

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

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

5.9 Testing the hypotheses: Regression analysis

Based on the hypotheses developed in chapter three, multiple regression analysis was adopted to investigate the associations between the three predictor variables namely, religiosity, training and development, and supervisor support and the mediator variable i.e. work engagement. In this context, multiple regression was utilised to explore the relationships when there is more than one IV in predicting a DV (Leech, Barrett, & Morgan, 2005; Gujarati, 2003). In addition, hierarchical multiple regression is utilised to test the moderation relationship. This method is employed for the purpose of investigating the interaction effect of the predictor variables in predicting the DV.

Given the fact that there is one mediator variable in the conceptual framework, a simple regression analysis was employed for the purpose of investigating the relationship between work engagement and the outcome variables namely, affective commitment and turnover

intention. However, in relation to the mediation analysis, this thesis employed a joint significance test to examine mediation (MacKinnon *et al.,* 2007). This approach i.e. joint significance is recommended in order to determine whether mediation occurs or not (MacKinnon *et al.,* 2007; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). According to MacKinnon *et al.* (2007), two conditions should be accomplished in order to establish mediation. Firstly, the route from the IV or predictor to the mediator has to be significant. Secondly, the route from the mediator variable to the DV or outcome has to be significant. Mediation occurs if these two conditions are achieved.

The following discussion will offer the findings of the hypotheses testing. In this regard, it will first present the results of the relationships between the three IV's (the predictors) and work engagement. After that, a test of hierarchical multiple regression is presented for the purpose of demonstrating the existence of the moderator effect on the association between the predictor variables and work engagement. This is followed by investigating the relationships between work engagement and the outcome variables namely, affective commitment and turnover intention. Finally, the mediation results are offered.

5.9.1 The relationship between the antecedents and work engagement

A multiple regression analysis was utilised to investigate the relationship between the antecedents i.e. religiosity, training and development, and supervisor support and work engagement. Based on the research model of and in relation to the first question of this thesis namely, "what is the role of the antecedents; religiosity, training and development, and supervisor support on work engagement?", the following three hypotheses were proposed:

H1: There is a positive association between religiosity and work engagement.

H2: There is a positive association between training and development and work engagement.

H3: There is a positive association between supervisor support and work engagement.

The findings of the multiple regression analysis, and after controlling for the demographic variables show that religiosity is strongly and significantly related to work engagement (β = .188, p =.000). This finding provides support for hypothesis 1. In relation to H2 which predicted that training and development is positively linked with work engagement, multiple regression analysis shows that training and development is positively and strongly linked with work engagement (β = .309, p =.000). This finding supports hypothesis 2. Supervisor support is positively and significantly connected with work engagement (β = .352, p =.000) providing support for hypothesis 3.

Table 5.9 below demonstrates the findings for H1-H3.

Table 5. 9 The relationship between the predictors and work engagement

Variable	Beta coefficient β	Sig.	R	R Square
Religiosity	.188	.000	.596	.356
Training and development	.309	.000	. 596	. 356
Supervisor support	.352	.000	. 596	. 356

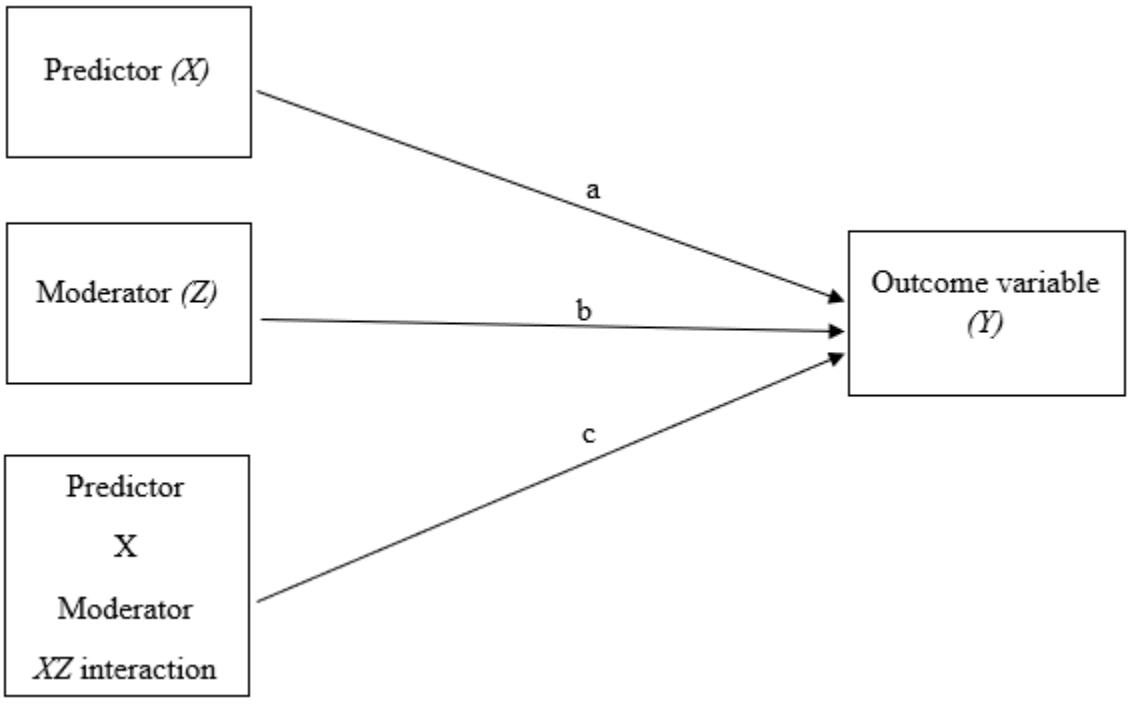
Note: *Dependent Variable: Work engagement*
Note: *These results after controlling for the demographic variables*

5.9.2 The moderating role of workload on the association between the antecedents and work engagement

A moderator is "a variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable" (Baron & Kenny, 1986, p. 1174). In other words, a moderator is a variable that strengthens or weakens the association between an independent or predictor variable and a dependent variable. A moderator variable is a third variable signifies an interaction effect in which entering it into the regression test will influence the magnitude and/or strength of the association between a predictor or IV and a DV.

In order to examine the moderating effect in the research model, hierarchical multiple regression was utilised (Evans, 1991). In addition, Ro (2012) mentions that hierarchical multiple regression is the most frequently employed procedure to examine the moderating effect. In order to determine whether or not there is a moderating effect, it is important to see that the interaction effect between the IV (X) and the moderator variable (Z) is statistically significant (MacKinnon, 2011). Figure 5.1 illustrates the moderating variable from a statistical standpoint (Baron & Kenny, 1986).

Figure 5. 1 Moderator model



Source: Adapted from Baron and Kenny (1986, p. 1174).

The above figure shows three paths for testing moderation. The first path (a) signifies the direct association between the predictor variable (X) and the outcome variable (Y), the second path (b) shows the association between the moderator variable (Z) and the criterion variable (Y). The third path (c) demonstrates the influence of the interaction effect between the predictor and the moderator variables (XZ) in predicting the outcome variable (Y). In this respect, for moderation to occur, the third path (c) i.e. (XZ) interaction in predicting (Y) should be statistically significant.

In relation to the research model and based on the second question of this study i.e. "does workload moderate the association between the antecedents; religiosity, training and

development, and supervisor support and work engagement?", the following three hypotheses are postulated:

H4: Workload moderates the association between religiosity and work engagement, such that the positive association between religiosity and work engagement is stronger at higher levels of workload than at lower levels of workload.

H5: Workload moderates the association between training and development and work engagement, such that the positive association between training and development and work engagement is stronger at higher levels of workload than at lower levels of workload.

H6: Workload moderates the association between supervisor support and work engagement, such that the positive association between supervisor support and work engagement is stronger at higher levels of workload than at lower levels of workload.

In the context of hierarchical multiple regression, the procedures employed in previous studies (e.g. Wang & Chung, 2013) to determine the moderating effect in the analysis were followed. In order to test hypothesis 4, in the first step, the control variables namely, qualification, tenure, age, marital status, and gender were entered. In the next step, both religiosity and the moderating variable i.e. workload were entered. In the final step of the regression, the interaction terms (XZ) of the predictor (religiosity) and moderator (workload) were entered. The same procedure was utilised in order to examine the moderating effect in both hypothesis 5 and hypothesis 6.

In relation to hypothesis 4, hierarchical multiple regression demonstrates that the interaction effect is statistically significant (β = -.152, p =.005), but it undermined the association between

religiosity and work engagement. As such, hypothesis 4 is not supported. Table 5.10 below illustrates the findings of the interaction effect in hypothesis 4.

Table 5. 10 Hierarchical multiple regression analysis for investigating the moderating effect of workload on the relationship between religiosity and work engagement

	Model 1			Model 2			Model 3		
Variables	**β**	***t*-value**	**Sig.**	**β**	***t*-value**	**Sig.**	**β**	***t*-value**	**Sig.**
Control variables									
Qualification	.044	.861	.390	.074	1.499	.135	.073	1.512	.131
Tenure	-.092	-1.199	.231	-.095	-1.302	.194	-.086	-1.191	.234
Age	.006	.082	.935	-.034	-.467	.641	-.042	-.581	.562
Marital status	-.013	-.240	.811	-.021	-.423	.672	.002	.045	.964
Gender	.040	.765	.445	.030	.606	.545	.025	.520	.603
Direct effect variables									
Religiosity				.196	3.906	.000	.191	3.833	.000
Workload				.242	4.883	.000	.309	5.656	.000
Interaction effect									
Religiosity × Workload							-.152	-2.800	.005
R^2	.011			.122			.140		
Adjusted R^2	-.002			.106			.122		

In relation to hypothesis 5, hierarchical multiple regression demonstrates that the interaction effect between training and development and workload in predicting work engagement is not significant (β = .080, p =.087). Accordingly, hypothesis 5 is not supported. Table 5.11 below demonstrates the results of the interaction effect in hypothesis 5.

Table 5. 11 Hierarchical multiple regression analysis for investigating the moderating effect of workload on the relationship between training and development and work engagement

	Model 1			Model 2			Model 3		
Variables	**β**	***t*-value**	**Sig.**	**β**	***t*-value**	**Sig.**	**β**	***t*-value**	**Sig.**
Control variables									
Qualification	.044	.861	.390	.056	1.245	.214	.053	1.165	.245
Tenure	-.092	-1.199	.231	-.116	-1.722	.086	-.115	-1.706	.089
Age	.006	.082	.935	.022	.328	.743	.026	.374	.708
Marital status	-.013	-.240	.811	.004	.077	.938	-.002	-.053	.958
Gender	.040	.765	.445	.040	.868	.386	.033	.718	.473
Direct effect variables									
Training and development				.417	8.964	.000	.401	8.455	.000
Workload				.175	3.763	.000	.187	3.981	.000
Interaction effect									
Training and development × Workload							.080	1.717	.087
R^2	.011			.249			.255		
Adjusted R^2	-.002			.235			.239		

Regarding hypothesis 6, hierarchical multiple regression shows that the interaction effect between supervisor support and workload in predicting work engagement is also not significant (β = -.007, p =.875). As such, hypothesis 6 is also not supported. Table 5.12 below shows the findings of the interaction effect in hypothesis 6.

Table 5. 12 Hierarchical multiple regression analysis for investigating the moderating effect of workload on the relationship between supervisor support and work engagement

	Model 1			Model 2			Model 3		
Variables	**β**	***t*-value**	**Sig.**	**β**	***t*-value**	**Sig.**	**β**	***t*-value**	**Sig.**
Control variables									
Qualification	.044	.861	.390	.013	.300	.764	.013	.298	.766
Tenure	-.092	-1.199	.231	-.072	-1.105	.270	-.072	-1.094	.275
Age	.006	.082	.935	.067	.996	.320	.066	.983	.326
Marital status	-.013	-.240	.811	.000	-.005	.996	.000	.007	.994
Gender	.040	.765	.445	.027	.620	.536	.028	.630	.529
Direct effect variables									
Supervisor support				.459	10.198	.000	.460	10.102	.000
Workload				.243	5.487	.000	.243	5.474	.000
Interaction effect									
Supervisor support × Workload							-.007	-.157	.875
R^2	.011			.287			.287		
Adjusted R^2	-.002			.273			.271		

5.9.3 The association between work engagement and the outcomes

A regression analysis was used to examine the association between work engagement and the two DV's namely, affective commitment and turnover intention. Based on the research model and in relation to the third question namely, "what is the effect of work engagement on the outcomes, affective commitment and turnover intention?", the present thesis hypothesised:

> *H7: There is a positive association between work engagement and affective commitment.*

H8: There is a negative association between work engagement and turnover intention.

The results of the regression analysis and after controlling for the demographic variables demonstrate that work engagement is strongly and significantly related to affective commitment (β = .483, p =.000). This result provides support for hypothesis 7. Table 5.13 below demonstrates the results of hypothesis 7. On the other hand, in relation to H8, regression analysis after controlling for the demographic variables shows that work engagement is negatively and strongly linked with turnover intention (β = -.324, p =.000). As such, hypothesis 8 is also supported.

Table 5.14 below shows the findings of hypothesis 8.

Table 5. 13 The relationship between work engagement and affective commitment

Variable	Beta coefficient β	Sig.	R	R Square
Work engagement	.483	.000	.510	.260

Note: *Dependent Variable: Affective commitment*
Note: *This finding after controlling for the demographic variables*

Table 5. 14 The relationship between work engagement and turnover intention

Variable	Beta coefficient β	Sig.	R	R Square
Work engagement	-.324	.000	.361	.130

Note: *Dependent Variable: Turnover intention*
Note: *This finding after controlling for the demographic variables*

5.9.4 The mediating role of work engagement

A mediator is a variable that "transmits the effect of an independent variable on a dependent variable" (MacKinnon *et al.*, 2007, p. 593). Regarding Baron and Kenny (1986, p. 1173), the mediator variable is defined as "the mechanism through which the independent variable is able to influence the dependent variable of interest". A mediator is a variable that demonstrates how and why a predictor or IV predicts the outcome or DV (Bennett, 2000).

In order to decide whether a variable is a moderator or mediator, this decision must be made on the basis of the theoretical underpinning that guides the study (Ro, 2012). Drawing on the JD-R theorising (Bakker & Demerouti, 2008, 2017), work engagement acts as a mediator on the association between both job and personal resources on the one hand, and the consequences or the outcomes on the other. Consequently, work engagement is considered as a mediator in the present thesis.

Theoretically underpinned by JD-R theory, and in relation to the fourth question namely, "does work engagement mediate the relationship between the antecedents; religiosity, training and development, and supervisor support and the outcomes; affective commitment and turnover intention?", the study posits the following six hypotheses:

H9: Work engagement will mediate the association between religiosity and affective commitment.

H10: Work engagement will mediate the association between religiosity and turnover intention.

H11: Work engagement will mediate the association between training and development and affective commitment.

H12: Work engagement will mediate the association between training and development and turnover intention.

H13: Work engagement will mediate the association between supervisor support and affective commitment.

H14: Work engagement will mediate the association between supervisor support and turnover intention.

As mentioned earlier, the present thesis utilises the joint significant test to examine mediation (MacKinnon *et al.,* 2002; MacKinnon *et al.,* 2007). In relation to MacKinnon *et al.* (2007), two conditions should be accomplished in order to establish mediation as outlined above.

Hypothesis 9 predicted that work engagement mediated the association between religiosity and affective commitment. Whilst there is a positive and significant association between religiosity and work engagement (β = .188, p =.000), and work engagement is positively and strongly connected with affective commitment (β = .483, p =.000). As such, it can be concluded that work engagement mediated the association between religiosity and affective commitment, accordingly, providing support for hypothesis 9.

Hypothesis 10 predicted that work engagement mediated the association between religiosity and turnover intention. Since religiosity is significantly associated with work engagement (β = .188, p =.000), and work engagement is strongly and significantly linked with turnover intention (β = -.324, p =.000). Therefore, this provides evidence that work engagement mediated the association between religiosity and turnover intention and H10 is supported.

Hypothesis 11 anticipated that the association between training and development and affective commitment is mediated by work engagement. Training and development is strongly and significantly connected with work engagement (β = .309, p =.000), and work engagement is significantly linked with affective commitment (β = .483, p =.000), consequently, this reveals that work engagement mediated the association between training and development and affective commitment, therefore, hypothesis 11 is also accepted.

H12 predicted that work engagement mediated the association between training and development and turnover intention. Since training and development is significantly associated with work engagement (β = .309, p =.000), and work engagement is significantly connected with turnover intention (β = -.324, p =.000), accordingly, these findings demonstrate that work engagement mediated the association between training and development and turnover intention. As such, H12 is supported.

H13 predicted that the association between supervisor support and affective commitment is mediated by work engagement. Supervisor support is positively and strongly linked with work engagement (β = .352, p =.000), and work engagement is strongly and significantly related to affective commitment (β = .483, p =.000), hence, work engagement mediated the association between supervisor support and affective commitment and H13 is supported.

H14 supposed that work engagement mediated the association between supervisor support and turnover intention. Supervisor support is significantly related to work engagement (β = .352, p =.000), and a significant relationship is found between work engagement and turnover intention (β = -.324, p =.000), as such, the association between supervisor support and turnover intention is mediated by work engagement. Accordingly, hypothesis 14 is supported.

Overall, Table 5.15 summarises the findings of all of the hypotheses of this thesis.

Table 5. 15 The findings of the study hypotheses

No.	Study hypotheses	Findings
H1	*There is a positive association between religiosity and work engagement.*	Supported
H2	*There is a positive association between training and development and work engagement.*	Supported
H3	*There is a positive association between supervisor support and work engagement.*	Supported
H4	*Workload moderates the association between religiosity and work engagement, such that the positive association between religiosity and work engagement is stronger at higher levels of workload than at lower levels of workload.*	Not supported
H5	*Workload moderates the association between training and development and work engagement, such that the positive association between training and development and work engagement is stronger at higher levels of workload than at lower levels of workload.*	Not supported
H6	*Workload moderates the association between supervisor support and work engagement, such that the positive association between supervisor support and work engagement is stronger at higher levels of workload than at lower levels of workload.*	Not supported
H7	*There is a positive association between work engagement and affective commitment.*	Supported
H8	*There is a negative association between work engagement and turnover intention.*	Supported
H9	*Work engagement will mediate the association between religiosity and affective commitment.*	Supported
H10	*Work engagement will mediate the association between religiosity and turnover intention.*	Supported
H11	*Work engagement will mediate the association between training and development and affective commitment.*	Supported
H12	*Work engagement will mediate the association between training and development and turnover intention.*	Supported
H13	*Work engagement will mediate the association between supervisor support and affective commitment.*	Supported
H14	*Work engagement will mediate the association between supervisor support and turnover intention.*	Supported

5.10 Chapter summary

The current chapter offers the results of the data analysis and demonstrates the way the research model that has been presented in chapter 3 is statistically tested for the purpose of exploring the associations between the variables of this thesis. The results of the statistical analysis support all of the hypotheses, with exception to hypothesis 4, hypothesis 5, and hypothesis 6. The present study offers interesting results that contribute to the work engagement literature. In this respect, the findings revealed that religiosity as a personal resource in the JD-R model is a strong predictor of work engagement. Also, the findings revealed that both training and development and supervisor support predicted work engagement.

In addition, unexpectedly, the results show that workload which is considered in previous literature as a challenging job demand that strengthens the relationship between personal and job resources and work engagement, undermined the association between religiosity and work engagement. However, no significant association was found for the moderating effect of workload on the link between training and development and work engagement as well as supervisor support and work engagement.

Furthermore, the findings also show that work engagement is positively and strongly linked with affective commitment on the one hand, and negatively and significantly associated with turnover intention on the other. Finally, the results suggest that work engagement mediated the association between the antecedents and outcomes. The discussion chapter explains the findings that offered in this chapter, and correlates these results with the extant literature.

CHAPTER SIX: DISCUSSION

6.1 Introduction

This chapter discusses results in relation to the objectives of the study as well as the literature reviewed in chapter 2. As mentioned in chapter 1, there are four main objectives for the current research as listed below:

1. To investigate the relationship between the antecedents (religiosity, training and development, and supervisor support) and work engagement.
2. To examine whether workload moderates on the association between the antecedents (religiosity, training and development, and supervisor support) and work engagement.
3. To examine the association between work engagement and the outcome variables (i.e. affective commitment and turnover intention).
4. To investigate whether work engagement mediates on the association between the antecedents (religiosity, training and development, and supervisor support) and the consequences (affective commitment and turnover intention).

6.2 Research Objective 1: To investigate the relationship between the antecedents (religiosity, training and development, and supervisor support) and work engagement (Hypothesis 1, Hypothesis 2, and Hypothesis 3).

The first objective is to investigate the association between religiosity, training and development, and supervisor support and work engagement through H1-H3. H1 - there is a positive association between religiosity and work engagement, H2 - there is a positive association between training and development and work engagement, and H3 - there is a positive association between supervisor support and work engagement. In order to examine these associations and as demonstrated in chapter five, a multiple regression analysis is employed.

In relation to (H1), the findings show that there is a significant association between religiosity and work engagement (β = .188, p =.000). That is, being religious plays a role in boosting engagement in the workplace. Consequently, this result provides support for hypothesis 1.

The finding of H1 is in line with the previous studies. More specifically, this result provides support for Abu Bakar *et al.* (2018) who from qualitative research argue that religiosity could facilitate work engagement and thus improving work performance. Added to that, by thinking of work as a kind of worship, this helps in enhancing happiness at work thus boosting work engagement (Abu Bakar *et al.,* 2018). Furthermore, in their qualitative study, Abu Bakar and her colleagues mention that being religious assists in enhancing engagement at work, and this is because employees will be morally obligated to God.

Previous literature provides evidence regarding the role of religiosity in enhancing happiness at work. In this respect, Hossain and Rizvi (2016) carried out a study in Oman which examined

the association between religiosity and happiness. Their study drawing on a sample of 335 participants in Oman found that being religious enhances the degree of happiness at work. Abdel-Khalek and Lester (2017) investigated the relationship between religiosity and happiness and mental health in Kuwait and found that religiosity is significantly and strongly associated with happiness and mental health. This means that being religious helps in enhancing happiness as well as experiencing better mental health. Likewise, another study conducted by Abdel-Khalek (2008) in Kuwait to examine to the association between religiosity and wellbeing and health yielded similar findings in which religiosity is positively and strongly linked with mental health, physical health, and happiness. This, in turn, plays an important role in promoting engagement at work (Abu Bakar *et al.,* 2018). Added to that, Hossain and Rizvi (2016, p. 786) mention that "religious belief makes people helpful, productive, loyal, honest, truthful, sincere, hard-working and accountable". This also indicates that being religious plays a significant role and has an influence in boosting engagement at work.

In relation to JD-R theory (Bakker & Demerouti, 2008, 2017), personal resources play a significant role in predicting engagement in the workplace. In this respect, H1 is consistent with the JD-R theory. In other words, guided by JD-R theory, the present study provides evidence for and strongly supports the idea that religiosity as a personal resource assists in enhancing work engagement.

H2 predicts that there is a positive association between training and development and work engagement and the multiple regression analysis reveals a moderate and positive connection (β = .309, p =.000). Consequently, this finding supports hypothesis 2, in which training and development is considered as a predictor of work engagement.

As expected, this finding supports the idea that training and development is considered as an important job resource that helps to enhance engagement in the workplace. This is in line with JD-R theory (Bakker & Demerouti, 2008, 2017). In this respect, JD-R theory demonstrates that job resources such as training and development play an important role in enhancing and facilitating work engagement.

Added to that, H2 is consistent with the previous studies. Alfes *et al.* (2013a) examined the connection between HRM practices and work engagement in the UK to show that HRM practices were significantly and positively connected with work engagement. In addition, in their recent study, Karadas and Karatepe (2019) examined the connection between HPWS and work engagement drawing on a sample of hotel employees in Romania. Their results show that HPWS is strongly and positively linked with work engagement. In a similar vein, Huang *et al.* (2018) show that HPWS were positively and significantly related to work engagement, and that this association is mediated by job satisfaction and positive mood.

Moreover, Cooke *et al.*'s (2016) study of 2040 workers in the banking sector in China reveals that there were a positive and significant association between HPWS and work engagement. Added to that, Crawford *et al.*'s (2010) meta-analytic test reveals that offering employees opportunities for learning and development plays a pivotal role in enhancing engagement in the workplace. Furthermore, Shuck *et al.* (2014) drawing on a data gathered from 207 workers from the healthcare sector offer evidence for the idea that the involvement in HRD practices was strongly and positively connected with work engagement. More specifically, the participation in these practices helps employees to be engaged in their work tasks.

According to Bakker (2017), training and development is a vital job resource in which it helps in boosting work engagement. Likewise, Gruman and Saks (2011) mention that training and

development opportunities are considered as one of the significant resources that make employees feel psychologically available at work. This in turn helps in enhancing work engagement. Similarly, Schaufeli and Salanova (2008) state that providing employees with sufficient training and development opportunities plays a role in enhancing their engagement levels. This is because these opportunities for training and development provide employees with the skills, knowledge, and abilities they need in order to perform their work tasks. This is likely to improve their engagement in the workplace.

Additionally, when employees receive training and development programmes from their organisations on a continuous basis, they will feel more satisfied and will acquire the skills, abilities and knowledge needed to accomplish their job tasks. Consequently, this has the potential to promote engagement. The findings of this thesis provide support the idea that training and development helps in enhancing work engagement.

H3 proposes that there is a positive association between supervisor support and work engagement. The findings of the multiple regression analysis as demonstrated in the previous chapter show that the association between supervisor support and work engagement is strong and significant (β = .352, p =.000), hence, this result offers support for hypothesis 3. That is, support from supervisor helps in facilitating work engagement.

This finding is consistent with JD-R theory (Bakker & Demerouti, 2008, 2017), in which supervisor support as a job resource helps in enhancing work engagement. That is, support from supervisor plays a significant role in boosting and consolidating engagement in the workplace.

H3 is in line with some previous studies which demonstrate that support from supervisor helps in enhancing work engagement. Othman and Nasurdin (2013), for example, found from a study of 402 nurses in Malaysian hospitals that supervisor support is significantly and positively connected with work engagement. Ling Suan and Mohd Nasurdin (2016) examined the same association in hotels in Malaysia again finding a positive association. This means that when employees experience support from their supervisors, this will enhance the opportunity for them to be engaged at work.

Added to that, in their recent study, Hidayah Ibrahim *et al.* (2019) investigated the connection between support from supervisor and work engagement in Malaysian call centre staff working for 26 firms. The findings of this study demonstrate that supervisor support positively and significantly connected with work engagement. Furthermore, based on a data gathered from 1039 nurses in Australia, the results of Holland *et al.* (2017) study reveal that support from supervisor is strongly and positively associated with work engagement. Consistent with these results, Crawford *et al.* (2010) in their meta-analysis found the same association.

Theoretically underpinned by JD-R theory (Bakker & Demerouti, 2008, 2017), this thesis delivers empirical support for the notion that supervisor support as a job resource plays a pivotal role in facilitating work engagement. That is, when a worker feels supported from his/her supervisor, this will help him/her to meet their basic human needs (Deci & Ryan, 1985 cited in Bakker & Demerouti, 2008), and this plays a role in motivating the employees to exert more effort, which in turn leads to workers becoming more engaged in the workplace (Schaufeli & Bakker, 2004).

An additional possible explanation is that when workers perceive that their efforts are appreciated and their line-managers care about them (Rhoades & Eisenberger, 2002), this is

likely to encourage them to be vigorous, absorbed, and dedicated in their work. Therefore, this reinforces the employees' engagement levels (Bakker & Demerouti, 2007, 2008; Crawford *et al.,* 2010; Hidayah Ibrahim *et al.,* 2019; Karatepe, 2012). Added to that, the recognition and positive and constructive feedback given to employees by their supervisors play a significant role in boosting work engagement (Saks & Gruman, 2018). Taken together, the current thesis provides support for the JD-R theorising, in which the presence of supervisor support as a job resource helps in promoting work engagement.

6.3 Research Objective 2: To examine whether workload moderates the association between the antecedents (religiosity, training and development, and supervisor support) and work engagement (Hypothesis 4, Hypothesis 5, and Hypothesis 6).

The current study postulates that: H4 - workload moderates the association between religiosity and work engagement, such that the positive association between religiosity and work engagement is stronger at higher levels of workload than at lower levels of workload, H5 - workload moderates the association between training and development and work engagement, such that the positive association between training and development and work engagement is stronger at higher levels of workload than at lower levels of workload, and H6 - workload moderates the association between supervisor support and work engagement, such that the positive association between supervisor support and work engagement is stronger at higher levels of workload than at lower levels of workload. For the purpose of investigating these three hypotheses and as discussed in the previous chapter, a hierarchical multiple regression is utilised.

As indicated in chapter five, the results of the hierarchical multiple regression analysis for H4 show that the interaction effect between the predictor namely, religiosity and the moderator namely, workload in predicting work engagement is significant (β = -.152, p =.005), but it weakened the relationship between religiosity and work engagement, and accordingly, this provides no support for hypothesis 5.

As discussed in chapter two, the literature (e.g. Crawford *et al.,* 2010) has distinguished between two kinds of job demands i.e. hindrance and challenge. Whilst the former can derail personal development and goal achievement (Cavanaugh *et al.*, 2000; Crawford *et al.,* 2010) and is linked with low motivation (Lepine *et al.,* 2005), the latter, on the other hand, provides scope for workers to learn and grow (Crawford *et al.,* 2010). Challenge demands play a role in enhancing employees' abilities and confidence by giving them the experience they need to better deal with their work tasks (Crawford *et al.,* 2010). Interestingly, the findings do not support this argument.

Contrary to previous claims that addressed workload as a challenging job demand (Crawford *et al.,* 2010), the results of this research provide support for Bakker and Sanz-Vergel's (2013) work which challenged the idea of the taxonomy of job demands into hindrance and challenge demands. In this respect, Bakker and Sanz-Vergel (2013) argue that this categorisation of job demands into challenge and hindrance demands is not the same for all individuals and it depends on the professional sector. Therefore, the findings in relation to H4 support Bakker and Sanz-Vergel's (2013) argument and also extend previous studies by revealing that workload acts as a hindrance demand in the telecom sector in which it undermined the relationship between religiosity and work engagement.

An additional possible explanation for this result comes from Crawford *et al.* (2014, p. 67) who mention that even though workload involves the possibility of raising expectations and boosts meaningfulness in the workplace, "there comes a point where work demands can overwhelm individuals' capacity and trigger negative emotions that make them feel unable to adequately deal with these demands". In a similar vein, God says in the Quran (65:7) "God does not burden any human being with more than He has given him". Added to that, Hossain and Rizvi (2016, p. 786) mention that "God does not burden anyone beyond his/her capacity". This means that even though the participants in the present study considered themselves as religious people, God will not blame them if the amount of their workload is beyond their capability to deal with this kind of job demands. Added to that, the participants involved in the present study perceived themselves as religious but they have other family and social responsibilities which in turn could influence their ability to cope with high levels of workload. Furthermore, it may also be argued that the split of job demands into hindrance and challenge, to some extent, could depend on the perception of the individuals. Overall, the finding for H4 provides evidence that the categorisation of challenge and hindrance demands is not as straightforward as proposed and may rely on the professional sector.

H5 postulates that workload moderates the association between training and development and work engagement, such that the positive association between training and development and work engagement is stronger at higher levels of workload than at lower levels of workload. As revealed in the previous chapter, the results of the hierarchical multiple regression analysis showed that the interaction effect between the predictor i.e. training and development and the moderator i.e. workload in predicting work engagement is not statistically significant (β = .080, p =.087) providing no support for hypothesis 5.

H6 posits that workload moderates the association between supervisor support and work engagement, such that the positive association between supervisor support and work engagement is stronger at higher levels of workload than at lower levels of workload. Hierarchical multiple regression revealed that the interaction effect between the predictor i.e. supervisor support and the moderator i.e. workload in predicting work engagement is also not statistically significant (β = -.007, p =.875). Consequently, this offers no support for hypothesis 6.

Taken together, neither hypothesis 5 nor hypothesis 6 yielded significant results for the interaction effect of the IV's i.e. training and development and supervisor support and the moderator variable i.e. workload in predicting the DV i.e. work engagement. As mentioned earlier in chapter five, a moderator variable is a third variable signifies an interaction effect in which entering it into the regression test will influence the magnitude and/or strength of the association between a predictor or IV and a DV.

The findings of these two hypotheses are inconsistent with JD-R theory. In other words, these results were not in line with the assumption that job resources and work engagement relationship is moderated by job demands. In this respect, JD-R theory assumes that job resources increase in importance and add to their motivational potential when workers are faced with greater demands in their jobs (Bakker *et al.,* 2007; Bakker *et al.,* 2010; Bakker & Demerouti, 2008, 2017). Therefore, the results of H5 and H6 contradict the assumption of the interaction influence of job demands and job resources in predicting work engagement.

In addition, these results are not in line with the prior work engagement literature. For instance, Hakanen, Bakker, and Demerouti, (2005) examined the interaction effect between job resources and job demands in predicting work engagement. Drawing on a data collected from

1919 dentists in the public sector in Finland, they found that job resources help in enhancing work engagement particularly when dentists are facing greater levels of job demands. Likewise, Bakker *et al.* (2007) investigated the interaction hypothesis of job resources and job demands and their influence on work engagement. Their findings and based on a sample of school teachers in Finland show that when the job demand, i.e. pupil misbehaviour, is high, the importance of job resources (e.g. organisational climate) in boosting work engagement are increased. This in turn supports the interaction effect assumption of the JD-R model (Bakker and Demerouti, 2008, 2017).

Furthermore, Breevaart and Bakker (2018) tested the job resources and job demands interaction in predicting work engagement in the Netherlands. Their study yielded similar findings in which the interaction of job resources i.e. transformational leadership and job demands i.e. cognitive demands and workload enhance work engagement. Consistent with these findings, in their daily diary research, Tadić, Bakker, and Oerlemans, (2015) find that the interaction effect between job resources and job demands boosts work engagement. However, Brough *et al.* (2013) offer limited evidence for the interaction effect hypothesis in the JD-R model, but at the same time, do provide evidence for the JD-R model in relation to the motivational process.

The present study, however, offers no support for the interaction effect between job resources and job demands in predicting work engagement. Put differently, the connection between training and development and work engagement is not moderated by workload (H5), and the association between supervisor support and work engagement is also not moderated by workload (H6).

One possible interpretation for these results may be due to the incongruity between job resources, job demands, and the outcome variables in relation to the same human psychological functioning domain (Brough *et al.*, 2013). Moreover, a possible explanation for the findings is that it might be because of cultural differences. In this respect, the majority of previous research in work engagement has been conducted in European and Anglophone nations (Abu Bakar *et al*., 2018; Kim *et al.*, 2013). It is worth noting that the application of JD-R theory in a Middle Eastern country yielded different results in relation to the interaction effect hypothesis between job resources (training and development and supervisor support) and job demands (workload) in predicting work engagement. In other words, different cultures could result in different findings and also could illustrate, to some extent, the inconsistency in the results (Beehr & Glazer, 2001 cited in Glazer & Amren, 2018). This is because culture shapes and influences the way individuals explain different situations in the workplace (Glazer & Amren, 2018). Due to the collectivistic nature of Middle Eastern culture (Darwish & Huber, 2003), it therefore might be argued that the social and family life of individual employees plays an important part in their lives (Brough *et al.*, 2013). This, in turn, could influence employees' attitudes and behaviours in relation to the interaction effect assumption between job demands and job resources in predicting work engagement. Consistent with this argument, Glazer (2006) investigated the role of social support in different cultural contexts and found different results across different countries. It may also be argued that these findings came from this particular sample in this specific sector.

Added to that, given that the present thesis is cross sectional study, the interaction effect between job resources and job demands is likely to be more visible using a longitudinal research design (over time periods). An additional possible explanation is that the non-

significant interaction effect between job resources and job demands in predicting work engagement could be affected by the size of the sample (Brough *et al.,* 2013). Nonetheless, the present sample size is 383 which is large enough to test for interactions and accordingly this helps to put some confidence in the findings (Roscoe, 1975 cited in Sekaran & Bougie, 2016; Saunders *et al*. 2009).

6.4 Research Objective 3: To examine the association between work engagement and outcome variables (affective commitment and turnover intention) (Hypothesis 7 and Hypothesis 8).

A further objective is to uncover the association between work engagement and the outcome variables namely, affective commitment and turnover intention. The current study posits that: H7 - there is a positive association between work engagement and affective commitment and H8 - there is a negative association between work engagement and turnover intention.

H7 predicts that there is a positive association between work engagement and affective commitment. Regression analysis reveals that work engagement is strongly and positively connected with affective commitment (β = .483, p =.000) providing support for hypothesis 7, in which work engagement helps in enhancing affective commitment.

As expected, this finding is consistent with previous research. Scrima, Lorito, Parry, and Falgares, (2014) found a positive relationship between work engagement and affective commitment in data gathered from 405 employees in different Italian firms. Paek *et al.* (2015) also found that work engagement positively and significantly influenced affective organisational commitment.

Furthermore, Karatepe, Beirami, Bouzari, and Safavi, (2014) investigated the relationship between the constructs from hotel staff in Cyprus and revealed that the association between work engagement and affective commitment is significant and positive. Similar results have also been provided by Jung and Yoon (2016) using data from employees working in hotels and restaurants. In addition, Basit (2019) found that work engagement is strongly and positively connected with affective commitment. In other words, staff who are engaged are more committed to their organisations (Bakker & Schaufeli, 2008; Gupta, 2017; Llorens *et al.,* 2006; Saks, 2006; Yalabik *et al.,* 2015).

This is in line with JD-R theory (Bakker & Demerouti, 2008, 2017) in which work engagement is considered to be a mechanism by which it is possible to achieve desirable results for firms like organisational commitment (Bakker & Demerouti, 2007, 2017; Hakanen *et al.,* 2008; Demerouti *et al.,* 2001; Schaufeli & Bakker, 2004; Llorens *et al.,* 2006). As demonstrated in the previous chapter, the findings of the present study provide evidence for this argument.

A possible explanation for this finding is that Bakker and Demerouti (2008) state that engaged employees in the task have greater levels of performance for the following reasons. Engaged employees frequently practice better health, practice positive emotions, use their resources better, and they share their passion for their work with other employees. “These positive experiences and emotions are likely to result in positive work outcomes” (Saks, 2006, p. 607). As such, one of the positive consequences that may result from having engaged workers is being committed to their firms (Bakker & Schaufeli, 2008; Gupta, 2017; Llorens *et al.,* 2006; Saks, 2006; Yalabik *et al.,* 2015). Furthermore, staff who are engaged are likely to have higher attachment to their firm (Schaufeli & Bakker, 2004). This is because workers who are engaged are likely to invest more effort on the job, be enthusiastic and energetic about their work, and

fully concentrated on it (Yalabik *et al.,* 2015). Taken together, the results of the present research empirically support the notion that work engagement plays a substantial role in promoting affective organisational commitment.

H8 postulates a negative association between work engagement and intention to leave. As demonstrated in chapter five, the results of the regression analysis show that work engagement is negatively and significantly connected with turnover intention (β = -.324, p =.000). This finding supports hypothesis 8.

As expected, this result supports the notion that work engagement is an important mechanism that helps to have positive consequences such as minimising employees' turnover intention. This is in line with JD-R theory (Bakker & Demerouti, 2008, 2017). In this context, JD-R theory demonstrates that work engagement is a pivotal tool which has positive outcomes for both employees and organisations. As shown in the previous chapter, the results of the current thesis provide evidence for this assumption.

This finding is in line with past literature. Bhatnagar (2012) found a negative association between work engagement and the intention to leave using data gathered from 291 managers working in a variety of sectors in India.

Other studies noting the same association are Takawira, Coetzee, and Schreuder, (2014) who collected data from 153 respondents in a "higher education institution", and Lu, Lu, Gursoy, and Neale, (2016) who from data gathered from both employees and supervisors found that work engagement is negatively linked with intention to turnover. At the same time, the results of Lu and colleagues study revealed that supervisors have greater levels of work engagement and lower intentions to turnover than workers at lower levels.

Added to that, Memon, Salleh, Mirza, Cheah, Ting, and Ahmad, (2019) examined the connection between performance appraisal satisfaction, work engagement, and intention to quit. Based on a survey of employees in oil and gas companies, they found that work engagement is negatively and significantly connected with intention to turnover. In line with this finding, Lee, Idris, and Tuckey, (2019) who investigated associations between leadership styles, performance feedback, supervisory coaching, work engagement, and intention to turnover using data from 500 staff working in different firms show that work engagement is negatively linked with intention to turnover.

According to Mackay *et al.* (2017), work engagement is considered as an effective and efficient mechanism which helps to predict employee attitudes such as intention to turnover. This is because workers who are engaged in their job are likely to think about their job tasks in a positive manner, they experience positive emotions at work as well as better health, and they are passionate about their work (Bakker & Demerouti, 2008). These positive emotions help to enhance the levels of worker identification with his/her firm, and happily invest extra effort to accomplish their work tasks. This, therefore, leads to an employee becoming more attached to his/her work and also the organisation (Bakker, Demerouti, De Boer, & Schaufeli, 2003b), which in turn helps to reduce intention to turnover. Overall, the results of this study are in line with previous research (e.g. Lee *et al.*, 2019), which shows that work engagement leads to reduced intention to leave.

6.5 Research Objective 4: To investigate whether work engagement mediates the association between the antecedents (religiosity, training and development, and supervisor support) and the consequences (affective commitment and turnover intention) (Hypothesis 9, Hypothesis 10, Hypothesis 11, Hypothesis 12, Hypothesis 13, and Hypothesis 14).

The fourth objective of this thesis is to investigate the mediating influence of work engagement on the relationship between the predictors namely, religiosity, training and development, and supervisor support on the one hand, and the outcome variables namely, affective commitment and turnover intention on the other. As shown in the theoretical model in chapter three, this thesis hypothesises the following: H9 - work engagement will mediate the association between religiosity and affective commitment, H10 - work engagement will mediate the association between religiosity and turnover intention, H11 - work engagement will mediate the association between training and development and affective commitment, H12 - work engagement will mediate the association between training and development and turnover intention, H13 - work engagement will mediate the association between supervisor support and affective commitment, and H14 - work engagement will mediate the association between supervisor support and turnover intention.

As demonstrated in the previous chapter, the current study employs the joint significant test to examine mediation (MacKinnon *et al.*, 2007). According to MacKinnon *et al.* (2007), two conditions should be accomplished for the purpose of establishing mediation. Firstly, the route from the IV or predictor to the mediator has to be significant. Secondly, the route from the mediator variable to the DV or outcome has to be significant. As such, mediation occurs if these two conditions are achieved.

H9 predicts that work engagement will mediate the association between religiosity and affective commitment. Added to that, H10 postulates that work engagement will mediate the association between religiosity and turnover intention. Based on the joint significant test (MacKinnon *et al.*, 2007), the findings of the previous chapter show that work engagement mediates the link between religiosity and affective commitment H9, and also the association between religiosity and turnover intention H10 providing support for both H9 and H10.

These results are in line with JD-R theory (Bakker & Demerouti, 2008, 2017). In this context, JD-R theory assumes that work engagement acts as a mediator between personal resources on the one hand, and the outcome variables on the other. In other words, work engagement is the mechanism by which the IV influences the DV. This means that the availability of resources helps to predict work engagement, and that work engagement will lead to positive outcomes to the firm. The results of the current thesis (see chapter five) offer support for this argument.

Furthermore, the results for H9 and H10 are consistent with previous research which shows that work engagement mediates the association between personal resources and the outcomes. For example, Hidayah Ibrahim *et al.* (2019) investigated work engagement as a mediator on the association between personal resources i.e. self-efficacy and the outcome variable namely, intention to quit and found that work engagement mediates this relationship. Xanthopoulou *et al.* (2008) showed that the association between self-efficacy and in-role performance and extra-role performance is mediated by work engagement. Furthermore, Kim and Hyun (2017) found that work engagement mediated the association between personal resources namely, optimism, organisational-based self-esteem, and self-efficacy and the outcome i.e. intention to turnover in a sample of 571 workers in South Korean private sector firms. Additionally, Airila, Hakanen, Schaufeli, Luukkonen, Punakallio, and Lusa, (2014) carried out a research to

uncover the relationship between job and personal resources and the outcome i.e. work ability during the mediation of work engagement. Drawing on a sample of 403 Finnish firefighters, Airila and colleagues found that the association between the personal resource, i.e. self-esteem, and the outcome variable namely, work ability is mediated by work engagement.

The present study, however, expands previous literature by investigating the influence of religiosity as a personal resource on the two outcome variables namely, affective commitment and turnover intention during the mediating role of work engagement. That is, the results of this thesis support the idea that work engagement mediates the link between religiosity on the one hand, and affective commitment and turnover intention on the other. Taken together, as one of the significant personal resources, this study shows that religiosity has a vital influence in boosting work engagement, and engagement, in turn, helps to enhance affective commitment and also leads to lower levels of intention to turnover.

H11 postulates that work engagement will mediate the association between training and development and affective commitment. H12 predicts that work engagement will mediate the association between training and development and turnover intention. Additionally, H13 proposes that the association between supervisor support and affective commitment will be mediated by work engagement, and lastly, H14 predicts that work engagement will mediate the association between supervisor support and turnover intention. The results in chapter five reveal that work engagement mediates the association between training and development and affective commitment H11, the relationship between training and development and turnover intention H12, the association between supervisor support and affective commitment H13, and the relationship between supervisor support and turnover intention H14. As such, hypotheses 11, 12, 13, and 14 are supported.

These findings are consistent with JD-R theory (Bakker & Demerouti, 2008, 2017). In this regard, JD-R theory suggests that work engagement acts as a mediator on the association between job resources on the one hand, and the consequences on the other. This thesis supports that assumption. That is, the present study reveals that work engagement acts as a mediator on the association between job resources namely, training and development and supervisor support on the one hand, and the outcome variables i.e. affective commitment and turnover intention on the other.

Additionally, these findings are in line with previous studies, which demonstrate that work engagement mediates the association between job resources and the outcomes. For example, a study carried out by Sulea *et al.* (2012) to explore the influence of work engagement as a mediator on the connection between perceived organisational support as a job resource and the outcome variable namely, organisational citizenship behaviour. The findings of their research show that the association between the predictor variable i.e. perceived organisational support and the outcome i.e. organisational citizenship behaviour is mediated by work engagement. Similarly, in their empirical study, Agarwal *et al.* (2012) investigate the association between leader-member exchange and innovative work behaviour under the mediating influence of work engagement. Drawing on a sample of 979 participants working in different Indian firms, the findings of Agarwal and colleagues found that work engagement mediates the connection between the predictor i.e. leader-member exchange and the outcome variable namely, innovative work behaviour.

Furthermore, Rich *et al.* (2010) show that engagement mediates the connection between three predictors namely, perceived organisational support, value congruence, and core self-evaluations on the one hand, and two criterion variables i.e. organisational citizenship

behaviour and task performance on the other. Added to that, in their study, Johnson and Jiang (2017) investigate the mediating effect of work engagement on the relationship between the predictor variable i.e. meaningful work and the outcome namely, "work-to-life enrichment". They further examine whether work engagement acts as a moderator in this relationship. Drawing on a sample of 194 participants, the results of Johnson and Jiang (2017) study reveal that work engagement mediates the connection between meaningful work and "work-to-life enrichment". The findings of their study also provide evidence for the mediating but not the moderating role of work engagement on the association between the predictor and the outcome. This, in turn, provides empirical support for the motivational process of JD-R theory (Bakker & Demerouti, 2008, 2017), which proposes that work engagement acts as a mediator between the predictors namely, personal and job resources and the outcomes.

In addition, a study carried out by Garg and Dhar (2017) to examine the mediating effect of work engagement on the relationship between leader-member exchange and "employee service innovative behaviour". Their findings reveal that the association between these variables is mediated by work engagement. Moreover, a recent study conducted by Zheng, Graham, Epitropaki, and Snape, (2019) to uncover the association between service leadership and service performance under work engagement as a mediator. The results of Zheng and colleagues show that the association between the antecedent namely, service leadership and the outcome i.e. service performance is mediated by work engagement. In line with these results, Memon *et al.* (2019) show that the association between performance appraisal satisfaction and intention to turnover is mediated by work engagement.

The findings of the present thesis show that work engagement acts as a mediator on the association between job resources namely, training and development and supervisor support

and the outcome variables i.e. affective commitment and turnover intention. In other words, work engagement is considered as a significant mechanism that connects job resources and the outcomes. This means that when the resources offered to employees are increased, this will result in workers becoming more engaged in the workplace, and work engagement, accordingly, leads to desirable consequences to the organisation. This is because providing employees with sufficient resources will help employees to invest themselves in their job tasks, which in turn reinforces their engagement levels. Additionally, Bakker and Demerouti (2008) mention that workers who are engaged at work frequently practice better health, practice positive emotions, are use their resources better, and they share their passion for work with other workers. Employees in this regard will be more engrossed in their work and will exert extra effort in order to perform their job tasks. This, in turn, will lead to desirable outcomes such as workers being more connected to their firm, and also will lead to lower intention to leave the organisation. Taken together, the results of the present thesis show that work engagement is considered as an underlying mechanism that helps to clarify the association between job and personal resources and the outcome variables.

6.6 Chapter summary

The present chapter discusses of the findings of the hypotheses testing in relation to previous research and in relation to the assumptions of the JD-R theory. This study provides empirical evidence for the motivational process of the JD-R theory. That is, the results of this study show that both personal and job resources start a motivational route which leads to enhancing an employee's engagement at work, and work engagement in turn leads to desirable organisational outcomes. However, in relation to the interaction effect hypotheses, the findings of the present thesis reveal that the moderating role of job demands i.e. workload on the

association between job resources namely, training and development and supervisor support and work engagement is not significant.

Furthermore, the results of this research provide evidence that the categorisation of job demands into challenge and hindrance demands is not the same as suggested, and it depends on the professional sector. This is because workload undermined the association between religiosity and work engagement. Added to that, this research extended the JD-R theory by empirically showing that there are other resources which help to facilitate work engagement i.e. religiosity. That is, the results contribute to the engagement literature and suggest that both HR practitioners and line managers can recognise religiosity as an important personal resource to enhance engagement at work and employee well-being. The next chapter moves towards conclusions and highlights the contributions of this research. Limitations of the current thesis are discussed and the avenues for further research are offered.

CHAPTER SEVEN: CONCLUSION

7.1 Introduction

The current chapter encompasses a conclusion of the present study by offering a summary of the study and demonstrating its contributions to theory and practice. The chapter begins by providing a general overview of the thesis by illustrating its objectives and hypotheses. Secondly, it outlines the theoretical contributions and practical implications. This is followed by addressing the limitations of the present thesis. The final section identifies suggestions and avenues for future research.

7.2 General overview of the study

As demonstrated in chapter one, the main purpose of the present study is to test and extend the JD-R theory in the Jordanian context. This was done by investigating the research model of the present thesis which demonstrates the associations between the study variables namely religiosity, training and development, supervisor support, workload, work engagement, affective commitment, and turnover intention. Previous studies (Bailey *et al.*, 2017; Wollard & Shuck, 2011) have mentioned that engagement research has focused on a limited number of predictors of work engagement. Added to that, previous research has ignored the role of religiosity in the workplace (Assouad & Parboteeah, 2018; Mellahi & Budhwar, 2010; Tracey, 2012).

From this perspective, and drawing on the JD-R theory, the current thesis aims to achieve the following four objectives:

1. To investigate the relationship between the antecedents (religiosity, training and development, and supervisor support) and work engagement.
2. To examine whether workload moderates the association between the antecedents (religiosity, training and development, and supervisor support) and work engagement.
3. To examine the association between work engagement and the outcome variables (i.e. affective commitment and turnover intention).
4. To investigate whether work engagement mediates the association between the antecedents (religiosity, training and development, and supervisor support) and the consequences (affective commitment and turnover intention).

In order to achieve these four objectives, fourteen hypotheses were developed as illustrated below in Table 7.1

Table 7. 1 Study hypotheses

No.	Study hypotheses
H1	*There is a positive association between religiosity and work engagement.*
H2	*There is a positive association between training and development and work engagement.*
H3	*There is a positive association between supervisor support and work engagement.*
H4	*Workload moderates the association between religiosity and work engagement, such that the positive association between religiosity and work engagement is stronger at higher levels of workload than at lower levels of workload.*
H5	*Workload moderates the association between training and development and work engagement, such that the positive association between training and development and work engagement is stronger at higher levels of workload than at lower levels of workload.*
H6	*Workload moderates the association between supervisor support and work engagement, such that the positive association between supervisor support and work engagement is stronger at higher levels of workload than at lower levels of workload.*
H7	*There is a positive association between work engagement and affective commitment.*
H8	*There is a negative association between work engagement and turnover intention.*
H9	*Work engagement will mediate the association between religiosity and affective commitment.*
H10	*Work engagement will mediate the association between religiosity and turnover intention.*
H11	*Work engagement will mediate the association between training and development and affective commitment.*
H12	*Work engagement will mediate the association between training and development and turnover intention.*
H13	*Work engagement will mediate the association between supervisor support and affective commitment.*
H14	*Work engagement will mediate the association between supervisor support and turnover intention.*

7.3 Research contributions

The main aim of the current research is to replicate and extend the JD-R theory. Based on the review of the work engagement literature, this thesis determined the gaps in knowledge and then developed a research model which helps to examine the associations between the study variables. The examination of the associations between the variables that comprise the research model provided empirical findings, which in turn contributes to the extant literature of work engagement and also has implications for practitioners in the workplace. The discussions below will demonstrate the contributions of this thesis.

7.3.1 Theoretical contributions

This thesis makes a number of contributions to the work engagement literature based on the following:

First, this study extends JD-R theory by investigating the influence of religiosity as a personal resource on work engagement. In doing so, the present research builds on and complements Abu Bakar *et al.*'s (2018) qualitative work by empirically examining the association between religiosity and work engagement. The majority of the previous studies in the work engagement literature have been largely focused on the effect of job resources in predicting work engagement, whilst the influence of personal resources is often neglected in the literature (Agarwal & Gupta, 2018). Additionally, only a limited number of personal resources have been investigated with work engagement such as self-esteem. Accordingly, by focusing on testing the influence of religiosity as an important personal resource in predicting work engagement in the context of JD-R theory, greater attention will be directed towards those variables which have not yet been explored within the literature. As such, this quantitative

study sought to fill this important gap in the literature to shed light onto this under-explored area and also offer new insights for the role of religiosity in enhancing engagement at work. Furthermore, this thesis addresses the limitation of Abu Bakar *et al*.'s (2018) research by examining this association from the standpoint of employees at the lower hierarchical levels.

Second, this thesis responds to a call from Bakker and Demerouti (2017) to investigate the moderators of the job demands-resources relationship. The authors also asked whether workload affects this association. The current study addressed this by investigating the role of workload as a moderator in the JD-R model. It can be argued that this is the first study that examined the moderating role of workload on the association between religiosity as a personal resource and work engagement. Added to that, this thesis responds to another call from Bakker and Sanz-Vergel (2013) to further investigate the categorisation of job demands into hindrance and challenge demands in various sectors. The findings of present research offer evidence that the classification of hindrance and challenge demands is not straightforward as proposed, and it relies on the professional sector. This, in turn, opens avenues for future research to further examine this categorisation of job demands into hindrance and challenge demands in different professional sectors.

Third, this study also provides empirical evidence for the role of training and development and supervisor support as job resources in predicting work engagement in a non-Western country i.e. Jordan. By doing so, the present thesis enriches the understanding of the influence of these two job resources in facilitating engagement in the workplace, and therefore, offers support for the motivational process of JD-R theory, by showing that the associations between training and development and work engagement as well as supervisor support and work engagement are statistically significant.

Fourth, whilst prior research has ignored the influence of religiosity in the workplace (Assouad & Parboteeah, 2018; Mellahi & Budhwar, 2010; Tracey, 2012), this study examines the association between religiosity and the two outcome variables namely, affective commitment and turnover intention during the mediating role of work engagement. To the best of the researcher's knowledge, this study is the first that investigates this association in the context of the JD-R theory. Therefore, the present thesis contributes to the field of work engagement by investigating these associations.

Finally, since the majority of work engagement studies have been conducted in developed economies in European and Anglophone countries (Abu Bakar *et al.,* 2018; Bailey *et al.,* 2017; Kim *et al.,* 2013), the present thesis, however, contributes to the work engagement literature by expanding and enhancing the understanding on this research field in the telecom sector in Jordan, a Middle Eastern nation and developing economy.

7.3.2 Practical implications

The findings of the present study can assist both policy makers and HR practitioners who have a substantial role in boosting and consolidating work engagement and employee well-being. Based on the findings of this research, i.e. H1, which show that religiosity is positively related to work engagement, organisations are encouraged to pay attention to the role of religion through embedding it with the values and mission of the institution which, therefore, helps to support religion in the workplace. As such, promoting religious values within the institution has an influence in boosting work engagement. This study also encourages organisations to review all their HRM and HRD policies practices to embed an awareness of religiosity and relevant employment law. This, in turn, plays a role in enhancing work engagement.

Furthermore, this study encourages organisations to offer staff with adequate and appropriate training and development programmes based on their needs. This, in turn, will provide employees with the skills, knowledge, and abilities that play a role in enhancing their availability at work, which, therefore, leads to employees becoming more engaged in the workplace.

In addition, since the role of the supervisor is significant in enhancing the performance of the employees, the present thesis encourages supervisors to support their subordinates such as offering a constructive feedback, guide them and provide employees the information needed to accomplish their job tasks, and appreciate their contributions. Added to that, this study encourages organisations to provide supervisors with mentoring programmes which help to further consolidate and enhance their ability to support their workers. This, in turn, plays a role in enhancing and facilitating work engagement.

7.4 Limitations

Despite the important contributions of this thesis that have been discussed above, this study is not without limitations. These limitations will be discussed in this section and will lead to open avenues for future research.

According to the first limitation, the current study is based on cross-sectional data which affects the conclusions to be made regarding causality. Therefore, longitudinal research design is needed as this will help to address issues of causality and facilitate drawing conclusions regarding causal inferences. In relation to the second limitation, this study depends on self-report data which raises concerns of the possibility of common method bias. In order to limit the effect of this, this thesis followed the procedures recommended by Podsakoff, MacKenzie,

Lee, and Podsakoff, (2003). In doing so, this thesis guaranteed anonymity for the participants involved in the study to reduce evaluation apprehension. This study used validated and reliable scales, and it also provided explanations and instructions at the top for each page of the questionnaire to create a psychological separation.

A third limitation is that this thesis focuses only on one type of job demands namely, workload. Other job demands such as job responsibility have not been tested in the research model of the current thesis. The fourth limitation of this study is that it only concentrates on two outcome variables i.e. affective commitment as well as turnover intention.

Finally, this study is restricted to a single sector in Jordan namely, the Jordanian telecom sector. This, in turn, will influence the generalisability of the findings of the present thesis to the employees of other sectors in the Jordanian context and in other countries. Future scholars may expand this study to other sectors in Jordan and other states.

7.5 Recommendations for future research

This thesis offers directions for future research based on the following. Firstly, the findings of the current research need to be replicated in other industries in Jordan and other countries for the purpose of generalising the results of the study.

Secondly, future researchers are encouraged to employ a longitudinal research design as this will help to explore the links between the variables of the study over a period of time. In other words, examining the associations between the study variables using longitudinal methods would benefit to address issues of causality. Additionally, the application of a mixed methods approach could also be used by researchers as this will enable them to conduct interviews with

the participants and in doing so gain a deeper understanding of the aspects that might enhance employees to become more engaged at work.

Thirdly, whilst this thesis emphasises only on one type of job demands namely, workload, it would be interesting for future studies to examine the moderating role of other types of job demands on the association between the predictor variables namely, religiosity, training and development, and supervisor support on the one hand, and work engagement on the other. For example, does job responsibility moderate the relationship between these variables?

Fourthly, since the current study focuses only on two DV's i.e. affective commitment and turnover intention, future researchers are encouraged to address other outcomes in the research model of the current thesis such as organisational citizenship behaviour. As such, future research may investigate the mediating role of work engagement on the association between the IV's i.e. religiosity, training and development, and supervisor support on the one hand, and the outcome variable namely, organisational citizenship behaviour.

7.6 Conclusion

This research is designed to investigate the associations between the predictors i.e. religiosity, training and development and supervisor support on the one hand, and work engagement on the other. It also investigates the association between work engagement and the outcome variables namely, affective commitment and turnover intention. Additionally, this thesis has investigated the moderating influence of workload on the association between the IV's namely, religiosity, training and development, and supervisor support on the one hand, and work engagement on the other. A related aim is to examine the mediating role of work engagement

on the association between the antecedents and the outcomes. Of the 14 hypotheses that have been investigated, 11 hypotheses were confirmed.

Theoretically underpinned by the JD-R theory, the present study reveals that the three predictors have a strong influence in enhancing work engagement, and work engagement, in turn, has a positive impact on affective organisational commitment and also plays a role in reducing turnover intention. Furthermore, this thesis shows that work engagement mediated the association between the IV's (religiosity, training and development, and supervisor support), and the outcome variables namely, affective commitment and turnover intention.

Moreover, the present thesis further finds that the classification of job demands into challenge and hindrance is not the same for all professional sectors, this is because workload undermined the association between religiosity and work engagement. This result, therefore, requires further examination for the moderating role of workload in different sectors and occupations. However, no statistically significant association was found for the moderating role of workload on the relationship between training and development and work engagement or for the association between supervisor support and work engagement.

This quantitative study sheds light on the significant role of the under-explored area of how religiosity enhances work engagement and in turn resulted in positive outcomes to the organisation such as reducing employees' intention to leave and enhances their attachment to the organisation. This is together with the role of job resources i.e. training and development and supervisor support in consolidating work engagement and employee wellbeing.

This study hopes that the findings contribute to an existing dearth of management research on the role of religiosity in organisations in order to shed light on its importance (Assouad &

Parboteeah, 2018; Mellahi & Budhwar, 2010; Tracey, 2012), the growing body of research on HRM in Jordan (e.g. Ababneh & Avramenko, 2016; Darwish & Singh, 2013; Singh *et al.*, 2012), Islamic HRM (Habib & Shaukat, 2016; Mellahi & Budhwar, 2010), and non-Western contexts where links between employee religiosity and HRM are often overlooked.

Further research might investigate the research model of this thesis in different contexts, sectors, intersectionality such as age, gender, race, and at different organisational levels using mixed methods and longitudinal studies.

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Appendices

Appendix A: Ethical committee approval

Dear Ahmad,

I have been asked to forward the following to you:

> Thank you for your response to the Business School Research Ethics Committee. I confirm that your application is now approved.
>
> Best Wishes,
>
> Dr Andrew Jenkins
> Chair of the Business School Research Ethics Committee

Regards,

Alex Thompson
Education Services Administrator (Students and Courses)
: 01484 472529
: m.a.thompson@hud.ac.uk
: www.hud.ac.uk

Appendix B: EFA results

Appendix B (a) Factor loadings for work engagement scale

No.	Items	Factor loadings
1	At my work, I feel bursting with energy	0.735
2	When I get up in the morning, I feel like going to work	0.711
3	At my work I always persevere, even when things do not go well	0.669
4	I can continue working for very long periods at a time	0.678
5	At my job, I am very resilient and mentally	0.693
6	At my job I feel strong and vigorous	0.718
7	To me, my job is challenging	0.716
8	My job inspires me	0.731
9	I am enthusiastic about my job	0.724
10	I am proud on the work that I do	0.715
11	I find the work that I do full of meaning and purpose	0.683
12	When I am working, I forget everything else around me	0.628
13	Time flies when I am working	0.765
14	I get carried away when I am working	0.794
15	It is difficult to detach myself from my job	0.689
16	I am immersed in my work	0.77
17	I feel happy when I am working intensely	0.645
	KMO .931	
	Bartlett's test 3721.907	
	Sig .000	
	Percentage of variance 50.5	

Appendix B (b) Factor loadings for religiosity scale

No.	Items	Factor loadings
1	I connect to God by praying	0.873
2	I have a great sense of God's presence.	0.838
3	It is important for me to spend more time on religious activities.	0.845
4	I live my life according to my religious beliefs.	0.867
5	I follow religion because it gives me comfort in times of trouble and sorrow.	0.829
	KMO .879	
	Bartlett's test 1157.517	
	Sig .000	
	Percentage of variance 72.3	

Appendix B (c) Factor loadings for training and development scale

No.	Items	Factor loadings
1	My employer encourages me to extend my abilities.	.740
2	This organisation has provided me with training opportunities enabling me to extend my range of skills and abilities.	.750
3	I get the opportunity to discuss my training and development requirements with my employer.	.752
4	My work pays for any work-related training and/or development I want to undertake.	.668
5	This organisation is committed to the training and development of its employees.	.682
	KMO .794	
	Bartlett's test 434.097	
	Sig .000	
	Percentage of variance 51.7	

Appendix B (d) Factor loadings for supervisor support scale

No.	Items	Factor loadings
1	My supervisor cares about my opinions	.756
2	My work supervisor really cares about my well-being	.789
3	My supervisor strongly considers my goals and values	.790
4	My supervisor shows very little concern for me ®	-.625
	KMO .748	
	Bartlett's test 305.827	
	Sig .000	
	Percentage of variance 55.2	

Appendix B (e) Factor loadings for workload scale

No.	Items	Factor loadings
1	How often does your job require you to work very fast?	0.810
2	How often does your job require you to work very hard?	0.839
3	How often does your job leave you with little time to get things done?	0.825
4	How often is there a great deal to be done?	0.879
5	How often is there a marked increase in the amount of concentration required on your job?	0.852
	KMO .844	
	Bartlett's test 1133.371	
	Sig .000	
	Percentage of variance 70.7	

Appendix B (f) Factor loadings for affective commitment scale

No.	Items	Factor loadings
1	I would be very happy to spend the rest of my career with this organisation	.783
2	I enjoy discussing my organisation with people outside it	.801
3	I really feel as if this organisation's problems are my own	.754
4	I think that I could easily become as attached to another organisation as I am to this one ®	-.522
5	I do not feel like 'part of the family' at my organisation ®	-.783
6	I do not feel 'emotionally attached' to this organisation ®	-.817
7	This organisation has a great deal of personal meaning for me	.808
8	I do not feel a strong sense of belonging to my organisation ®	-.693
	KMO .919	
	Bartlett's test 1402.970	
	Sig .000	
	Percentage of variance 56.3	

Appendix B (g) Factor loadings for turnover intention scale

No.	Items	Factor loadings
1	Thought about leaving this job	.862
2	I am planning to look for a new job over the next 12 months	.868
3	I would actively search for a new job outside this organisation	.905
	KMO .719	
	Bartlett's test 509.039	
	Sig .000	
	Percentage of variance 77.1	

Appendix C: Questionnaire

Dear participant

You are invited to participate in this study that focuses on investigating the linkage between the predictors i.e. religiosity, training and development, and supervisor support on work engagement and the organisational outcomes in organisations in Jordan hoping that it will play a role on the enhancement of the work of employees that could assist the Jordanian telecom sector.

I would like to ask for your contribution by giving around 15-20 minutes to respond to each statement in the survey offered. All responses will be kept confidential and will be utilised only for research purposes. In the research, no participants' names or their firm will be identified. You are free to withdraw or stop your participation at any stage (i.e. before the data has been analysed). Please contact me by email if you prefer to withdraw. The involvement in the research is entirely voluntary

This research is under the supervision of Dr. Shelley Harrington and Prof Stephen Swailes at the University of Huddersfield, UK. If you have any queries about the study then please do not hesitate to email me on (ahmad.abualigah@hud.ac.uk).

Yours sincerely,

Ahmad Abualigah
PhD student, The Business School
University of Huddersfield
United Kingdom

Work Engagement: Testing and Extending Job Demands-Resources Theory with Religiosity, Implications for Human Resource Management Practices

Part one: General information

Please indicate the appropriate option about yourself.

Qualification:	High school	Diploma	Bachelor	Master	PhD
Tenure:	5 or less	6-10	11-15	16-20	21 or more
Age:	18-24	25-34	35-44	45 or more	
Marital status	Married	Single			
Gender:	Male	Female			
Religion:	Islam	Christianity		Other	

Part two

Please indicate to what extent you agree or disagree with the following statements by ticking the appropriate box

No.	Statement	Strongly disagree	Disagree	Neither	Agree	Strongly agree
1	At my work, I feel bursting with energy.					
2	When I get up in the morning, I feel like going to work.					
3	At my work I always persevere, even when things do not go well.					
4	I can continue working for very long periods at a time.					
5	At my job, I am very resilient and mentally.					
6	At my job I feel strong and vigorous.					
7	To me, my job is challenging.					
8	My job inspires me.					
9	I am enthusiastic about my job.					
10	I am proud on the work that I do.					
11	I find the work that I do full of meaning and purpose.					
12	When I am working, I forget everything else around me.					
13	Time flies when I am working.					
14	I get carried away when I am working.					
15	It is difficult to detach myself from my job.					
16	I am immersed in my work.					
17	I feel happy when I am working intensely.					

Please indicate to what extent you agree or disagree with the following statements by ticking the appropriate box

No.	Statement	Strongly disagree	Disagree	Neither	Agree	Strongly agree
1	I connect to God by praying					
2	I have a great sense of God's presence.					
3	It is important for me to spend more time on religious activities.					
4	I live my life according to my religious beliefs.					
5	I follow religion because it gives me comfort in times of trouble and sorrow.					

Please indicate to what extent you agree or disagree with the following statements by ticking the appropriate box

No.	Statement	Strongly disagree	Disagree	Neither	Agree	Strongly agree
1	My employer encourages me to extend my abilities.					
2	This organisation has provided me with training opportunities enabling me to extend my range of skills and abilities.					
3	I get the opportunity to discuss my training and development requirements with my employer.					
4	My work pays for any work-related training and/or development I want to undertake.					
5	This organisation is committed to the training and development of its employees.					

Please indicate to what extent you agree or disagree with the following statements by ticking the appropriate box

No.	Statement	Strongly disagree	Disagree	Neither	Agree	Strongly agree
1	My supervisor cares about my opinions.					
2	My work supervisor really cares about my well-being.					
3	My supervisor strongly considers my goals and values.					
4	My supervisor shows very little concern for me. ®					

Please indicate to what extent you agree or disagree with the following statements by ticking the appropriate box

No.	Statement	Strongly disagree	Disagree	Neither	Agree	Strongly agree
1	I would be very happy to spend the rest of my career with this organisation.					
2	I enjoy discussing my organisation with people outside it.					
3	I really feel as if this organisation's problems are my own.					
4	I think that I could easily become as attached to another organisation as I am to this one. ®					
5	I do not feel like 'part of the family' at my organisation. ®					
6	I do not feel 'emotionally attached' to this organisation. ®					
7	This organisation has a great deal of personal meaning for me.					
8	I do not feel a strong sense of belonging to my organisation. ®					

Please indicate to what extent you agree or disagree with the following statements by ticking the appropriate box

No.	Statement	Strongly disagree	Disagree	Neither	Agree	Strongly agree
1	Thought about leaving this job.					
2	I am planning to look for a new job over the next 12 months.					
3	I would actively search for a new job outside this organisation.					

Part three

Please indicate to what extent you agree or disagree with the following statements by ticking the appropriate box

No.	Statement	Never	Rarely	Sometimes	Often	Always
1	How often does your job require you to work very fast?					
2	How often does your job require you to work very hard?					
3	How often does your job leave you with little time to get things done?					
4	How often is there a great deal to be done?					
5	How often is there a marked increase in the amount of concentration required on your job?					

Thank you for your cooperation