The power of productive organisational energy in relation to leadership style and job satisfaction: The context of Saudi Arabian universities

By

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DECLARATION

I declare that this Ph.D. thesis entitled "**The Power of Productive Organisational Energy in relation to Leadership Style and Job Satisfaction: the context of Saudi Arabia Universities"** has been compiled by me under the supervision of Dr. Linda Alker, Prof. Ben Lupton and Dr. Rosane Pagano. No part of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other University or Institution.

Signature: _____________________

Date: _________________________

ABSTRACT

Leadership as a research concept has been for many years – and still remains – an area of significance. The topic of leadership has been researched and debated a great deal; however, the leadership style adopted by higher education institutions within a particular context and culture has been considered very little. The primary aim of the Doctorate research study carried out herein is to examine and evaluate the relationship between leadership styles, i.e. transformational and transactional, productive organisational energy and academic and administrative staffs' job satisfaction in public and private universities of Saudi Arabia. In fact, during the latest few decades, the leadership body of literature has expanded beyond the focus on traits and behaviours and also provided the theoretical basis for understanding the nature of each variable, which is highlighted in the research study.

The present study was based completely on the quantitative research method approach. Data for the research were collected from the academics and administrative staff of two higher educational institutions in Saudi Arabia through the use of a survey questionnaire which was sent to more than 1,400 potential respondents.

A theoretical framework was also assessed in an empirical study in Saudi Arabia, to examine the impact of leadership style on job satisfaction and the mediating role played by productive organisational energy – as observed in the relationship between leadership style and job satisfaction. The study is significant for practical purposes, as it can benefit organisations in identifying their need for a specific leadership style, in order to boost their employees' productive energy and satisfaction. The relationship between leadership style, productive organisational energy and job satisfaction was tested theoretically and empirically.

The research determined that in the public King Abdulaziz University, transformational leadership predicted neither job satisfaction nor productive organisational energy to a significant level, though transactional leadership did so. Conversely, for the private Dar Alhekma University, transformational leadership did predict job satisfaction and

productive organisational energy to a significant level, but transactional leadership did not manage to do so.

Finally, a review of some of the limitations of the research study and several areas of future research are provided on the basis of the empirical and theoretical findings.

DEDICATION

To my wife **Rozan Baghdadi**, soulmate and my other half.
Also to my parents and only sister for their unconditional love, support and time.

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It is true that human beings have been given an immense power of sensibility and purpose in life; however, these powers cannot be put into use and application without the interacting with others. The knowledge and resources that are received from other people and the nature are what help a person in achieving the things he/she desires. Hence, I would take this opportunity to thank each and every person who has helped me in finishing this work.

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1. Research Introduction

1.1 Preamble

Global recognition of the "leadership" concept that has emerged over the past several years has resulted in certain challenges for various contexts in altered settings. Debates about different leadership styles and the suitability of specific approaches in various situations have been highlighted. Furthermore, the literature asserts that no clear understanding has been established that differentiates between leaders and non-leaders (Vroom and Jago, 2007; Bennis and Nanus, 1985), and it is also evident that "leadership" studies have been growing significantly in many fields such as politics, organisations, health and even education. In the higher education institutions context the concept has begun to unleash some challenges and issues (Bryman, 2007; Scott et al., 2008), and a review of the literature reveals that hardly any research study has been conducted on Saudi Arabian higher education institutions by focusing on leadership style and its relationship to other concepts.

This thesis focuses on and informs research and practice in the particular context of public and private universities within Saudi Arabia and examines the relationship between specific leadership style with productive organisational energy and job satisfaction. The following research study is a summary of a three-year journey encompassing learning, challenges and working under pressure, in order to encapsulate significant and noteworthy findings. The present study has been structured and tailored to focus on examining a theoretical framework via academics and administrative staff working in several Saudi universities. Indeed, each chapter is divided into sub-sections, each one of which addresses a specific topic and subject. To aid the reader, this first chapter focuses on identifying the research problem and raising some of the main issues that will be presented in the following literature review and context review chapters. Furthermore, the introductory chapter provides an overview of the contextual features, namely Saudi Arabia, and highlights the importance of the "productive organisational energy" concept in the present study.

Finally, this chapter presents the research aim and objectives and provides a brief overview of the adopted research method.

1.2 Research Problem

Leadership is one of the few phenomena that has been extensively reviewed and studied over the last few decades (Kovjanic, et al., 2012). Burns (1978) stated that 'Leadership is one of the most observed and least understood phenomena on earth yet has been one of the most commonly studied and researched subjects in different disciplines'. Many researchers claim that leadership theorists have defined leadership through the lens of various aspects of human endeavour, such as academia, social work, politics, business and others (Obiwuru, Okwu, Akpa & Nwankwere, 2011; Paracha et al., 2012). As explained by Lyons and Schneider (2009), the globalisation of organisations has led to a shift in the focus of companies, from outcomes and profits, to employee-focused, and hence the study of leadership has gained more interest. Higher education is now one of the most important and empowering sectors playing an extremely crucial role in the social, economic and political development of various countries (Ivory et al., 2007; Boer & Goedegebuure, 2009). Universities are also considered extremely important for the development of contemporary society, where they act as repositories of knowledge and are considered to play a crucial role in the cultural and socioeconomic aspects of nations (Barnett, 1997). Altbach and Salmi (2011) take examples from some of the best universities in the world, such as Harvard and Oxford, and explain that such universities tend to study and examine the government, economic needs and conditions of their respective countries. The literature highlights that the concept of "leadership" in the educational context refers to the practice of enhancing and improving human potential, and hence is extremely crucial for academic institutions as well (Bolden et al., 2009). It has been argued that various higher education institutions in several contexts adopt different leadership styles, namely distributed (Gosling, 2009), transactional (Kurland et al., 2010) and transformational (Chen et al., 2010), while Reeves' (2009) study reveals that transformational leadership is more effective in motivating students than transaction leadership. According to Fullan (2009), universities in the past used to adopt and follow a routine approach to teaching, and hence top management used to dictate rules and the same administrative practices were followed year after year. Fullan (2009) also states that academics now have stronger and more diversified individual goals as well as in terms of innovation and research. Hence, higher support from and collaboration with top management are necessary, in order to increase their motivation to perform better and become more innovative. At this point it is reasonable and necessary to focus on the adopted leadership style in both types of higher education institution, i.e. public and private universities, and to examine whether or not it has an effect on academic and administrative staff job satisfaction.

1.2.1 Contextual Features and Relevance

Several differences have been observed and noted in the leadership styles adopted by public and private educational institutions (Hansen and Villadsen, 2010; Bhatti et al., 2012). Yavirach (2009), for instance, carried out a comparative analysis in Thailand to identify and discuss the implementation and existence of the transformational style of leadership. The author's results highlight that universities in the public sector are more prone to exhibiting a transformational style, compared to universities in the private sector, which compares with a study carried out in the context of Pakistan by Bodla and Nawaz (2010), who presented slightly different findings. According to the authors, public and private universities both exhibit transformational leadership style to the same extent, but the degree of transactional leadership is higher in private sector universities compared to their public counterparts. Furthermore, the study carried out by Drummond and Al-Anazi (1997) in the case of Saudi Arabia presents a slightly different perspective and states that academic and administrative staff satisfaction levels in the public universities of the country are very low, which could be due to the leadership style and management approaches being used. Nonetheless, Drummond and Al-Anazi's (1997) results highlight that public organisations tend to adopt transactional leadership, in contrast to private organisations, where transformational leadership is more preferable.

It can hence be deduced from these discussions that while leadership plays an important role in higher educational institutions in the growth and higher job satisfaction for academics and administrative staff, many studies have highlighted different results in regards to adopting transformation, transactional, democratic or even autocratic leadership in public and private universities. In addition, since academics and administrative staff play a vital role in the development of the sector, this study will help in examining perceived leadership styles in public and private universities in the context of Saudi Arabia.

1.2.2 The Power of Productive Organizational Energy

Considering the importance of leadership style and job satisfaction in the Saudi Arabian higher education sector, adding a mediator variable to the study would help provide suggestions for the universities to the extent that such a meditator could enhance the impact of a specific leadership style on overall job satisfaction. Moreover, this mediator could also identify whether the level of productive organisational energy would vary when different leadership styles are adopted. Due to Saudi Arabia's culturally-driven society, the majority of employees tend to work routinely and on a similar daily basis, not understanding that being positively energised at work has far-reaching consequences for the organisation in general and employees in particular (Cole et al., 2012). Dutton (2003) suggests that 'energy at work is defined as the most important renewable resource and the fuel that makes organisations run'. It is worth mentioning at this juncture that the concept of productive organisational energy is also known as the 'joint experience and demonstration of positive affect, cognitive activation and argentic behaviour among members of a collective in their shared pursuit of organizationally salient objectives' (Cole et al., 2005, p. 9). Cole also suggests that productive organisational energy has three types of energies: affective energy, cognitive energy and behavioural energy (Cole et al., 2005). The study carried out by Louw et al. (2012), in the meantime, highlights that the productive organisational energy of employees in an organisation is the result and outcome of their overall well-being, which in turn is affected by the leadership style adopted by top management in the organisation. A similar discussions, presented by Kunze and Bruch (2010), highlights that the adoption of a participative leadership style tends to lead to a significant boost in the overall productive organisational energy of the workforce so that they work towards achieving common organisational goals. According to Atwater and Carmeli (2009), leadership style tends to have a strong influence on these three aspects of productive organisational energy, thus leading to the final performance outcomes of employees. Furthermore, the discussion presented by de Jong and Bruch (2013) highlights that a transformational leadership style leads to the development of a more positive climate within the organisation, thus advancing to higher productive organisational energy. While these studies have established that there exists a relationship between leadership style and productive organisational energy, the literature lacks in such studies carried out in the field of higher education.

1.2.3 The Kingdom of Saudi Arabia

Saudi Arabia is a country that has a strong traditional and religious culture which is influenced by the Wahhabi Islamic movement. The current Saudi system of education developed significantly in the early 1970s, resulting in establishing the Ministry of Higher Education. In addition to the development of the basic and traditional education system, the country has also focused a great deal on the development of its higher education system. Smith and Abouammoh (2013) discuss that the government of Saudi Arabia considers higher education to be one of the most important pillars of development for the nation and hence provides significant financial grants and other support for the creation and development of universities. The leadership style adopted in Saudi Arabia is considered to be traditional in nature. Higher education has had a continuous focus in the region through developing future plans for universities to improve management systems and leadership approaches, in order to offer a better education (Aldaweesh et al., 2013). As of 2014, there were 28 public universities and 24 private institutions in the country (Koch, 2014), and according to the data presented by Koch (2014), 1,165,091 students were registered in different universities and colleges all across the country. Another significant point is that almost 50% of these students were females, which demonstrates a seismic shift in the education system, as female education was formerly not supported. Furthermore, Alamri (2011) explains that the Saudi government is highly focused on increasing the number of universities so that more students can get a top-class education and also so that more courses in varied fields and subjects can be offered to students, in order to establish a comprehensive system. According to Smith and Abouammoh (2013), the country is focusing on developing a more global mean and form of education to make sure that it can compete in the global environment with the help of more qualified and experienced indigenous scholars and academics.

An interesting observation made in the higher education sector is that the current education system is very much in its infancy, as more than 63% of the universities that currently exist have formed only in the last 15 years (Aljubaili, 2014). Administration and management documentation is written predominantly in the Arabic language; however, the system is trying to move towards a more 'Westernised' style of teaching and curriculum, where the prime language is English, though this has only been possible because of support given by the government (Aljubaili, 2014), which allocates money in its budget every year for the development and facilitation of education in the country. In the 2015 budget, education was allocated around 25% of total government expenditure, leading to funds of around £37billion (UK Government, 2015) allocated to a number of developments and activities, including the refurbishment of existing universities, the construction of new universities as well as improvements to different colleges and sports centres (UK Government, 2015). In addition to these activities, the government even allocated a sum of £3.8billion from the total education budget to extend support to Saudi students studying abroad, which exceeded 200,000 students and £1billion for funding the Technical and Vocational Training Corporation (UK Government, 2015). Nonetheless, it has been found that some new public universities, especially those offering technical and science subjects, such as (KAUST) King Abdullah University for Science and Technology, are trying to reform their learning, teaching and assessment approaches and offer higher autonomy to academics and administrative staff. Furthermore, private universities have also shifted their teaching pedagogy towards a student-focused system rather than being faculty-focused, such as (DAH) Dar Al-Hekma University. In addition, they have also enhanced the overall learning environment through the implementation of interactive learning methods. The discussions and facts highlighted above are the reasons for choosing Saudi Arabian higher education institutions as a context for this research study.

To the best of the researcher's knowledge, no such study has been carried out that proposes universities as a research sample, and as productive organisational energy is a relatively new concept in the field of organisational studies, it has not been studied or evaluated in the context of Saudi Arabia, either. Hence, it would be beneficial to study the contrast between public and private universities in the Saudi Arabian context.

1.3 Research Aim and Objectives

The primary aim of the research study herein is to **"examine the relationship between leadership style, productive organisational energy and academic and administrative staff's job satisfaction in Saudi Arabian public and private universities."**

The aim presented above has been broken down further into four key objectives that need to be accomplished within the research study, namely:

- To **identify** the leadership style as perceived in public and private universities in Saudi Arabia.
- To **measure** the level of productive organisational energy in public and private universities in Saudi Arabia.
- To **test** the relationship between leadership style, productive organisational energy and job satisfaction in public and private universities in Saudi Arabia.
- To **examine** the mediating role of productive organisational energy in the relationship between leadership style and job satisfaction in public and private universities in Saudi Arabia.

1.4 Research Questions

Below are a few research questions with respect to different areas of focus within this research. These questions need to be answered by the research and the researcher, in order to meet the aims and objectives defined earlier.

Leadership

- What are the current adopted leadership styles in Saudi Arabian universities?
- What makes transformational and transactional leadership styles suitable for improving job satisfaction in Saudi Arabian universities?

Productive Organisational Energy

- Does productive organisational energy boost job satisfaction?
- Does productive organisational energy mediate the relationship that exists between leadership style and job satisfaction in an organisation?

Job Satisfaction

- Does implementing transformational or transactional leadership styles influence job satisfaction in public and private sector universities in Saudi Arabia?

1.5 Overview of Research Method

In order to examine the designed model, research data were collected from academic and administrative staff from public and private universities. The entire research is a quantitative research study attempting to examine the relationship between different variables, namely leadership style, productive organisational energy and job satisfaction. The literature review formed the research framework and contributed to developing the research hypotheses, which were then tested using an objective approach, which suits the quantitative research method. In order to generalise the findings and make sense of them, a large sample was required for the research, so the chosen data collection tool was a survey, using a simple random sampling technique. The adopted questionnaires were previously used and tested in different research studies and in various contexts. To complement the research findings and do them justice, the researcher used structural equation modelling, which required the use of various statistical analysis software tools, namely SPSS and AMOS, to draw some remarkable outcomes. SPSS is often used to study multiple regression analysis, frequency analysis, central tendency, kurtosis and multicollinearity, whilst AMOS is used to compute structural equation modelling and other advanced assessments of variables, which will be discussed in detail in later chapters.

1.6 Framework

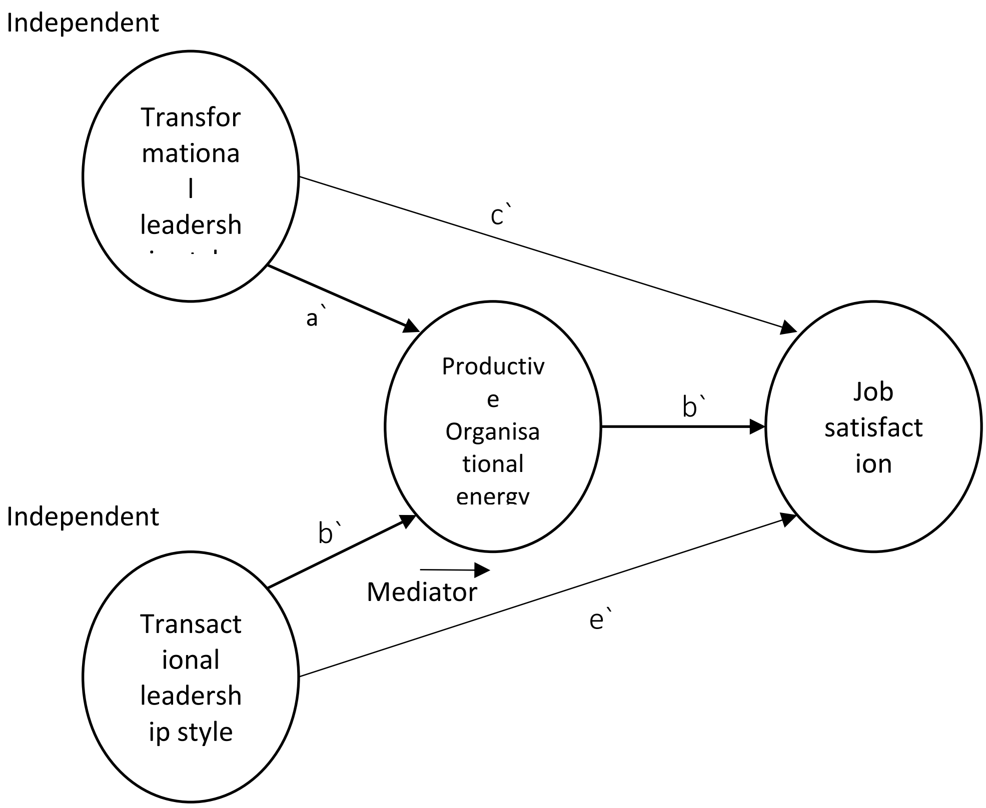


Figure 1.1 Theoretical Framework

Based on the extensive discussion, the gaps that will be identified in the literature show that there is a need to examine the impact of leadership style on employees' job satisfaction in the context of higher education (Al-Rubaish et al., 2011). Indeed, there are several theories that have been developed to study and explain the measurement of job satisfaction among employees working in different organisations. However, it can be argued that not all theories are applicable or valid in all given organisational scenarios or settings, and so researchers need to make careful and informed decisions while selecting the one that is most beneficial and effective in the organisational setting in which their studies are based. Therefore, due to Saudi Arabia's performance-oriented and individualistic culture (Smith and Abouammoh, 2013), the focus on both hygiene and motivators factors is necessary, and so the content theory will contribute to the present research study.

1.7 Significance of Study

Globally, leadership in organisations is well known and considered a key factor that leads to either the success or failure of organisations and institutions (Trottier, Van Wart and Wang, 2008; Storey, 2016). Saudi Arabia is known for its Islamic religious beliefs and culture, which could be a crucial aspect that affects how leadership in academic settings is perceived (Vassiliev, 2013; AL-Rasheed, 2010). Furthermore, it has been adopting more progressive higher educational institutions to improve the education of students as well as addressing leadership challenges in the higher educational system (Alamri, 2011; Krieger, 2007). A better and wide understanding of the adopted leadership style in Saudi Arabian higher education may allow for identifying the most suitable leadership style in public and private universities (Prokop, 2003). Furthermore, knowledge can be gained by examining the relationship between leadership style and productive organisational energy, which will help top management enhance the overall well-being of academics and administrative staff. In addition it could support top management and lead to the conversion of a corrosive organisational environment into a positive environment with higher productive organisational energy. Examining the mediating role of productive organisational energy in the relationship between leadership style and job satisfaction may provide an opportunity to understand the effect of the energy factor and could boost academic and administrative staff job satisfaction (Cole, Bruch and Vogel, 2012) in both private and public universities. A fundamental significance of this research study is that building a structural equation model that examines the relationship between leadership style (McColl-Kennedy and Anderson, 2002), productive organisational energy and job satisfaction will support the higher education system and institutions in increasing decision making (Dresselm 1981; Shapiro and Stefkovich, 2016), autonomy and flexibility in universities, thus achieving the Saudi government’s vision of world-class universities. Eventually, future researchers could develop similar models and frameworks by using different factors, which will contribute not only to the Saudi Arabian higher education context, but also to leadership studies and the literature.

1.8 Thesis Structure

This thesis introduction has provided an overview of the research problem and the main research variables. The research aims and objectives were developed specifically for this thesis.

In Chapter Two, the literature review journey will start in more detail, supported by academic researches which provide theoretical concepts on leadership styles, productive organisational energy and job satisfaction. In addition, any limitations, challenges and gaps in past and current research studies will be unearthed and examined.

In Chapter Three the researcher provides an interesting insight into Saudi Arabia, starting with its location, climate and population. Furthermore, the current situation of leadership and cultural aspects is covered. The same chapter also offers an intensive review of the most sensitive matters in Saudi Arabia, i.e. the political and education systems.

Chapter Four discusses the research methodology utilised and applied in this research. The chapter is divided into various sections, starting with the research paradigm, research philosophy, research method, research design, data collection, measurement instruments and finally the pilot study covering sample size and strategy.

Chapter Five provides the research's data analysis approaches, such as identifying the required data analysis techniques with an evaluation and comparison between different techniques and tests. The chapter also presents the objective, focus and level of analysis and finally the tests employed herein.

Chapter Six provides an analysis of the collected empirical data as well as the findings of this research study. Additionally, the demographic profile of respondents, descriptive statistics, factor analysis and the structural equation models are addressed.

In the seventh and final chapter, the researcher highlights links between the research findings and all of the chapters, followed by highlights of the implementation of the research results and findings. Finally, a summary of the study’s limitations, gaps, recommendations and conclusions for further research on this topic is emphasised.

1.9 Summary

The discussions presented in this chapter present a comprehensive overview of the significance and relevance of the study. It has been established that the education sector plays an extremely important and crucial role in the development of any given economy and leads to multiple benefits for the people as well as the nation itself. Hence, this is why the Saudi Arabian government has been paying special attention to the growth of its higher education sector and several reforms have taken place in institutions and universities in the sector. It can be concluded from the discussions that universities in Saudi Arabia are moving towards a complete transformation and are widely adopting different organisational practices inspired by other industries and even Western universities. However, there are not many studies that have focused on the study of leadership style or even productive organisational energy in the context of higher education in Saudi Arabia, so this inquiry hence aims at bridging this gap in the literature, leading to practical suggestions for improving not only the teaching and learning environment, but also the overall leadership and management practices of universities in the country. The next chapter will present further research on current and past leadership theories, job satisfaction concepts and the power of productive organisational energy in the working environment, a great deal of which has been utilised in public and private sectors.

Chapter 2: Literature Review

2. A Review of Literature

2.1 Introduction

Leadership still remains one of the most commonly studied and contested subjects in different disciplines (Grint, 2005), and as companies are becoming more global and international in nature, the focus on the study of the leadership construct has been increasing (Yukl, 2002; Dunston, 2016). Furthermore, since the construct of leadership has a direct and strong impact on the overall outcomes of companies (Katou, 2015), its importance in organisational behavioural studies is rising significantly (Lyons and Schneider, 2009). Discussions by Bolden et al. (2009) highlight that the concept of leadership refers to the construct or practice of enhancing and improving human potential, and hence it is extremely important and crucial for academic institutions as well. In fact, studies have shown that leadership style can influence job satisfaction (Podsakoff et al., 1996), performance (Oluwatoyin and Cristopher, 2016) and characteristics (Piccolo and Colquitt, 2006) as well as organisational performance (Castelli, 2016).

Bryman et al. (1996) note that a study of context can illustrate dissimilarities in leadership results and outcomes. The importance of choosing a research context is explained by Tourish (2014) as an obligation to understand leadership in context, and in this case the researcher's interest is in higher education institutions in the Kingdom of Saudi Arabia. Leadership is an evolving topic in different types of organisations, including higher education institutions, and it is a subject often researched to examine the significant value it plays in the role of application (Pfeffer, 1977; 2011). Scholars across the world recognise that the demands of having effective leadership have grown in various disciplines, including higher education institutions (Ivory et al., 2007), and different researchers have examined the challenges that these bodies face as academics and administrators (Boer and Goedebuure, 2009). Some of the challenges experienced by higher educational institutions that have been identified include the need to measure activities and performance, improve compliance with government regulations, global competitiveness and identifying strategic needs (Thomson, Reuter 2010).

Leadership has a vast array of literature research and definitions of what constitutes a leader, and leaders today are also tasked with deciding what leadership style is most effective for their organisations. Kouzes and Posner (2002) explain further how a leader can best lead a team, in that '[they] work to make people feel strong, capable, and committed'. Hewitt (2008) argues that the success of higher education institutions depends not only on an effective leadership approach and style, but also on great leaders, while various studies indicate that organisational performance can be affected by leaders (Thomas, 1998) and organisational culture (Ogbonna and Harris, 2000).

There is also some evidence that leadership is a significant factor and associated with higher education institutions, though it does present some challenges and needs to be examined in more depth (Bolden et al., 2009). The arguments above have brought into focus the importance and need to study leadership in higher education institutions, and therefore it is important to dig deep into the literature to explore the key challenges facing higher education institutions, before developing the theoretical framework.

In order to address the research context challenges, the present chapter commences with an overview of the leadership challenges that face higher education institutions and the importance of the chosen context. The second section focuses on leadership theories and leadership styles and presents an overview of the way the concept of leadership has evolved over time through the development and advent of multiple organisational theories. Moreover, the chapter highlights the history of leadership, defining what leadership is, discussing its characteristics and outlining its limitations. The third section provides a further understanding of leadership styles used and the limitations involved with utilising these approaches, while the fourth section reviews the research to find the most suitable leadership style and then links these findings with productive organisational energy and job satisfaction in higher educational institutions.

The overall goals of this chapter are to establish the significance of leadership and its connection with the level of productive organisational energy at work and overall job satisfaction, and then to identify the contribution of the developed research framework in the context of higher education institutions in Saudi Arabia.

2.2 Challenges facing Higher Education

In the higher education context, numerous studies show that leadership has a relationship with academia through university focus (Braun et al., 2009: 2016), organisational culture (Taylor, 1986) recourse and accountability issues (O'Donnell and White, 2005), teaching delivery and learning culture (Scott, 2001: 2002: 2005), gender issues (Kloot, 2004) and institutional support practices (Uslu and Welch, 2016).

Higher education, in both the public and private sectors, faces distinct challenges such as curriculum design, technology, accreditations, student employability, widening participation, quality of learning and teaching, quality of research, assessment, generation of new staff and funding (Kogan, 1994; Levy, 1986; Enders, 2004; Robson, 2006; Scott, 2000; Alvesson 2013). Mossmayer (2010) argues further and brings into focus the notion that in relation to the higher education context, 'critics have expressed concern about university-industry relations', in that corporations may influence research topics and in exchange university governance structures promote greater faculty surveillance and accountability, albeit with a reduction in academic autonomy (MacLean, MacIntosh, and Grant, 2002; Dill, 2003; Bennich-Bjorkman, 2007). These challenges may potentially have a significant impact on higher educational institutions, as currently existing universities may not realise the very tangible nature of these obstacles. The mission of higher educational institutions to provide first-class educational programmes in which leadership and management are responsible for achieving results and where there is a continuous need to measure and quantify activities and performance (Thomson Reuters, 2010).

Pfeffer (2010) argues that there is a paucity of leadership development evaluation in universities. Although higher educational institutions' roles are changing and in need of an evaluation of their leadership development, many administrators note that they are finding that measurement is central to their responsibilities (Thomson, 2010). Measuring performance in regards to leadership is critical in understanding what is working, what is not working, what changes should be made and what resources are needed to improve leadership performance and job satisfaction. Higher educational institutions are also faced with the challenge of technology and social media and how it rapidly effects change in institutions (Collins, 2014). Technology plays a vital role in universities becoming competitive, as they have integrated e-learning management systems to broaden their ability to recruit leaders to provide leadership instruction based on actual application through hands-on experience. E-leadership applied to educational technology is still in the early introduction/elaboration stages (Jameson, 2013; Gurr, 2004, Gurr, Drysdale and Mulford, 2006; Tan, 2010; Yee, 2000). The researcher would therefore argue that one of the main issues facing the current research study in dealing with public universities in Saudi Arabia is the use of technology, especially in processing documentation. Alotaibi et al. (2016) argue that Saudi Arabian universities lack up to date information systems, and so new approaches to managing admission systems must be employed, in order to increase universities' efficiency. Similar findings are highlighted by Bangert and Almahfud's (2014) study, which compared six Saudi universities and five American universities in relation to using the information and communication technology tools. Jameson (2013) argues that it is critical that leaders, managers and staff in higher education can recognise the importance of adapting to the exponentially increasing changes occurring in education as a result of educational technology advancements. Furthermore, platform developments of distance learning, cloud computing, tablets, mobile apps and video/teleconferencing are creative and innovative ways for institutions to embrace workplace trends such as flexible work schedules and telecommuting, and utilising freelance leaders willing to work from home. Kearsley and Lynch (1994) also argue that the critical need for training in technology leadership is still relevant across the world today – and in higher education in particular. In contrast to some of the newly opened private universities in Saudi Arabia, such as King Abduallah University for Science and Technology (KAUST), advancements in the use of technology have resulted in adopting national projects such as solar power by 2030 (Alyahya and Irfan, 2016). On a similar basis, the private University of Business and Technology (UBT) is shifting away from its adopted teaching pedagogy towards more of an e-learning approach (Zabadi and Alalawi, 2016). The stark contrast between public and private universities in Saudi Arabia raises many questions and illustrates several issues that need to be resolved. Therefore, based on Smith and Abouammoh's (2013) focus group study, these challenges are stated as follows:

- The implementation of strong and appropriate leadership in Saudi universities.
- The enhancement of learning approaches and processes, and the use of technology.
- Improvements in the quality of strategic planning and organisational energy in both private and public universities.
- International collaboration that links Saudi universities with others.
- The development of opportunities for women to participate in higher education as academics and students.
- The balance between higher quality teaching and high-quality research.
- The use of international research standards capacity.
- The adoption of world-class standards while at the same time maintaining a focus on the specific needs of Saudi Arabia.
- The insurance of delivering high-quality education in both private and public universities and supporting the overall strategy for higher education in Saudi Arabia.

These issues, challenges and more have been identified by Saudi and international researchers, which gives a clear sign and obvious indication that change in the near future is an obligation. One of the foremost issues in the higher education context concerns leadership (Moses and Roe, 1990; Middlehurst, 1993; Zusman, 2005). Basham (2010) also argues for the need for more research that touches upon leadership style in higher education institutions. Based on an extensive discussion, the first step would be to look at top management and the adopted leadership style, in order to overcome other issues. Based on the research aim and objectives, the researcher proposes some solutions that may help address the acknowledged issues. Hence, the next section presents and focuses on the history of leadership, its etymology and definitions thereof.

2.3 Leadership Etymology and Definitions

The Oxford English Dictionary defines leadership as the state or position of being a leader and the action of leading a group of people or a particular organisation. The growth and importance of leadership in the study of organisational behaviour have grown substantially (Bass and Stogdill, 1990). One of the most ancient and oldest definitions recorded to define the concept of leadership was given by Munson (1921), who described it as 'the creative and directive force of morale' (Stogdill, 1975). Leadership is one of the few phenomena or constructs that have been extensively reviewed and studied by a large number of academics (Graen and Uhlbien, 1995; Vroom and Jago, 1988; Bass, 1997). Another very commonly used leadership theory was proposed by McGregor (1960), who said 'The importance of leaders increased because most of the people had to be directed'. Furthermore, the term "leadership" can have many definitions and has been described as being a multidimensional phenomenon (DePree, 1989; Drucker, 1988); hence, as Arnold and Feldman (1986) argue that there are over 3,000 leadership research studies, one could say there are countless leadership definitions.

The next major leadership change was observed during the 1980s, when its segregation into multiple rational categories was presented. Bass (1985) was among the first researchers who identified the transformational and transactional styles as the two main elements of leadership. The concept has then evolved and developed over a period of time, with its implications defined from the psychological (Tierney al et., 1999), philosophical (Osborn et al., 2002) and managerial perspectives (Judge and Piccolo, 2004). As a result, definitions shifted from individual aspects to collective behaviour; for instance, Bryman (1992) expressed and defined the concept of leadership as a process that drives social influence, wherein the group of subordinates is driven by their leaders for the achievement of a particular goal. The concept was also defined as influence (Maxwell, 1998), and a leader as someone who has employees (Druker, 1999). Another perception proposed the idea of defining leadership as a function of leadership qualities (Kenny and Zaccaro, 1983; Kirkpatick and Locke, 1991). The discussion above is an indication that the literature provides various leadership definitions that can be defined according to the perspective and the chosen field (Armstrong and Taylor, 2014). Many researchers claim that leadership theorists have defined leadership in relation to various aspects of human endeavour, such as academics, social works, politics and business and management (Obiwuru, Okwu, Akpa & Nwankwere, 2011; Paracha et al., 2012).

Different leadership schools, frameworks and perspectives have underpinned the leadership approach during different time periods (Antonakis et al., 2004), by exploring new areas (Avolio et al., 2009), criticising a specific theory or style (Bass, 1999), identifying new approaches (Antonakis and Atwater, 2002) and examining a specific research methodology (Bryman, 2004).

The concept of leadership emerged during the early twentieth century, when the development of globalised organisations had just taken place. Randeree and Chaudhary (2012) explain that the development of entrepreneurial activities that has been observed in the past three to four decades has been one of the main factors causing changes and the increasing importance of the study of leadership among organisations. Also according to Randeree and Chaudhary (2012), the first wave of change in the study of leadership came during the mid-twentieth century, when academics moved away from the classical and scientific management theories to theories based on the needs and behavioural aspects of workers or subordinates.

After the review of the leadership body of literature, one can recognise simple definitions such as those posited by Bass (1985) and Stogdill (1975), which in fact are substantial in their theoretical complexity and consider leadership as an important, intentional procedure in influencing different perspectives. Therefore, assuring the exciting of leadership is associated with the differentiation between other organisational processes and the leadership potential utility in a specific research. Hence, it is important to understand the difference between leadership and management (Bargau, 2015; Solomon, Costea and Nita, 2016; Kaplan, 1998; Bass and Stogdill, 1990; Smircich and Morgan, 1982; Weathersby, 1999).

An important distinction must be pointed out here on management and leadership, as it is considered one of the most impractical and never-ending debates in the literature (Kotter, 1990; Bennis, 1989; Rost, 1998). Kotter (2001), for instance, suggests a difference between leadership and management, in that 'Management develops the capacity to achieve its plan by organizing, staffing and creating an organizational structure and set of jobs for accomplishing plan requirements, staffing the jobs with qualified individuals communicating the plan to those people, delegating responsibility for carrying out the plan, and devising systems to monitor implementation'. Before presenting a focused discussion on leadership theories, styles and their links with organisational energy in the higher education context, it is necessary to understand the difference between leadership and management in general – and in relation to higher education context in particular.

2.4 Leadership Versus Management

For over 50 years, there have been discussions on whether or not leaders and managers are, in fact, the same (Zaleznik, 1977; Bennis, 1989). There is an ongoing debate on the difference between management and leadership directed by the managerial power, which is considered an instrument to control organisations (Grey, 2009; Alvesson and Wilmott, 2012). According to Northouse (2004), 'Many of the functions of management are activities that are consistent with the definition of leadership'. Katz (1955) also suggested that managers are task-oriented, which involves skilfully training staff, coaching individuals and resolving conflicts while maintaining ethics and discipline. Researchers have argued that some of the characteristics and responsibilities may be similar and overlap, but the two activities are not synonymous (Bass, 2010; Kotterman, 2006). Additionally, leaders and managers are both tasked with influencing others and motivating employees to achieve business goals and desired outcomes. In the twenty-first century, organisations need to have effective management and leadership skills for optimal success (Kotterman, 2006). The differentiation between management and leadership gap exists in the higher education institution context, in which scholars have debated and questioned the idea of merging management approaches (Huberman, 1973), in contrast with Schofield (1991), who emphasised the significance of management within higher education studies.

Management is defined as providing direction for a group or organisation through executive, administrative and supervisory positions (Katz, 1955). Conversely, Kotter (2001) defined management as a job which manages planning, organising, budgeting, coordinating and monitoring activities for a group or an organisation. Therefore, management is a systematic process utilised to achieve the goals and objectives of an organisation. More interestingly, and despite the idea that leadership and management are separate aspects, there are some leadership styles that consider management theories as part of it and key element, such as the transactional leader, i.e. management by exception (Yammarino and Bass, 1990), and yet this has also been argued against by (Day 2001; Bolden, 2007).

On the other hand, Kouzes and Posner (2002) highlight that 'Leaders enable others to act not by hoarding the power they have but by giving it away', while Zaleznik (1997) suggests that the organisation needs both effective managers and effective leaders in order to reach its goals, though he argues that both make different contributions. It is worth mentioning at this juncture that scholars must be cautious when studying leadership in higher education institutions, which are built via a hierarchal organisational structure and paid employees (Smith and Bell, 2011). Management and leadership certainly do have similarities, as they both work with people in teams, influence others and work to achieve goals and objectives (Northhouse, 2004). Drucker (1998) supports this augment by stating that leaders must be decent managers. On the same basis, Katz (1955) asserts that leadership is a multi-directional influencing relationship, while management is a unidirectional authority relationship, though both are key aspects in managing complicated universities (Kotter, 1990).

Managers may share roles that are similar, yet it is important to observe the functions of both positions (Kotter, 1990). The differences between managers and leaders are the ways in which they achieve their goals and objectives. Both managers and leaders are also similar, in that they can influence as well as control work that has to be done to reach the outcome of success. Leaders, though, are visionaries and use their visions to provide direction and action. Leadership is also defined as 'leading an organization to constructive change begins by setting a direction – developing a vision of the future (often the distant future) along with strategies for producing the changes needed to achieve that vision'(Kotter, 2003).

Several scholars and researchers have focused on studying the style of leadership adopted within the educational context (Bolden et al., 2009; Collinson and Collinson, 2009; Bolden and Petrov, 2014). It is worth mentioning that in the higher education context the perception of being a manager is completely dissimilar to how it views those who are managers in the business and services sectors (Winter, 2009). In fact, academic managers do not operate in a traditional way, apart from being influenced by organisational structure and culture (Hellawell and Hancock, 2001). Hence, the focus of this study in on the leadership style adopted within a higher educational institutional setting. It is therefore important to understand and discuss leadership theories that reinforce the research's chosen leadership style.

2.5 Development of Leadership Theories

The discussions above were clear reasons to enlighten scholars, in and beyond the leadership field, that there is no certain definition or style, nor bad or good style, as there are various ways to study leadership and different perspectives that accommodate a huge array of research studies (Middlehurst, 1993). More interestingly, diversity and social power have created a cumulative progression within the leadership field that has led to the development of leadership theories that drive leadership style and incorporate different aspects thereof (House and Aditya, 1997). The interpretation and understanding of these theories is compulsory, in order to identify the chosen style and the suitable measurement tool in a specific context. The section below covers the main leadership schools of theory.

2.5.1 Trait Theory

The trait approach is one of the oldest approaches used for defining the construct of leadership (Zaccaro, Kemp and Bader, 2004), and it is based completely on the personal qualities of leadership and explains that the characteristics that are exhibited by individuals help distinguish between leaders and non-leaders (Northouse, 2015; Kirkpatrik and Locke, 1991). A simpler explanation of the approach is presented by Colbert et al. (2012), who explained that the trait approach to leadership helps in identifying and defining the characteristics or personality traits that can be defined as some of the key qualities of a leader. Some of the characteristics that have been associated with good leadership – as per the trait approach or theory – include intelligence, cooperation, energetic, self-efficacy, extroversion, cognitive abilities, self-confidence and expertise (DeRue et al., 2011; Hersey and Blanchard, 1988). In fact, Vroom and Mann (1960) argue that traits are not particularly key aspects and do not ensure successful leadership in various contexts. It seems the trait approach has helped in categorising these factors into three broad categories, namely physical elements such as appearance and age, ability characteristics or elements such as knowledge and personality characteristics such as confidence and control of emotions (Antonakis, 2011). Northouse (2013:2015) also explains that although the trait approach has helped in differentiating between leaders and non-leaders, it has failed to provide a measurable scale that could be used for measuring the construct. Marshall (2008) also argues that there is a lack of evidence in the leadership literature that would otherwise support the theory of traits or personal qualities. The attentiveness of measuring behaviours and using the human resources lens has led to a shift from the focus on leaders' traits and characteristics to their behaviours (Brungardt, 1997; Grey, 2009). As a result of the literature evolution, scholars introduced the next leadership theory, namely the behavioural model (Stogdill and Coons, 1957), which is presented in the following section.

2.5.2 Behavioral Theory

The failure of the traits approach led to the development of the behavioural approach, which defined leadership on the basis of behaviour exhibited by individuals (DeRue et al., 2011). The shift started after McGregor's (1960) research publication, "The Human

Side of Enterprise," in which great attention was paid to leader/manager behaviours. Dansereau et al. (1975) explain that the behavioural approach asserts that the success and performance of leaders are highly dependent on their behaviour, or rather the things that they actually do. The major dimension that is usually related to the concept of leadership, based on the behavioural approach, is that leaders' assumptions are the key drivers to evolving leadership approaches and strategies (Bolden et al., 2003). Various scholars claim that the basic idea of the behavioural model is a clear focus on the leader-employee relationship (Seters and Field, 1990; Yukl, 1971). Hoojiberg (1996) explains that while "consideration" refers to leaders looking at employee benefits and wellbeing, "initiation" refers to the quality of initiating activities or processes. The behaviour approach has been tested several times in the leadership literature (Cartwright and Zander, 1960; Likert, 1961; Johns and Moser, 2001), including in the context of higher education institutions (Marshall et al., 2000). These studies have in fact divided the leadership concept into two main aspects, namely task-oriented (Wren, 1999) and people-oriented (Kayworth and Leidner, 2002; Marshall, 2008), though the approach defines commitment, information gathering, listening and motivational skills, perceived identity and trust as some key factors (Brower et al., 2000; Blake and Mouton, 1964). However, in the global virtual teams context, Kayworth and Leidner (2002) argued that these variables might be difficult to correlate, and hence the approach did not take into account group characteristics and the nature of tasks, and it still assumed the idea of 'one best style' of leadership. On a similar basis, and in order to achieve personal and organisation goals, more leaders must adapt a specific style – 'not the best' but the most affective and suitable style, according to Hersey and Blanchard (1979). Furthermore, Wolverton et al. (2005) highlight that one can consider the behaviour theory as a collection of tasks that should be eliminated from certain positions of leadership, such as department chairs and heads in higher education institutions. The most effective style of leadership behaviour is the attempt by Blake and Mouton (1964) to develop the 'managerial grid', which concentrates on production and people at the same time.

Despite the fact that there is concrete evidence of using behaviour theory in the leadership context, many researches and studies suggest that the results are not appropriate in all leadership situations with respect to leaders' day-to-day activities in dealing with several situations, teams or even individuals (Blake and Mounton, 1964; Likert, 1976). This indicates that it is not correct to focus on employees' perceived behaviours and leaders' qualities in a specific situation, and so more research in this particular area is needed (Bloden et al., 2003). Unfortunately, behaviour theory did not manage to tackle such issues, and due to the unavoidable relationship between context and leadership, the leadership contingency theory was invented (Bloden et al., 2003; Fiedler, 1978; Vroom and Yetton 1973).

2.5.3 Contingency Theory

In an attempt to present and identify a measurable approach for defining leadership, academics introduced the contingency theory (Hersey and Blanchard, 1988), which suggests that the success or behaviour of a leader is highly dependent on different contingencies, such as the tasks that need to be carried out, group variables and even subordinates (Shin et al., 2011). Hence, according to the contingency theory, a leadership style that is exhibited and demonstrated by a leader tends to be affected highly by the situation in which he/she is working (Shin et al., 2011). The authors also explained that the same individual can exhibit different styles and characteristics of leadership in different conditions.

The main focus of the approach thus remains on the situations under which leaders operate and work, and it is considered a refinement to the situational theory (Bloden et al., 2003). Five main factors are applicable and relevant to the theory, namely tasks, employees, context, situation and other micro-environmental constructs (Bloden et al., 2003; Lu and Chiou, 2010). Fiedler (1967) concentrated on boosting the idea of adopting extensive leader training and using organisations as platforms on which to perform.

In analysing the previous literature, it seems to lack evidence supporting the fact that contingency theory can be applied in different situations, thereby creating a bubble containing overgeneralised research solutions. For instance, and considering higher education institutions as the research context, the researcher can argue that a leader in such a university may be successful in accomplishing individual daily activities yet fail to build decent relationships with academics or even administrative staff. As a result, this theory eventually made a limited contribution and led to the several challenges and failed to address the presented issues, as did the previously defined approaches. The limitations of the contingency theory led to vast developments in leadership theories such as social exchange and the leaders and employees' theory. In the late 1990s, the leadership literature started moving towards a focus on the "leader-employee" relationship instead of centring on the leader, as it was argued that employees must be part of any leadership study (Hollander, 1992; Meindle, 1985; Conger et al, 2000; Lord et al., 1999), thereby highlighting that the 'following part of leading' (Katzenbach and Smith, 1994) and 'new leadership' models, i.e. transformational (Bass, 1998; Burns, 1978) and transactional (Burns, 1978), were necessary. Hence, the section below emphasises and examines the leaders and employees theory or, as otherwise known, the new leadership models.

2.5.4 Leaders and Followers – *"New Leadership"*

To be effective, organisations need to nourish and be competent in both management and skilled leadership (Northhouse, 2004). Steers et al. (2012) explain that as academics realised and identified that the old approaches to leadership were not able to provide any measurable outcomes or results, the new leadership approach was introduced at the end of the twentieth century. Burns (2004) and Bass (1985) were among the first set of scholars to present the modern approach to leadership, according to which it can be of two types: transformational and transactional. Voegtlin et al. (2012) explain that the new approach to leadership took the expertise and features of leadership from the old and traditional style but directed them in new transformational and transactional directions. Transformational leadership is defined as the type of leadership which involves interactions between leaders and staff members in a way such that the former try to motivate and change the behaviour and attitudes of the latter (Givens, 2008). House and Howell (1992) also highlighted that charismatic leadership focuses on a leader's vision, inspiration, non-verbal communication and behaviour. Both transformational and charismatic leadership can be forms of manipulation (Klein and House, 1995), a claim challenged by Bass and Steidlmeier (1999), who offered some form of separation between authentic and pseudo-transformational leadership.

In contrast to transformational leadership, transactional leadership focuses on the interactions between leaders and employees, based on rewarding and punishing subordinates (Ivey et al., 2010). The same argument is supported by Bass and Avolio (1994), who noted that ‘leaders provide rewards to employees when a certain given task is accomplished’. The body of scholarship in the context of leadership is still home to dozens of studies that adopt transformational and transactional leadership in various contexts (Conger, 1999), including higher education institutions (Lowe et al., 1996; Moss and Ritossa, 2007; Bass et al., 2003) in Iraq (Al-Husseini and Elbeltagi, 2016), South Africa (Kele and Pietersen, 2015), Turkey (Gözükara and Šimsek, 2015), Pakistan (Zulfqar et al., 2015) and Jordan (Nusair et al., 2012), and yet more studies are required in this area (Middlehurst, 1993; Green and McDade, 1991; Fender 1993; Spendlove, 2007; Marshal, 2007; Drape et al., 2016; Alonderiene and Majauskaite, 2016). Hence, the present research focuses on transformational (Bass, 1998) and transactional (Burns 1987) styles of leadership. In order to justify the researcher’s choice, further discussions are undertaken and then described carefully and in detail in sections 2.7.4 and 2.7.5.

Traditional styles of leadership, such as situational (Hersey and Blanchard, 1969), autocratic (Fey et al., 2001) and democratic (Bolden et al., 2003), come with multiple problems like inconsistent findings, casualty issues and problems in measuring them accordingly; thus, it is important to discuss leadership in context before critically analysing the most common styles, in order to justify the researcher’s choice.

2.6 Leadership in Context

The increase in the global collaboration between organisations and institutions across the globe means that more research studies are required to understand culture and contextual influences (Littrell, 2013). In essence, this remains challenging, and hence the business sector and due to globalisation several researches view the world now spiky (Ghemawat, 2007; Florida, 2005) and no longer flat (Friedman, 2005).

Over recent decades, there has been a noticeable interest in and focus on the contextual issues that influence leadership (Pettigrew, 1987). Boas and Shamir (1999) highlight that crisis, organisational environment, culture and governance are common examples of contextual issues that affect transformation and charismatic leadership. An addition, it has also been found that complexity, national culture and team context also rank among transformation leadership contextual issues (Osborn, 2002; Liden and Antonakis, 2009). Several researchers have presented studies that discuss the contextual issues of various leadership models and styles, for instance the charismatic (Pawar and Eastman, 1997; Cogliser and Schriesheim, 1997), transformational (Pillai and Meindi, 1998; Humphrey, 2005) and servant (Hale and Field, 2007) styles.

Based on the literature there are two ways to discuss "context" within leadership studies, i.e. analytical and ontological. Although the analytical view can be implemented in research studies by identifying specific parameters to investigate a chosen context, the ontological view focuses more on the socially constructed "real" structure that is built over a selected period of time (Gurwitsch, 1962; Bourdieu, 1983; Schatzki, 2003). Furthermore, it has been argued that the relationship between "context" and leadership is recursive, as usually leadership is linked and presented via the context lens (Denison and Mishra, 1995; Schein, 1996; Yukl, 2002; Vera and Crossan, 2004). In fact, Bass (1999) and Dan Hartog et al. (1999) highlighted that leadership is a generic construct, suitable for cross-culture studies, such as Hofstede's (1980) research, and is able to fuse in different settings. Moreover, the importance of investigating cultural and contextual aspects in the leadership literature is also highlighted by Triandis (1993).

The GLOBE project (House et al., 2004; Chhokar et al., 2007) is one of the most popular and largest cross-cultural scale research studies on global leadership and organisational behaviour, investigating 17,000 middle managers' behaviours and traits in relation to organisational culture and national culture, aiming at 'separating the essentialist and contextual traits with various societies and organisations'

(Waldman et al., 2004). The GLOBE project is still an ongoing study involving 170 researchers, 951 firms from, amongst others, the fields of finance, telecommunications and food-processing and focuses on leadership in 62 countries, representing various well-known regions around the world such as Egypt, Kuwait, Qatar, etc. (Dorfman et al., 2012).

In the GLOBE project, seven out of nine common organisational cultural dimensions were found and listed in the table below (Hofstede et al., 1990; Hofstede, 1991; Chat and Jehn, 1994; McClelland, 1985; House et al., 2002; Liu and Lee, 2012).

No	Dimension	Definition	Status
1	Uncertainty Avoidance	This is the extent to which members of a culture feel threatened by an uncertain or unknown future	Hofstede (1980,1983, 1991) and Hofstede et al. (2010)
2.	Power Distance	The extent to which the less powerful members of an organisation or a society accept and agree that power is distributed unequally	Hofstede (1980, 1983, 1991)) and Hofstede et al. (2010)
3.	Group Collectivism	The extent to which individuals in the organisation express pride, loyalty and cohesion	Hofstede (1980, 1983, 1991) and Hofstede et al. (2010)
4	Institutional (societal) Collectivism	The extent to which organisational and societal institutional practices encourage and reward collective resources, distribution and action	Hofstede (1980,1983, 1991) and Hofstede et al. (2010)

5	Gender Egalitarianism	The minimisation of gender role differences and gender discrimination within the organisation or society	Developed by House et al. (2004)
6	Assertiveness	The extent to which individuals in organisations or society are allowed to be dominant, aggressive and assertive in social relationships	Developed by House et al. (2004)
7	Performance orientation	When organisations or society encourages and rewards members for performance improvement	McClelland (1985) 'The Need for Achievement'.
8	Future Orientation	The extent to which future-oriented behaviours are encouraged and rewarded	Derived from Kluckhohn & Strodtbeck's (1996) work (past, present, future orientation dimension)
9	Humane Orientation	The extent to which individuals in organisations or societies encourage and reward individuals for being fair, altruistic, friendly, generous and caring to others	Derived from McClelland (1985)

Table 2.1 The Nine Cultural Dimensions Studied In GLOBE (House et al., 2004)

Indeed, as with every other research, the GLOBE project has been criticised, in this case by Delobbe & Haccoun (2002), Keshavarzi (2007) and Khan (2010), for focusing only on middle managers (Hofstede et al., 1990;) and ignoring all other members in organisations. Furthermore, several scholars also argue that the study is based on various contexts, its results are limited and not applicable (Glisson, 2007; MacIntosh and Doherty, 2009; Shim, 2010) and the techniques employed led to confusing results (Keshavarzi, 2007).

In fact, by understanding the effect of cultural differences and contextual issues in leadership research studies, many relationships can be uncovered and established, in which case more cross-cultural studies are required (Dorfman, 1996). As an extension to the arguments above, globalisation and becoming meta-national (Doz et al., 2001), besides adopting post-modern policies, are also obvious leadership challenges within the dynamic business environment (Bass, 2000; Vera and Crossan, 2004; Berson et al., 2006). There are also several global leadership competencies, namely empowerment, personal energy and multi-cultural awareness (Campbell, 2006). Prior to conducting cross-cultural research studies it is obligatory to understand differences in culture, values, systems, policies, structure and processes in altered organisations and countries (Ouchi, 1983; Hofstede, 1994; Schein, 1996; Deal and Kennedy, 2000; Ogbonna and Harris, 2000; House et al., 2002).

The present research study may enlighten and help in developing new leadership theories, processes and even theoretical frameworks in Saudi higher education institutions (Littrell, 2013). It is important to acknowledge the nature of the relationship between leaders and subordinates, and therefore the following section presents extensive discussions on the most popular leadership styles in a specific context.

2.7 Leadership Style

The importance of "style" is defined by simply understanding a leader's behaviour (Nelson, 2003; Ogbonna and Harris, 2000). Nelson (2003) also added that different leaders can behave in certain ways and be controlled by various hidden motives. Besides, there are crystal-clear indications that there is a relationship between leadership style and organisational development (Hall, 1994). On the other hand, it is argued that leadership "style" is used as a label to differentiate between leaders' interpersonal competences and attitudes to employees (Goleman, 2002). The benefits of using leadership styles can addresses contextual issues in both respects, i.e. facing organisational issues and dealing with employees at several levels, with or without a managerial role (Collinson, 2008). Many leadership styles, such as transformation, transactional and even distributed, contribute to altered organisations such banks (Asrar and Kuchinke, 2016), hospitals (Rab and Yarmohammadian, 2006) and even schools (Eagly and Johnson, 1990; Harris, 2004). In addition, some argue that leadership style has a direct impact on job satisfaction (Medley and Larochelle, 1995), employee performance (Walumbwa, 2011) and organisational commitment (Lok and Crawford, 2004). As mentioned previously, this study focuses on examining the relationship between leadership style, job satisfaction and productive organisational energy in the higher education institution context in Saudi Arabia.

Therefore, it is a prerequisite to identify which style is suitable for this research and can be a predictor of job satisfaction and productive organisational energy in higher education. In order to understand the behaviour of leaders, an investigation into these styles is presented below.

2.7.1 Situational

In 1969, the situational leadership model, considered one of the most popular leadership styles, was developed by Paul Hersey and Kenneth Blanchard. Situational leadership is based on altering situations which can arise, since 'situational contingencies dictate your style for the moment' (Lumsden, & Wiethoff, 2010). There are also three principles behind the theory: 1) the amount of guidance and direction a leader provides (task behaviour), 2) the amount of socio-emotional support a leader provides (relationship behaviour) and 3) how employees perform tasks specifically according to their function and objective (Hersey and Blanchard, 1977). The advantages of situational leadership are that it allows leaders to be more flexible in his or her approach, and they can use an array of leadership styles based on the work situation. Kao et al. (2006) claim that it is identical to contingency leadership, though it focuses more on employees.

A case study was conducted by Larsson and Vinberg (2010), who determined common behaviours of successful leadership in Sweden through a small group of select companies. Larsson and Vinberg (2010) also introduced these common behaviours and categorised them to examine further a number of situational characteristics, as they correlate to effective leadership. This case study was an attempt to discover leadership behaviours which were common and to outline how they involve quality, effectiveness, health perceptions and the environment. Robbins (2001) describes situational leadership as a relationship between a leader and his or her employees, analogously to a relationship between a child and its parent. This can be explained further, as leaders need to relinquish control and allow autonomy for their employees in the same way that parents must allow their children to become autonomous and grow, in order to reach their full potential.

Situational leadership has been a popular theory of leadership (Yukl, 1989); however, there are some flaws (Northhouse, 2001). Nichols (1985) argued that issues with situational leadership involve continuity, consistency and conformity. Bass (2008) posits similar criticisms of situational leadership, stating that there is a lack of internal consistency, conceptual contradictions and ambiguities (Glynn and DeJordy, 2010). Situational leadership, however, appears to be an easier approach to understand, is popular and is used often for coaching and developing leaders in global organisations; nonetheless, not many research studies have been conducted to justify the assumptions and propositions introduced by the situational leadership approach (Kao et al., 2006). Some limitations were presented by Jonansen (1990), i.e. the validly of the instruments used, while Jonansen (1990) also added that it could be used only as an opening topic in relation to leadership behaviour and decision-making.

This leadership style can also stunt creativity in workers, which may result in further dissatisfaction and affect job performance – in contrast to transformational leadership (Shin and Zhou, 2003). Fernanze and Vecchio (1997) also argue that situational leadership has not received full support on theory validation, which has led to a lack of studies that would otherwise evolve and test the approach in the body of scholarship. The arguments above provide a warning to the researcher about the unsuitability of using situational leadership in the present research study.

2.7.2 Democratic

The second leadership style is democratic, though there is no clear or well-developed definition of the term within academia (Gastil, 1994). The only exception is that, herein, leadership is viewed as constituting only constructive behaviours aimed at pursuing group goals. This defines leadership as 'an instrument of goal achievement' (Bass, 1990, pp. 15-16). A democratic leader encourages and allows team members to become involved in the planning process and control the direction of the team (Bolden et al., 2003). These leaders serve as coaches or mentors as opposed to an autocratic leader (Tannenbaum and Schmidt, 1973), and this style allows team members to feel as if they are a part of the decision-making process, which in turn makes them feel as if they have contributed. Alkahtani et al. (2011) argue that democratic leadership occurs when one group member modifies the motivation or competencies of others in the group, while others claim that any member of the group can exhibit some amount of leadership (Bass, 1990). Scholars have also promoted the idea of adopting democratic leadership in the educational context, including schools (Woods, 2005; Harris and Chapman, 2004). The study carried out by Ukpere et al. (2014), which gathered data from academics in Owerri, north of Nigeria, concluded that the most suitable leadership style to be adopted in educational organisations is the democratic style. In fact, this area is known for its approach to equality amongst its citizens, in contrast to other parts of Nigeria, as for many years they held strong against the monarchy system in contrast with the current research context, i.e. Saudi Arabia. Additionally, it also reflected in their education system, since democratic leadership helps in encouraging the participation of students in classroom discussions and decision making, thus facilitating their overall learning and development. Ukpere et al. (2014) also concluded that the leadership style of academics tends to affect their teaching and researching style, which further affects the overall learning and development of students. A slightly different perspective on the correlation between leadership style and learning and teaching in an educational setting was presented by Reeve (2009), who explained that the style of leadership that is adopted by academics tends to affect the motivation of students to learn. Reeve (2009) discusses that leadership in educational institutions refers not only to the exhibition of leadership approaches by university heads on lower level academics and administrative staff, but it also refers to the leader-subordinate relationship between teachers and students. The results of the study carried out by Reeve (2009) reveal that the transformational style of leadership is much more effective in motivating students to learn as compared to other styles. Conversely, the findings by Cerit (2009) highlighted that academics who practice a democratic style of leadership are much more satisfied with their jobs compared to academics who work under the influence of an autocratic style of leadership. Similar results obtained by Hulpia and Devos (2009) highlight that the democratic leadership style is most effective in promoting higher job satisfaction among academics in a higher educational setting.

Limitations to this leadership style occur in conservative and hierarchical contexts such as Saudi Arabia – a notion which will be presented in detail in the following chapter – as team members lack the ability to manage themselves and often need a leader to become firmer. A major issue can be uncertainty in defining the democratic leadership (Choi, 2007). Indeed, democratic leadership is an interaction between two or more members of a group that often involves equal opportunities for taking decisions (Gastil, 1994), and yet it can often be possible for the leader to shift from "joining" to "telling," which could lead to confusion, as roles remain unstable (Choi, 2007). Additionally, there is limited research on democratic leadership in relation to higher educational institutions (Ryan, 2010), especially in the Saudi Arabian context. Therefore, the focus on more applicable leadership styles is more valuable, which offers the chance to present the autocratic leadership style in the section below.

2.7.3 Autocratic

An autocratic leadership style is where a leader has as much control over others as possible (Fey et al., 2001). Bolden et al. (2003) also suggest that autocratic leaders are not open to feedback or input from anyone and they hold others accountable when a task fails to succeed. These leaders often use fear to motivate success (Lippitt, 1940), and their main purpose is to make decisions that will serve needs, claiming they have the know-how to get things done in the right way (Fey et al., 2001). Studies suggest that autocratic leaders often experience high turnover rates, resistance and even high absenteeism (Burns, 2004). On the other hand, one advantage of autocratic leadership is not only that the leaders make sure tasks are done and done correctly (Tannenbaum and Schmidt, 1973), but it could also help teams to function in exceptional circumstances (Cammalleri et al., 1973; McGinnies, 1959).

Lewin et al. (1939) and Lippit (1953) studied a group of students in various schools which were facilitated by adult teachers. Additionally, the teachers were to deliver instruction in three different leadership styles that included autocratic, democratic and laissez-faire. With autocratic leadership, the students exhibited leadership behaviours such as being rigid, aggressive, conformist (Terzi, 2011) and resentful, compared to the democratic and laissez-faire leadership approaches. It was further noted that all students who experienced democratic and laissez-faire leadership went on to continue in their studies; however, those who experienced autocratic leadership dropped out before completing all of their tasks (Lewin et al., 1939). Peterson (1997) argues that the major and undeniable negative behaviour of autocracy in Lewin's study occurs in the decision-making process, as such leaders do not accept discussion. This evidence suggests that autocratic leadership is a difficult style for employees to function under (De Cremer, 2006), and it is harmful to team performance (De Luque et al., 2008) and the work climate (Edmondson, 2003), especially in a diverse context such as an educational institution. In contrast to the autocratic style of leadership, employees want to feel that they can make a valuable contribution and offer feedback, not be undervalued (Adams, 1965), underestimated (Anderson and Brown, 2010) and kept away from the decision-making process. Despite the fact that some scholars consider autocracy as a way to direct power and centralise decision-making by a single leader (Bass and Bass, 2008; Jago, 1982; Peterson, 1997), others consider it a useful style in the context of social hierarchy teams (Hoogh et al., 2015). Autocratic leadership style has received a great deal of criticism in relation to the possible creation of inequity in working teams (Muller, 1985).

In 2015, Hoogh, Greer and Hartog conducted an investigation proposing that autocratic leadership can influence team performance in a hierarchical environment. The sample consisted of 225 employees and managers in 60 retail stores. The result, as expected, showed that with low level of team power struggles, autocratic leadership was positively related with team psychological safety in contrary when team power struggles were high. The study also suggested that autocratic leadership may be beneficial and have great potential in certain conditions via the contingency approach (Van Kleef et al., 2010; Fiedler 1964), as stated previously in section 2.5.3.

In contrast, another study, conducted by Murigi (2013) in the education context, demonstrated the influence of head teachers' leadership styles on students' performance. The findings of the study revealed that autocratic leaders placed emphasis on being task-oriented and completing tasks. In this study, it was disclosed that autocratic leadership is the least important factor for influencing performance (Murigi, 2013).

Based on the discussion above, the limitations of autocratic leadership are that employees can and do become hostile, angry, resentment and fearful, which can result in negative morale (Hoogh et al., 2015). This style of leadership rewards the behaviours of those who are obedient to authority, but it is extremely prejudiced against others (Terzi, 2011). Autocratic leaders appear to seek total control and the virtual wholesale delegation of tasks (Fey et al., 2001) and do not focus on a group's social-emotional dimension (Bass, 1990; Vroom and Yetton, 1973; Lewin et al., 1939). Furthermore, they focus on what they perceive to be the best way to get things completed and how they align with their thought process – they try to achieve this particular end by exerting total control over people and what elements they can control in spite of the working team's stability (Van Vugt et al., 2004). In the higher education institution context, sharing knowledge and consulting on decisions are key to organisational success (Davies and Casey, 2001; Apple, 2016), while collaboration and decentralising power are obligations in the academic setting (Robles, 1998). Hence, autocracy is not suitable for the present research context, and so other styles must be investigated.

2.7.4 Distributed

The notion of distributed leadership has a particular affinity in educational circles as it resonates with humanistic intentions to develop students and also acts as a narrative of resistance against the centralisation of organisational management.

Distributed, or shared, leadership as a concept can be seen to arise from earlier human relations concerns around consideration for people, narratives of empowerment for its own sake, to facilitate decision-making and service delivery, or to increase the ‘leadership’ capacity within the organisation where leadership is seen as organisational asset perhaps linked to ideas of knowledge management and human capital.

More recent interest in distributed leadership arises from social constructionist and critical accounts of leadership such as relational leadership (Uhl-Bien, 2006), in the shift in focus away from individual leaders to the construction of leadership by ‘followers’ (Meindl, 1995) and critical leadership studies (Collinson, 2011) that challenge traditional assumptions about leadership and the relationship of dominance and control between leader and followers. Since the early 2000’s the idea of ‘distributed leadership’ has become an increasingly considered concept, especially in educational circles, with Bush (2013) asserting that it, “has become the normatively preferred leadership model in the 21st century. “ (p.543) However, Bolden (2011) suggests that, “its popularity remains very much restricted to particular geographical and sector areas.” (Bolden, 2011; p 256) In a detailed review of distributed leadership literature, Bolden (2011) charts the rising publication rates (from 1980 to 2009) of articles considering distributed, shared, collective, collaborative and emergent leadership and finds that whilst the vast majority of articles are published by US authors, distributed leadership (DL) is of much greater interest in the UK whilst shared leadership (SL) is more prevalent in the US and that, “68% of DL articles were published in education/educational management journals, compared with only 22% of SL articles.” (p.255) The word ‘distributed’ suggests that ‘leadership’ is not located in one hierarchical level or structural location within an organization or in one individual or one team.

The idea that ‘leadership’ is distributed is both obvious and problematic. It is obvious because whilst the leadership of organizations is associated primarily with senior managers/executives and boards formal leadership in organizations including team leadership, project leadership and people management/leadership is necessarily distributed around the organizational locales formally depicted in the organizational structure diagram or chart. However, Harris (2008) differentiates between the potential for leadership and the extent to which, "leadership is facilitated, orchestrated and supported." (p. 173) Some of the debate around distributed leadership goes beyond a functional view of leadership and assumes a critical stance calling for a democratic organizational ethos (Woods, 2004) in which the right to lead by one cadre or group is questioned. The concept is problematic when distributed leadership is portrayed as some new/improved form of leadership and when the type of 'distributed leadership' being considered is ill-defined thereby contributing to conceptual confusion. Alvesson and Spicer (2012) note the conceptual confusion associated with the word 'leadership' and assert that, "the quest to find leadership that is distributed throughout the organization has only made matters worse. It means nearly anything and everything can be viewed as leadership." (p.369)

Northouse (2007) and Yukl (2002) mention distributed leadership not at all and Antonakis et al (2004) briefly mention it in relation to "leadership as shared influence, and self-managing teams" (pp.36-37). They do however, highlight a relatively early contribution to the debate from House and Aditya (1997) who consider distributed leadership in three forms – delegated leadership, co-leadership and collaborative leadership and ask, "is distributed leadership more effective when it is consciously planned and formally implemented than when it emerges naturally and informally?" (p.459).

Rickards (2012) also sees distributed leadership as reframing the understanding of leadership, "as a collective rather than an individual activity," (p.65) so rather than talk of distributed leadership perhaps Grint and Rickard's notion of collective leadership is more worthwhile? 'Collective leadership' implies mechanisms, processes or practices that facilitate organisational members working together to determine the direction of organisational travel and/or to achieve some goal, although as Denis, Lamothe and Langley (2001) indicate the collective leadership may be fragile. There are issues around how shared the goal is and whether it arises from some egalitarian process of decision-making (democratic) or through effective communication, persuasion and engagement from more vocal or powerful individuals (traditional person-centred leadership). Collective leadership in a higher education context could be taken to mean the process by which disparate staff groups, for example academics and professional service staff or academics from different disciplinary areas and professional service (and 'third space') staff having different professional backgrounds, come together to agree and work towards organisational goals. Bolden et al (2008a) equate collective leadership with 'distributed' leadership and differentiate it from 'individual' leadership but suggest that universities need a 'blended' approach (Collinson and Collinson, 2009) involving both. Some notions of collective (distributed) leadership could open the leadership boundaries to encompass other stakeholders such as students, parents and wider society allowing dialogue amongst a wide range of voices to influence organisational values, goals and activities.

MacBeath (2003), in a school educational context, recognises the ambiguity and variety of meanings associated with the word 'leadership' and attempts to differentiate distributed/distributive leadership from other varieties with which it shares some connection or potential overlap such as dispersed, shared, invitational and collaborative leadership. Macbeath describes the terms in the following ways.

> Distributed –leadership roles are allocated by the most senior manager (head teacher) (effectively the delegation of power/authority)
>
> Distributive – the right for people to be involved in leadership is a cultural value or ethic (a normative value about how organisations should be run – democratically)
>
> Dispersion – leadership takes place in different points in the organisation, in a school setting therefore involving classroom teachers as well as in departments and senior teams (widening participation in decision-making)
>
> Shared – Either a cultural value of sharing leadership (and logically power) or

as arising in and from collective action rather than from a single leader (an ontological view that leadership emerges within and from collective action rather than an individual)

Invitational – sharing power and authority in a way which develops trust and respect (a normative value about human relationships)

Collaborative – inter-agency work to achieve joint projects/create social capital building on the capacity and expertise that is beyond that of a single organisation or group (a technical view that co-operation is an intrinsically beneficial aspect of inter-organisational activity)   In these different but related terms again we see a differentiation between the planned delegation of power or extension of participation in decision-making as a management initiative (distributed/dispersed) and the sense that the right to participate in decision-making as trusted and respected organisational members (distributive and invitational) is part of the essence of leadership.

2.7.5 Transactional

After the brief discussion in section 2.5.4, and highlighting the concept of the "new leadership theory," it is necessary to present the styles in detail. Initially, transactional leadership refers to the process of leadership whereby leaders try to establish an exchange between themselves and their employees, in order to generate positive emotions. It was first introduced by Burns (1987). Transactional leaders observe their employees, identify what elements may influence motivate them directly and, once these have been identified, seek to provide resources to support better performance outcomes (Burns, 1978). According to Jung and Avolio (2000), transactional leaders do not work towards changing or improving the future of subordinates but rather focus on processes and their relationships. Bono and Judge (2004) explain that the main motive of transactional leaders is to become a good manager so that employees can rely on them. There are various characteristics that are usually associated with transactional leadership, such as exchanging rewards for the occurrence of a specific behaviour (Waldman et al., 1987; Burns 1978). One of the key characteristics usually associated with transactional leaders is their application of the reward and punishment method or approach, to encourage or motivate employees (Bryant, 2003). Bryant (2003) also explains that transactional leaders usually focus on working with existing systems and hence try to work with existing measures, rules and regulations of the organisation to achieve desired goals and objectives.

Bass (1999) argues that such a style is helps leader-employee relationships, especially when they are experiencing similar self-interests. On the other hand, Burns (1978) claims that the proposed relationship is unstable and occurs rarely, as leaders and employees usually identify different interests.

Three broad dimensions are usually incorporated to describe the characteristics and meaning of transactional leaders, and these are discussed below.

The first dimension relevant to transactional leaders is contingent reward, which means that transactional leaders work towards achieving certain goals and objectives on the basis of rewards. Transactional leaders are also more driven by the overall status quo that helps them in achieving desired outcomes (Jung, 2001), concentrating on productivity and eliminating risk (Levy et al., 2002). Bass et al. (2003) explain that these leaders usually motivate their employees by providing them with suitable rewards for being able to achieve defined goals and objectives. However, at the same time, non-fulfilment of these objectives usually attracts some punishment from the employer (Bass et al., 2003).

The second dimension that defines the nature and characteristics of transactional leaders is management by exception, i.e. active and passive behaviours. Judge and Piccolo (2004) explain that management by exception means that these leaders usually tend to adopt managerial roles in situations when something negative or unexpected happens. According to Judge and Piccolo (2004), transactional leaders are required to monitor regularly the performance of their employees so that they can instigate adequate action and take suitable measures to make corrections when things go wrong. Such a practice defines transactional leaders as passive leaders (Bass and Avolio, 2004), who intervene in the case of specific failures or when things go wrong. Though it has been argued that this factor in the transactional approach has led to a reduction in its overall usage, Waldman et al. (2001) explain that it helps avoid any negative consequences in the organisation, thus leading to better performance and results. Previous studies have shown a massive amount of transactional leadership contribution in the leadership literature, such as primary education (Nguni et al., 2006), schools (Sillins, 1994; Nyenyembe et al., 2016), banks (Bass et al., 2003; Advani, 2015), hospitals (Lorber, 2016; Abdelhafiz et al., 2015) and universities (Raheel et al., 2016; Ohunakin et al., 2016; Spendlove, 2007). Basham (2010) argues that transactional leadership is a suitable style in higher education institutions in spite of the chosen context and the methodological approach used in a specific research study.

The third dimension is laissez-faire, which is considered a different leadership style (Avolio, 1999; Bass, 1998). Robbins (2007) argues that it is '*Abdicates responsibilities and avoid making decisions'.* Furthermore, laissez-faire leaders are considered to be individuals who occupy positions of leadership but have abdicated the responsibilities and duties assigned to them (Lewin, Lippitt, & White, 1939; Alkahtani et al., 2011). In addition, they often display characteristics such as avoiding making decisions or taking action, and they are often unavailable when needed (Judge and Piccolo, 2004) and ineffective (Bass and Avolio, 1994). However, Antonakis, Avolio, and Sivasubramaniam (2003) and Bass and Avolio (1997) have argued that laissez-faire leadership behaviours involve not taking responsibility, evading problems, being unavailable when needed, not following up, objecting to expressed views and postponing responses. Additionally, they (unlike transformational leaders) provide little to no resources or organisational knowledge (Eagly, Johannesen-Schmidt and Van Engen, 2003), and they will generally allow this along with policies or procedures to be exchanged from one employee to another (Wong and Giessner, 2015). Furthermore, there is rarely any defined plan to accomplish goals and objectives (Goodnight, 2004). Moreover, Koech and Namusunge (2012) conducted a case study on the effect of leadership styles on organisation performance. This study was conducted in Mombasa, Kenya, and laissez faire leadership was a key variable in this research. The study's results revealed that this type of leadership is not a critical factor in organisational performance (Skogstad et al., 2015). Additional results provided a recommendation that this approach should be disposed of and not to be included in providing leadership guidance (Skogstad et al., 2007; Hinkin and Schriesheim, 2008; Kuttner, 1992) to their employees and managers should develop integrate effective engagement and reward systems for subordinates.

Thus, it can be deduced that transactional leadership is a process that is completely different from previous styles, and leaders incorporating and adopting this style tend to demonstrate completely contrasting results. To have a complete overview and make a rational decision on the styles chosen for the present research study, it is certain that the most researched style, i.e. transformational leadership (Bass and Avolio, 1997; Avolio and Bass, 2004; Dvir et al., 2002; Northouse, 2007; Waldman et al., 2001), should be utilised.

2.7.6 Transformational

The first description of the concept of transformational leadership was presented in Downton (1973), while the first effective definition was presented by James Burns in 1978. Burns (1978) described the construct of transformational leadership and explained that it refers to a leadership style in which the leader tends to identify the needs of employees and then identifies suitable methods to cater to their higher needs. The author defined the concept of transformational leadership as the special relationship that is formed between the leaders and employees whereby people in both groups tend to work towards improving and raising levels of morality and motivation. Bass (1985) further extended the concept of transformational leadership and presented a more elaborate expansion of the construct. Bass (1985) and Waldman et al. (1987) also added that transformational leaders tend to enhance and raise the overall awareness of their employees so that they can contribute towards achieving the different outcomes, goals and vision required by an organisation. The study and descriptions provided by Bass (1985) were much more detailed and descriptive, and the author was able to identify several key characteristics that can define transformational leaders, such as motivation and morals (Kuhnert and Lewis, 1987). This can also be attributed to the fact that the discussions by Burns (1978) focused more on defining relationships that are formed between transformational leaders and their subordinates, and hence the author did not pay much attention to individual characteristics.

Also, the definitions presented by the aforementioned authors also differ in terms of the perceived benefits of the transformational approach to leadership. According to Burns (1978), transformational leadership is always beneficial for society or people because of the approaches or measures adopted by leaders. This finding was contradicted by Bass (1985), who presented a slightly different perspective, in that it is not always a given that this style will be beneficial, because there have been leaders like Adolf Hitler, who adopted the transformational style but did not provide or add any benefit to society or people.

Indeed, transformational leadership as a construct has been the subject of several researches over the years (Bass, 1985; Conger and Kanungo, 1988; Podsakoff et al., 1990; Trice and Beyer, 1986; Yukl, 1989; Dvir, et al., 2015; Banks et al., 2016; Muenjohn 2015; Boehm et al., 2015) and in specific settings such as education (Koh et al., 1995) and the military (Kane and Tremble, 2000). Bass and Riggio (2006, p. 56) conclude that transformational leadership affects group performance regardless of whether performance is measured subjectively or objectively, while Bass (1985), Bass and Avolio (1993), Jabnoum and al Rasai (2005) and Goodheim (1987) later added that there are four main dimensions that define transformational leaders: idealised influence, inspirational motivation, intellectual stimulation and individualised consideration. *Idealised influence* (charisma) refers to the ability of the transformational leader to enhance trust and loyalty among their employees. As explained by Dai et al. (2013), they also tend to influence their employees so that their vision and overall behaviour can be aligned in a better manner with the organisational strategy for better outcomes. Some of the key characteristics identified for charismatic leaders include self-esteem and self-confidence (Bass, 1985; Dai et al., 2013). Some scholars, such as Rogers and Farson (1955), have expressed their fear of the similarities and confusion that can prevail between transformational leadership and charismatic leadership, yet is was later argued by Conger and Kanugo (1988) that altered leaders share the same vision in achieving personal and organisational aims. In fact, the first appearance of charismatic leadership in organisational studies was in 1921 and later in 1947 by Weber, followed by House (1977), in contemporary organisational studies.

Inspirational motivation is the second factor used to describe the characteristics of transformational leaders. As explained by Stewart (2006), transformational leaders are expected to behave as inspirational figureheads, whereby they incorporate and adopt different activities or processes to motivate their employees and encourage them to achieve specific goals and objectives. Stewart (2006) and Lowe et al. (2006) explain that transformational leaders tend to define and present a clearer picture of the future in front of their subordinates, which not only increases awareness, but also motivates them to achieve defined goals.

The third factor usually associated with transformational leadership is *intellectual stimulation.* Judge and Piccolo (2004) refer to the ability of leaders to stimulate and develop new ideas and values among their employees. Dai et al. (2013) and Bass and Riggio (2006) explain that transformational leaders usually try to stimulate the development of intelligence and rationality among their employees so that they can become more creative. According to the discussions presented by Politis (2001), transformational leaders usually tend to create an atmosphere in which they tend to not only influence, but also positively stimulate the beliefs and values (Robinson and Boies, 2016) of their subordinates so that they can come up with new ideas and thoughts for achieving the goals and objectives of the organisation (Eagly et al., 2003).

Individualised consideration is the last factor related to transformational leadership, and it refers to the characteristic whereby they try to take care of and work according to the *individualised* needs of their subordinates (Bass and Steidlmeier, 1999). Yammrino et al. (1993) explain that they pay close attention to the needs of their employees by coaching and advising them effectively. As discussed also by Yammarino et al. (1993), and supported recently by Muenjohn and Armstrong (2015), transformational leaders contribute to the individual development of employees by listening to the needs and concerns of individuals and by teaching them adequately for their own personal development.

As explained by Sarros and Santora (2001), the process of transformational leadership starts with the familiarisation of leaders with their subordinates and their needs, which is followed by the provision and enhancement of learning (To et al., 2015). As mentioned previously, transformation leadership studies have been addressed in different context-diverse cultures such as hospitals in Taiwan (Lin et al., 2015), Turkey (Top et al., 2015), Iran (Safi, 2016) and in Germany (Hillen et al., 2015). There have also been studies in universities in the UK (Osseo et al., 2005), Iran (Almayali and Ahmad, 2012) and in Malaysia (Baker and Mahmood, 2014). In higher education institutions, Bass (1999) argues that transformational leaders in such a context concentrate on directing employees' interests toward overall organisational goals. Although transformational leadership is used globally in various industry sectors, there are limited research articles written on the subject in higher educational institutions (Antonakis et al., 2004).

In the last few decades, multiple methods have been identified by academics in studying transformational leadership, i.e. in labs (Judge and Avolio, 1999), in the field (Yammarino et al., 1997), analytical and correctional (Hater and Bass, 1988) and experimental (Barling et al., 1996). There is also a list of characteristics identified by academics (Judge and Piccolo, 2004; Piccolo et al., 2006; Politis, 2001; Stone et al., 2004; Howell and Avolio, 1993), including courageous, risk-takers, visionary, strategic, effective communicator, mentor, persistent, enthusiastic, value-driven, lifelong learners and change agents. Stone et al. (2004) attempted to establish the relevance of these characteristics on the basis of some real-life examples, for instance Mahatma Gandhi, who motivated his followers to overcome their own interests and work for the interests of others. Another example presented by Stone et al. (2004) was the leader of Chrysler, Lee Iacocca, who tried to save the company from bankruptcy by motivating employees and creating a vision of success in the organisation, which ultimately helped bring together the workforce (Podsakoff et al., 1990) for the overall development of the organisation.

Jung and Avolio (2000) and Bass (1985) explain that the transformational style of leadership differs from transactional leadership, because transformational leaders focus on motivating and developing their employees and their vision, whereas transactional leaders focus on developing better relations with their employees, in order to increase their overall job satisfaction and engagement in the organisation. In contrast with Goodheim (1987), who claimed that transformational and transaction leadership are connected in regards to achieving goals and organisational objectives. Additionally, transformational leadership – as the name implies – is an approach requiring leadership to transform employees seeking to motivate and influence their actions to contribute to the overall growth of companies and in turn activate higher order needs (Yukl, 2006).

It is important to understand and differentiate between transformational and transactional leadership before moving forward. The models and definitions presented by Burns and Bass in this regard have been identified to demonstrate some fundamental differences (Bass and Avolio, 1993). The very first difference lies in the basic concept of the two leadership styles – while Burns (1978) suggests that they cannot be used by a leader at the same time, because of their existence at two extreme ends of the leadership continuum, Bass (1985) presents a different explanation, in that both styles can be exhibited and demonstrated by the same individuals in the same situations, albeit at different times, and complement one another (Howell and Avolio, 1993). While Burns (1978) focused on the exhibition of the two leadership styles at different times, Bass (1985) acknowledged that transformational leadership is a higher-order style that focuses more on missions and strategies (Covery, 1992) and is hence needed as a supplement to the transactional style of leadership for enhanced performance. A summary of the various factors and behaviours of both styles is presented in the table below.

Transactional Leadership	Transformational Leadership
Builds on man's need to get a job done and make a living Is preoccupied with power and position, politics and perks Is mired in daily affairs Is short-term and hard data-orientated Focuses on tactical issues Relies on human relations to lubricate human interactions Follows and fulfils role expectations by striving to work effectively within current systems Supports structures and systems that reinforce the bottom line, maximise efficiency and guarantee short-term profits	Builds on a man's need for meaning Is preoccupied with purposes and values, morals and ethics Transcends daily affairs Is orientated toward long-term goals without compromising human values and principles Focuses more on missions and strategies Releases human potential-identifying and developing new talent Designs and redesigns jobs to make them meaningful and challenging Aligns internal structures and systems to reinforce overarching values and goals

Table 2.2 Comparison of transformational and transactional leadership (Covey, 1992)

After researching the most important leadership styles in various sectors, including higher education institutions, it is apparent that transformational and transactional leadership styles represent a significant variable that has an essential linkage with different variables such as effectiveness (Lowe et al., 1996), employee performance (Yammarino et al., 1993), employee attitude (Asrar-ul-Haq and Kuchinke, 2016), innovativeness (Dunne et al., 2016), organisational culture (Sarros et al., 2008) and engagement (Babcock-Robenson and Strickland, 2010), 2010), which supports the current researcher's objectives by linking both leadership styles with organisational energy (Kunze and Bruch) and job satisfaction (Medley and Larochelle, 1995; Braun et al., 2013).

Hence, these discussions highlight that transformational leadership as a process includes the overall development and enhancement of employees so that they can exhibit personal as well as organisational development. The body of literature shows that transformational leadership has been heavily researched, but more studies are required in the higher education institution context (Spreitzer et al., 2005; Beytekin, 2014; Noorshahi, 2006) and within Saudi Arabia. Thus, the researcher has chosen transformation and transaction leadership styles based on the extensive augments and discussions above, and a summary of the key points is presented below:

- Heavily researched in various settings (Conger, 1999; Judge and Piccolo, 2004; Banks et al., 2016)
- Lack of and limited validation in the context of higher education institutions (Henkel, 2016; Al-Husseini and Elbeltagi, 2016; Beytekin, 2014; Middlehurst, 1993; Drape et al., 2016).
- Popular and relevant in the academic world (Beytekin and Arslan, 2012).
- Suitable for the Saudi Arabian working culture (Drummond & Bani Al-Anazi, 1997).
- Powerful tool to transform organisations, which is needed in Saudi Arabian higher education institutions (Prokop, 2003; Aljubaili, 2014).
- Supports the Saudi Arabian new vision to replace hierarchical and bureaucratic higher education systems (Smith and Abouammoh, 2013; Doumato and Posusney, 2003; Zabadi and Alalawi, 2016).
- Boosts the satisfaction of both academics and administrative staff in higher education institutions (Lowe, Kroeck and Sivasubramaniam, 1996; Kirby, Paradise and King, 1992).

In order to enable the research to develop a theoretical framework that aligns with the research objectives, the next section discusses the possible linkage between leadership style, namely transformational and transactional, and productive organisational energy in different fields, including higher education institutions, if one exists.

2.8 Linkage between Leadership Style and Organisational Energy

As mentioned previously, one of the main objectives of this research study is to examine the relationship between leadership style and productive organisational energy. During the last 50 years, the body of scholarship, management literature in particular, has focused on operational and analytical approaches and critical theories (Willmott, 1992; Baumann and Cowell, 1999; Burns and talker, 1969), ignoring and denying feelings and emotional constructs (Bruch and Ghoshal, 2003). Nonetheless, this case has been reversed and researchers are nowadays concentrating on known soft factors such as organisation culture and human resources management (Homburg et al., 2003). Payne and Cooper (2003) also not only highlight the importance of emotion factors at work, but they also focus on the role of factors such as fear, sadness, happiness, stress and greed in the life of modern organisations. As mentioned in the previous sections, the leadership literature has been researched extensively and contributed greatly to the management field, with several researchers and academics examining the impact of or relationship between leadership and soft factors such as organisational stress (Sosik and Godshalk, 2000; Stordeur et al., 2001; Bass and Riggio, 2006), engagement (Ghafoor et al., 2011), satisfaction (Braun et al., 2013) and energy (Kunze and Bruch, 2010).

Bruch and Ghoshan (2004) argue that despite many research studies contributing to the leadership, soft factors and emotions fields, the current literature is still speculative (Cole, et al., 2012) and more studies are required concerning organisational energy. Tushman and O'Reilly (1996) also added that the *'best leaders are those who can compose energy before directing it'.* According to Bruch and Ghoshal (2003), productive organisational energy is becoming one of the most widely studied concepts in the study of organisational behaviour and performance, because it defines the ability of an organisation to reach its maximum potential.

Though conventional and old studies and academics like Etzioni (1975) have argued that productive energy and collective energy cannot be used to study organisational performance, recent studies presented by Walter and Bruch (2010) have presented and validated different measures and scales (Cole et al., 2005) for the construct. Additionally, more research studies and attention have been given to unearthing the stark contrast between individual and organisational energy (Huy, 2002).

Therefore, establishing a relationship between leadership style and productive organisational energy is valuable (Cameron et al., 2003), but to ensure a better contribution to the field, conducting the study in the Saudi Arabian higher educational institution context will complement and support the idea of Bruch and Ghoshal (2004) that a leader's main task is not just to make employees happy and feel comfortable, but also to direct their intellectual capabilities and energy towards the organisational vision. As Atwater (1995) pointed out, '*examining contextual impacts and leadership behaviour is the future of the research process*'. Furthermore, as far as the researcher is aware, no research study has been conducted in the Saudi Arabian context that examines leadership and energy at work.

In the context of management and organisational behaviour, very few and limited research studies examine the relationship between leadership style, i.e. transformational and transactional, and organisational energy, i.e. productive organisational energy (Kunze and Bruch, 2010; Edmondson, 1999). In order to understand the scope of the research and trends in this field, the researcher used "ISI Web of Science," a dataset which is one of the most consistent sources of academic articles in the leadership and management fields (shepherd and Gunter 2005).

In September 2016, the dataset was searched for papers' titles, abstracts and keywords. By linking the main constructs of the present research, and with the aim of finding key articles, only 15 relevant papers were identified, and the five most cited papers are presented in the table below:

- [‘Leadership style’] AND [‘Transformational Leadership’] AND [‘Transactional Leadership’] AND [‘Energy at Work’] OR [‘Organi*ational Energy’] OR [‘Productive Organi*ational Energy’].

Title	Author	Year	Citations
What creates energy in organizations?	By: Cross, R; Baker, W; Parker, A	2003	542
Unleashing Organizational Energy	By: Bruch, H; Ghoshal, S	2003	176
Structural Impacts On The Occurrence And Effectiveness Of Transformational Leadership: An Empirical Study At The Organizational Level Of Analysis	By: Walter, Frank; Bruch, Heike	2010	70
Energy At Work: A Measurement Validation And Linkage To Unit Effectiveness	By: Cole, Michael S.; Bruch, Heike; Vogel, Bernd	2012	51
Organizational Energy: An Empirical Study In Indian R&D Laboratories	By: Dhawan, Sk; Roy, S; Kumar, S	2002	18

Table 2.3 List of studies on the relationship between leadership and organisational energy.

Table 2.3 illustrates that the concept “organisational energy” evolving within the psychology field (Ryan and Frecrick, 1997), yet it has only merged recently with the management field (Quinn, 2007; Schwatz, 2007). In the next section the researcher focuses on examining the literature and studies that propose the relationship between leadership and energy in the organisational context, following which a comparison is made between employee engagement and organisational energy and then the conceptualisation of organisational energy, as it not often defined properly (Quinn and Dutton, 2005).

2.8.1 Organisational Energy and Leadership

The organisational energy concept has been very limited in the management literature for more than 30 years since the 1980s, when the first occurrence was noted (Louw, 2012). The development of organisational energy and various related concepts continued for many years, and one of the most recent definitions is that 'organisational energy refers to the positive intense force that is used and incorporated by companies in order to promote its employees and individuals to achieve specific goals and objectives' (Cole et al., 2005; Walter and Bruch, in press), key factors in an organisation's physical and emotional state (Pines and Aronson, 1988) and positive, affective arousal (Quinn and Dutton, 2005). Bruch and Ghoshal (2003) and Cole et al., (2012) argue that it is extremely important to study the development of organisational energy, because it benefits employees and helps compete with other organisations.

Additionally, Bruch and Ghoshal (2003) highlighted that the concept of organisational energy is necessary in relation to organisational behaviour and significant in providing positive experiences to employees. A few scholars have suggested and promoted the idea of linking leadership style with organisational energy (Kunze and Bruch, 2010) and have also discussed the importance of energy at work (Dutton, 2003; Atwater and Carmeli, 2009; Lykken, 2005; Sonenshein and Grant 2005).

Kunze and Bruch (2010) argue that adopting a transformational leadership style in such organisations will lead to an increase in productive organisational energy levels. Furthermore, positive emotions and being productively energised boost employee efficiency (Fredrickson, 2001), creativity (Atwater and Carmeli, 2009) and satisfaction (Donnelly, 2008; Cherniss et al., 2006; Watkin, 200). On a similar basis, Dyne and Pierce (2004) conducted a study and the results showed that there is a direct correlation between positive emotions, engagement and productive organisation energy in the workplace. Tosey and Llewellyn (2002) further added that the concept of energy has enriched the human resources literature and proved significant in different settings such as higher education and consultancy. Jamrog et al. (2008) also found that there is direct relationship between organisation energy and market performance, which supports Cole et al.'s (2005) claim that higher levels of energy can be transformed into better performance.

The CEO and leader of the international airline Lufthansa once asked the question '*How do I motivate this company in good times?'* to which Bruch and Vogel (2011a) answered that irrespective of the current performance situation of a company, leaders can try to enhance overall positive energy (Dutton, 2003) in their organisation, in order to motivate employees to perform better.

One of the key factors important for promoting and developing energy in an organisation is leadership style – charismatic and transformational leaders in particular (Ashkanasy and Tse, 2000; Avolio and Bass, 1988) – and the managerial approach (Bruch and Vogel, 2006; Dutton, 2003). In fact, the vast majority of the body of literature supports the idea that employees under transformational leadership are capable of experiencing higher levels of performance, positivity and development than those who are under transactional leadership (Politis, 2002; Dvir et al., 2002), which in a way is considered an explanation for the current domination of transformational leadership in relation to the soft factors context.

Various scholars explain that transformational leaders are highly responsible for motivating their employees and enhancing their overall enthusiasm levels and positive emotions (Bruch et al., 2005; Conger et al., 2000; Kark et al., 2003; Shamir et al., 1998). Since positive emotions and enthusiasm act as the determinants of overall energy among individuals, it can be deduced that leadership style and characteristics among the managers of an organisation are extremely crucial for orchestrating productive energy among employees (Schein, 2006), innovation (Howell and Higgins, 1990) and job satisfaction (Hater and Bass, 1988; Seltzer et al., 1990; Safi et al., 2016).

Quinn and Dutton (2005) adopted Einstein's formula for energy to demonstrate the impact of leadership on the overall energy in an organisation. According to the authors, every organisation possesses a huge reservoir of energy that needs to be channelled and multiplied to receive suitable responses and enhance overall sustainability, a task that can be done only by management and leaders. The CEO and leader of PayPoint stated '*Leadership is about inspiring and directing energy; therefore, it is essential to capture the hearts and minds'.* Bruch and Vogel (2004) have explained that leadership is important for mobilising energy in organisations, not only directly, but also indirectly.

It is worth mentioning that the notion of organisational energy is related to employee engagement, which creates some confusion within the human recourse research field (Lamberti 2010; Lok and Crawford, 2004). Therefore, it is necessary to acknowledge the difference between employee engagement and organisational energy and justify the researcher's choice, before the conceptualisation of organisational energy is examined.

For decades, many ongoing arguments have focused on defining measures of employee performance (Brayfield and Crockett, 1955; Saks, 2006; Ferrer, 2005; Bommer et al., 1995; Salanova et al., 2005; Dedy et al., 2016; Sharma et al., 2016; Yasin et al., 2016; Kramer et al., 2016). One of the determinants and measures that has been commonly used for measuring the performance of employees is employee engagement, defined by Kahn (1990) as the '*harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances'. Kahn* (1990) also suggested three different aspects of employee engagement, namely cognitive, emotional and physical, while productive organisational energy factors are emotional/affective, behavioural and cognitive energy (Cole et al., 2005; 2008; 2012).

Even though engagement has been identified as an important and relevant measure of employee performance, academics have argued for the selection of engagement versus other measures for measuring employee engagement. Welbourne (2014) argues for and compares the constructs of employee engagement and organisational energy and states that the two constructs are highly correlated, albeit energy is considered the prime mover. Welbourne (2014) also added that high levels of energy among individuals in an organisation usually tend to lead to higher levels of employee engagement, thus contributing to higher organisational performance. In other words, energy is becoming a critical ingredient and has great potential for impacting not only employees, but also the leaders' decision-making processes (Welbourne, 2014; Storey et al., 2009).

While the engagement of employees in an organisation has been shown by Welch (2011) to affect productivity in a positive way, Song et al. (2012) argue that productive organisational energy is what contributes to the development of employee engagement. The findings by Welbourne (2010) have also contributed to this notion by highlighting that it is engagement levels that come as a successor of overall organisational energy, and hence it makes more sense to measure organisational energy instead of engagement in relation to employee performance. Additionally, Macey and Schneider (2008) argue that employee engagement has become a catch-all phrase for various employee behaviours, and studies show that it is an important factor but does not contribute to higher performance.

In fact, employee engagement has received very limited criticism (Kroll, 2005; Frauenheim, 2009) and it is challenging to find negative literature about it (Welbourne, 2011). Yet another factor that makes the selection of productive organisational energy more relevant for measurement over employee engagement is the difficulties faced by academics in measuring the latter (Loehr and Schwartz, 2005; Welbourne, 2011; Attridge, 2009). Similar perspectives have been presented by Macey and Schneider (2008), who explained that the meaning and scope of employee engagement also tends to change in the business world, and hence academics prefer not to use it as a measure of employee performance.

On the same basis, Crawford et al. (2010) argue that research experts have not been able to develop or implement an effective engagement measure that can be applied to all organisations, and hence academics tend to choose other constructs such as organisational energy (Welbourne, 2014; Loehr and Schwartz, 2001; Schiuma et al., 2007; Cross et al., 2003; Bruch and Vogel, 2011), job motivation (Huggins et al., 2016; Lazaroiu, 2015; Van der Weijden et al., 2015) and job satisfaction (Atmojo, 2015;

Crossman and Abou-Zaki, 2003) for performance evaluation. Schaufeli et al. (2002) have also confirmed that the study of productive organisational energy helps in evaluating the emergent effects that tend to impact the performance of not only employees but also organisations.

Since leadership style has been identified to possibly stimulate organisational energy and is associated with the job satisfaction of employees, and based on the discussions and arguments above, organisational energy has been chosen as one of the main variables in the present research study. Hence, the following section explains and discusses organisational energy types and defines the scales and dimensions on the basis of which the overall organisational energy can be measured.

2.8.2 The Conceptualisation of Organisational Energy and the Energy Matrix

Based on Einstein's "Everything is energy" (Lederman and Teresi, 2012) theory, Levy and Merry (1986) pointed out that energy in the organisational context refers to the *'level of motivation, performance and spirit among the employees'*. Adams (1984) was among the first researchers to use the term "energy" in organisational studies, and Thayer (1989) described being energetic at work as the ability to take action and have a positive effect (Watson et al., 1988). In this research study the researcher focuses on examining the relationship between three different variables, with organisation energy being chosen as one of the main research variables. Due to the noticeable development and transformative potential in the last 20 years in higher education institutions, some studies have highlighted that academics and administrative staff from both genders are in need of higher levels of productive and positive energy (Astin, 1984; Clark, 1986; Fullan and Scott, 2009; and Benner, 2016). In a similar context, the impacts of organisational energy on the overall performance of employees have been discussed by Quinn and Dutton (2005), who not only explain the way energy at work among employees tends to affect their overall communication and performance (Burgoon, 1994), but also elaborate on the way their energy generates (Collins, 1981) and also gets diminished during attempts to coordinate.

Conversely, Hatch (1999) argues that *'affective experience in the workplace is the biggest empty space in the context of organisation conceptualisation'.* In fact, scholars in the organisational behaviour field have carried out several studies and proved that organisational energy is correlated directly with communication (Capella and Street, 1985) and indirectly with coordination (Fairhurst and Putnam, 1999).

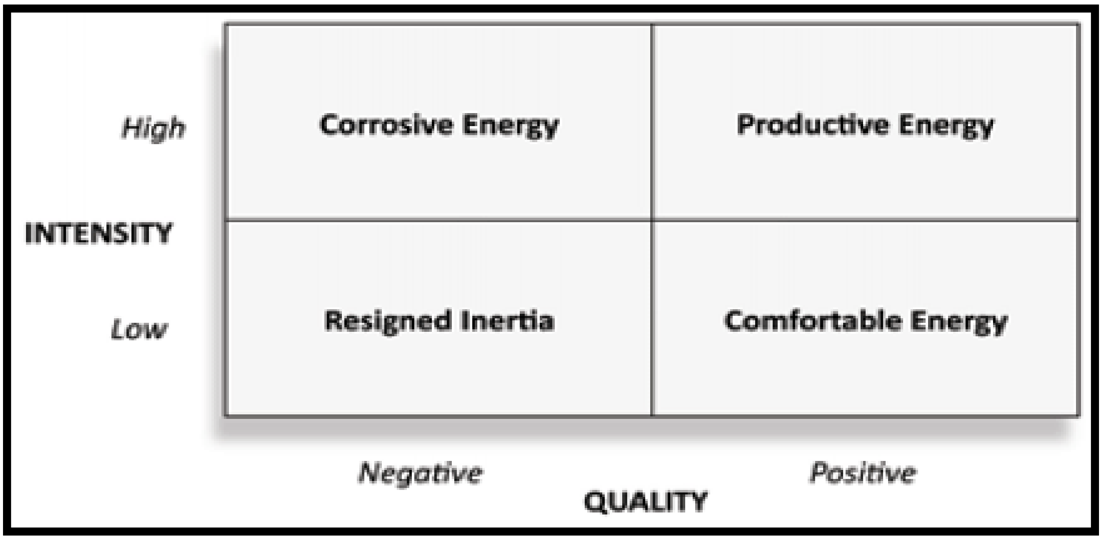
According to the discussions presented by Cross et al. (2003), the levels and types of organisational energy needed in different organisations tend to differ because of the nature of tasks that employees are expected to carry out, and hence leaders and management need to find a suitable leadership style to encourage this type of organisational energy among their employees so that they can carry out their tasks more effectively. Additionally, it is also crucial because it helps employees develop and implement new ideas and innovative concepts (Baker, 2000), an activity that is extremely crucial and important for organisational development (Cross et al., 2003).

Taking the discussion further, Bruch and Vogel (2011a) presented a framework for the measurement and management of organisational energy, known as the "energy matrix," which helps map the overall energy in an organisation by plotting its intensity as well as quality (Dutton, 2003), the two dimensions that lead to differences in the energy state of a company.

According to Dhawan et al. (2002), the energy matrix is a decent framework and model for measuring organisational energy because it helps management and leaders identify key areas of weaknesses so that they can be overcome effectively and lead to better and enhanced results. Bhatnagar (2005) also highlighted that the measure of intensity refers to the degree of activation of the overall cognitive, behavioural and emotional potential of a company, whereby quality is used to measure the extent to which the organisations can make use of these energy dimensions, in order to achieve their overall goals and objectives (Cross et al., 2003).

The figure below illustrates energy types and states.

Figure 2.1 Energy Matrix



Four different energy states are identified and defined by the matrix, as discussed below.

- ***Corrosive Energy:*** Corrosive energy refers to an energy state with high intensity and negative quality of energy. As described by Cross et al. (2003), this is an unfavourable state of energy for organisations, because the negative competition or factors that are prevalent in the organisation tend to destroy the energy that exists within them. According to Powell and DiMaggio (1991), corrosive energy usually corresponds with high levels of anger and negative emotions in an organisation, thus leading to non-productive and rather destructive actions and efforts.
- ***Resigned Inertia:*** Resigned inertia is the organisational energy state that refers to low intensity and negative quality of energy. According to Dhawan et al. (2002), resigned inertia is also an unfavourable state of organisational energy because, in this state, individuals and employees in the organisation tend to become indifferent towards organisational goals (Shirey and Hite, 2015). Some of the key characteristics that define this state of organisational energy include frustration, cynicism, mental withdrawal and low collective engagement (Dean et al., 1998). Bruch et al. (2005) contend that no initiative or changes in such organisations can result in a change in overall productivity.

- ***Comfortable Energy:*** Comfortable energy refers to the energy state in which the overall intensity is low but the quality is positive. This has been identified as a positive and favourable energy state, as employees in an organisation in this state are found to exhibit positive characteristics such as high satisfaction (Loehr and Schwartz, 2012) and a sense of personal identification within the group. Bruch et al. (2005) suggest that though the comfortable energy state leads to the development and formation of high-energy teams, it can also in the long run lead to complacency in organisations, which then needs to be managed well.
- ***Productive Energy:*** According to Schudy and Bruch (2010) and Cullen-Lester et al., 2016), productive energy is the most favourable and desirable state of organisational energy, due to its high intensity and positive quality of energy. Schudy and Bruch (2010) further highlight that organisations that exhibit productive energy usually find ways to channel and manage their overall emotions in an effective manner, which leads to better engagement and performance (Owens et al., 2016), knowledge transfer (Casciaro and Lobo, 2008) and higher effort from employees for achieving set targets and goals. Some of the key characteristics that define productive energy in organisations include high levels of mental alertness, high stamina and high productivity, positivity and enthusiasm (Spreitzer et al., 2005: 2011; Baker et al., 2003; Cross and Parker, 2004).

Although there are many factors that result in higher and better productive organisational energy at work, Bruch and Ghoshal (2003) maintain that there are multiple negative factors that tend to lead to low levels of productive organisational energy, and thus is it is extremely crucial for managers and leaders to integrate the energy of individuals effectively with the energy of the organisation, to achieve higher levels of performance. Some of the factors identified by Bruch and Ghoshal (2003) that may cause changes in the level of productive organisational energy are lack of cooperation, low teamwork and conflicts. Loehr and Schwartz (2003) and Pfeffer (2010) also added that poorly led and managed organisations commonly disregard the significance of such critical organisational recourse, namely productive organisational energy. Additionally, the deficiency and scarcity of productive organisational energy can increase employee stress (Sonnentag, Kuttler and Fritz, 2010) and lead to being disengaged (Schaufeli, Bakker and Van Rhenen, 2009).

According to Tosey and Llewellyn (2012), two characteristics that define productive organisational energy in companies are collectiveness and malleability. The authors explain that all types and states of organisational energy, especially productive organisational energy, are extremely soft and malleable in nature, because they can be changed easily due to the impacts of external and internal factors. Thus, it is can be interpreted that the ways employees, leaders and other executives in an organisation work tend to affect the energy levels in that organisation, thereby leading to different outcomes and results. Similar perspectives have also been presented by Martin et al. (2012), who explain that the productive organisational energy of an organisation is attributed to and highly correlated with the intangible factor of human beings working in that organisation, and so any changes in these soft factors can lead to an immediate change in energy levels**.**

Several key factors were identified by Hayes et al. (2004) as acting as the drivers of productive organisational energy. These factors or drivers include leadership (Goleman 2004; George et al., 2007; Bruch and Ghoshal, 2003), corporate identity (Cole et al., 2006), engagement of employees (Goleman 2004), trust (Alston and Tippett, 2009) and employee job satisfaction (Thomas et al., 2009; Lui, 2009).

According to Quinn and Dutton (2005), energy in the workplace is usually a collective process which helps facilitate communications and conversations among employees, which further lead to overall improvements in performance. Atwater and Carmeli (2009) also confirmed that when employees have better and high quality relationships with their supervisors or leaders, they generate positive emotions towards the organisation and fellow employees, thus leading to higher productive energy levels. According to the discussions presented by Cole et al. (2005), productive organisational energy is usually obtained due to the interactions taking place between individual energy, organisational energy and team energy.

Various researchers have discussed different definitions of productive organisational energy in the individual and collective level at work (Cole et al., 2012; Kozlowski and Klein, 2000; Mathieu and Chen, 2011). As Cole et al. (2012) and Button (2003) note, the study of the collective productive organisational energy at work concept is extremely important in the organisational behaviour field, as it acts as fuel and a basic resource that helps motivate employees so that they are able to perform better.

According to Cole et al. (2005) and Cuff and Barkhuizen (2014), two distinct attributes can be used for defining the construct of productive organisational energy. The first, defined by Cole et al. (2005), Bliese (2000) and Kozlowski and Klein (2000), is collective-level energy, according to which the energy that gets generated in individuals usually results from employees' interactions with the group or other members that evolve the contextual influence. The second attribute refers to the nature of individual-level energy, wherein energy of an individual in the organisational context is expected to be treated as a separate construct (Schwartz, 2007), ignoring the fact that individuals must align their work with work teams (Mathieu et al., 2008; Cole et al., 2012).

The concept of collective-level productive organisational energy is linked to overall organisational energy, since academics have established that the collective productive energy of individuals tends to affect the overall energy and performance of an organisation (Jansen, 2004). Bruch and Vogel (2011a) also suggest that productive organisational energy is the '*extent to which an organization has mobilized its emotional, cognitive, and behavioural potential to pursue it goals'.* The importance of collective productive energy has been demonstrated by Kozlowski and Klein (2000), in that that it is not too simplistic and can contribute to *'emergent effects models'.*

The discussions and explanations of the energy matrix highlight that productive organisational energy is the most favourable state of organisational energy, can have a great impact and leads to better employee satisfaction in different contexts. This research study focuses on one type and state of organisational energy, namely productive organisational energy, which will be examined in a higher education institution context in Saudi Arabia. Therefore, it is important to justify the researcher's choice, and so in order to identify reasonable facts and coherent arguments, the following section focuses on the developments, dimensions and measurement tools of "***productive organisational energy***".

2.8.3 Productive Organizational Energy

The concept of productive organisational energy (POE) has been a topic of discussion and study by several academics and experts (Kahn, 1990; Schaufeli et al., 2002; Bruch and Ghoshal, 2003; Cross et al., 2003; Cole, Bruch and Vogel 2005; Kunze and Bruch, 2010; Schudy and Bruch, 2010; Cole et al., 2012; Derman, Barkhuizen and Stanz, 2011; Bruch and Vogel 2011a; Cuff and Barkhuizen, 2014; Cameron, Bright and Caza, 2004; Lamberti, 2010), because it demonstrates the most favourable and compatible state of energy that organisations must exhibit. According to Bruch and Ghoshal (2003), for instance, productive organisational energy helps organisations carry out and complete core activities so that the emotions of employees are channelled towards positive measures that motivate them to achieve common goals. Indeed, there is a lack of studies in the literature review examining the importance of productive organisational energy, especially in the context of behaviour and performance, as it can define the ability of a company to reach its maximum potential (Cole, Bruch and Vogel, 2012).

The concept of productive organisational energy has been defined by Cole et al. (2005), who suggest that this energy refers to the fuel that is responsible for the running of any organisation. Bruch and Vogel (2011b) and Shraga and Shirom (2009) have also defined the concept as a *'joint experience and demonstration of positive effect, cognitive activation and argentic behaviour among members of a collective in their shared pursuit of organizationally salient objectives*'. One of the key characteristics of productive organisational energy that has been identified by Cole et al. (2005) is its multifaceted nature. That is to say, it consists of three major energy dimensions, namely cognitive alertness, which is the desire to focus attention (Lykken, 2005), emotional arousal, i.e. a feeling of excitement (Quinn and Dutton, 2005), and, lastly, purposeful behaviour, namely the use of different physical resources for promoting positive energy in a management context (Spreitzer and Sonenshein, 2004). Hence, it can be clearly deduced that the overall organisational energy in a company is highly linked to the collective level of productive organisational energy and is modified and promoted by the overall behaviour and soft factors exhibited by employees (Cole et al., 2005).

The importance of productive organisational energy is that the existence of such energy in an organisation not only has a positive impact on overall performance (Cuff and Barkhuizen, 2012), but it is also crucial from the point of view of individuals, because it contributes to the overall development of an individual's motivation (Donelly, 2008), health, wellbeing, creativity and performance (Barkhuizen and Stanz, 2010; Dutton, 2003). On a similar basis, Mathew (2007) highlighted the importance of creating a productive culture using teamwork, building trust between employees (Schiuma et al., 2007) and managers and providing support. Besides, it has been found that there is a direct link between productive organisational energy, job satisfaction and employee engagement (Downey, 2008). Another suggestion was proposed by White (2008), who found that productive organisational energy is influenced by several internal factors, including challenges faced by employees and perceived leadership style.

Cross, Baker and Parker (2003) discussed the application and importance of such energy in different fields and proved that the service industry, including the professional services industries, is one of the sectors severely impacted by its existence.

Taormina (2008) argues that organisational culture is also correlated to the overall organisational energy which is associated with the collective level of productive organisational energy. The focus of the present research study is on higher educational institutions in Saudi Arabia, which is currently facing major changes and challenges such as using quality measures (Alkhazim, 2003) and a lack of institutional autonomy, due to the heavily centrally controlled culture (Smith and Abouammod, 2013). Altbach (2011) also argues that higher education institutions in Saudi Arabia are currently seeking a world-class system via social engagement, higher employee satisfaction and productivity. An examination of productive organisational energy within such a context is a noteworthy yet challenging undertaking, as previous research studies prove that cultural differences are linked to participants' reactions and answers (Van Eeden and Mantsha, 2007). Despite the fact that productive organisational energy has been tested in various contexts, such as France, Germany, South Africa, Sweden, United Kingdom, United States and Switzerland (Cole et al., 2012), Vogel and Bruch (2011) argue that measurement tools for the concept still limited and more research studies are required in this respect.

Sonova Group and Lufthansa are the two real-life examples in different settings that demonstrate the application, relevance and benefits of productive organisational energy. As discussed by Bruch and Vogel (2011a), the Sonova Group, under the leadership of Valentin Chapero, in 2002, demonstrated extremely high levels of productive energy throughout the whole of the organisation before the launch of its products every year in April and in November, whereby employees demonstrated high levels of enthusiasm and everybody was focused on achieving the goal of a timely product launch. Bruch and Vogel (2011a) explain that it was the adequate channelling of productive energy that helped the company launch all of its products on time. Another organisation that demonstrates the positive impact of productive organisational energy is Lufthansa. As discussed by Bruch and Vogel (2011a), Lufthansa revived its productivity after the crisis of September 2001 with extended wage contracts and unpaid vacation time, in order to reduce human resources costs and generate higher profitability. Thus, it can be deduced that the concept of productive organisational energy is an important and crucial aspect of discussions in the study of organisational behaviour, including higher education institutions, because it tends to impact significantly on the overall productivity and performance of an organisation. Therefore, it is mandatory to highlight and present productive organisational energy dimensions, which will be covered in the following section.

2.8.4 Productive Organisational Energy Dimensions

As mentioned briefly in the previous section, three dimensions on which productive organisational energy can be measured have been defined by Vogel and Bruch (2011), as discussed below.

- **Behavioural Dimension:** The behavioural dimension of organisational energy facilitates and improves the overall action-related behaviour of employees (Spreitzer et al., 2005). This dimension affects the overall activeness and involvement of employees in a given scenario, thus influencing their overall performance and process execution (Cole et al., 2012; Vogel and Bruch, 2011).
- **Cognitive Dimension:** As discussed by Vogel and Bruch (2011), the cognitive dimension is yet another important element of productive organisational energy, which leads to the development of intellectual processes among employees. Cognitive energy, or the dimension of organisational energy, tends to contribute to more optimistic attitudes and better financial outcomes in employees (Cannon-Bowers and Salas, 2011).
- **Emotional/ Affective Dimension:** Shirom (2003) explains the emotional dimension of productive organisational energy and states that it is related to the types of human interactions and collaborations that employees have with the people around them. According to Shirom (2003) and Cole et al. (2012), employees regularly interact with their external environment, and hence behaviour that helps them in meeting their goals and objectives affects their energy by causing positive experiences and responses as well as emotional arousal.

Therefore, several academics have used these dimensions for measuring the overall productive energy in an organisation (Cuff and Barkhuizen, 2014; Cole et al., 2012; Vogel and Bruch, 2011; Bruch and Ghoshal, 2003; Louw, 2012; Lamberti, 2011; Bruch, Cole and Vogel, 2007; Kunze and Bruch, 2010). The most commonly used tool in this regard is the productive organisational energy measure (PEM) tool or questionnaire that was developed by Cole et al. (2005). The tool or measure that was proposed and developed by the authors provides a scale to measure three different dimensions of productive organisational energy: affective, cognitive and behavioural, as discussed previously. The questionnaire used in the tool is divided into multiple questions, the answers to which need to be graded on a Likert scale. The authors not only measured the overall levels of organisational energy on the basis of three different aspects of productive energy, but they also tested and validated the questionnaire in different settings, to demonstrate its effectiveness in measuring productive energy (Cole et al., 2005).

On the other hand, it has been also argued that productive organisational energy is still ambiguous, with no theoretical underpinning or reliable measurement tools (Bradbury and Lichtenstein, 2000). Nonetheless, in order to overcome this issue, the three-factor model-based measure of productive energy was validated by Cuff and Barkhuizen (2014), who used the scales defined by Cole et al. (2005) to measure overall productive organisational energy as observed in the context of South Africa, which is similar to the conservative Saudi Arabian culture. Another measure or framework that can be used for the measurement of productive organisational energy is force field analysis. Wright (2003) developed and incorporated a special force field analysis, based on Kurt Lewin's expertise, for evaluating the impacts of different situations on productive organisational energy. The framework helps measure the overall productive energy in an organisation on the basis of a vertical scale. Wright (2003) explains that it is extremely effective and efficient because it can be employed in different situations and can also provide an overview for managers regarding the situations and factors on which they must focus, in order to improve overall results. In order to justify the researcher's choice, a review of the most commonly used measurement tools will be presented later in this chapter.

The discussions presented above have highlighted and led to the conclusion that productive organisational energy is an important construct used for the measurement of organisational and employee performance. It is also one of a number of emerging and modern constructs that are being evaluated and studied by a large number of academics, because the existence of productive organisational energy has been found to lead to higher satisfaction, confidence and better channelling of employee emotions, all of which in turn lead to higher performance. Furthermore, the arguments have demonstrated that the construct is not very easily measurable, but there are multiple measures and scales that have been developed in order to enhance the ability of academics to achieve this aim. Considering the fact that there is a direct link between leadership style and productive organisational energy, it becomes obligatory and significant to start focusing on the last research variable and study the linkage between leadership style and academic and administrative staff's job satisfaction in higher education institutions, keeping in mind the meditating role of productive organisational energy on the present relationship.

2.9 Linkage between Leadership Style and Job Satisfaction

As mentioned previously, the second main objective of this research study is to examine the relationship between leadership style and job satisfaction. In 1976, and based on Locke's review of "job satisfaction" in the body of literature, it was found that just over 3,300 academic articles were published on the subject. Employee job satisfaction is considered to be one of the most widely studied phenomena in organisational and leadership studies, and hence multiple attempts have been made by researchers to evaluate and analyse it with reference to different aspects of organisations such as leadership, work environment, employee performance, organisational energy and more (Johnson, 1996; Reynierse and Harker, 1992; Sun et al., 2016; Reid, 2016; Buckman, 2015; Safi et al., 2016; Lu, 2015). Job satisfaction, as described by Hasenfeld (2010), refers to the overall level of contentment that employees have with respect to their job and their supervisors. Job satisfaction, as explained by Mount et al. (2006), not only has multiple positive impacts on the performance of employees, but it also tends to lead to better staff retention and higher learning and growth. Noe et al. (2005) also highlighted that the pleasurable feeling employees experience is a reflection of her/his personal value fulfilment. Besides, organisational success is also derived from several key indicators such as employee job satisfaction (Toker, 2011) and has a direct influence on organisational performance (Lok and Crawford, 2004). Due to the fact that various researchers have attempted to define job satisfaction, Furnham (2005) argued that each definition focuses on one side only of being satisfied at work. Karimi (2008) also added that it is a fictional concept and does not consist of one agreed definition (Worrell, 2004).

In contrast, several research studies have focused on examining the impact of leadership style on job satisfaction, not only transformational (Judge and Piccolo, 2004; Podsakoff et al., 1990; Jensen and Jacobsen, 2015) but also transaction leadership (Nguni, Sleegers and Denessen, 2007; Haider and Raiz, 2010; Mahmoud, 2008) and in the context of different organisations and industries, which include the healthcare sector (Morrison, Jones and Fuller, 1997), education sector (Hamidifar, 2015) and the financial sector (Walumbwa et al., 2005). Although Bryman (2007) argued that in the literature there is a noticeable paucity of leadership, job satisfaction and employee performance research studies within a higher educational initiation context, Toker (2011) pointed out that the recent research focus on and interest in job satisfaction within higher education institutions is growing.

In order to understand the current size of the research, trends in this field and the most cited papers, the researcher also used "ISI Web of Science," similar to what was done for the organisational energy concept. In September 2016, the dataset was interrogated by searching for papers' titles, abstracts and keywords. By linking the main constructs in the present research to find key articles, 131 relevant papers were identified, the five most cited of which are presented in the table below:

- ['Leadership style'] AND ['Transformational Leadership'] AND ['Transactional Leadership'] AND ['Job Satisfaction] OR ['Employee Job Satisfaction].

Title	**Author**	**Year**	**Citations**
Transformational leader behaviours and substitutes for leadership as determinants of employee satisfaction	By: Podsakoff, PM; MacKenzie, SB; Bommer, WH	1996	435
Transformational leadership and job satisfaction	By: Medley, F; Larochelle, D	1995	278
Participative management and job satisfaction: lessons for management leadership	By: Kim, S	2002	119
The relation between leadership and empowerment on job satisfaction	By: Morrison, RS; Jones, L; Fuller, B	1997	82

Transformational and transactional leadership effects on teachers' job satisfaction, organisational citizenship behaviour in primary schools	By: Nguni, S; Sleegres, P; Denessen, E	2006	70

Table 2.4 List of studies: Relationship between leadership and job satisfaction.

Table 2.4 proves that the concept "job satisfaction" is still popular and growing sharply within the organisational studies context (Harter and Schmidt, 2002; Hayes, Douglas and Bonner, 2015). Furthermore, the research study carried out by Alonderiene and Majauskaite (2015) within the higher education sector reveals and confirms that the behaviour of leaders in educational institutions tends to determine and affect significantly the overall outcomes of employees by positively affecting and enhancing their overall learning and organisational behaviour. Similar discussions confirm that the adoption of a suitable leadership style helps in promoting and establishing a strong and positive relationship between employees and leaders, hence leading to higher levels of trust, commitment and job satisfaction (Akdere et al., 2012; Liao, Hu and Chung, 2009).

Fernandez (2008) and Shaw and Newton (2014) argue that job satisfaction plays an extremely important and significant role in the occupational and professional lives of people, because it helps improve the output of employees, thus leading to higher performance. Moreover, a study was carried out by Leary et al. (1999) which focused on the American higher education context and investigated the link between leadership styles and employee job satisfaction, showing a significant relationship between both variables. On the other hand, Al-Omari (2008) presented a similar study concerning the Jordanian higher education context, for which the results aligned with Leary et al.'s outcomes. In a completely different setting, Seseer (2007) also conducted similar research in Mongolian higher education institutions, the results confirming the findings of both previous research studies and highlighting that leaders' behaviours are one of the key factors in job satisfaction.

The present research thus focuses on evaluating and measuring the levels of job satisfaction as observed among employees of Saudi Arabian higher educational institutions in relation to the leadership style adopted therein. Furthermore, it presents different theories to explain the concept in more detail, following which a discussion on the proposed measurement tools in the present research study is undertaken.

2.9.1 Job Satisfaction Theories

The importance of job satisfaction in organisational studies has been remarkable for several decades (Hoppock, 1935; Herzberg, 1966; Locke, 1969; Brayfield and Rothe, 1951; Lok and Crawford, 2003; Skogstad et al., 2015). Besides, there are several different definitions relating to job satisfaction that are present in the literature and research (Armstrong, 2006; Evans, 2000; Vroom, 1982; Schultz, 1982; Tobais, 1999). While some studies relate the concept to the emotions and feelings of employees (Siegel and Lane, 1987), some relate it to their attitudes and behaviours (Roberts, 2001; Smith et al., 1969).

Based on extensive research in the literature, measuring job satisfaction can be done in two distinct ways: either via a general concept and overall notion (Nguni et al., 2006) or duel-faced, namely intrinsic (job issues) and extrinsic (environmental issues) (Cerit, 2009). Due to the setting adopted in the present study, the researcher chose to use both intrinsic and extrinsic measures, in order to have a greater overview and make a better contribution (Al-Omari, 2008). On a similar basis to previous sections, on leadership in particular, job satisfaction is also driven, articulated and defined by altered theories (Worrell, 2004; Castillo and Cano, 2004; Siripak, 2006 Dawis, 2004). Therefore, the adoption of these different definitions of the concept has led to the evolution of a large number of theories surrounding the subject, which have been divided further into three categories: content theories, process theories and situational theories, some of which are discussed below (Siripak, 2006; Worrell, 2004).

2.9.1.1 Content Theories

Olobue (2006) suggests that content theories are needs-based, assuming that everybody shares a similar list of needs within their jobs. Latham and Pinder (2005) also highlighted that the content theories relating to job satisfaction of employees are focused upon and explain the various incentives and factors that tend to drive the actions and priorities of individuals, as observed in an organisational setting.

Kini and Hobso (2002) further explain that these theories are highly related to the identities of individuals, because they are important and crucial in defining the factors that tend to motivate as well as drive individuals or employees to achieve different goals and carry out different tasks. Different levels of needs thus lead to different behavioural expressions from people working in any given organisation (Maslow, 1954). It is important to understand the content theories in which managers and leaders can identify the most suitable strategy to improve employee job satisfaction levels (Tietjen and Myers, 1998).

Maslow's Hierarchy of Needs is one of the most commonly adopted theories of job satisfaction and motivation. It defines that there are different levels of needs for an individual, and as each level of need is met (Palmer, 2005; Maslow, 1954), the overall satisfaction levels of employees tend to increase based on what they already have (Tikkanen, 2009; Zalenski and Raspa, 2006). The five levels of needs identified by Maslow are safety needs, physical needs, social needs, self-esteem and self-actualisation, all of which make up the hierarchy of importance (Schutz et al., 2010). Zalenski and Raspa (2006) explain that the theory is extremely beneficial for studying job satisfaction (Fisher and Royster, 2016) because it presents and defines the needs of individuals in a sequential (Botana and Neto, 2015) and logical order (Naylor, 1999) and hence suggests that the lower levels of needs must be met first, in order to proceed to the higher levels. Moreover, as these needs are fulfilled sequentially (Borkowski, 2005), the overall satisfaction of employees increases tremendously (Huber, 2006).

Several researches argue that despite the popularity of the present theory, it still remains volatile in regards to its level of validity (Ifinedo, 2003; Lawler and Suttle, 1972), can be clustered into less than five levels or groups (Siddiqui, 2015) and completely eliminates job-related key factors (Amin, 2012). In contrast, other research studies show their interest in regards to the implementation of the theory within the social networking context (Cao, et al., 2013), small enterprises (Botana and Neto, 2015), teaching and learning strategies (Bishop, 2016) and healthcare (Benson and Dundis, 2003). Another issue was pointed out by Cullen and Goten (2002), in that both genders have different lists of needs, and Coy and Kovacs-Long (2005), who proved that it is suitable for both females and males. In fact, with all the criticism received, and based on the number of citations of Maslow's theory article, it is still worthy and valuable to academic research studies in various contexts (Mullins, 2009; Taormina and Gao, 2013). However, Maslow's hierarchy of needs theory was not recommended to be used in the working environment, though it remains a critical and significant theory of motivation leading to higher job satisfaction (Iyad, 2011).

Based on the discussions above, a theory movement led to a development in content theories, and eventually Herzberg's two-factor theory was proposed (Herzberg, 1959: 1974). Also commonly known as the motivator/hygiene theory, this theory was based on Maslow's hierarchy of needs and identified the needs and motivations of people via two different categories, namely motivator and hygiene factors (Lawler, 199). According to the theory (1959: 1966), there are two key sets of needs that need to be fulfilled and met by individuals (Lundberg et al., 2009). Motivation factors are used to define individual characteristics that are important and related to the growth of employees, such as the recognition, achievement, work and responsibility, and hygiene factors prevent or minimise any form of dissatisfaction among employees, including company policies, administration, interpersonal relations and more (Stumpf ,2003; Lundberg et al., 2009). According to Lu et al. (2005), the theory is extremely beneficial and effective in describing and measuring job satisfaction, because it helps in not only identifying the factors that cause satisfaction, but it also allows employees to identify why they are less satisfied. Lawler (1994) also argues that satisfaction at work is not the opposite of dissatisfaction, as employees might be satisfied and dissatisfied at the same time. This supports Herzberg's (1974) claim that job satisfaction consists of two altered factors, i.e. intrinsic and extrinsic, which is similar labels of motivators and hygiene (Worrell, 2004) as mentioned previously.

For decades, researchers have appreciated and used Herzberg's two-factor theory in their studies in relation to employee job satisfaction (Ewen Smith and Hulin, 1966;

Gawel, 1997; Malik and Naeem, 2013; Karimi, 2008; Hardman, 1996), including in the higher education institution context (Mehrad and Abdullah, 2015; Ghazi, Shahzada and Khan, 2013; Hoseyni et al., 2014). On the other hand, the theory has received its fair share of criticism (Locke, 1976). Locke et al. (1983), for instance, created a list of arguments, citing a model-based approach, a unidirectional operation of needs, the denial of individual differences and defensiveness. As a conclusion to Locke and others' criticism, both intrinsic and extrinsic factors can affect employee satisfaction and dissatisfaction (Oshagbemi, 1997; Bowen, 1980), and so development in the interpretation process (Tang and Gilbert, 1995) and more theory validation (Jarkas, Radosavljevic and Wuyi, 2014; House and Wigdor, 1967) are required. This gives us the chance to present the second well-known theory, process theory.

2.9.1.2 Situational Theories

In 1992, the last set of theories, namely situational theories, related to job satisfaction was presented by Quarstein et al. They primarily focus on describing the different situations that contribute to and lead to job satisfaction. Furthermore, they base the existence and occurrence of job satisfaction primarily on two factors, situational characteristics and situational occurrences (Christen et al., 2006; Siripak, 2006). According to the discussions presented by Christen et al. (2006), some of the situational factors or characteristics that often lead and contribute to job satisfaction include promotional opportunities, pay structure, working conditions and company policies. The two situational factors are not identical but similar to the intrinsic and extrinsic content theories (Worrell, 2004). On the one hand, situational characteristics refer to the process of accepting a specific job based on elements such as pay, supervision and working conditions (Quarstein, McAfee and Glassman, 1992), while on the other hand situational occurrences are related to what is offered after accepting the job and which can be positive, for example giving employees time off in return for their hard work, or negative, for example rude attitudes by other employees (Daneshfard, Ekvaniyan, 2012).

Several academics and experts have established that the situational theories of job satisfaction are extremely beneficial in describing and measuring job satisfaction

(Quarstein, McAfee and Glassman, 1992; Webb, Royal and Nash, 2015; Springer, 2011), including in a higher education context (Nguni et al., 2006; Rahim and Afza, 1993; Seseer, 2007; Webb, 2003; Ekvaniyan, 2012; Oshagbemi, 1997), because they help identify different situations contributing to the same. Furthermore, contextual culture is also considered a drivers and critical factor in job satisfaction; for example, Giacometti (2005) highlights in his study conducted in a performance-oriented society, i.e. the American educational system, that emotional factors and student-related issues are one of the key elements affecting academics'/teachers' job satisfaction. Similar results were obtained by Ingersoll (2001), Luekens et al. (2004), Ambrose et al. (2005) and Oshagbemi (1997). Conversely, Sharma and Jyoti (2009) argue that in human-oriented societies such as Pakistani universities, employees seek achievements, autonomy, mentoring and recognition to improve job satisfaction. In a similar context, these research outcomes are supported by several scholars, such as Karimi (2008), Sargent and Hannum (2005), Toker (2011) and Alam et al. (2005).

After the research gaps have been identified, and on the basis of the literature review chapter, the following sections highlight the development of the theoretical framework and the current research hypothesis.

2.10 Theoretical Framework

"Leadership" as a construct has been among the most debated and popular research topics in the management field (Scott, 2009; Bryman, 2007; Khoury and McNally, 2016). Indeed, several research studies have focused on leadership in various contexts, including higher education institutions (Ivory et al., 2007; Boer and Goedegebuure, 2009). Based on the discussions and arguments in the previous sections, it can be concluded that, recently, educational institutions have started to gain more attention and recognition within the management and organisational behavioural fields in general and the higher education institution context in particular (Bryman and Lillet, 2009; Bloom and McClellan, 2016). The present research's theoretical framework, presented below, was developed after critically reviewing and analysing the body of literature.

2.10.1 The Relationship between Leadership style and Productive Organisational Energy

While several scholars have focused on studying the link between leadership and energy at work (Bruch and Ghoshal, 2003; Schiuma, Mason and Kennerley, 2007), others have highlighted that more research is required in various settings and cultures (Dutton, 2003; Cole, Bruch and Vogel, 2012; Brakhuizen, 2014), as it improves employee motivation and performance (Quinn, Spreitzer and Lam, 2012). In higher education institutions, Herrington (2006) argues that academics must use the right level of energy to maintain high productivity. Leadership has also received a huge amount of attention, especially in higher education institutions (Alonderiene and Majauskaite, 2016). In addition, Bryman (2007) highlighted that the gap in the literature about leadership in higher education institutions is still noticeable and further research in necessary. Webb (2009) carried out one of the very few studies that focused on leadership style in higher education institutions, and even fewer have concentrated on a specific style in this context, such as transformational (Abbas et al., 2012; Asmawi et al., 2013; Lin and Tseng, 2013; Webb, 2009) and transactional (Aydin et al., 2013; Webb, 2009). Van Ameijde et al. (2009) suggested that higher education institutions are such as interesting and unique field to study, as they require the adoption of different styles of leadership. In fact, Walter and Bruch (2010) found that there is a direct link between transformational leadership and organisational energy. It is also argued that charismatic leadership is considered one of the key drivers of collective energy (Burch and Vogel, 2006; Dutton, 2003; Bruch, Walter and Voelpel, 2006). As discussed in section 2.8.3, the present research study focuses on the collective level of productive organisational energy, though it is still in the early stages of improvement (Dhawan, Roy and Kumar, 2002; Quinn and Dutton, 2005; Bruch, Walter and Voelpel, 2006). Furthermore, in relation to an important aspect in regards to productive organisational energy in the management context, Bruch and Vogel (2011) claimed that *'Leadership is the art of orchestrating energy'.* The researchers further added that it is an obligation for leaders to understand and acknowledge organisational energy, as low levels can lead to inflexibility and job dissatisfaction. It is also possible that in teams and working groups experiencing a transformational leadership style, all productive organisational energy dimensions, namely affective, behavioural and cognitive, will increase accordingly (Kunze and Bruch, 2010). However, linking leadership style to productive organisational energy is not a common finding in the literature (Cole et al., 2005), though it is likely that this relationship could be justified (Kunze and Bruch, 2010; Bruch and Goshal, 2003). Hence, the present researcher made the assumption that leadership style could influence productive organisational leadership in higher education institutions in Saudi Arabia, thereby formulating the following hypotheses:

H2a Transformational leadership predicts productive organisational energy in the public King Abdulaziz University in Saudi Arabia.

H2b Transactional leadership predicts productive organisational energy in the public King Abdulaziz University in Saudi Arabia.

H4a Transformational leadership predicts productive organisational energy in the private Dar Alhekma University in Saudi Arabia.

H4b Transactional leadership predicts productive organisational energy in the private Dar Alhekma University in Saudi Arabia.

H8 There is a statistically significant positive relationship between transformational leadership and productive organisational energy at the public King Abdulaziz University in Saudi Arabia.

H9 There is a statistically significant positive relationship between transactional leadership and productive organisational energy at the public King Abdulaziz University in Saudi Arabia.

H13 There is a statistically significant positive relationship between transformational leadership and productive organisational energy at the private Dar Alhekma University in Saudi Arabia.

H14 There is a statistically significant positive relationship between transactional leadership and productive organisational energy at the private Dar Alhekma University in Saudi Arabia.

2.10.2 The Relationship between Leadership Style and Job Satisfaction

While several scholars have focused on studying the link between leadership and energy at work (Bruch and Ghoshal, 2003; Schiuma, Mason and Kennerley, 2007), others have highlighted that more research is required in various settings and cultures (Dutton, 2003; Cole, Bruch and Vogel, 2012; Brakhuizen, 2014), as it improves employee motivation and performance (Quinn, Spreitzer and Lam, 2012). In higher education institutions, Herrington (2006) argues that academics must use the right level of energy to maintain high productivity. Leadership has also received a huge amount of attention, especially in higher education institutions (Alonderiene and Majauskaite, 2016). In addition, Bryman (2007) highlighted that the gap in the literature about leadership in higher education institutions is still noticeable and further research in necessary. Webb (2009) carried out one of the very few studies that focused on leadership style in higher education institutions, and even fewer have concentrated on a specific style in this context, such as transformational (Abbas et al., 2012; Asmawi et al., 2013; Lin and Tseng, 2013; Webb, 2009) and transactional (Aydin et al., 2013; Webb, 2009). Van Ameijde et al. (2009) suggested that higher education institutions are such as interesting and unique field to study, as they require the adoption of different styles of leadership. In fact, Walter and Bruch (2010) found that there is a direct link between transformational leadership and organisational energy. It is also argued that charismatic leadership is considered one of the key drivers of collective energy (Burch and Vogel, 2006; Dutton, 2003; Bruch, Walter and Voelpel, 2006). As discussed in section 2.8.3, the present research study focuses on the collective level of productive organisational energy, though it is still in the early stages of improvement (Dhawan, Roy and Kumar, 2002; Quinn and Dutton, 2005; Bruch, Walter and Voelpel, 2006). Furthermore, in relation to an important aspect in regards to productive organisational energy in the management context, Bruch and Vogel (2011) claimed that *'Leadership is the art of orchestrating energy'.* The researchers further added that it is an obligation for leaders to understand and acknowledge organisational energy, as low levels can lead to inflexibility and job dissatisfaction. It is also possible that in teams and working groups experiencing a transformational leadership style, all productive organisational energy dimensions, namely affective, behavioural and cognitive, will increase accordingly (Kunze and Bruch, 2010). However, linking leadership style to productive organisational energy is not a common finding in the literature (Cole et al., 2005), though it is likely that this relationship could be justified (Kunze and Bruch, 2010; Bruch and Goshal, 2003). Hence, the present researcher made the assumption that leadership style could influence productive organisational leadership in higher education institutions in Saudi Arabia, thereby formulating the following hypotheses:

H2a Transformational leadership predicts productive organisational energy in the public King Abdulaziz University in Saudi Arabia.

H2b Transactional leadership predicts productive organisational energy in the public King Abdulaziz University in Saudi Arabia.

H4a Transformational leadership predicts productive organisational energy in the private Dar Alhekma University in Saudi Arabia.

H4b Transactional leadership predicts productive organisational energy in the private Dar Alhekma University in Saudi Arabia.

H8 There is a statistically significant positive relationship between transformational leadership and productive organisational energy at the public King Abdulaziz University in Saudi Arabia.

H9 There is a statistically significant positive relationship between transactional leadership and productive organisational energy at the public King Abdulaziz University in Saudi Arabia.

H13 There is a statistically significant positive relationship between transformational leadership and productive organisational energy at the private Dar Alhekma University in Saudi Arabia.

H14 There is a statistically significant positive relationship between transactional leadership and productive organisational energy at the private Dar Alhekma University in Saudi Arabia.

2.10.3 The Relationship between Leadership Style and Job Satisfaction

Research in leadership styles has presented numerous numbers of contracts, such as situational (Hersey and Blanchard, 1982), transactional (Bass and Avolio, 2000), transformational (Bass and Avolio, 2000), autocratic and democratic (Muhammad et al., 2009), the majority of which have contributed to the context of higher education institutions (Ivory et al., 2007).

Although various research studies have focused on establishing a direct link between several leadership styles, namely transformational and transactional and job satisfaction within altered contexts (Saif et al., 2016; Reid, 2016; Bhatti et al., 2012), there is still a lack of studies within the educational sector (Bents and Blank, 1997; Bogler, 2001; Fields and Heroldm, 1997; Barnett and McCormick, 2004; Nguni et al., 2006), and especially higher education institutions (Gorsso, 2008; Tucker et al., 1992; Bolden, Petrov and Gosling, 2009; Burns, 2007).

Levine (2000) and Webb (2003) argued that in American higher education institutions there is a correlation between transformational and transactional leadership and academics' job satisfaction. On a similar basis, Dastoor et al. (2003) also supported the claim in the Thai context and Sung (2007) in the Taiwanese context. Furthermore, the vast majority of previous studies have highlighted that the transformational leadership style is practiced and employed more by university leaders compared to transactional and laissez-faire styles (Stumpf, 2007). In the present research study, the focus is on Saudi Arabian higher education institutions, for which the job satisfaction studies remain very limited (Rubaish et al., 2011). In a more general context, and despite the sizeable body of literature on academics and administrative staff's job satisfaction, the majority of the studies have adopted all-purpose measurement instruments (Spector, 1997; Kallebreg, 1977; Ironson et al., 1989; De Lourdes-Machado-Taylor et al., 2016).

Burns (2007) argued that in higher education institutions the transformation leadership style is strongly and positively associated with academics', or as otherwise known "faculty members'," self-perceived job satisfaction compared with transactional leadership. As an extension to this argument, Grosso (2008) pointed out that the *'transaction leadership style didn't have a positive significant relationship with academics' job satisfaction'.* It is also worth mentioning that leadership style can be considered dependent, independent or even mediator-variable in different research studies with regards to job satisfaction (Rad and Yarmohammadain, 2006; Lok and Crawford, 1999:2004). Based on the literature review in section 2.9, it can be posited that leadership style could interact with job satisfaction in various settings and altered contexts. Stumpf's (2003) study is an important example, due to the fact that the research variables leadership style and job satisfaction were measured using similar instruments to the present research study, aiming at examining the relationship between the two elements. In addition, similar results were found by Dastoor et al. (2003) and Trucker et al. (1992), highlighting that the relationship between a transaction leadership style and job satisfaction is unstable and could vary across different contexts and situations. In the Taiwanese context, Sung (2007) pointed out that the majority of highly satisfied faculty members experience transformational leader behaviours compared to those who work under transactional leadership. It is also argued that in order to enhance employees' job satisfaction, it is important for leaders and managers to establish a good relationship with their subordinates, which is a core behaviour of a transformational leader (Tucker et al., 1997; Braun et al., 2013; Yildiz and Simsek, 2016; Top, Akdere and Tarcan, 2015).

However, a vast amount of research argues that there is no such 'best' leadership style that will be successful in all settings and situations (Bhella, 1982; Boyer, 1982, Everett, 1987; Halpin, 1959; Stogdill, 1974). On the other hand, Grosso (2008) argues that adopting and utilising transformational behaviours in a higher education institution setting will create a harmonic and efficient atmosphere sufficient enough to achieve not only academic and administrative staff goals, but also the organisation's aims, mission and vision.

Therefore, due to the context aspects which will be discussed in more detail in the following chapter, and based on the extensive literature review, transformational and transaction leadership styles will be adopted in this research to examine their relationship with academic and administrative staff job satisfaction within the context of higher educational institutions in Saudi Arabia.

The researcher made two assumptions by relating leadership style with job satisfaction in the Saudi Arabian context. The first one was that transformational leadership may influence job satisfaction (Buckman et al., 2015; Hanaysha et al., 2012; Stumpf, 2003; Alonderiene and Majauskaite, 2016), and the second one was that transactional leadership could also influence job satisfaction (Arzi and Farahood, 2014; Emery and Barker, 2007; Nguni, Sleegers and Denessen, 2006; Bogler, 2001).

H1a Transformational leadership predicts job satisfaction in the public King Abdulaziz University in Saudi Arabia.

H1b Transactional leadership predicts job satisfaction in the public King Abdulaziz University in Saudi Arabia.

H3a Transformational leadership predicts job satisfaction in the private Dar Alhekma University in Saudi Arabia.

H3b Transactional leadership predicts job satisfaction in the private Dar Alhekma University in Saudi Arabia.

H5 There is a statistically significant positive relationship between transformational leadership and job satisfaction at the public King Abdulaziz University in Saudi Arabia.

H6 There is a statistically significant positive relationship between transactional leadership and job satisfaction at the public King Abdulaziz University in Saudi Arabia.

H10 There is a statistically significant positive relationship between transformational leadership and job satisfaction at the private Dar Alhekma University in Saudi Arabia.

H11 There is a statistically significant positive relationship between transactional leadership and job satisfaction at the private Dar Alhekma University in Saudi Arabia.

Whilst transformational and transactional leadership styles have been anticipated to be linked to job satisfaction, another important variable that can merge with leadership style and enhance the level of job satisfaction is productive organisational energy. Studies have shown that there is a conflict in terms of whether or not one should use "energy" or "engagement" in an organisational context (Loehr, Loehr and Schwartz, 2005), especially when considering the adopted leadership style. Cole et al. (2005) pointed out that boosting productive organisational energy in such dynamic organisations and institutions would lead to a better environment where ideas can flow freely and employees work effortlessly. Another argument was addressed by Cross, Baker and Parker (2003:2016), describing an influential and persuasive leader as an *'energizer who can spark progress on projects within groups'.* The researchers also emphasised the direct link between productive organisational energy, team performance, innovation motivation and job satisfaction. Besides, in order to increase performance and satisfaction in an organisation, it is an obligation not only to focus on employees' energy levels, but also to consider them as part of the equation (Steers et al., 2004; Arkes et al., 1988; Quinn and Dutton, 2005). Concerning the context of the present research study, it can be endorsed that higher education institutions are a great source of productive energy, which is an important factor for maximising overall contributions and satisfaction (Schiuma, Mason and Kennerley, 2007; Fitzgerald et al., 2016).

As mentioned in section 2.8.1, there is a need for more research studies in the management literature that focuses on managing energy and creating more competitive organisations (Bruch and Goshal, 2003; Cross et al., 2003; Quinn and Dutton, 2005; Loehr and Scwartz, 2001). The study carried out by Bruch et al. (2007) also highlighted that there is a link between productive organisational energy, performance and job satisfaction.

Thus, the present researcher made two assumptions by relating productive organisational energy with job satisfaction, where productive organisational energy can influence job satisfaction (Derman, 2009; Dutton, 2003; Bruch and Vogel, 2011; Schiuma, Mason and Kennerly, 2007), and by assuming that productive organisational energy could mediate the relationship between leadership style and job satisfaction in Saudi Arabian educational institutions.

H7 There is a statistically significant positive relationship between productive organisational energy and job satisfaction at King Abdulaziz University in Saudi Arabia.

H12 There is a statistically significant positive relationship between productive organisational energy and job satisfaction at Dar Alhekma University in Saudi Arabia.

H15 Productive organisational energy fully mediates the relationship between transformational leadership style and job satisfaction at King Abdulaziz University in Saudi Arabia.

H16 Productive organisational energy fully mediates the relationship between transactional leadership style and job satisfaction at King Abdulaziz University in Saudi Arabia.

H17 Productive organisational energy fully mediates the relationship between transformational leadership style and job satisfaction at Dar Alhekma University in Saudi Arabia.

H18 Productive organisational energy fully mediates the relationship between transactional leadership style and job satisfaction at Dar Alhekma University in Saudi Arabia.

Furthermore, based on the literature review arguments and discussions, it can be concluded that the above linkage and framework can be described as the relationship between leadership style, both transformational and transactional, and productive organisational energy, as well as the relationship between productive organisational energy and academic and administrative staff's job satisfaction. Eventually, the relationship between leadership style, both transformational and transactional, and academic and administrative staff's job satisfaction is mediated by productive organisational energy. This is acknowledged and understood to be the first attempt to examine such a relationship in Saudi Arabian higher education institutions.

2.11 Summary

The literature review chapter critically reviewed the main variables and factors in the present study, namely leadership style, productive organisational energy and job satisfaction, all which were found to be very significant in higher education institutions. Based on the discussions and arguments above, understanding the variety of theories and styles of leadership is essential and led to a noticeable evolution of leadership scholarship, especially in the management field (Antonakis et al., 2004; Grint, 2011).

In the present study, besides the transformational and transactional leadership styles, productive organisational energy and academic and administrative staff's job satisfaction was chosen to be part of the developed theoretical framework.

The researcher also justified the reasons for and motivation behind the choices made, by considering the influence and significance of the research context (Liden and Antonakis, 2009). The theoretical framework was built based on research assumptions reinforced and supported by the body of literature.

Therefore, the following chapter presents a full review of the research context, in line with the literature review in this section and in order to provide a coherent investigation that focuses on the Saudi Arabian political, economic and higher educational systems.

Chapter 3: The Saudi Arabian Context

3. Saudi Arabia: Context Review

3.1 Introduction

The literature review carried out herein not only focused on evaluating the adoption of leadership styles in educational institutions in Saudi Arabia, but it also highlighted the linkage between the research variables and how they interconnect and correlate within the research context.

Hence, before the methodology and analysis of the present study are presented, it is crucial to evaluate and understand the context in which the research is being carried out, and so this chapter presents an overview of the context and characteristics of the chosen country.

The chapter's purpose is to enrich the reader with an extended understanding of leadership in context and the challenges that face Saudi Arabia in general – and the higher education system in particular. The chapter starts by providing background information on the Saudi Arabian context and offers a complete overview of the location, geography and culture of the country.

A discussion on the population, political system and higher education system is highlighted, in order to understand the environment in which the research was conducted.

3.2 The Kingdom Of Saudi Arabia

Saudi Arabia is the heart of Arabic countries and the Islamic world, the investment powerhouse and the hub that connects three continents. It is the largest country on the Arabian Peninsula and is geographically located in the southwest of Asia. The overall area that is covered by the country has been found to be equivalent to the size of the United States measured towards the east of the Mississippi River (Al-Rasheed, 2010). The country borders the Red Sea and the Gulf of Aqaba, towards its western side, and the Persian Gulf lies on its eastern side. Some of the countries that neighbour Saudi Arabia include Qatar, Iraq, United Arab Emirates, Jordan, Bahrain and Oman. According to the government, the overall area country of the country has been estimated to cover approximately 2,143,865 square kilometres, out of which only approximately 1% of the area is used for cultivation (Al-Rasheed, 2010), thereby making it the world's twelfth largest nation. An overview of the Saudi Arabian map is shown in Figure 3.1.

Riyadh is the capital city of Saudi Arabia, and the main language spoken in the kingdom is Arabic.

Saudi Arabia is also commonly referred to as the "Kingdom of Saudi Arabia" and was transformed only in the last century.

Figure 3.1 Map of Saudi Arabia

The establishment of the modern kingdom was started in 1932 by King Abdulaziz Al-Saud (Safran, 1988). It is usually considered to be the original place or the birth land of Islam, as well as that of Arabs (Al-Farsy, 2003).

The population of the kingdom was recorded in the 2015 as 31,540,372 million, which included a large number of non-nationalised immigrants, in the range of 5.5 million to 10 million (CDSI, 2015). According to the data presented by WorldBank (2016), the country has one of the highest birth rates in the world at around 3%. More than 50% of the total population is young and below the age of 25, which leads to a highly productive populace (CDSI, 2015). This figure therefore reveals that there is a high demand for reform, and hence the study may contribute to providing direction for the young population of the country in the way they can manage their organisations and leadership styles better. The majority of the population is concentrated and lives in three major cities, namely Jeddah, Damman and Riyadh. According to data presented by CDSI (2015), some parts of these cities have a density higher than 1,000 people per square kilometre. According to Vassiliev (2013), the population of the country has transformed from a nomadic existence to modern-day characteristics due to the urban growth that has been observed over the last few decades.

While the population of the country is continuously increasing, Cole (2015) argues that it needs to reduce its economic dependency on the petroleum sector. More than 90% of the total export earnings of the country are the result of the oil industry, which also accounts for more than 75% of total budget revenues. The population of the kingdom consists largely of foreign nationals as well, among which almost 80% of them work in the private sector (Cole, 2015). While it is considered to be a young nation, there are multiple challenges that are being faced because of an increasing population – in other words, a massive increase in the size of the student population. Besides, some of the key challenges faced by Saudi Arabia because of this increasing population include a significant reduction in the per capita income of people. The population of Saudi Arabia has a median age of 28.6 years, and the median age for males has been found to be higher than the median age for the females. The sex ratio in the country is close to 1, which means that there are equal numbers of females and males (CDSI, 2015). Life expectancy at birth is approximately 75.29 years, and more than 85% of the population are considered urbanised and residing in urban areas. While the country's population largely contributes to its overall growth and development, the problem of unemployment is something that does exist and leads to discontent (CDSI, 2015).

Additionally, being a desert country, the climate is generally characterised by high temperatures during the day and low temperatures at night. The average temperatures that exist in the country during summer rise up to between 45°C and 54°C. Winters are definitely cooler, but the temperature never goes below Zero degrees°C (Parker, 2010). The only exception to this desert climate is the province of Asir, located and situated on the western coast of the country. Annual rainfall in the country is also very minimal, which is one of the main reasons why cultivation is very low and most of the area is desert. According to the discussions presented by Parker (2010), temperatures and humidity tend to vary and differ a lot from time to time because of the subtropical high-pressure system that exists in the region. The figure below illustrates climate and altitude changes in Saudi Arabia.

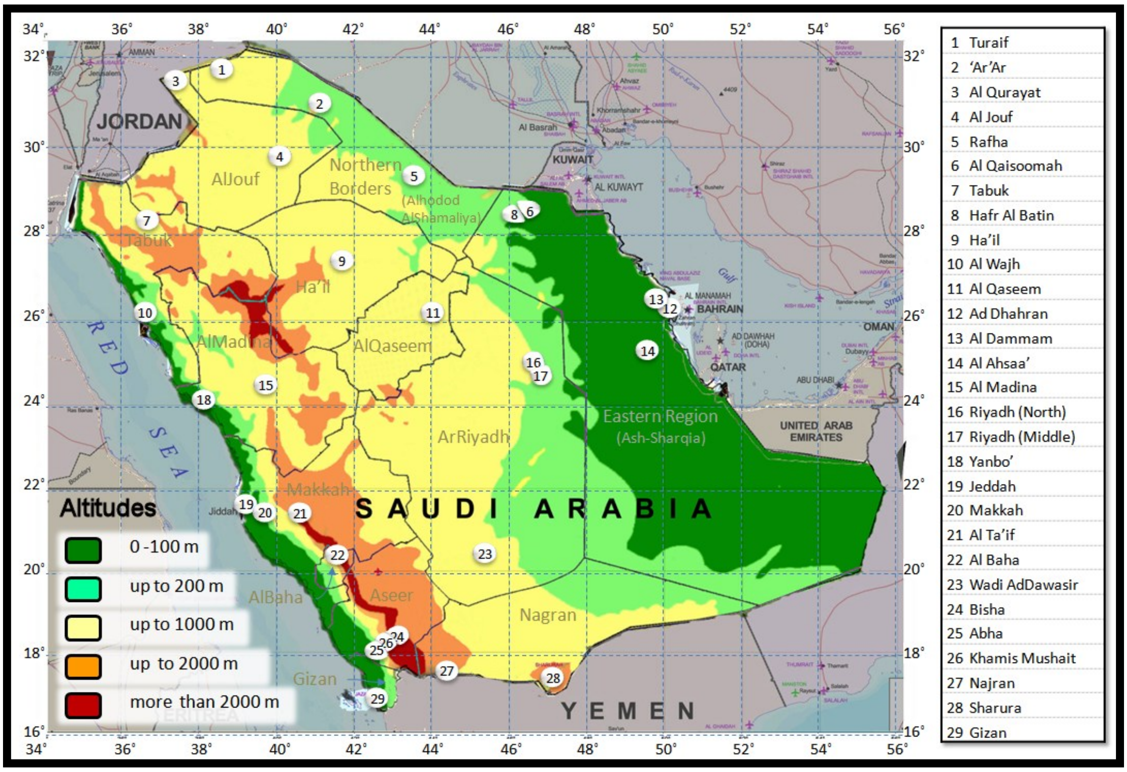


Figure 3.2 Saudi Arabia Climate and Altitude Changes

In fact, the Kingdom that was earlier considered to be merely a desert nation has witnessed tremendous growth in the past few decades and has become one of the most modern and sophisticated states playing an important role in international business as well as international culture (Aldaweesh, Al-Karaghouli and Gallear, 2013;

Nafie, Khanfar and Kaifi, 2012). The kingdom was formed through the unification of Hejaz and Nejd, but during the initial few decades, it was one of the poorest countries in the world (Safran, 1988).

Saudi Arabia is known for its oil reserves and resources, and as discussed by Vassiliev (2013) and Anderson (2014), it is only the discovery and development of the oil shores and fields in the last few years that have made Saudi Arabia rich and significant on the international stage. There are large numbers of expats working in the oil fields of the kingdom, which has a rich and long history of development (Patterson, 2014; Gately, Al-Yousef and Al-Sheikh, 2012). The biggest oil company in the world, Aramco, is also located and operational in Saudi Arabia (Anderson, 2014). According to Alshehry and Belloumi (2015), the government has recognised the need to use available resources, i.e. national resources and oil, to enhance various systems and focus on higher education systems, from both a policy and a practice point of view, to achieve world-class standards (Smith and Abouammoh, 2013).

In addition, one of the key development years in the history of Saudi Arabia was 2011 (Kmrava, 2012), when the kingdom was affected by multiple Arab spring protests, following which multiple benefits for the public were announced, including extra expenditure on new housing (Vietor and White, 2014), the right of women to vote in the 2015 elections (Welsh et al., 2014), the creation of new and secure jobs (Vassiliev, 2013) and supporting the higher education system and its staff, especially female academics (Alnasser, Grant and Holland, 2013).

The protests that started in 2011 were followed by multiple remonstrations by Saudi Arabians to introduce new reforms to the country in a move towards Westernisation and major transformation and democracy (Jones, 2011; Brynen et al., 2012; Matthiesen, 2013). Some of the key changes that took place due to these reforms were improvements and changes to the education sector (Alnasser & Dow, 2013; Campante and Chor, 2012). There have been significant changes in the overall curricula (Elyas and Picard, 2013), thus leading to a higher emphasis on technological and scientific studies (Nassuora, 2012) rather than the older religious studies. Additionally, as discussed by Al-Kinani (2014), the education sector is now focused on the development of multiple skills such as critical thinking, innovation, creativity, etc. in the hope of leading to better growth and the development of students. The education of female students is also being promoted in the country to provide a better lifestyle and rights for women (Jamjoom and Kelly, 2013).

Additionally, as the population is increasing, there is an increased burden on the government to improve education as well as working systems so that the growing needs of the people in the country can be met adequately. Mayhew et al. (2004) argue that the increase in the number of students aligns with not only the need for better and stronger management, but also more administrative staff must be recruited.

Nixon (1996) also points out that the increased number of students has unavoidably impacted the workload and professional identity of academics, thereby leading to lower satisfaction. Also, there is a higher need for the construction of new organisations, institutions and universities, especially in the private sector. The private higher education system is considered the fastest growing sector in higher education worldwide (Mazi and Altbach, 2013).

The government of Saudi Arabia helped private higher education expand rapidly to serve more than 35,000 students (Smith and Abouammoh, 2013). Coffman (2003) suggested that *'Gulf governments see privatization as more than a simple solution to unmanageable numbers; they have also vaunted private higher education as a means of ensuring the quality of instruction and the relevance to market needs that have been missing from public universities'.* The government also needs to become more versatile and adopt modern practices, to diversify the economy and create more opportunities in terms of employment and globalisation (Cole, 2015).

Towards a better higher education environment, and due to the extreme climate conditions in Saudi Arabia as mentioned above, the government facilitated and invested around £35 billion in 2015 to build modern and high-tech faculties and universities (Meo, 2015), with more than 24 public universities in Saudi Arabia accommodated with air-conditioning and spacious indoor areas (Smith and Abouammoh, 2013).

Al-Ohali and Shin (2013) also highlighted that due to Saudi Arabia's prime location connecting the country with the Arab Gulf states to the east and Africa to the west, the higher education system took advantage of it by not just establishing a collaboration that would help students to experience the "student exchange" programme in the region, but also by starting international collaborations between several universities, such as the seven-years research project between King Fahad University of Petroleum and Minerals (KFUPM) and MIT in the United States to investigate aspects of solar energy. In another example, there is collaboration between University of Aramco Oil Company (KACST) and Stanford University focusing on nanotechnology, engineering and petroleum (Al-Ohali and Shin, 2013).

All of the discussions and examples above are clear evidence that the Saudi government is using all possible and available resources to develop various systems, including its higher education system (Elyas and Picard, 2013).

The table below summarises the section above and highlights some facts about the Kingdom of Saudi Arabia.

Demographic	Population: 31.5 Million; M: (55.2%), F: (44.8%) 0-15 years: 36% 16-64 years: 61 % 65 years and over: 3% Population growth rate: Population annual growth rate (%), 1970-1990 - 5.1 Population annual growth rate (%), 1990-2010 - 2.7 Population annual growth rate (%), 2010-2030 - 1.7
Area	.2,143,865 square kilometers
Economy	Natural resources: petroleum, natural gas, iron ore, gold and copper

	GDP (Gross Domestic Product) 748.4 billion US $ GDP Per capita GDP at current prices is 25,961.81 US $. Economic growth is (3.4%) Consumption (6.7%) Investment (-1.5%) Exchange rate vs USD (3.75) Public Debt (5.8%) Inflation rate – CPI (2.3%) Unemployment Rate (5.7%)
Companies operating in the state	22,000 Saudi companies (2008) with a capital of SR 640 billion compared with just 11,000 companies in 2002 (Ramady, 2010).

Table 3.1 Kingdom of Saudi Arabia Profile (CDSI, 2015; WorldBank, 2015:2016; Focus Economics, 2015).

The section above has highlighted the key elements of the geographical aspects, location and population of Saudi Arabia. An overview of behaviour, the political system, leadership and culture in the country will now help gain a better perspective on the overall environment.

3.3 Leadership System and the Saudi Culture

Saudi Arabia is a highly cultural country which has old attitudes and traditions embedded in its origins and civilisation (Dickson, 2015). As explained by Al-Gathani et a. (2007), the culture of the country has been highly influenced by the Wahhabi form (Crooke, 2015) or mode of Islam, which was initiated and started in the eighteenth century and still exists and dominates (Blanchard, 2007). The overall culture of Saudi Arabia is considered to be highly conservative and is completely based on religion and family orientation (Al-Rasheed, 2010).

The main religion that dominates the country is Islam. Al-Rasheed (2007), however, explains that Saudi Arabia is religiously different from the other Muslim countries, because it is the only nation which has been created using the Quran as the basis of its constitution. One prominent thing in the religion and culture of the kingdom is that the people residing in the country do not have much religious freedom and are required to follow strict laws that are based on religious beliefs (Dekmejian, 1994; Doran, 2004). The Islamic religion prevalent in the country requires people to pray five times a day, everyday timings are given in the daily newspapers and Friday is considered a religious holiday, when most shops and stores close and shut down (Al-Rasheed, 2007).

According to Hamdan (2005), the overall religious culture of the country is highly dominated by Wahhabism, a separate form of Sunni Islam that arose way back in the central region of Najd. Even the calendar that is used by the country is not the international calendar but the lunar Islamic calendar (Vogel, 2000), in which the start of the lunar month is decided completely on the basis of sightings of the crescent moon by religious authorities. Even the media (Luqmani, Yavas and Quraeshi, 1989; Fandy, 2001) of the kingdom is highly dominated by religion, and the education system includes a thorough study of the history, practices and beliefs of Islam (Hamdan, 2005).

Embedded family values in Saudi Arabia make up another main part of the overall culture (Doumato, 1992; Dickson, 2015). People of the country not only prefer not to socialise with complete strangers, but they also do business with their own family members as opposed to outsiders (Mellahi and Wbod, 2001; Silvey, 2006). Family members have close ties and tend to stay together, and marriages take place with the consent of family members (El-Hazmi et al, 1995; Chaleby and Tuma, 1987; Al-Hakami and McLaughlin, 2016) (Long, 2005), in contrast to the modern ideas on marriage that involve love or romance beforehand. The people of the country are found to be closely linked to their heritage (Bowen, 2014) and have large and extended families (Silvey, 2006).

Ramadan is the biggest month of celebration, followed by Eid (Al-Subaie et al., 1996). During this month, people fast from dawn to dusk and are not allowed to work for more than six hours per day. In addition to their fasting, they are also required not to smoke or even chew gum. The fast is broken every night after sunset, when the family members get together and feast on a spread of food items (Silvey, 2006). This ritual breaking of the fast is known as *iftar* and includes whole nights of festivities. The main reason for fasting is to share the feelings of poor individuals and those who are suffering around the world. As Dr. Mahroof (2010) stated, Ramadan is an opportunity to lose weight, besides enjoying its spiritual aspects, and it is a great chance to improve physical ability, as there is a strong relationship between fasting and health.

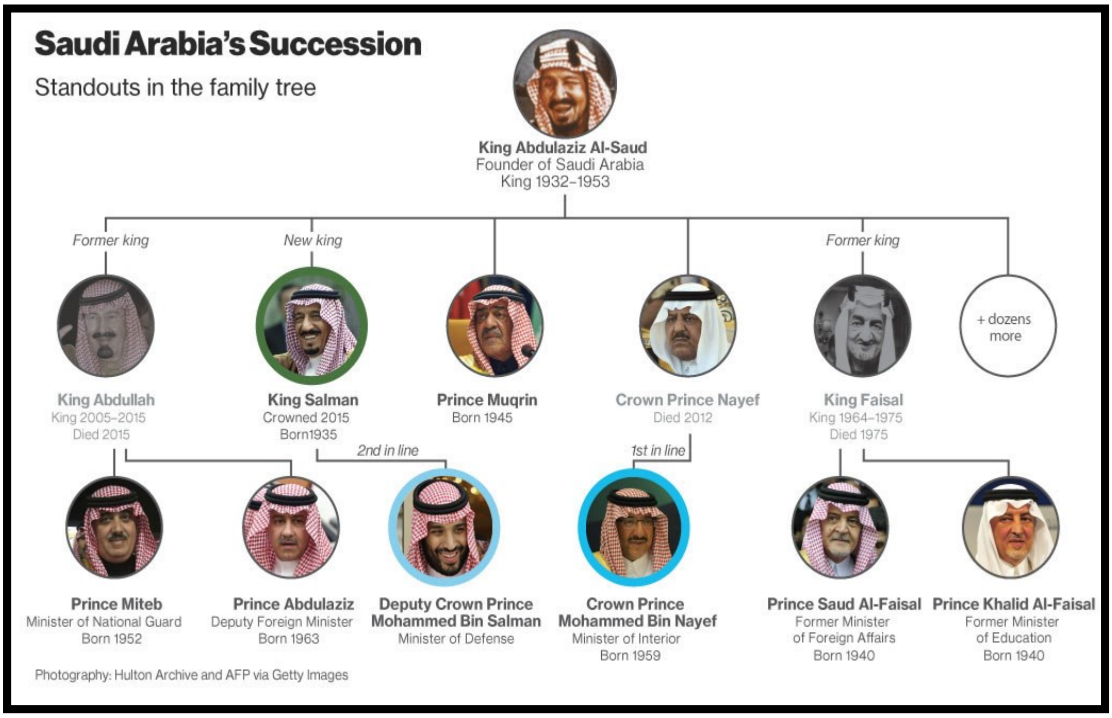
The social life and customs of the country are also extremely conservative and orthodox (Vassiliev, 2013). Greetings, for instance, are extremely lengthy and formal in nature, and the people generally take some time to discuss and ask questions regarding the lives of the other person, as a sign of respect (Ladin, 2007).

Even clothing is highly conservative in nature (Commins, 2006), in that complete uniformity is observed in the dressing code, which requires women to cover most parts of their body (AlMunajjed, 1997). The traditional dress that is worn by men in the kingdom is called a *thobe*, which is considered to be their national dress. *Thobes* or *thawbs* generally refer to the cloaks that are mostly white, brown or black in colour and have trimmed edges that are golden in colour. In addition to this traditional dress, the men also wear a headdress, which is made up of three different things, i.e. a white cap, known as a *taiga*, a large piece of cloth, known as a *ghutra*, and a black cord for holding the cap and cloth together, known as an *eigal* (Commins, 2006). The dress code for women is even more conservative, whereby they are required to wear mostly a black cloak, referred to as an *abaya* (Le Renard, 2008: 2014), which covers the entire body except for the faces and hands. However, in some cities in the kingdom women are also required to cover their faces as well with a veil called the *niqab*. While the men’s clothes are plain, women usually decorate and accessorise their dresses with sequins and lavishly intricate embroidery (Commins, 2006).

There are several specific pieces of etiquette embedded in the culture of the country, and the people are expected to follow these manners very strictly. While the men shake hands, women are not supposed to shake a man’s hand in public, especially strange ones (Sidani, 2005). In addition, socialising and dining is done between people who belong to the same sex, as people from the opposite sex are not allowed to dine in the same room unless there family is present (Al-Rasheed, 2006: 2013). The rules and customs with respect to business meetings and relationships are also extremely strict, and protocols must be obeyed and followed (Rice, 2004).

Saudi Arabia operates under a political system of absolute monarchy. However, the king does not develop or implement his own rules but rather follows and complies with the traditional rules that are defined by the Quran and Sharia law (Vogel, 2000). The first king was appointed back in 1932 and crowned HM King Abdul Aziz Bin Abdul Rahman Al-Saud. The king acts as the head of both the state as well as the government and has complete autocracy over the country and its decision-making process (Wehrey, 2015; Pant, 2006; Vogel, 2000). However, decisions are not made solely by the king, and he usually consults (Simons, 2016; Dekmejian, 1998; Abu-Namay, 1993) with the other senior members of the Royal Family before making any firm conclusions (Mellahi, 2007). However, the political system does not account for or include any form of election, and no political parties can be formed in the state (Diamond, 2010; Bollen, 1980; Gause, 2005; Nevo, 1998). While the Royal Family constitutes the whole of the political system of Saudi Arabia, Prokop (2003) and Matthiesen (2013) argue that there have been multiple protests and demands made by the public to include and increase political participation so that more people can be included in the debate.

The current king of Saudi Arabia is King Salman, who was awarded the throne in January, 2015. Hence, the national government is completely dominated by the royal family of the kingdom. The law behind choosing or selecting the king clearly states that the king must always be selected on the basis of the sons of the first king or **Figure**



3.3 Saudi Arabian Government Structure

their descendants (Niblock, 2015). The figure above presents the current political structure.

However, religious leaders of the country are required to give their approval during the selection of the king. Niblock (2015) argues that the existence and applicability of complete monarchy is more theoretical in nature, because the final decisions that are made are done only by getting complete consensus from members of the Royal Family and other important and crucial members of society (Vogel, 2000; Humphreys, 1979; Alawaji, 1971), which include the sheikhs and the heads of some of the big commercial families. Gause (2014) suggests that since the king is the most important member of the political system, the progress and development of the kingdom re highly dependent on the views (Al-Rasheed, 1996), beliefs and the personality of the king (Howarth, 1964; Hertog, 2011).

Gause (2014) and Okruhlik (2002) highlight that the existence of complete monarchy in the country has led to high levels of corruption. Nepotism and the widespread use of middlemen are some of the most common ways in which corruption exists (Aldraehim et al., 2012; Haniffa and Hudaib, 2007). The assets of the state are considered to be synonymous to the personal wealth that is held by the king and the Royal Family, and thus most public money is utilised by them for their own benefit.

On the other hand, the leadership style adopted in Saudi Arabia is considered to be old fashioned and traditional (Nevo, 1998). Ali (2009) explains that since the behaviour of people in the country is usually affected by two factors, namely religion and social, the adopted leadership style is also based on the state of bureaucracy (Nevo, 2009) and the formation of traditional dynamics (Niblock, 2004). Even the behaviour of managers and leaders has been found to be highly dominated by their friendship, family, cultural values and beliefs (Bjerke and Al-Meer, 1993; Ali and Swiercz, 1985; Azeem and Akhtar, 2014). Hence, leader-employee relationships always come through personal contacts and relationships (Ali, 2009; Aldaweesh et al., 2013). Leaders prefer a leadership style in which the authority of leaders is highly centralised (Bowen, 2014) and where they pay close attention to their employees or subordinates (Ismail et al., 2016; Cole, 2014; Ali, 2009).

Leadership style is even considered to be highly affected by Islam, which makes the risk-taking abilities of people extremely low (Asad Sadi and Al-Dubaisi, 2008) and the decision-making style becomes completely consultative in nature in various sectors (Dekemejian, 1994; Hegghammer and Lacroix, 2007), including higher education (Prokop, 2003). It is not only the risk-taking abilities that are low, but also the ability to innovate (Iqbal, 2011) and develop.

Ali (2009) therefore suggests that bureaucratic and autocratic leadership styles are more prevalent in companies operating in Saudi Arabia. The delegation of work is considerably less, and organisations usually adopt a completely flat structure (Doumato, 1999) in which there are no clear lines or definitions denoting authoritative and organisational relationships. Even control and performance evaluation activities and processes in the country are extremely traditional and unsystematic (Al-Ahmadi, 2009; Nuzhat et al., 2013).

Furthermore, as mentioned in detail in sections 2.7.4 and 2.7.5, there have also been findings establishing the existence of transactional and transformational styles of leadership (Alhardbi and Yusoff, 2012; Nafei, Khanfar and Kaifi, 2012; Pillai, Scandura and Williams, 1999), including in higher education institutions (Gallear, Aldaweesh and Al-Karaghouli, 2012; Pounder, 2010).

Additionally, the study carried out by Drummond & Bani Al-Anazi (1997) determined that the transactional style of leadership is popular in public sector organisations in Saudi Arabia. One could argue that Saudi organisations, not only in the higher education sector but in all other sectors, have faced major developments since 1997, and so leadership styles might vary and change nowadays.

Nonetheless, Zia (2015) carried out a study in the context of private Islamic and commercial banks in Saudi Arabia, and the results showed that transformational leadership was appreciably and positively related to job satisfaction. Furthermore, similar results were presented by Alshahrani et al. (2016) in the private nursing context, highlighting that nurses working under leaders with transformational leadership styles demonstrate significantly higher job satisfaction, whereas in contrast with more Westernised countries in the Gulf region, such as UAE and especially Dubai City, the research carried out by Abdalla (2010) revealed an employee preference for transformational leadership in the public sector.

However, it has been found that the higher education sector in Saudi Arabia is trying to move away from traditional value systems and beliefs and is advancing toward the adoption of a new leadership approach that is used by organisations across the world (Al-Ohali and Burdon, 2013). Talking on the same point, Davies and Thomas (2002) argue that the university culture has become more individual and competitive, which aligns with Shattock's (2003) findings that top management in such universities need to be capable of drawing a success path to achieve targets and goals.

In the Saudi context, Aldaweesh, Al-Karaghouli and Gallear (2013) explain that the Saudi higher education system is trying to shift from a bureaucratic style of leadership to modern approaches like transformational or transaction. The study also points out that in order to enhance employee productivity, satisfaction and motivation, new leadership styles and overall total quality management should be implemented, which will result in a better education system and higher university rankings (Yamani and Royal Institution of International Affairs, 2000). However, Saudi Arabia in particular, and in contrast with other Gulf countries, tends to be very cautious in adopting American education models, known as modern or Westernised approaches (Coffman, 2003).

In fact, there are certain practices and reforms that are being introduced within government to improve and modernise the political system (Kechichian, 2012). One of the first reforms that took place was in 2005 (Etling et al., 2014), when the first municipal elections in the country were held (Mandeli, 2016; Matthiesen, 2015), followed by the appointment of a woman to a ministerial position in 2009 and the ability of women to participate in the Shura Council as per the reforms made in 2011 (Almansour and Kempner, 2016; Al Alhareth, Al Alhareth and Al Dighrir, 2015; Gause, 2014; Khan, 2016). This highlights that the country is constantly moving towards modernised practices, thus highlighting a higher acceptance of change.

Since January 2015, the country has faced a number of major changes within its leadership and government systems, especially after announcing the Saudi Arabian 2030 vision proposing a national transformation programme. The vision is divided into three main themes, namely a vibrant society, a thriving economy and an ambitious nation (Saudi Vision 2030, 2012). The focus is on various aspects, such as unleashing alternative natural recourses, promoting culture and entertainment, looking after Saudi citizens through healthy living and achieving environmental suitability through the development of all cities (Salameh, 2016). One of the main aims is to have at least three cities in Saudi Arabia recognised in the top 100 cities in the world. The vision will indeed open up more international businesses, which in turn will generate more investors and boost competitive advantage and the local economy (Saudi Vision

2030,2012). The unity between the government and Saudi citizens is growing and aiming at achieving these goals. HM King Salman stated *'My first objective is for our country to be a pioneering and successful global model of excellence, on all fronts, and I will work with you to achieve that'.*

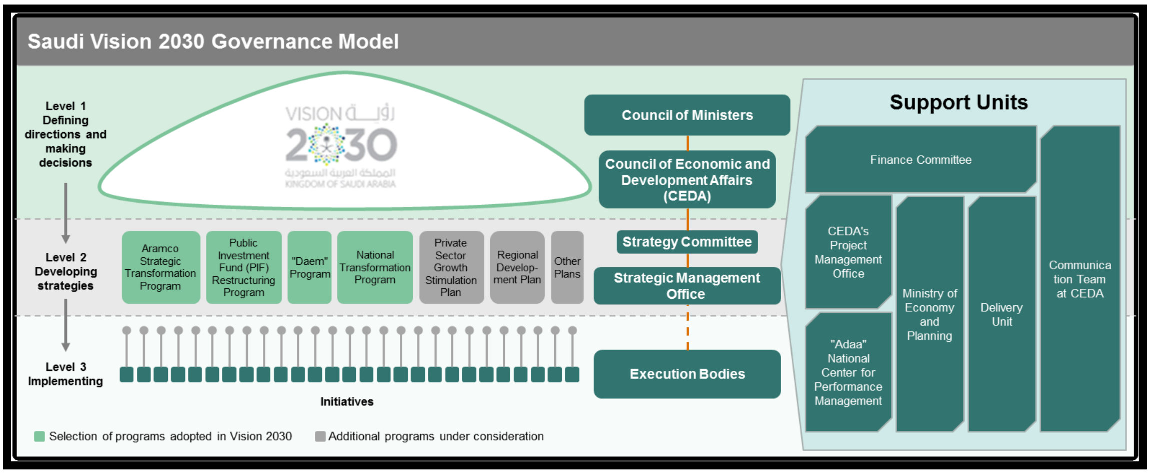
In the higher education context, the government's 2030 Vision objectives are:

- By 2030, at least five Saudi universities should rank amongst the top 200 universities worldwide.
- Filling the gap between the output of higher education and the market requirements.
- Help students make suitable career decisions.
- Facilitate the transition between different educational pathways.
- Develop further the education system in general and become more sustainable (Alshuqaikhat, Adenle and Saghir, 2016).

On the one hand, Salameh (2016) argues that the government understands the importance of having high-quality universities for smart Diversification. However, Saudi Arabia has a very long way to go before improving the quality of its higher education and reaching global standards (Salameh, 2016). On the other hand, Alshuwaikhat et al. (2016) highlight that Vision 2030, and having a better and sustainable higher education system, can be achieved by developing modern curricula and by tracking progress and publishing a sophisticated range of educational outcomes showing yearly improvements.

Furthermore, the Saudi government is also focusing on building a centralised database that tracks students' progress and is investing in strategic partnerships that will also contribute to the higher educational vision of 2030 (Saudi Vision 2030,2012). Alghamdi (2016) also highlighted that the current trend in higher education is to send students from different regions to study aboard, as well as enhance the use of technology in higher education and e-learning approaches such as mobile learning (M-learning) (Badwelan, Drew and Bahaddad, 2016). The figure below summarises the Saudi Arabian vision for 2030.

Figure 3.4 Governance Model for Achieving Saudi Arabia's Vision 2030



Hence, the cultural analysis and overview of the country reveals that its overall culture is very traditional and conservative. Religion and social values are the most important factors affecting the country's progress, functions and operations in all areas and sectors, including business, trade and education.

Even the political system is extremely autocratic and hierarchical in nature, which has led to obstructions to changing old laws and regulations. An overview of the higher education system is presented below, to gain a better understanding and validate the research context.

3.4 Saudi Arabian Education System

The evolution and development of the education system in the country has been extremely significant (Khan and Adams, 2016). Up to the formation of the Kingdom of Saudi Arabia in 1932, the education system and its provision were highly limited and there were only a few Islamic schools that could provide education to only the children of wealthy families (Prokop, 2003).

The religious beliefs of the country suggest that both males and females must receive an education (Aldayel et al., 2011) but be segregated (Baki, 2004). The Islamic world has been an extremely huge centre for learning and has also made significant contributions to different fields of education, including physics, art and medicine (Rugh, 2002; Halstead, 2004).

The history of the Saudi higher education system starts with the oldest university, King Saud University, which was established in Riyadh in 1957, with only 21 students and nine teachers (Elgohary, 2008). Islamic University of Madinah is yet another prominent university and is known for its Islamic studies. The departments of Islamic law and history are also extremely prominent and well-appreciated in universities (Elyas and Picard, 2010) such as Imam Muhammad bin Saud University in Riyadh, founded in 1974, and Umm Al-Qura University in Makkah, founded in 1981 (Elgohary, 2008). Universities like King Abdulaziz University and King Abdullah University are well-known for their science and technology departments.

Currently, there are three main authoritative organisations responsible for the management of the overall education system, excluding the General Presidency for Girl's Education. These organisations are the Ministry of Education, the General Organisation for Technical Education and Vocational Training and the Ministry of Higher Education. Higher education national development plans (HENDPs) are the main tools responsible for building and developing the higher education framework as well as its policies and goals.

Abdulrahman et al. (2012) highlighted that there are three main areas of focus for the higher education system in Saudi Arabia, namely the allocation of education adequately among candidates so that it benefits them, providing equal opportunities for the purpose of education and, lastly, enhancing the overall motivation and flexibility of people to choose their educational careers.

The organisational structure below illustrates the hierarchy of the Ministry of Education in Saudi Arabia.

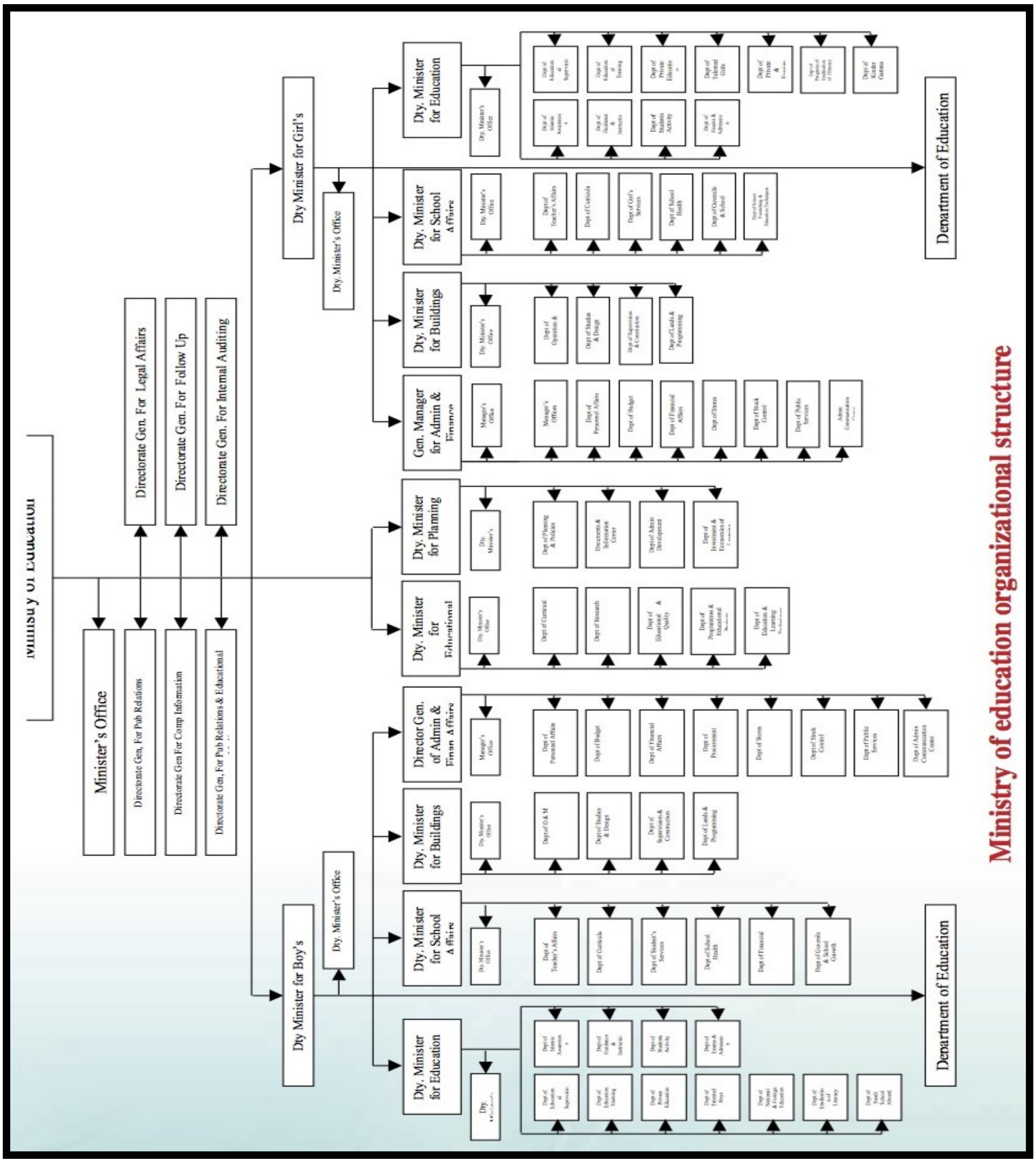


Figure 3.5 Organisational structure of the Ministry of Education.

It is worth mentioning that higher education is also provided and is available to all citizens residing in Saudi Arabia (Alamri, 2011). There are 28 public universities as well as more than 24 private universities that are currently functional, thus leading to the provision of a better quality of education (Aldayel et al., 2011). According to Pavan (2016), at least 10 more universities are expected to open within the next five years. Furthermore, there are more than one million students who are currently studying in different colleges and universities in Saudi Arabia, and almost 50% of the student cohort are female (MOHE, 2012).

In fact, higher education has become highly focused upon by the country and its government (Alamri, 2011; Smith and Abouammoh, 2013; Saha, 2015; Alkhazim, 2003; Krieger, 2007). In addition, a good deal of attention has been paid to the higher education of girls and women (Hamdan, 2005), as special colleges and universities are being opened for them (Rawaf and Simmons, 1991; El-Sanabary, 1994; Abdulrahman et al, 2012). The figure below presents the remarkable growth of universities in Saudi Arabia.

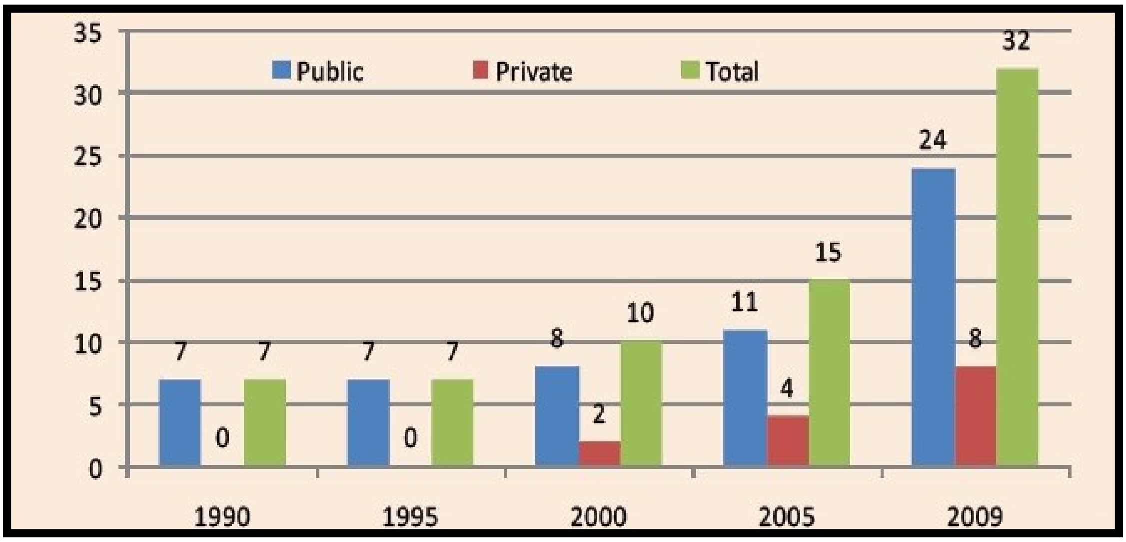


Figure 3.6 Numbers of Saudi Arabian Universities throughout 1990-2009.

The figure above illustrates the noticeable increase in the number of universities. Indeed, universities are continuously expanding their offerings and Westernising their teaching approaches so that students are able to receive a better education (Krieger, 2007). Nevertheless, the major issues in higher education are management systems and the leadership styles adopted within universities (Asiri et al., 2012). Although the higher education system is in many ways similar to the American system (MOHE, 2012), Saudi Arabian culture and behaviours still dominate the overall environment and dictate how change is managed, especially in the public sector. It is also a prerequisite to consider the importance of developing better management styles in accordance with the high investment in higher education institution systems (Mellahi and Wbod, 2001).

However, even though the public system has improved (Doumatom, 2003), including colleges and universities (Saleh, 1986; AlMunajjed, 1997), a huge gap still remains between the quality of teaching and the learning environment in both private and public universities. Based on the extensive discussions in the literature review chapter and the context review, the need to study both elements is therefore tangible, valuable and beneficial. Several studies have focused on both private and public higher education to address any gap and compare results (Marginson, 2007; Volkwein and Parmley, 2000; Doumato, 2003) in different settings such as Indonesia (Welch, 2007), Bangladesh (Alam, 2009), Malaysia (Ramachandran, Chong and Ismail, 2011), Pakistan (Khalid, Irshad and Mahmood, 2012) and the United States (Levy, 1986), also taking into consideration leadership style issues (Bodla and Nawaz, 2010).

Another key agenda that highlights and establishes the fact that the higher education system of the country is continuously undergoing reforms is the King Abdullah Scholarship Program (Hall, 2013), which was introduced in order to provide support and help to students so that they can receive the best of education abroad (Denman and Hilal, 2011). The goals of the programme include sponsoring qualified Saudis so that they can study in different universities around the world, thereby facilitating the exchange of scientific, educational and cultural experience with other countries to make the practices of Saudi Arabia more global and also to increase the number of qualified and professional Saudis working in their home country (Hilal, Scott and Maadad, 2015). According to data presented by *University World News* (2016), and as mentioned briefly in section 1.2 of this thesis, the total number of Saudi students abroad is just over 200,000, with an approximate breakdown of 150,109 males and 49,176 females – roughly a 3:1 ratio. The Saudi government has focused on sending students not only to familiar education systems such as the United Kingdom, United States, Canada and Australia, but also to different ones, for instance, China, Japan, Singapore and Malaysia (MOHE, 2015). The number of students in the United States in 2014 was around 111,000, compared to approximately 53,900 in 2013-14 (MOHE, 2015). According to the Ministry of Higher Education and UNISCO, Saudi Arabia is the fourth highest country for sending students abroad for their education, after China, India, and South Korea and ahead of Japan and the United States. Hence, the figures below highlight that there has been a significant increase in the number of Saudi Arabian students going abroad to study.

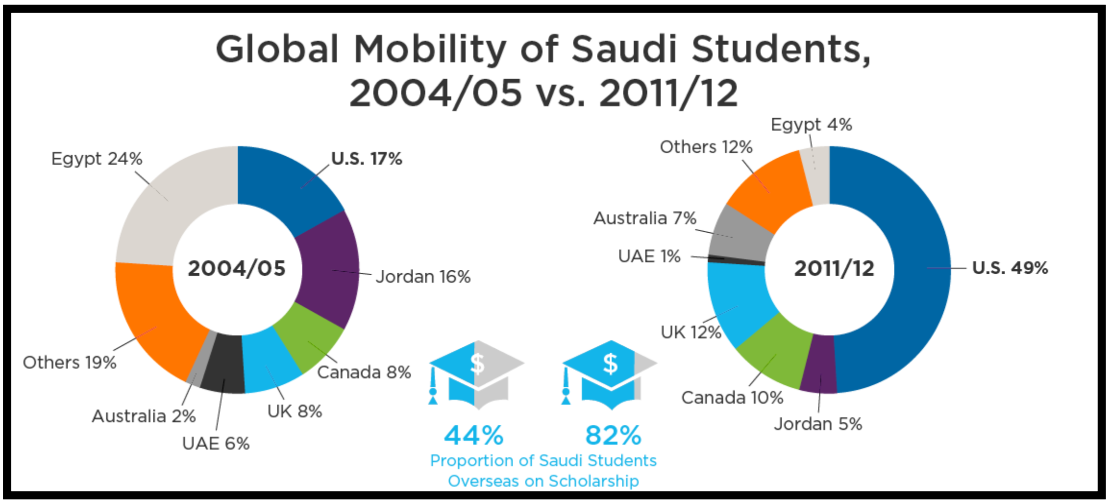


Figure 3.7 Movement of Saudi Arabian students around the world

3.5 Summary

The section above has highlighted that Saudi Arabia is governed by old, conservative and traditional rules and regulations, though different aspects of the country, including its higher education system and political system, are being modernised in order to improve and enhance overall output and productivity.

The adoption of enhanced leadership styles and management approaches is crucial for the whole system in general and higher education institutions in particular. Adopting a decent and suitable methodology will lead to valuable analysis and results – it is all about understanding, not just knowing. The research methods that have been accepted in this regard will now be discussed further.

Chapter 4: Methodology

4. Research Methodology

4.1 Introduction

To complement an extensive review of the literature and the research context it is essential to choose the most appropriate methodology. This chapter seeks not only several answers on how the information will be obtained in the Saudi Arabian higher education institutions, but it also justifies the chosen methods and research activities (Scott and Morrison, 2006). The methodology chapter is always considered the core of any research study. The factor in which the literature review is implemented into practice and provided the reasoning of conducting such research. It is important to note that the vast majority of researchers adopt some commonly used methodologies, such as exploratory, descriptive, analytical, predictive, quantitative, qualitative deductive, inductive or basic (Hussey and Hussey, 1997), constantly based on the researcher's assumptions and hypotheses (Saunders et al., 2009).

The research's main aim is to examine the relationship between leadership style, namely transformational and transactional, productive organisation energy and job satisfaction. In addition, it also aims at examining an established theory in the Saudi Arabian higher education context, and hence the **positivist epistemological stance** is required and suitable. Addressing the issue of perceived leadership style from the perspective of academics and administrative staff working in private and public universities requires **objectivism ontology**. Besides, the literature review and theories on the subject of leadership, productive organisation energy and job satisfaction have helped in developing a framework establishing multiple **hypotheses**; hence, the research is **deductive** in nature. Furthermore, the **quantitative research method** helped in gathering numerical information that can be analysed with the help of mathematical tests establishing cause and effect relationships among variables. In fact, and as a support to the researcher's methodology proposal, Wood and Welch (2010) illustrated that objectivism is associated with a positivist philosophical stance, the deductive research approach and the quantitative research method during the process of specific research. Hence, the section below presents the chapter's structure and the theoretical underpinning for the discussion summarised above.

This chapter is divided into various important sections. The first focuses on the philosophical stance, where the researcher journeys back to the history and origins of research philosophy. The researcher also illustrates his beliefs in the way that the data should be gather and analysed, and the same section also presents the meaning and types of scientific research paradigms usually adopted by researchers.

The second section provides the meaning and choice of research methodology and the research method chosen for the present study. These discussions then help in defining the research design, including the approach and method chosen for the present research, by giving suitable justifications and reasoning.

The third section explores the proposed research instruments and measurement tools, namely a multiple leadership questionnaire, productive organisational energy and job satisfaction, and also presents the pilot study and research validity and reliability tests.

The fourth and final section highlights the data collection process, challenges, sample size and strategy of this research study.

4.2 The Art of Philosophy and Research Methodology

Social sciences and philosophy, set by previous researchers and scholars, include questions such as positivism versus interpretivism (Giddens, 1974; Walsh, 1972), objectivism versus subjectivism (Burrell and morgen, 1979), quantitative versus qualitative (Bryman and Bell, 2003; Saunders, Lewis and Thornhill, 2013) and more.

According to Easterby-Smith et al. (2002), understanding philosophical issues helps the researchers identify in a clearer way the components of the research that is to be undertaken. Additionally, in the context of social and behavioural science, it also helps in recognising the overall research design that is most suitable for solving the problems proposed in the research (Brannen, 2005), while, lastly, it can also be beneficial in the creation and adoption of research designs that may be beyond the experience of the researcher (Bryman, 2008; Creswell, 2009; Cohen et al., 2007; Fan, 2009). A slightly different perspective is presented by Tashakkori and Teddlie (2010), who suggest that every researcher looks at the research situation and scenario in a completely different manner, and so the paradigmatic preferences that are adopted by them help in adopting a suitable approach and methodology for a given study. As an extension to the argument above, Cohen et al. (2007) highlighted that the *'research design is governed by the notion of fitness for purpose; in other words, there is no single blueprint for planning research'.*

The present study focuses on the perceived leadership style in Saudi Arabian higher education institutions and adopts the “objective” lens by considering the collective practices involved such as institution, group, cultural, organisational and society as outsiders. Neither the researcher’s intentions nor any individual actions are present, which will definitely help justify the research methodology.

On the other hand, Kothari (2004) explains that a methodology is more of a study and analysis of methods, which helps identify, analyse and choose the desired methods for research. It is also argued that a research methodology defines the systematic way in which a problem can be solved and involves the application of science and scientific procedures that help study the available research methods, in order to meeting the aims of a given research study (Patton, 2005). Creswell and Clark (2007) further explain that the overall research methodology and method of a study help in defining and identifying the research design, which refers to nothing but the overall plan and technique that shape the work. Besides, Cohen et al. (2007) highlighted that while a research method defines the approach that needs to be adopted, the research methodology is related more to defining the doctrine of knowledge research that needs to be applied.

Based on the present research context, “leadership” is considered an influential process that is based on conscious actions, as a leader obtains, observes and attains sets of goals and aims, it can be seen that the consequences of the process can be reflected on the subordinates or employees. As Giddens (1984) stated, '*What actors are able to say, or to give verbal expressions to, about social conditions, including especially the conditions of their own action; awareness which has a discursive form”,* so it is therefore, as mentioned above, crucial to pinpoint the leadership angle that should be focused on the suitable research methodology.

Indeed, the research design is mainly initiated through the definition of the aim and purpose, which are then used under the practical constraints of research to define and identify the methodology and methods to be adopted (Cohen et al., 2007; Hitchcock and Hughes, 1995). Creswell (2014), Bryman (2008) and Morrison (2007) discussed that defining a research design for a study is extremely crucial, because it tends to affect the overall reliability and accuracy of the findings or results that are obtained from the research. These philosophical and methodological discussions then lead to defining the research paradigm.

The paradigm concept was presented by Denscombe (2008), who suggested that it includes all patterns, theories and methods that guide a researcher to carry out certain activities and processes. The most commonly accepted and used definition of a paradigm was presented by Thomas Kuhn, who suggests that it refers to '*the practices that define a scientific discipline at a certain point of time'* (Kuhn, 2012). This definition primarily illustrates and states that a paradigm is a framework that provides direction for the researcher to structure his or her work in a suitable manner. The contemporary meaning of the concept portrays it in a scientific light, in that it defines universally acceptable standards and scientific bases that can guide a research study (Kuhn, 2012).

In fact, social science studies are full of complex concepts, such as the core constructs of this research study, namely leadership, productive organisational and job satisfaction, and yet its complexity does not stop academics and researchers from pursuing scientific studies, as they are aware that it is compulsory to understand the ontological, epistemological and methodological stances, in order to build a robust research paradigm (Uhl-Bien, Marion and McKelvey, 2007; Norris and Barnett, 2004; Antonakis et. 2011). The present research study focuses on higher education institutions in Saudi Arabia, drawing attention to academics and administrative staff, excluding top and senior management. Various scholars and researchers have adopted different paradigms in the context of higher education, such as the critical relational frame for understanding educational policy (Maton, 2005), practice and power (Heimans, 2012), institutional change (Kloot, 2009), educational research

(Grenfell and James, 2004), education management (Gunter, 2002), educational leadership (Lingard and Christie, 2003) and higher education leadership (Bolden et al., 2008). Therefore, it is important to understand and acknowledge the fundamental aspects of social science and scientific theories in regards to leadership studies and other research variables (Antonakis et. 2011). More importantly, it is vital to demonstrate the ways in which leadership styles, productive organisational energy dimensions and job satisfaction theories have been tested in previous studies, which was covered in detail in the literature review (2.5, 2.8.3 and 2.9.1). These considerations then help the researcher present and justify the present research philosophical stance, research method and data collection instruments that have been chosen for this research study, giving suitable justifications and reasoning for the same.

4.2.1 Epistemology and Ontology

Epistemology and ontology are the two views on research philosophical stances that are commonly adopted by researchers and are difficult to differentiate between (Saunders et al., 2009). On the one hand, ontology is the philosophical assumption mainly concerned with and related to reality in the world (Allison and Pomeroy, 2000). Phillimore and Goodson (2004) explain that it is primarily related to the way realities in the world are structured and deals with different ways in which the opinions and experiences of different human beings can be filtered and interpreted to reach to desired conclusions. It is worth mentioning that in leadership research it is an obligation to consider both epistemological and ontological issues while conducting a study (Fry and Kriger, 2009; Allix, 2000; Eacott and Evers, 2016; Alvesson, 1996).

According to the discussions presented by Easterby-Smith et al. (2012), ontology can be either subjective or objective, whereby subjective ontology occurs and refers to the existence of some reality via the experience of that phenomenon, and objective ontology refers to the existence of the reality, independently of the people who live it (Saunders et al., 2009). According to Alvesson (1996), human beings are part of the reality, considered actors and constructed by subjectivity as individuals, which is a clear indication that investigating is related to the subjectivist ontological stance. The well-known subjectivist Kuhn stated clearly that due to some limitation that affects subjectivism, the success of objectivism is unstoppable (Hunt, 1993; Hughes & Sharrock, 1997), especially in leadership studies (Cunliffe and Hibbert, 2016; Onyango, 2015; Petan and Bocarnea, 2016) and within the higher education context (Barbezat and Bush, 2012).

From another perspective, leadership can be an objective phenomenon (Day and Antonakis, 2012; Northouse, 2015; Kelly, 2013), that is to say using the objectivist ontological stance lens, one can examine leadership aspects in a particular context. It is also argued that formal structures of organisations consist of leaders at various levels (Schaubroeck et al., 2012); therefore this research excludes any faculty member with a managerial role despite the level of employee. It is worth mentioning that there are leaders and there are those who lead, yet this point indicates that despite the fact that there are different leadership styles, “leadership” as a phenomenon is structural and equivalent in most cases (Storey, 2016). The majority of organisational sciences studies believe that reality is objective and can be found where knowledge is sharable and exchangeable (Holden & Lynch, 2004).

It is also argued that human beings are complex creatures and can “act,” so the subjectivist ontological position is more suitable (Holden and Lynch, 2004) and does not ignore the fact that nature is made up of intangible phenomena. In contrast, and due to the present research context of higher education institutions, the use of the objectivism position takes into account that “leadership” in context is an external reality that can be measured and observed (Zacher and Johnson, 2015; Nguyen, 2015; Bastedo, Samuels and Kleinman, 2014; Al-Husseini and Elbeltagi, 2016).

Besides, many leadership research studies conducted in Saudi Arabia have adopted the objectivism position in the banking sector (Zai, 2015), nursing studies and healthcare (Alshahrani and Baig, 2016; Alharbi and Yusoff) and more. Based on the discussions and arguments above, in line with the research aim and objectives of this study, the adopted ontological stance is objectivism, which means the state of being true in a phenomenon is beyond the subject’s individual biases (Tuli, 2010), interpretations, meanings and imagination (Wong, Ghazali and Wong, 2011). Thus, the entire research study's outcomes, results, analysis and discussion are purely objective (Sarantakos, 2012; Dainty, 2008; Bogler, 2001).

The other philosophical stance, epistemology, is related more to identifying the sources and study of the beliefs that underlie a given finding or research (Creswell, Goodchild and Turner, 1996). Johnson and Duberley (2000) and Saunders et al. (2009) differentiated between the two philosophies and explained that while ontology is more about determining what the reality is, epistemology is about determining the ways in which a reality can be evaluated and knowledge can be gathered. A slightly different perspective was presented by Muis (2004), who explains that epistemology is completely related to the study of the way knowledge related to humans exists and the way different methods or tools can be adopted to take that knowledge from different sources. The epistemological stance also helps in distinguishing and differentiating between adequate as well as inadequate knowledge and expands the scope of a given study by identifying the way reality can be defined or presented in a given scenario (Allison, 2000; Hofer, 2004). The categorisation of epistemology has been done by Hofer (2004), who suggests that its philosophical stance can be divided into three different views, namely realist, positivist and interpretivist.

In the present *leadership* research study, the choice of the epistemological stance therefore depends on the aims, objectives and questions that the researcher aims at answering (Gunter and Ribbins, 2002; Bohman, 1993). Saunders et al. (2011) explain that the research's philosophical assumptions that are adopted in a given study are inspired primarily by these two most adopted epistemological stances, i.e. positivism or interpretivism. They are discussed in detail in the next section.

4.2.2 Positivism and Interpretivism

In the leadership literature, although several studies and large numbers of articles have adopted interpretivism (Bryman, 2004; Klenke, 2008; Bryman, Stephens and Campo, 1996; Smith et al., 2016; DuBrin, 2015; Parry et al., 2014), many scholars believe that leadership in research studies must implement the positivism epistemological stance (Bass, 1996; Komives and Dugan, 2010; Gronn and Ribbins, 1996; Fuller et al., 1996).

Burrell and Morgan (1979:2013) and Morrison (2002) identified two major schools of epistemological stance, namely positivism and interpretivism. These two schools of science are the ones most commonly adopted and used by researchers in different research scenarios. Rolfe (2006) argues that although these stances are not completely mutually exclusive, they are different from one another and are used in different circumstances (Heshusius and Ballard, 1996; Reason and Torbert, 2001).

Hence, the section below explains both these philosophies, so that the researcher can identify and select the one that suits the present frame of research.

4.2.2.1 Positivism

Positivism is one of the most commonly adopted research epistemological standpoints which revolve around the actual laws and cause which are relevant in the world and govern the activities and occurrences of the same (Giddens 1974; Weber, 2004; Alasuutari, Bickman, Brannen, 2008). As discussed by Ritchie and Lewis (2003), positivism is based on the objective realities of the world that are not merely interpretations or perceptions of the human mind. It deals with logical and mathematical treatments of the information that is gathered so that theories existing in the literature can be tested and verified (Habermas, 2015). While Morrow (2005) explains that positivism is related only to the data collection and interpretation aspects of a given research, Denzin and Lincoln (2011) have criticised it and explained that the approach focuses on the adoption and use of a single scientific method which can be easily challenged by the findings of other research studies. According to Holt et al. (2012), the dominant research philosophy adopted in mainstream leadership studies is positivism. The greatest benefit of adopting and incorporating positivism has been explained by Heshusius and Ballard (1996), who state that it keeps the researcher independent and separate from the study that is being carried out, which helps in obtaining results that are not biased. The research thus becomes completely objective in nature and the researcher has no or minimum interaction with any of the external objects presented in the research environment (Krauss, 2005).

It is also noted that leaders and leadership are clearly positivist in nature, as most researchers tend to concentrate on styles, qualities, behaviours with the fact that leadership concept is global out there in the literature (Holt et al., 2012). As mentioned previously, one of the present research objectives is to examine two styles of leadership, i.e. transformational and transactional leadership. In other words, the focus of the research is on the perceived leadership style in higher education institutions in Saudi Arabia, where the researcher's interaction is not applicable or irrelevant.

While the positivism epistemology is widely adopted in the majority of the social sciences, because of its ability to objectify the study, there are multiple criticisms. Denzin and Lincoln (2011) and Cloke et al. (1991) critiqued the positivism epistemology by explaining that although it includes the use of the statistical analysis of quantitative data, the unaccountability of spatial data can lead to multiple challenges and inefficiencies. Another criticism of the philosophical stance was presented by Weaver and Olson (2006), who argued that the world comprises human beings and hence it is extremely important and crucial to identify and incorporate their feelings and perceptions, to avoid acquiring a superficial view on any research subject. Furthermore, positivism considers human beings as objectives, ignoring human feelings, perceptions and providing superficial results (Bond, 1993; Moccia, 1988; Payle 1995).

While there are leadership studies that have adopted the interpretivism epistemology, in order to analyse employees' perceptions of leadership, such as Démeh and Rosengren (2015), Klenke (2008), Eagly and Johnson (1990) and Kerr and Jermier (1987) argue that the attributes and qualities of leaders can be specific and also measured effectively. Similar discussions as presented by Carroll et al. (2008), who reveal that the positivism epistemology is ideal for establishing relationships between different styles of leadership and different aspects of business and management. More importantly, the positivist epistemology is correlated with objectivist ontology, the deductive research approach and the quantitative research method (Wood and Welch, 2010). Therefore, the research's aim and objectives will direct the epistemological stance of a particular research study after considering the context literature, which was covered in Chapters 1 and 3.

4.2.2.2 Interpretivism

The other commonly used research epistemology is interpretivism, also referred to as "phenomenology" or "anti-positivist" (Burrell and Morgen, 2013). Unlike positivism, interpretivism does not consider research to be completely objective in nature; rather, it suggests that the researcher needs to look at subjects and research topics in a subjective manner (Crotty, 1998). O'Donoghue (2007) explains that the interpretivism epistemology perceives the world as a social construct, wherein the researcher can study actively and in context. The results in this philosophical stance are not driven by the statistical analysis of quantitative data but are rather driven by human interests and their perceptions (Klenke 2008, Northouse, 2013).

While the interpretivism epistemological stance has gained significant attention in leadership and management studies (Gronn and Ribbins, 1996; Leitch, McMullan and Harrison, 2013), Leitch et al. (2009) critiqued it and argued that the assumption of the interpretivism epistemology – that all processes are the results of actions taken by humans – is not correct, because not everything in the world is controlled by human actions and perceptions. Another criticism of the interpretivism epistemology was presented by Weaver and Oson (2006), who explain that research that is generally carried out on the basis of human behaviour tends to be restricted, due to small sample sizes. Weaver and Olson (2006) also argue that the reliability and overall validity of the results that are obtained via the interpretivism philosophy are poorer than those obtained via the positivism philosophy, which can lead to compromises in the overall quality of the findings that are achieved. According to (Alvesson, 1996) leadership studies could be conducted using the interpretivism epistemology, yet the literature shows a stark contrast between the numbers of leadership studies that adopted positivist or interpretivism epistemology, were interpretivism is less prominent. These can be attributed as some of the key reasons why the adoption of interpretivism in leadership studies is limited as compared to the positivism epistemological stance in relation to the present research variables, aim, objectives and context.

Therefore, the present study will adopt the positivism epistemological stance, due to the fact that the research problem requires an examination of leadership styles and various outcome variables, i.e. productive organisational energy and job satisfaction. In addition, we also need to analyse the research data, using statistical methods, in order to generalise the findings of the research in higher education institutions. In order to obtain valid and reliable results that have been tested and verified with the help of numerical and quantitative results, the positivism epistemological stance will be adopted.

After determining the epistemological and ontological positions for the present research, it is important to understand the most available and suitable research approaches, i.e. deductive and inductive (Wood and Welch, 2010). That is to say, the results in the current research study can be either deducted based on implementation or inducted based on observation (Cohen et al., 2007).

4.2.3 Deductive and Inductive Research Approaches

Deductive reasoning can be defined as 'a logical process in which a conclusion is based on the concordance of multiple premises that are generally assumed to be true' (Cohen et al., 2007). Inductive reasoning can be defined as 'a logical process in which multiple premises, all believed true or found true most of the time, are combined to obtain a specific conclusion' (Bryman, 2015). The table below illustrates a comparative evaluation between deductive and inductive.

Deductive reasoning	**Inductive reasoning**
Deductive reasoning starts with the more general approach and then drops down to a specific conclusion, and it is also formally called the "top down	Inductive reasoning is exactly the opposite to this approach, and in this methodology a specific phenomenon is observed and then it is moved up to a

approach" of reasoning. First, a general theory is developed about a phenomenon and then a few specific hypotheses pertaining to that theory are developed before being tested for their validity and confirmation.	broader and general theory. An inductive reasoning approach is also called a "bottom-up" approach. In inductive reasoning patterns and regularities are detected, which is opposite to deductive reasoning, where patterns are explored.
Academic examples below are the reference details of three deductive and three inductive research studies.	
Deductive approach • Ogawa, r.t. and Bossert, s.t.(1995), leadership as an organizational quality, *educational administration quarterly*, vol. 31, no. 2, pp. 224-243 • Dorfman, p. (2002). Understanding cultures and implicit leadership theories across the globe: an introduction to project globe. Journal of world business, 37(1), 3-10. • Sarros, j.c. and Santora, j.c.(2001), the transformational-transactional leadership model in practice, *leadership & organization development journal*, vol. 22 iss: 8, pp.383 – 394	**Inductive approach** • Mastrangelo, a. Eddy, e. R. and Lorenzet, s. J., (2004). The importance of personal and professional leadership. *Leadership & organization development journal*, 25(5), pp. 435-451 • Kirkpatrick, s.a. and Locke, e.a.(1991), leadership: do traits matter?, *academy of management executive,* vol.5, no,2, pp.48-60 • Kayworth, t.r. and Leidner, d.e.(2001), leadership effectiveness in global virtual teams, *journal of management information systems,* vol.18, no.3, pp.7-40

Table 4.1 A comparison of Deductive and Inductive Research Approaches

As presented in Table 4.1, both approaches can be used in a research methodology, because specific observations can be created from general observations made on different types of leaders and their leadership approaches (Antonakis et al., 2004). For example, common leadership traits can be taken from different leaders (passion, determination, discipline, vision, etc.) and then a specific theory can be suggested that a particular set of traits is commonly found in leaders from a particular sector, industry or region. This is an example of the deductive approach, where a group of general observations percolates down to a specific theory or hypothesis that needs to be tested.

Reddy (2011) also provides a deductive research example on the knowledge of the way the whole process of transformational leadership works, beginning with gaining the trust of employees on the foremost points. Also, the transactional leadership policy encourages leaders to employ beneficiary methods for workers, where they receive benefits and incentives for the extra effort they put in.

Randeree et al. (2012), on the other hand, provide a good example of an inductive research study which presents, to some extent, the theories of transformational leadership and their purpose and application in an organisation. The authors also highlight the effectiveness of employing the transformational method in an organisation. Thus, employees and the whole system depend on the leader and the perspective he shares with his workers. This is a clear indication that using deductive or inductive approaches in leadership studies will generate interesting and valuable results; yet the reason for choosing the right research approach relies heavily on the most suitable option that will help address the research questions (Antonakis et al., 2004).

As mentioned in section 1.3, this research addresses perceived transformational and transactional leadership styles from academic and administrative staff's perspectives in public and private universities in Saudi Arabia, as well as examining the relationship between leadership style, productive organisational energy and job satisfaction. Thus, the researcher is completely detached from the results (Morrison, 2007), by adopting a positivist epistemological stance, and the developed framework is based on the extensive literature review from abstraction to the specific (Antonakis et al., 2004). Furthermore, the present research questions are addressed with data in the form of numbers (Teddlie and Taskakkori, 2009) and hypothesis testing (Mautner, 2005).

Additionally, the deductive approach is applicable where sample size, datasets and collection tools are identified, leading to the analysis of the collected data where proper conclusions can be gained (Creswell, et al., 2008). Based on the discussion and arguments above, the deductive approach is more suitable for this research, as measuring observed variables and testing hypotheses is required, in order to collect the views of a sample of employees from a large population (Bryant and Charmaz, 2007) in public and private universities in Saudi Arabia.

4.3 Research Methods

Thomas (2004) highlighted that there is no such “best way” to conduct research, thereby enriching Robson’s (2002) view that a deductive research consists of five main elements, namely purpose, theory, research question, methods and sampling strategy.

Several scholars often adopt a broad brush of dichotomy to classify research methods, either qualitative or quantitative, in relation to the implemented philosophical data collection methods and statistical analyses in the most typical and common leadership research studies (Saunder et al., 2009; Scott, 2015; Taylor, Psotka and Legree, 2015; Nguyen, 2015; Lowe, Kroeck and Sivasubramaniam; 1996; Hartog, Muijen and Koopman, 1997; Judge et al., 2002).

Research methods define the techniques that must be adopted for a given research so that the defined aims and objectives can be met adequately (Saunders et al., 2009). According to Creswell (2014), defining the research method is one of the most important elements of a research design and helps in selecting adequate methods for data collection and analysis. The two most commonly used and adopted research methods in management and leadership studies are qualitative and quantitative (Neuman, 2002), which are chosen by researchers on the basis of the underlying assumptions, aims, objectives and philosophies of the research in question (Alvesson, 1996; Bryman, 2008). In fact, Bryman and Bell (2003) classify both methods as research strategies, whilst Klenke (2008) highlights that they are research paradigms. Furthermore, Tashakori and Teddlie (2010) explain that the selection of the right research method is extremely crucial for a study, because not only does it help in eliminating ambiguity of any form for the researcher, but it also helps in adopting a structured approach to answering the research questions.

The quantitative research method is more closely related to the positivism epistemology of study, whereas the qualitative research method is closer to interpretivism (Denzin and Lincoln, 2003; Bryman, 2006).

As discussed by Bryman (2006) and Williams (2007), the quantitative method of research aims at maximising the objectivity of the given findings or results of the research and carries out statistical tests and analyses to validate and test different hypotheses. On the other hand, the qualitative method is more closely related to the study and evaluation of the overall meaning or purpose of the results in terms of an evaluation of the thoughts and perceptions of the people who participate in the research (Sale et al., 2002).

Thus, there are significant differences between the qualitative and quantitative methods of research, a comparison of which is given in the table below.

Qualitative Research	**Quantitative Research**
It is mainly used and employed for the interpretation of different interactions that take place in the social environment.	It is mainly used and employed for testing and validating hypotheses that have already been established.
The data that are collected are usually collected from a smaller group of people selected by the researcher.	Data are usually collected or gathered from a large group of people or sample selected randomly.
Data collected are usually theoretical or qualitative in nature.	Data collected are numerical in nature.

Gathered information is analysed with the help of qualitative tools like content analysis, interpretations, etc.	Gathered information is analysed or evaluated statistically with the help of different tools or models.
Research is highly subjective in nature.	Research is objective in nature and helps in objectifying the research objects and scenario.
The results can be affected by a researcher's opinions, thus leading to bias.	Results are not usually affected by external bias.
The results cannot be generalised for a given population.	The results can be estimated or generalised for a given population.
Qualitative research cannot be used for comparing the characteristics of two or more groups.	Quantitative research can be used for comparing the characteristics of two or more groups.
It cannot be used for future predictions or estimations.	Statistical analysis in quantitative research allows future predictions or estimations.
Qualitative research focuses on people as social beings and considers their opinions and perceptions on different subject matter.	Quantitative research focuses on and considers people as objects.
The researcher is usually involved and associated with the research environment.	The researcher is completely detached from the research environment or research objects.
Qualitative research provides higher flexibility to the researcher.	The scope of study becomes restricted in the case of quantitative research for the researcher.
Commonly used data collection techniques are case study, grounded	Commonly used data collection techniques include experiments and surveys.

theory, ethnography and content analysis.	

Table 4.2 A Comparison of Quantitative and Qualitative Research Methods (Sukamolsen, 2005; Cloke et al**., 1991; Smith, 1998)**

The comparison of the two research methods in Table 4.2 highlights that there are multiple advantages and disadvantages of both the methods, and neither method can be classed as being perfect for any given scenario (Sukamolson, 2005). Zikmund et al. (2013) explain that multiple debates surround the question of identifying the better or more perfect research method, but no one has been able to prove or demonstrate the superiority of one method over another. According to Zikmund et al. (2013), the choice of the most suitable or adequate research method depends completely on the nature of the study and the suitability (Bryman and Bell, 2015) and feasibility of using the given approach in the existing scenario (Cohen, Manion and Morrison, 2013), as well as the aims and objectives of the research (Cooper, Schindler and Sun, 2003). It is also worth mentioning that the differentiation between qualitative and quantitative research methods is *'crude and over-simplified dichotomization',* as it is an obligation to be transparent when examining and reflecting on the research's philosophical assumptions (Morgan and Smircich, 1980).

Since the study aims at carrying out a comprehensive study in Saudi Arabian higher education institutions, it needs to adopt a suitable research method for research, which will be discussed and described at length in the next section.

4.3.1 Quantitative Research Method

The quantitative research method, as discussed earlier, is the most commonly used technique in the leadership literature (Alvesson, 1996; Bryman, 2006; Bogler, 2001; Judge, Colbert and Llies, 2004; Herrmann and Felfe, 2014). For several years, it has dominated the research and naturally favoured psychological-oriented and survey-based research methods (Lowe and Gardner, 2001) as a result of the hegemony of positivism (Klenke, 2008). Klenke (2008) further stated clearly that '*leadership research studies have been grounded to the positivism and quantitative paradigm'*. On the other hand, Alvesson (1996) argued that thousands of leadership research studies have adopted the quantitative method, thereby showing severe dissatisfaction with the overly used approaches to studying "leadership" and therefore embracing new perspectives.

Furthermore, Muijs (2010) explains that quantitative research is related to the positivism paradigm of research, because it focuses on collecting factual data that exist in the world for testing different hypotheses mathematically. The process of carrying out a quantitative study was discussed by Creswell (2014), who explains that research is initiated through a problem statement, which is followed by the development of hypotheses, the collection of suitable data and a quantitative assessment of the gathered data, in order to test the hypotheses. The connection between the quantitative method of research and the positivism epistemology was analysed by Wright et al. (2004), who argue that it suggests and includes a complete scientific approach to carrying out the study which results in the application of the quantitative method (Klenke, 2008).

Some of the key characteristics of the quantitative method were also discussed by Punch (2014), who explains that it is beneficial for studying and evaluating whole populations and carries out research in a completely controlled external environment, such that the variables that are included in the study do not affect each other. In addition, a key characteristic of quantitative research, as identified by Mertens (2014), is that data are collected with the help of valid data collection instruments and the study helps in carrying out extremely precise measurements, which are then used mainly for testing and validating the most predictable and commonly observed behaviours. Additionally, Bryman (2004) argues that leadership researchers must seek and make an effort to generalise their findings (Greene and Caracelli, 1997) building on previous research studies, as way of promoting quantitative research method.

Punch (2013) and Leedy and Ormond (2001) categorised quantitative research into three types: descriptive, casual comparative and experimental. Bernard (2011) argues that the selection of one of these types needs to be done by the researcher, depending on the type of study that the researcher aims at carrying out and the results he or she is trying to establish. The table below presents the definitions of the three categorised quantitative research methods.

Descriptive	A basic research method that examines the situation as it exists in its current state. Involves the identification of attributes of a particular phenomenon based on an observational basis, or the exploration of correlation between two or more phenomena.
Experimental	The researcher investigates the treatment of an intervention in the study group and then measures the outcomes of the treatment.
Casual Comparative	The researcher examines how independent variables are affected by dependent variables and involves cause and effect relationships between the variables. The causal comparative research design provides the researcher with the opportunity to examine the interaction between independent variables and their influence on dependent variables.

Table 4.3 Types of quantitative research methods, extracted from Williams (2007).

Based on the presented types in Table 4.3, for this research study casual comparative is proposed, which is suited to the aim and objectives presented herein. There is a dependant variable, leadership style and independent variables, productive organisational energy and job satisfaction, which will be dealt with, and it is very important to know how these variables impact each other as also impact the overall result of the study. Quantitative research methods and the purpose of each one are presented in the table below.

How to conduct quantitative research	Definition
Correlation	Degree and type of relationship between any two or more quantities (variables) which vary together over a period.
Observational Studies	An observational study is a study in which a researcher simply observes behaviour in a systematic manner without influencing or interfering with the behaviour.
Survey Research	Surveys are questionnaires (or a series of questions) that are administered to research participants who answer the questions themselves.
Developmental Design	Developmental research, as opposed to simple instructional development, has been defined as the systematic study of designing, developing and evaluating instructional programmes, processes and products that must meet criteria of internal consistency and effectiveness.

Table 4.4 Varieties of quantitative research methods extracted from Williams (2007).

For instance, studying the impact of transformation and transactional leadership style on productive organisational energy and the job satisfaction of academics and administrative staff in higher education institutions in Saudi Arabia, the researcher needed to understand that in order to generate data and understand the causes and effects of the current research variables (Bold, 2001), the correlational analysis within the casual comparative quantitative research method is the most suitable approach. Correlational analysis would also help in reducing the complexities associated with this research (Cooper and Schindler, 2001) and also help keep the results objective (Creswell, 2002). One good example of a study similar to this research using correlational analysis is by Torlak et al. (2007), which mostly deals with the employment of transformational leadership in corporal sectors and also applies the methods of leadership and the relationship between the emotional attachments of the workforce. The results that were found in this research study were accurate and highlighted the importance of validity and reliability tests (Leedy and Ormrod, 2001). It is also noticeable that many other researchers have adopted correlation analysis and tests in a leadership context (Joseph and Winston, 2005; Judge and Piccolo, 2004; Choudhary, Akhtar and Zaheer, 2013; Top et al., 2013; Yasin Ghadi, Fernando and Caputi, 2013); therefore, employing the correlation method will help the researcher achieve his aim and create a decent structural equation model, which will be discussed in detail in the analysis chapter.

Indeed, quantitative research is widely adopted in several different disciplines and areas of study, including biology (Zimmer, 1961; Kolar and Lodge, 2011), social sciences (Neuman, 2002) and organisational business studies (Cavana, Delahaye and Sekaran, 2001). While Hair et al. (2007) argue that social and behavioural research must be based on qualitative research, while Bryman and Bell (2011) explain that behavioural studies also need to generalise and validate their results, and hence quantitative research is extremely common in these studies, in order to make the results more valid and reliable. According to the discussions presented by Bryman and Bell (2011) and Wiersma and Wiersma (1985), educational and organisational studies also make extensive use of the quantitative method of research, because it is necessary and important for gathering data from business respondents so that the results can be based on collected data and thus used in similar business environments. Bryman (2004) argues that the application of statistical modelling and different quantitative orientations has led to the development and adoption of multiple leadership scales that are used for measuring different styles of leadership.

On the other hand, Bryman et al. (1996) noted that the use of qualitative methods within leadership research is increasing and making inroads into the field. Furthermore, the suitability of adopting a qualitative method can be crystallised in understanding leadership as being multi-level with a symbolic component (Cogner, 1998). Though it has been critiqued by Leithwood and Jantzi (2005), who stated that leadership is a qualitative phenomenon and hence cannot be measured, Stenz et al.

(2012) countered the argument by stating that leadership styles are based on certain attributes and characteristics of individuals, which can be evaluated on the basis of their response to different statements and activities, in which case quantitative research provides a more accurate measurement.

Also, since the evaluation of leadership qualities of an individual can be done best by assessing the responses received from his or her subordinates, the data must be quantitative so that the findings can be examined and then generalised (Dewey & Levi, 2010). The use of qualitative research is not suitable, because it can lead to negating the overall reality and can also result in findings that are biased by the views of the researcher. Also, there are numerous leadership studies with different outcome variables that have successfully made use of the quantitative method of research; a summary of a few is presented in the table below.

Study	Authors	Quantitative Research Used
Applying mixed methods to leadership research: A review of current practices	Stenz, J.E., Clark, V.L.P. and Matkin, G.S. (2012)	The authors concluded that a mix of qualitative and quantitative research is adopted in leadership studies, but quantitative research is more common and effective.
"Impact of Leadership Style (Transformational & Transactional Leadership) On Employee Performance & Mediating Role of Job Satisfaction" Study of Private School (Educator) In Pakistan	Paracha, M.U., Qamar, A., Mirza, A. and Waqas, H. (2012)	The researchers made use of the survey questionnaire-based quantitative research method to gather data from people working in six different schools in Pakistan.
Transformational Leadership and performance: a	Yammamiro, F.J., Spangler, W.D., & Bass, B.M.(1993)	Leadership study was based on a survey of a representative sample, the results or responses obtained

longitudinal investigation		from which were then analysed quantitatively.
Transformational and transactional leadership enabling (disabling) knowledge acquisition of self-managed teams: the consequences for performance	Politis, J.D.(2002)	The author also adopted the quantitative research and 239 employees were evaluated with the help of the MLQ questionnaire used for measuring leadership style
Predicting Unit Performance by Assessing Transformational and Transactional Leadership	Bass, B.M., Avolio, B.J., Jung, D.I., Berson, Y. (2003),	The authors made use of numerical calculations for predicting the relationships that exist between the transformational and transactional styles of leadership

Table 4.5 Examples of Quantitative Leadership Studies

It is therefore apparent from Table 4.5 that some of the most prominent and relevant studies on leadership have made use of quantitative research and adopted questionnaires and a survey approach for data collection and statistical analysis tests. A summary of the advantages and disadvantages (Sukamolson, 2005) of using quantitative research is highlighted below:

- Population can be estimated.
- Condensation of research outcomes to statistical results.
- Statistical comparisons between variables and groups.
- Definitive, standardised and precise.
- It measures actions and occurrences.
- Helps in answering the "How" questions.

And some disadvantages (Cloke et al., 1991; Smith, 1998):

- Treat people as objects and outsiders.
- Quantification can result in false objectivity.

- Separation of the observer and the observed.
- Human values and meanings are not considered.

At this stage, and based on the extensive discussion above, it is noticeable that the positivist epistemological stance, objectivist ontological stance, deductive research approach and quantitative research are suitable for this research study.

4.4 Research Design

A research design is used to describe and discuss the ways in which essential data can be collected and sorted for analysis. This analysis will lead to the meaningful interpretation of and a solution to existing problems (Bryman, 2004). A research study could be exploratory in nature, experimental in nature, descriptive or a case study. The present research study focuses on what is happening and on gaining a new understanding of the perceived leadership style in higher education institutions in Saudi Arabia. The objectives and research methodology in this research focuses on studying the relationships between different variables by developing hypotheses (Saunders et al., 2009) and causal relationships between leadership style, productive organisational energy and job satisfaction, thus making it an exploratory research study (Robson, 2002; Lee, 2012).

4.4.1 Data Collection Strategies

As explained by Forza (2002), survey research refers to research methods that primarily involve the collection of data from a decent number of individuals or participants who represent an entire population. A similar explanation of the concept was presented by Fowler (2014), who suggests that surveys are nothing but data collection methods that involve the collection of responses or answers to a given set of questions that are related to the topic of research. Fowler (2014) categorised surveys into two types, namely longitudinal surveys or cross-sectional surveys. While longitudinal surveys are related to the collection of data at different intervals of time to observe changes in the results or findings based on time, cross-sectional surveys are related more to the collection of data at one point in time. Rindfleisch et al. (2008) explain that although longitudinal research seems to be more effective because of multiple data collections, it can eventually lead to a loss of participants, which can then lead to ineffective results. In fact, several longitudinal leadership studies show valuable results and adequate contributions to various contexts and sectors such as higher education (Marks, et al., 2000), elderly care (Nielsen et al., 2008) and health care (Cowin and Hengstberger-Sims, 2006) by focusing on altered styles such as transformational leadership.

On the other hand, Hasson et al. (2000) argue that the longitudinal survey is not always feasible, because the external research conditions and environment also tend to change over time and thus the research results might not remain feasible at a later point in time. Leadership literature presents a noticeable preference for cross-sectional research studies in different sectors (Poghosyan, Aiken and Sloane, 2009; Laschinger, Wong and Grau, 2012; Nielsen et al., 2009; Gillet et al., 2013). Due to the research aim, objective and the limited time of the present research, it was decided that carrying out a cross-sectional survey, whereby data would be collected at one point in time for a given group of people would be suitable and relevant.

To take the discussion further, Rossi et al. (2013) identified multiple advantages of using surveys in management and leadership quantitative researches. One of the most important and prominent advantages, as discussed by Saunders et al. (2009), is that surveys are extremely easy to use and cost-efficient to conduct and carry out. In addition to the ease of conducting them, in leadership studies they are also simple to administer and monitor and take less time for data collection compared to other methods (Jenkins, 1947). Avolio, Bass and Jung (1999) also highlight the benefits of using surveys in examining transformation and transactional leadership styles, naming the tool the multiple leadership questionnaire (MLQ).

Nulty (2008) and Greenlaw and Brown-Wetly (2009) state that surveys are usually online or on paper, which provides higher independence to the research participants, who tend to provide unbiased and fair responses without being affected by the researcher’s opinions. However, there are multiple disadvantages at the same time. Rossi et al. (2013) and Sax, Gilmartin and Bryant (2003) argue that surveys do not provide flexibility in studies and restrict the research to just a few closed-ended questions. Additionally, as argued by Adcock (2001), surveys do not ensure in any way that the respondents will provide true and honest answers. Another disadvantage with surveys is that they can lead to data errors if not administered adequately. However, it has been explained by Cooper, Schindler and Sun (2003) that the use of adequate instruments and the selection of a suitable sample size help in overcoming the challenges related to surveys and provide better and more accurate results. In the leadership context several scholars have made use of online surveys and highlighted the benefits of using such an approach (Piccolo and Colquitt, 2006; Dennis and Bocarnea, 2005; Schneider and George, 2011; Parolini, Patterson and Winston, 2009).

Besides, the most commonly used survey method is the questionnaire, which can be either descriptive or analytical. The descriptive questionnaire consists more of open-ended questions, i.e. *"What people do and think",* whereas the analytical questionnaire consists more of closed-ended questions, i.e. *"Answer research questions and test hypothesis"* (Gray, 2004). Pickard (2012) explains that descriptive questionnaires are primarily designed to identify and measure the overall characteristics exhibited and demonstrated by a given population observed over a period of time, whereas analytical questionnaires include the measurement of different variables used for testing a given theory or hypothesis. According to Thomas (2003), descriptive questionnaires are much more efficient than analytical questionnaires, because they help obtain in-depth responses from respondents; however, Brace (2008) argues that the respondents are more likely to provide accurate responses in an analytical questionnaire as compared to descriptive questionnaires, because not only do they take less time, but they only just have to choose from a certain number of options.

The use of questionnaires provides multiple benefits to the researcher. Not only are the questionnaires extremely practical and effective in gathering data from research participants, but they also help in collecting a lot of information at once (Eiselen et al., 2005; Brace, 2008). Additionally, there is no limitation to the number of people to whom questionnaires can be given while carrying out a research. Though there is no means of validating the instrument and identifying if the respondents are being truthful or not, Muijs (2010) explains that questionnaires are the best way of collecting data in a quantitative study in organisational, behavioural and leadership studies. Some researchers are sceptical about using it in their research because of its inability to identify and measure the emotions and feelings of respondents (Bryman and Bell, 2003; Denzin and Lincoln, 2003). However, it helps compare quantitative data, which is not feasible with any other given data collection method or instrument, and so it is used in the present study for gathering information from academics and administrative staff in public and private universities in Saudi Arabia. Hence, the study has chosen to carry out a questionnaire-based survey analysis.

According to Schindler (2005), designing a questionnaire and or a measurement tool is considered one of most important aspects of any given research. Churchill and Iacobucci (2002) explain that in order to make a study effective and efficient, it is important to design the questionnaire in an adequate manner so that the goals and objectives of the study can be met. Some of the criteria that have been defined by Schindler (2005) suggest that the questionnaire that is used must encourage all research participants to provide accurate responses, and it must also be designed in such a way that the participants are encouraged to provide a suitable and adequate amount of information. This step is being eliminated due to the fact that the questionnaire used in this research is already validated and has been used in various contexts by different researchers. The researcher developed and merged three different measurement tools together to fulfil the research objectives. The following section discusses the various measurement instruments that were developed and used for measuring the current research's variables, namely leadership style, i.e. transformational and transactional, productive organisational energy and job satisfaction, in the context of higher education institutions in Saudi Arabia.

4.4.2 Evaluating and Measuring Research Variables

4.4.2.1 Leadership Style

After the extensive argumentation in the previous sections, it is the ideal time to justify the researcher's choice in regards to the measurement tools that will be used in the current research study. Several instruments were developed and used to measure leadership style in different organisational settings (Scott, 2003). One of the important aspects in the leadership literature is identifying the approach to and measurement tool for evaluating "leadership style" in a particular context. For example, selected scholars suggest that using contingency theory (Lorsch, 2010) and case studies (Humphris, 2004), alongside adopting the qualitative research method, is very effective in leadership studies. Conversely, Avolio et al. (2003) argue that the use of leadership surveys and questionnaires is more effective especially in higher education institutions. The following table provides leadership measurement instruments used in management and leaderships studies. A detailed discussion is provided in appendix 1A.

Acronym	**Title**
AZIMUTH	Leader Azimuth Check II
CLI	Campbell Leadership Index
CM	Conflict Management
CUS	Campbell Unit Survey
CVI	Competing Values Framework
ECA TS	Climate Survey
Empower	Empowering Behaviour Questionnaire
JDI	Job Descriptive Index
JSS	Job Stress Survey
LBDQ	Leader Behaviour Description Questionnaire
LMX-7	Leader Member Exchange-7
MEI	Meeting Effectiveness Inventory
MPS	Managerial Practices Survey or Compass
MLQ	Multifactor Leadership Questionnaire
MLQT	Multifactor Leadership Questionnaire for Teams

OCB	Organisational Citizenship Behaviour
OCQ	Organisational Commitment Questionnaire
S/H	Shamir-Hunt Charisma Instrument
SLDI	Strategic Leader Development Inventory
TARGET	Simulated Combat Measure
Team LMX-7	Team Leader Member Exchange-7 (adapting LMX-7)
TES	Team Effectiveness Survey
TKI	Tacit Knowledge Inventory
TLI	Team Leader Inventory
360̊	360 Degree Assessment

Table 4.6 Leadership measurement tools (Zaccaro et al., 1999)

Table 4.6 presents some of the most commonly adopted instruments, which is be discussed and analysed in detail, to identify their strengths and weaknesses and can be found in appendix 1A.

Multifactor Leadership Questionnaire (MLQ) is one of the most commonly used instruments developed for measuring leadership style in an organisation (Rowold and Heinitz, 2007; Asrar-ul-Haq and Kuchinke, 2016; Lowe, Kroeck and Sivasubramaniam, 1996). It was established in 1985 by Bernard Bass, who extended the work of Burns, who developed basic factors of leadership in 1978. It is well-established and accepted in leadership studies and helps measure and analyse a range of behaviours related to the two leadership styles, transactional and transformational.

The questionnaire was designed to measure or identify primarily three different forms of leadership, in this case transformational, transactional and laissez-faire (Hinkin and Schriesheim, 2008). The instrument was developed by Bass and Avolio (1987), tested and verified in a large number of different studies and contexts (Hartog, Muijen and Koopman, 1997; Mandell and Pherwani, 2003) and tested for multiple countries as well (Erkutlu, 2008; Top, Akdere and Tarcan, 2015; Hamidifar, 2015). It helps measure different aspects or behavioural characteristics of leaders based on different scales that are then used to identify the characteristics of individuals (Hinkin and Schriesheim, 2008). Some of the key areas that are measured with the help of the MLQ instrument include contingent reward, intellectual simulation, inspirational motivation, management-by-exception, individualised consideration and laissez-faire management (Bass and Avolio, 1997; Schriesheim et al., 2008).

According to the discussions presented by Kanste et al. (2007), MLQ is an extremely effective measure for leadership style, because it helps measure it by breaking it down into different components, which makes it easier to analyse. In addition, Kanste et al. (2007) also explain that the questionnaire is not only used for measurement, but it is also an integral system for identifying ways of making improvements, because it helps measure specific areas where enhancements are required. Also, the reliability and validity of the tool was established by a large number of researchers and academics (Muenjohn and Armstrong, 2008; Judge and Piccolo, 2004). Leong and Fischer (2011) contend that although MLQ can be an extremely lengthy approach to measuring leadership styles and can provide some overlapping properties, it is still the best instrument adopted for the modern leadership approach. Tejeda, Scandura and Pillai (2001) also note that based on the present literature several studies adopting MLQ showed inconsistency in their results and outcomes. Additionally, Yukl (1999) criticised the content of MLQ, pointing out that leadership behaviours tend to change over time and so do MLQ, which led to, altered factors weakness i.e. transformational intellectual stimulation and idealised influences factors are still vague and unclear and transactional factors focus on the insufficient behaviours and ignore the positive side of the exchange process. Despite the harsh criticism offered by Yukl (1999), empirical research studies lean more towards the use of MLQ, as the vast majority of the current leadership literature employs it (Dumdum, Lowe and Avolio, 2000; Bass, 1990; Seltzer and Bass, 1990; Kirby et al., 1992; Xu et al., 2016; Bormann, 2013), including higher education institutions (Bryman, 2007; Ingram, 1997; Teshome, 2013; Zacher and Johnson, 2015). As the present research study is utilising the transformation and transaction leadership styles and examining their impact on job satisfaction and productive organisational energy, it is acceptable to suggest that the use of MLQ is suitable and beneficial. Furthermore, the MLQ measurement tool was validated in the context of Saudi Arabia in altered settings, such as banks (Zia, 2015), hospitals (Alharbi and Yusoff, 2012), local airlines (Almutairi, 2013) and educational settings (Cavanagh, 2011).

The applicability and reliability of the questionnaire has been demonstrated and tested by multiple studies, such as in Hogg et al. (2005), Gardner and Cleavenger (1998), Bass et al. (2003) and Bogler (2001). The effectiveness and applicability of the questionnaire has also been verified and tested in different scenarios and circumstances and in different cultures and countries, including Australia, Spain, Germany, Saudi Arabia, etc. (Silverman, 2011). Hence, the questionnaire developed for the present research includes 36 statements after excluding the outcomes of leadership variables, i.e. extra effort, effectiveness and satisfaction. Thus, the study makes use of the MLQ questionnaire as mentioned above, not just because it is most suitable in the modern organisational scenario, but it has also been verified and tested to be significant in different situations.

4.4.2.2 Productive Organisational Energy

After the wide discussion on the different ways of measuring and evaluating leadership style, the following section presents measurement tools in regards to the other research variables productive organisational energy and job satisfaction.

As mentioned previously, despite the fact that there is a direct relationship between leadership style and productive organisational energy (Kunze and Bruch, 2010), the concept remains ambiguous and hard to measure (Cross, Baker and Parker, 2016; Walter, Frank and Bruch, 2010). Furthermore, there is a paucity of literature in regards to the development of measurement tools that focus on identifying and measuring the level of productive organisational energy in a specific context (Cole et al., 2005). Cole et al. (2012) developed a scale consisting of 14 statements that can be used for measuring productive organisational energy observed or perceived in an organisation. The validity of the questionnaire was tested by the authors, who examined it in relation to five different cultures, namely American, British, European, Indian and

Japanese (Creswell, 2014). The scale that was developed by the researchers consists of different questions based on a Likert scale which helps measure overall productive organisational energy as perceived in an organisation (Schindler, 2005). The PEM questionnaire that was developed by Cole et al. (2012) helps measure three separate dimensions of organisational energy, namely cognitive, behavioural and affective/emotional. Hence, the questionnaire that was presented includes multiple statements that can be used for measurement, whereby a higher score on the scale denotes higher organisational energy. The scale consists of Likert-type response scores based on five points, ranging from point 1, representing "strongly disagree," to 5, representing "strongly agree," for measuring cognitive and behavioural items. It also makes use of the five-point frequency scale to measure emotional items, whereby the scale ranges from 1 (never) to 5 (frequently, if not always). The overall productive organisational energy score was calculated based on the average of all the responses gathered from the data (Cole et al., 2005; Walter & Bruch, in press).

Based on the discussion above and in section 2.8.5, the researcher chose the productive organisational energy measure (PEM) as the most suitable and relevant instrument for the present study.

4.4.2.3 Job Satisfaction

On the other hand, while leadership studies prove that there is direct link with job satisfaction (Bogler, 2001; Medley and Larochelle, 1995), Stride et al. (2008) highlight that there are large numbers of measuring tools and instruments that can be used for measuring job satisfaction. The Likert scale-based measuring approach was found to be the best way to measure the level of job satisfaction among employees, as it helps measure the exact level of satisfaction, which can also be used for comparative analysis and discussions (Stride et al., 2008). Some of the instruments that have been developed and are used for measuring job satisfaction levels among employees are discussed in appendix 2A.

In addition, the instrument used for measuring job satisfaction that has been validated and tested in different contexts and organisations is the Mohrman-Cooke-Morman job satisfaction scale (MCMJSS) developed by Mohrman, Cooke, Mohrman, Ducan and Zaltman (1977). The multidimensional scale is used for measuring the level of job satisfaction on the basis of two key scales or sets of factors that identify the intrinsic and extrinsic motivational levels of employees (Mohrman et al., 1977). The scale consists of multiple statements and subscales that are used for measuring different aspects of job satisfaction (Bright, 2007). The study carried out by Mckee (1991) in the context of higher education institutions used and confirmed the validity of the scale. Other studies, such as those carried out by Brown (2014) and Shamsi et al. (2016), have also validated the instrument and demonstrated that it can be used in different organisational settings to obtain desired responses from employees and respondents. Although K.Smith, Gregory and Cannon (1996) debated that intrinsic factors were not the major source of job satisfaction for employees in the American context, several scholars adopted MCMJSS in their research studies and more specifically in the context of higher education institutions (Al-Omari, 2008; Cerit, 2009; Karen, 1999; Leary et al., 1999; Mckee, 1990; Pritchett, 2006; Amin, Shah and Tatlah, 2013; Leary, Sullivann and Ray, 2001). The fact that it focuses on the intrinsic and extrinsic factors of job satisfaction and has been popular among other measurement tools, especially in higher education contexts, aligns and supports the present research's aim and objectives. Furthermore, in a similar context the MCMJSS instrument has also been used in various doctoral research studies examining leadership style and using the MLQ measurement tool (Hebert, 2004; Karen, 1999; Nestor and Leary, 2000).

Hence, when analysing and comparing the different instruments and measurement scales used for measuring the job satisfaction levels of employees, it can be deduced that most of the earlier instruments were irrelevant to the current research settings. As mentioned in the section above, the MCMJSS measurement tool has been used in higher educational institution settings and validated accordingly. It also provides simple and multiple scales and statements for the accurate measurement of different aspects of satisfaction, which is why it was chosen and selected in the present study to measure self-perceived job satisfaction, i.e. intrinsic and extrinsic, with the focus on leadership style.

Therefore, the research's aim is to examine the relationship between leadership style, productive organisational energy and academic and administrative staff's job satisfaction in Saudi Arabian educational institutions. The researcher made use of the most used and most relevant measurement instruments in the body of literature in relation to the MLQ, PEM and MCMJSS instruments, in order to measure and assess the research variables respectively and in a quantitative way.

The last section of the questionnaire focused on demographics, by asking the respondents to fill in their personal information, including gender, age, work field and education level. Fink (2003) explains that demographic information is important to research, because it helps identify the participants. Researchers can then determine if the responses have been obtained from a group of participants that falls into their target group bracket. Additionally, demographic information also helps filter responses with respect to one particular target group of participants. Fink (2003) discusses that collecting demographic information provides greater flexibility for the researcher, as he or she can differentiate between different groups of respondents and compare their responses. Hence, the last section of the research questionnaire aimed at gathering information related to the basic demographics of the respondents, which provided information regarding their gender, age, work level and education level.

4.4.3 Research Reliability and Validity

Silverman (2011) and Sekaran (2003) defined the concept of research reliability and explained that it refers to the overall consistency of the results obtained from research over time. According to Burns (1997), reliability in the context of quantitative research refers to three different types of reliabilities, namely stability of the overall measurement, degrees of similarity that exist in the overall measurement over time and, lastly, overall repeated degrees of measurement. Hence, a given research can be considered to be reliable when the measurements carried out and the results that are obtained as a result remain consistent over time and can be reiterated again by other researchers carrying out similar tests and studies (Ticehurst and Veal, 2000; Gliem and Gliem, 2003). Morse et al. (2008) clarify that the reliability of a research study is measured in terms of the overall consistency of the results obtained from the tests and not from the consistency of the instruments that are used. Reliability comes in various guises, such as test-retest reliability, inter-rater reliability, internal consistency reliability and parallel forms reliability. Voss et al. (2002) suggest that researchers can try to maintain high reliability in their results by ensuring that the conditions, participants and instruments remain the same. The most widely used reliability measure is Cronbach's coefficient alpha (Cronbach 1951), which will be discussed in detail in section 5.9. For decades, leadership literature has highlighted that Cronbach's alpha tests have been used in various sectors and different settings (Howell and Avolio, 1993; Scundura and Graen, 1984; Zhu, Chew and Spangler, 2005), including the educational sector (Geijsel et al., 2003; Grift, 1990; Bolkan and Goodboy, 2009; Ivankova and Stick, 2007).

Another aspect of research that needs to be analysed and kept in mind by a researcher is the overall validity of the instrument. Research validity refers to the general ability of a given study to measure the facts that were intended to be tested. Messick (1999) defined validity as '*an overall evaluative judgment of the degree to which empirical evidence and theoretical rationales support the adequacy and appropriateness of interpretations and actions on the basis of test scores or other modes of assessment'.* Creswell (2014) and Bryman and Bell (2015) explain that validity in quantitative research is associated with the cogency of the instrument and its ability to measure desirable variables. While reliability is related more to the consistency of the results that are obtained from a study, validity is related more to the ability of the adopted or used instrument to gather enough evidence to prove a given point or to test the hypotheses that have been developed (Campbell and Fiske, 1959; Peter, 1981; Hair et al., 2006). Judge and Piccolo (2004) conducted a study examining the relative validity of transformational and transactional leadership, using a meta-analytic test. Another research study, presented by Lowe, Kreck and Sivasubramaniam (1996), applied the validity test to examine the effectiveness of the correlation between transformation and transaction leadership, besides validity tests is also common in higher education context (Zacher and Johnson, 2015).

The study will include and make use of instruments that have been used for similar studies, thus giving higher credibility to the mode of measurement. The reliability and validity of the present study also need to be maintained, and its results are presented in Chapter 6, which will be done via the selection of adequate research instruments.

4.4.4 Pilot Study and Pre-Testing

A pilot study is a crucial part of any research, because it involves conducting a small trial of the procedures that are to be adopted in the study for collecting significant data and to meet the defined aims and objectives (Mackey and Gass, 2015; Van Teijingen and Hundley, 2002). Moreover, it is a research project that is performed on a limited scale and allows researchers to get a clearer idea of what they want to know and how they can best find it, without the expense and effort of a fully-fledged study (Soy, 2015; Yin, 2011). They are used commonly to try out survey questions and to refine research hypotheses. Cohen et al. (2007) explain that pilot testing helps in sampling and identifying if the instrument that has been chosen for the study provides suitable responses. Additionally, in leadership research studies, pilot testing also helps evaluate and verify the applicability of the statistical procedures to be adopted for the research, eliminate problems or any form of errors that may occur and also reduce the overall time and costs incurred in collecting primary data (Wang et al., 2005). A pilot study with a sample size of just 12-25 can really be considered acceptable, though it would be really difficult to get a uniformly distributed sample from such a small number of samples (Sheatsley, 1983; Julious, 2005). It is also possible that probability sampling would be unsuccessful, and there is a high chance of subjectivity incorporation (Johanson and Brooks, 2009). According to Lancaster, Dodd & Williamson (2004) a good sample size for a pilot study should be between 30 and 50 or above. In the current research study the pilot test was carried out on a small sample of the population during March 2015 at *Majmaah University* in Saudi Arabia, which fits within the research targeted sample. Majmaah University is a new public university that was founded in August 2009 by the former King of Saudi Arabia

Abdulallah Bin Abdulaziz. Establishing this university in the Majmaah area was a great idea, since its prime location serves a four small cities in the centre of Saudi Arabia, namely Zulfi, Remeh, Ghat and Hawtat Sudair. Majmaah University is also part of the government's plan to expand higher education institutions across the whole country. The reasons for choosing this university to be part of this research are stated in the table below.

Key aspects	**Reason**
University Vision	The university supports research projects and social initiations that contribute to a better and sustainable environment, and it is interesting to note that the university promotes the idea of being a research-focused faculty, in other words working in teams towards one goal.
University Structure	Hierarchical employee structure, very typical in Saudi Arabian public universities.
New establishment	Building founded in 2009, which means a fairly new management team was employed.
Location	Centre of Saudi Arabia, which is known as the most conservative region in the country.

Table 4.7 Pilot Study Sample Justifications

Based on the points in Table 4.7, and due to the fact that Majmaah University promotes group work and research activities, the researcher was interested in identifying leadership traits perceived by academics and administrative staff. Furthermore, implementing a hierarchical employee structure would indicate centralisation and a rewards and punishment system. Nevertheless, the fact that it is a new establishment gave the research the expectation of adopting a new leadership style which would later enhance job satisfaction. Indeed, it cannot go without mentioning the university's prime location in the centre of Saudi Arabia, which is known for its strong culture and being very conservative. The points above were enough to justify the researcher’s choice to conduct the pilot study in such a university.

The questionnaire was sent to 92 respondents (38 academics and 54 administrative staff), receiving 47 valid responses from 19 academics and 28 administrative staff, thereby giving a 51.1% response rate. The pilot study’s objectives were to spot any problems such as understanding difficulties while responding, doubts that may arise while responding to the questionnaire and to test the reliability of the research and help improve and validate the questionnaire, which was then finally used for the actual research study (Lancaster, Dodd and Williamson, 2004; Glasow, 2005). The collected data were analysed using the SPSS (Statistical Package for Social Sciences) software package.

In addition, sample studies were carried out to test the validity of the instrument and the measurement of the results. The aim of the presented pilot study was to examine the correlation between the items of each variable, i.e. leadership style, productive organisational energy and job satisfaction, in order to validate it within the Saudi Arabian context. Based in Majmaah City, the study of Majmaah University helped in carrying out research on respondents from a culture very similar to the main research sample. Cronbach’s alpha was used to measure reliability in this research study. The minimal value was > .70, to make it acceptable and to make sure that the research data were valid (Serenko, 2008). Furthermore, the correlations between variables were kept at ≥ 0.3 and ≥ 0.5, respectively (Tavakol and Dennick, 2011). The table below provides the pilot survey’s results. According to Pallant (2010), if the alpha value is more than 0.7, the data and measure are expected to be reliable; however, values above .8 are preferable (Gliem and Gliem, 2003). The table below illustrates the results of the pilot study, using SPSS.

Construct	**Number of Items**	**Cronbach’s Alpha**	**Evaluation of reliability**	**Items numbers in the main questionnaire**

Transformational leadership	20	.88	Good	10, 18, 21, 25, 6, 14, 23, 34, 9, 13, 26, 36, 2, 8, 30, 32, 15, 19, 29 and 31.
Transactional leadership	16	.70	Acceptable	4, 22, 24, 27, 1, 11, 16, 35, 3, 12, 17, 20, 5, 7, 28 and 33.
Job Satisfaction	8	.75	Good	59, 60, 61, 62, 63, 64, 65 and 66
Productive Organisational Energy/ Cognitive Dimension - Behavioural Dimension - Affective Dimension	14	.72	Acceptable	50, 51, 52, 53, 54, 45, 46, 47, 48, 49, 55, 56, 57 and 58

Table 4.8 Pilot Study Results

The results of the pilot study highlighted in Table 4.8 were analysed in SPSS and show that the reliability of the instrument constructs transformational (.88), transactional Leadership (.70), job satisfaction (.75), POE (cognitive) (affective) and (behavioural dimension) exceeded .70, thereby indicating good/strong reliability.

The objectives of the research have been defined adequately and the mode of assessment and the instrument being used for the same have been matched with the goals and objectives to provide desired results. The use of a research environment that is completely detached from the researcher will also help increase and enhance the overall reliability and validity of the research. More detailed discussions on the research population, size and data collection strategy are presented in the next section.

4.5 Research Sample

4.5.1 Population

The main focus for recruiting respondents was on universities in Saudi Arabia. As discussed earlier in Chapter 3, Saudi Arabia pays a lot of attention to its higher education, and hence universities in the country have been chosen as research establishments. The research was conducted by surveying academics and administrative staff working in universities in different faculties and various departments, to get a comprehensive overview and understanding of the perceived leadership styles and their impact on productive organisational energy and job satisfaction. Furthermore, a self-administered web-based survey was carried out, with the link to the questionnaire being distributed with the help of the director of the research centre in each university and then emailed to the targeted university employees. The names of the universities that took part of this research and the choosing criteria are revealed below.

4.5.1.1 King Abdul-Aziz University

King Abdulaziz University is one of the biggest and oldest public universities in the Kingdom of Saudi Arabia. Launched in 1967, the university is located in Jeddah city and has more than 50,000 students. The university was named after the person who established it and is one of the most prominent national universities in the country promoting higher education in its western region (*The Economist*, 2016). The university is not only renowned for the provision of high-quality education, but it is also known for providing high levels of education for male and female students, which is a huge step forwards. The vision of the university is to become a world-class campus that focuses on the two most important aspects of learning and education, namely community engagement and sustainability (*Times Higher Education*, 2016). The university also pays a lot of attention to research facilities and practices, developing programmes and conducting high quality research, and yet the management style is still old fashioned and requires a lot of improvement (Al-hazimi, Al-Hyiani and Roff, 2004).

4.5.1.2 Dar Alhekma University

Dar Alhekma University is a private university catering to the higher education of women in Jeddah city. The medium of education in this university is English, and it started as an institute in 1999 but in 2014 was given the status of a university (Top Universities, 2016). Although this university is private, it complies with the regulations of the Saudi Ministry of Higher Education, and its students are entitled to all government aid and assistance. A few classes and lessons are also taught in the Arabic language, but the majority of courses are offered in English only. In the first year the campus was home to 120 students, but now they have 1200 students studying.

The criteria for choosing the above universities are stated below:

- Should be a public or private university implementing Saudi Arabian higher education laws and policies.
- The existence of top management or a board team into which employees report.
- Must have a good number of students.
- Administrative staff and academics should report to the head or dean of the university.
- Universities should employee both female and male staff.
- Allow data access and have a functional research centre.
- The table below summarises the employed sample of this research.

Number	Name	Number of staff (Academics and Administrative)	Organisation type	Profile
1	King Abdulaziz University	7072	Public	Academics and Administrative Staff

2	Dar Alhekma University	400	Private	Academics and Administrative Staff

Table 4.9 Research sample, type and profile

There is an argument that a sample population which is a mixture of academics and administrative officers might lack homogeneity in their thought processes and perceptions of leadership (Kusku, 2003; Pitman, 2000). In this research, this lack of homogeneity could enrich it, and a balance in opinion would reflect as unbiased and objective data (Bolden, Petrov and Gosling, 2008; Hassan, 2013). Top management of the targeted universities are expected to play the roles of leaders in a particular and specific leadership style. Perceptions of leadership style vary if the employee is an administrator or otherwise (Reddy, 2015). Hence, employing both academics and administrative staff will help the researcher examine both perceptions and provide the research with a wider array of data. It is also worth mentioning that participation in the survey was completely voluntary and optional, and none of the participants was forced to participate. The questionnaire cover letter clearly explained the questionnaire's purpose and the research aim, and the participants were free to understand what it involved and could then decide whether or not they wanted to take part.

4.5.2 Sample Size

After identifying the research sample, it is important to have an efficient and effective way of sampling whereby samples can be selected without any bias and sample size should be sufficient enough to cover all the variables, or at least it should not be so high that it can cause bias and become unmanageable (Krejcie and Morgan, 1970; Barlett, Kotrlik and Higgins, 2001). Accordingly, having an optimal sample size is very important (Bonett and Wright, 2015), especially in leadership studies (Muenjohn and Armstrong, 2015; Choudhary, Akhtar and Zaheer, 2013), as it is very important for the success of a research study (Barlett et al., 2001). In this research sample size selection is dependent upon the formula known as the "Krejice and Morgant," technique as it has been validated and used in various contexts such as science (Alters 1997), sports

(James & Lynn, 2002), education (Abduallah, 2006), health care (Pai & Huang, 2011), information technology (Da Veig and Eloof, 2010) and organisational studies (Downs & Adrian, 2012), including leadership studies (Muenjohn and Armstrong, 2015; Nordin, 2012; Zame, Hope and Respress, 2008).

Krejice and Morgant (1970) maintained that after a certain sample size has been exceeded, changes in results do not vary greatly, because the optimal sample size represents the entire population effectively and efficiently. It should be noted that as the population increases, the sample size increases at a diminishing rate and remains relatively constant at slightly more than 380 cases. Krejcie and Morgan (1970) developed the following formula, which has been cited more than 5,000 times:

"S = X 2NP(1- P) ÷ d 2 (N -1) + X 2P(1- P)"

where S = required sample size, X2= table value of chi-square for 1 degree of freedom at the desired confidence level (3.841), N= Population size, P= Population proportion (assumed to be .50, since this would provide the maximum sample size) and d= Degree of accuracy expressed as a proportion (.05). The table below presents the sample population and size required, according to the Krejice and Morgan (1970) formula.

University Name	**Population**	**Required Sample size**	**Respondents accessed**	**Valid Responses**	**Response Rate**
King Abdulaziz University	7072	365	1150	349	30.3%
Dar Alhekma University	400	196	310	204	65.8%

Table 4.10 Research Required Sample Size, Valid Responses and Response Rate

According to Bartlett et al. (2001) there is a good deal of variation in the response rate and its accuracy. It is argued by Mangione (1995) that having a response rate of 60%

is fairly acceptable in a research project. According to this acceptance rule we need to achieve a 60% response rate level in both universities. However, in both cases, population size was different and the sample size was also based on that size. Thus, in King Abdulaziz University the response rate was close to 30% with a sample size of 1150 and 349 valid responses. In Dar Alhekma University the response rate was 65%. Sekaran (2003), on the other hand, recommends that a 30% rate is also acceptable if the sample size is large enough and it yields a sufficient number of successful responses. Based on the research aim and objectives, a sample of at least 200 participants is recommended as a sufficient structural equation modelling (Hu and Bentler, 1995; Kline, 2005; Wong and Laschinger, 2013), which was used subsequently in the present research.

In this research it is evident that the discussions above justify the sample size and response rate received. There are different sample strategies that could be employed in research studies, as justification is required, and this will be discussed in detail in the next section.

4.5.3 Sample Strategy

After determining the sample size, it is important to focus on the sample strategy. There are two types of sample strategy, namely probability and non-probability (Thomas, 2004; Cohen et al., 2007). Probability sampling can be explained as a form of sampling which uses the random sampling method in one way or another (Ross, 2005). In this approach sampling units are created for the entire population and then it is ensured that a mathematical progression is present in the sample selection that gives equal probability to all units that they will be selected (Cohen et al., 2007). Simple random sampling, stratified random sampling and systematic random sampling are some of the methods that are considered to be a part of probability sampling (Leithwood and Jantzi, 2005).

Non-probability sampling is the method of sampling whereby a particular sample population or a specific case character population is needed for a research study, where some members of the wider population will be excluded (Doherty, 1994). Snowball sampling or convenience sampling are part of non-probability sampling

(Schreuder, Gregoire and Weyer, 2001; Sadler et al., 2010), but these techniques cannot be used to infer from the sample to the general population in statistical terms and thus answer "How many"-related research questions, as not every member will have an equal chance of being included in the sample (Morse et al., 2008). In fact, based on the leadership literature, probability sampling is considered a popular sample method and a commonly used strategy (Cummings et al., 2008; Evans and Lindsay, 2002; Ismail et al., 2011; Silins, 1994).

As discussed in section 4.5, the participants in this research were chosen randomly. Based on the chosen sample population, all participants had an equal chance of being part of this research study. Based on the research aim, which is to identify academic and administrative staff's perceived leadership style adopted by top management, and examining the relationship between leadership style, productive organisational energy and job satisfaction, the probability sampling approach was used, and the method employed was simple random selection. A similar study was carried out using simple random sampling, aiming at studying the impact of transformational leadership on employee job satisfaction in the banking sector (Bushra, Ahmad and Naveed, 2011). Simple random selection is justified by the obvious advantage that it has no bias in sample selection and each population unit has an equal chance of being selected. More importantly, it is possible to generalise the research findings, thus giving the entire research a much accurate and objective dataset (Cohen et al., 2007).

There is a motive behind every action, a story behind every commendation, and indeed there are data behind this research study. Gaining access to data collection has become very challenging, due to security and confidentiality issues (Couper, 2002). Saudi Arabia, as mentioned previously in Chapter 3, is known for a strong conservative culture that has clear influence on public and private institutions. The data collection journey and its challenges and opportunities are explained in the following section.

4.6 Data Collection

After justifying the chosen sample and population for this research, the research centre directors of each of the universities were contacted, told about the nature and purpose of the research and then requested to ask their faculty members to participate in the research. The questionnaire was completely self-administered, whereby the questionnaires were mailed to the respondents. Furthermore, the aims and purpose of the research were justified to the respondents via an explanation in a cover letter in the questionnaire itself, and the respondents were asked to fill in their responses, a copy of the letter and the questionnaire shown in Appendix 4A. The benefit of using a self-administered survey is that respondents have the flexibility to answer at a time that is convenient for them (Fowler, 2013; Cooper, Schindler and Sun, 2003). In addition, the responses are not biased because of the presence of the researcher, and the respondents are free to select any of the responses (De Vaus, 2013; Rossi, Wright and Anderson, 2013), as the questionnaires do not ask for their identification in any form. Hence, self-administered surveys were chosen as the quantitative research method to be employed in the study.

The directors of the research centres were given the task of distributing the questionnaires across their departments. Additionally, they were responsible for sending out the web-based questionnaire link and collecting completed responses from the participants, in this case administrative staff and academics. The participants had the option to participate in the web-based questionnaire or fill out the printed form and return it to the director. As the questionnaire did not ask for information that could be used to identify the respondents, they did not have to worry about revealing their opinions. The participants had to rate and fill out their ratings for all sections, including leadership style, productive organisational energy, and job satisfaction. The invitation section of the questionnaire also clearly mentioned that the confidentiality of the data and responses would be maintained completely. Every participant was asked to complete the questionnaire within approximately 15 minutes of reading the cover letter, which was estimated on the basis of the previous pilot test surveys that were conducted with the measurement instrument at Majmaah University.

The process went very smoothly and was conducted in a professional manner at the private Dar Alhekma University. The main contact method with Dr. Khawla Zahran, the director of the research centre, was email, via which the researcher was asked to fill out academic research and ethical application forms. The forms were then sent to the research committee in order to grant ethical approval. Gaining access to Dar Alhekma University data took fewer than 60 days with no issues. In contrast, at the public King Abdulaziz University, the researcher struggled to get in touch with the research centre, as no replies were forthcoming by either phone or email. After approximately two weeks, the researcher was eventually able to speak via a phone call with the director of the research centre, Mr. Omar Albilady. The process of gaining access to King Abdulaziz University was very complicated and involved different departments, including the dean's office. The researcher was asked to use a fax as the prime method of communicating, which made it a more challenging undertaking. Communication between the researcher and the research centre director was achieved in various forms, including emails, phone calls, text messages and fax. The process of gaining access to the university took more than 90 days. The above discussion gives a clear indication of the different management approaches between public and private universities in Saudi Arabia (Hamdan, 2013; Smith and Abouammoh, 2013). Admittedly, we cannot generalise the process based on the researcher's experience, but it is a sign of different management practices, various leadership styles and cultural influences in the workplace and working environment (Mosa, 2015). Despite the fact that the majority of universities in Saudi Arabia are encouraged by the Ministry of Higher Education to make effort to provide any requested information or data, numerous numbers of authors have experienced and faced challenges in conducting detailed analyses in this regard (Smith & Abuuammoh, 2013). After permission was granted for data access by both universities, the questionnaire link was mailed to the directors and they were asked to distribute them to their faculty members via email. The administrative staff and academics then filled in their responses, which were sent automatically and directly to the researcher's database, or used printed copies for which the directors were responsible for sending back to the researcher as previously agreed. The data were collected with the help of Qualtrics.com, which is popular and suitable in a higher education context (Lau, Oh-Young and Raines, 2015). Qualtrics is web-based software that provides support and enables multi-mode data collection from different sources (Snow and Mann, 2013). The ability of the software to support multi-mode data collection helped in ensuring that on-the-ground capabilities were also utilised and the researcher was able to gather and collect information in a systematic way from all respondents (Qualtrics, 2014). In addition, the respondents were able to fill out the questionnaire using a laptop, desktop computer or smartphone. After collecting the data, it was necessary to filter and organise them before starting the analysis phase. The first step involved editing the data and preparing it for analysis. Once that was done, the data were properly coded so that they could be properly handled and classified. Coded data were then fed into SPSS and then sorted alphabetically and numerically. It also helped in keeping the data and feeding them properly into SPSS, where unique codes were attached to each question. Before starting the analysis a final check was made to identify any errors in the sorted and coded data. If any error was found on this screening then it was immediately cleaned, following which the data analysis began after screening and feeding clean data into the software. Thus, the research and the process of data collection were carried out on the basis of the methodology proposed earlier in the current chapter.

4.7 Summery

This chapter has presented an overview of the research environment and methods used in the study for research and study purposes. It can be deduced from the discussions that the art of philosophy is perhaps a stepping stone in the methodology process and in identifying the epistemological and ontological stance in the present research. Also, the two major schools of the epistemological stance, i.e. positivism and interpretivism, were highlighted and supported by several examples and justified the research choice of positivism. In addition, the research illustrated the difference between adopting deductive and inductive reasoning, followed by academic examples and a coherent comparison. Based on the research aim and objectives, the quantitative method was used as the primary research method, after extensive research, based on the positivism epistemology and highlighting similar studies that adopted the same approach. After stating multiple advantages and addressing several disadvantages, the study thus made use of quantitative research. Furthermore, a focus on universities and the state of higher education in Saudi Arabia revealed that the country is trying to revolutionise its practices and facilities, in order to improve the general standard of living and the education system for people via the provision of both public and private universities. It is therefore important for educational organisations also to improve their leadership styles, in order to foster higher organisational energy and job satisfaction. A web-based self-administrated questionnaire was used to collect data from King Abdulaziz and Dar Alhekma Universities in Saudi Arabia, the results of which were analysed quantitatively to test the research hypotheses described earlier in Chapter 2. Last but not least, the researcher presented a consistent review of the measurement tools and instruments used most in the literature. This chapter finally provided the outcomes of the pilot study along with the current research sample and data collection procedure.

In the following chapter, the researcher starts the process of putting theory into practice and introduces the analysis tools and employed tests, before illustrating and presenting the analysis results.

Chapter 5: Analysis Approaches

5. Analysis Approaches

5.1 Introduction

The previous chapter covered the research philosophy and identified the research methods and data collection approaches applied to the current research study.

In this chapter the researcher justifies the analysis approaches and tests employed in the present study. The analysis approaches chapter is divided into various sections, namely identification of the required data analysis technique, a comparison and evaluation of other techniques and lastly justification for the selection. As the research aims at examining the relationship between leadership style, productive organisational energy and job satisfaction, the analytical tool that is to be used in this research study also plays a very important role in the selection of the right statistical technique to achieve the stated aim.

The structure of the entire chapter covers several areas. The first section covers the selection of the statistical system package, followed by the selection of an appropriate statistical technique, the objective of the analysis, the focus of analysis, the level of measurement, tests employed, their description, missing data and multicollinearity. The final section introduces structural equation modelling, confirmatory factor analysis and some common method bias tests.

Analytical software packages like SPSS (Statistical Package for Social Sciences) and AMOS are used for data analysis, not just because it makes sense to use sophisticated software where a large amount of data is present and needs to be analysed accurately, but also to help make sense of the collected data (Verma, 2012). There is a possibility that large datasets cannot be analysed easily without appropriate software tools, and if it did there is a huge margin of error which can be reduced by using these tools (Oishi, 2003). The researcher took into account that robust and applicable analysis techniques rely on underpinning research assumptions, analytical tests, design and data type (Churchill & Iacobucci, 2006). The next section presents more details about the employed statistical software.

5.2 Selection of Statistical System Package

IT-based systems affect research projects in a very strong way (Verma, 2012). There are various types of analysis techniques and tools that have evolved over time through the usage of IT-based services (Wang, Bethke and Barnwell, 2012). This entire research study is quantitative, in an attempt to conduct a correlation analysis between different variables. There are two software packages used in this research project, namely SPSS and AMOS, and both are highly advanced and based on analytical and permutation combination algorithms (Dawson, 2014). SPSS is very beneficial for basic research analysis (Coakes and Steed, 2009) and covers almost all the analysis done in this research study, namely multiple regression analysis, frequency analysis, central tendency, kurtosis, multicollinearity and Cronbach's alpha test. AMOS is relatively more advanced software which is well known for its computational capabilities and is used for structural equation modelling and other advanced variable assessments. SPSS is a statistical tool that was developed and designed by IBM, while AMOS is an advanced module which can be used as an attachment to SPSS, albeit the most important task is to build a structural equation model (Norusis, 2008; Arbuckle, 2008). AMOS software was produced by SPSS Inc and it is used primarily for data collection, data modelling, test analytics and automated scoring services. It is considered one of the most advanced tools for data analysis and is used in both academia and industry (Pallant, 2010). Based on the discussion in the previous chapter, this research adopted quantitative research, as the researcher examined the relationship between the dependant variable, leadership style and the independent variables, productive organisational energy and job satisfaction. Many researchers use SPSS in different fields, such as social and health (Argyrous, 2000), psychology (Mayers, 2013), business (Burns and Burns 2008), education (Mujis, 2010) and leadership and management (Mandell and Pherwani, 2003; Zahari and Shurbagi, 2012; Batool, 2013; Safi, et al., 2016; Hamidi and Salimi, 2015). Thus, a combination of software was used to ensure that the most accurate and highest levels of results would be obtained (Ian, 2011).

5.3 Selection of Appropriate Analytical Techniques

The researcher made his selection of the analysis techniques based on Burns' (2000) and De Vaus' (2002) criteria: the objectives of analysis, focus of analysis, level of measurement, data distribution pattern and statistical tests employed. It is worth mentioning that it is necessary for researchers to understand the advantage of choosing suitable analytical techniques that will help emphasise and highlight the quantitative meaning in collected data. The aim of applying decent analysis techniques is to make sense of numerical data by transforming them into readable and useful interpreted information.

5.3.1 Objective of Analysis

The objective of the entire data analysis chapter is to provide and in-depth interpretation of and logical statements on the data collected from the public and private universities in Saudi Arabia as a part of this research study. The entire focus of the data analysis was to examine the relations between three variables: leadership style, productive organisational energy and job satisfaction, where leadership style played the role of the independent variable and productive organisational energy and job satisfaction were considered dependent variables. From the gathered data and its analysis, the researcher identified in the higher education institutions context how different types of leadership style are adopted and how these affect the level of productive organisational energy, imparting knowledge and how transforming itself into a modern educational institute with satisfied administrative staff and academics.

Once the data were collected, they were sorted, and any irrelevant and redundant data were discarded before they could be used. Some advantages of using a questionnaire were that the information would be objective and it would also ensure that the reliability and validity of the research would be maintained, as data can be reproduced at any time and would be free of any bias. At the end of the research, and once the data collection process was completed, they were examined and unnecessary data rejected. The collected primary data were fed in digital format into SPSS and then AMOS, and the results were generated and presented in various tables, figures and charts (Saunders et al., 2011; 2012).

5.3.2 Focus of the Analysis

Based on the discussion in the previous chapter, this research is a quantitative study whose analytical stance is objective and analytical and relies on quantitative data analysis. It can be said that the smart evolution of information should start by defining significant parts and then move on to how they are related to each other (Bland and Altman, 1997).

The present research study focused on a combination of descriptive statistical analysis along with a combination of various estimation statistical analyses. Besides, hypothesis testing was more significant considering the objective and focus of this research study, as it helped determine the impact of leadership style on productive organisation energy and job satisfaction, as well as the mediating role of productive organisation energy on the presented relationship.

In data analysis, there are three categories and can also be classified as a descriptive, estimation and hypothesis testing (Wilcox, 2012). On the one hand, the descriptive option attempts to describe and summarise research variables and dimensions, while the estimation orientation highlights information to which a specific situation can be applied and generalised across the whole research sample (Loether and McTavish, 1974). On the other hand, with hypothesis testing, first a hypothesis or a pre-determined notion is created based on general observations and then its validity is verified (Newey and McFadden, 1994). Hypothesis testing is the logical and chronological usage of statistics to determine the probability that a given hypothesis is true or not (Lehmann and Romano, 2006).

5.3.3 Level of Measurement

Level of measurement refers to the relationship between values that are assigned to the attributes of different variables, as any measurement must be accurate and precise (John and Lee-Ross, 1998). Any variable has a large number of attributes, but to identify the level of measurement only those attributes are focused on which are relevant to the research objective. For researchers it is very important for the success of the research study that the level of measurements is determined, because it helps interpret data from the variable into numbers (Briggs, 1989; Ary et al., 2002).

In this research study non-parametric statistics were applied, because the data collected from the universities – though quantitative – are nominal and ordinal, as the questionnaire is in Likert scale form. As data analysis tests are certain (Blaikie, 2003; Hansen, 2003; Pett, 1997) Likert scales fits within the ordinal category measurement. Indeed, parametric data are considered powerful and accurate when it comes to the level of measurement, but in hypothesis testing they are not required (Cooper and Schindler, 2003). Several leadership studies (Podsakoff and Organ, 1986; Hartog et al., 1997; Lowe et al., 1996; Kirdy et al,. 1992) have adopted nominal and ordinal data. Based on the debate above, nominal and ordinal data were used and helped in hypothesis testing in the form of non-parametric data only (Sprinthall, 2002).

There are normally four different levels of measurement in data analysis – nominal, ordinal, interval and ratio (Pallant, 2010). Nominal and ordinal data are considered non-parametric statistical data, while interval and ratio apply to parametric statistical data (Anderson, 2001). For example, if data are nominal it becomes very easy for the researcher to code the data and understand that these codes are just representing the long names given to each variable (Shi, Li and Sha, 2016). In nominal data, numerical values just name the attributes in a unique manner so that they can be identified and sorted easily for analysis (Zapf et al., 2016), and no ordering of the case is implied in this situation (Manning, 2015). In ordinal data measurement, the attributes can be rank-ordered and there is no meaning associated between the distance of the two attributes (Pettitt, 1979). The interval between values is not interpretable in an ordinal measure (Sprinthall, 2002).

On the other hand, in interval measurement, the distance between the attributes does have a meaning and makes an impact on the outcome of the results (Bryman and Cramer, 2009). For example, the difference between 20 and 30 degrees Celsius will be the same as the difference between 30 and 40, and thus the average of such data can be taken and is interpretable in the results. Herein, we need to understand that the ratio makes no sense in this data, as 20 degrees would not be half as cold as 40 degrees, because with each drop the difference ratio changes. In the ratio level of measurement data always have an absolute zero, which only makes sense when data have absolute zero associated with them (Jamieson, 2004). A meaningful fraction can always be created with the ratio variable (Liu, et al., 1999). There is a specific hierarchy associated with the level of measurement, and as it moves from a lower level to a higher level there is a higher level of restriction and sensitivity associated with the analysis and fewer assumptions are allowed (Mayers, 2013).

Indeed, the level of measurement helped the researcher determine the suitable statistical tool and analysis test appropriate for the research study. Certainly some statistical tools have limitations when it comes to going in-depth with the measurement levels (Borgatta and Bohrnstedt, 1980; Ary et al., 2002), which was taken into consideration.

5.3.4 Data Distribution Pattern

Dallal (2000) identified a few advantages associated with non-parametric data analysis, and one of the biggest ones is the fact that various assumptions are required when analysing these data. Non-parametric data usually are more informative and descriptive in nature and a lot of information can be covered compared to parametric data like ratio and intervals (Cleophans and Zwinderman, 2011). Non-parametric data are also better in those situations where true distribution of data are unknown (Simar and Wilson, 2002). Experts like Hatcher (2003) also argue that ordinal scales are much more effective and efficient psychologically as well. Values on an ordinal scale can be easily stacked in a ranking system and respondents can rank a phenomenon or a development much more easily in their mind than by giving absolute numbers (Johnson and Albert, 2006). Ordinal data also provide the respondent with a comparative scale against which to make comparisons (McCullagh, 1980). For instance, scales like the Likert scale can easily enable a person to determine how they feel about something, as utilised in this research study (Allen and Seaman, 2007). Considering all of these aspects it was logical for the researcher to use non-parametric data in this research study.

5.4 Statistical Test Employed

A three-stage statistical test approach was used in this research study. This approach is designed and determined by developing a strong understanding of objectives. The first stage of a statistical test is descriptive statistical analysis such as minimum, maximum, median standard deviation. The second stage of statistical analysis includes missing data and a normality test and other factor analysis tests. Both the first and second stage of data analysis are done using SPSS software. The third stage of analysis includes structural equation modelling analysis, designed and examined using AMOS software.

The first stage of data is descriptive statistics and was presented including frequencies for categorical variables and descriptive statistics, including measures of central tendency, analysis of skewness and kurtosis, reliability and validity. After presenting a detailed descriptive analysis of statistics, a factor analysis test was also conducted to identify underlying factors. The factor analysis was helpful in identifying which factors would be included and which factors would be excluded from further analysis (Thompson, 2004; Brown, 2015; Harrington, 2009). One more aspect which needed to be considered before sending the data for analysis was to check for appropriateness and determine the assumptions required for the analysis along with availability of a sufficient size sample (Marsh, Balla and McDonald, 1988; MacCallum et al., 1999). A generally acceptable value for such a dataset is that the population sample should be 200 or more (Hinton, 2004). The present research's large sample size represented the entire value of the population in a better manner, as discussed in section 4.5.2.

5.5 Missing Data and Outliner

Missing data and outliers represent another set of data identified by using the frequency function of SPSS (Hill, 1997; Norusis, 2011). Missing data and outlier identification was very important, because without taking them into consideration a significant gap would have existed between the data that could not be explained (Allison, 2001; Scheffer, 2002).

Furthermore, the Mahalanobis distance was used to identify the distance between value "P" and distribution "D" (De Maesschalck, Jouan-Rimbaud and Massart, 2000). Mahalanobis (1936) presented this measurement approach, which is basically a multidimensional generalisation of the notion of measuring how many standard deviations away a particular data point P is from the mean distribution. As P grows and moves away from the mean, the Mahalanobis value increases. One interesting fact about Mahalanobis is that it is unit-less and scale-invariant, and it only takes into consideration the correlations of the dataset (De Maesschalck, Jouan-Rimbaud and Massart, 2000). The Mahalanobis distance is widely used in multivariate statistical testing and to detect outliers (Hadi, 1992; Filzmoser, 2004). In this research study the approach to find outliers was employed, and it was found that there were no significant missing data or outliers in the dataset and it was ready to be used for other analysis.

5.6 Normality Using Skewness and Kurtosis

After identifying the outliers, checking the normality of the data by using skewness and kurtosis analysis was conducted. For normality distribution testing skewness and kurtosis were performed. Various leadership studies (Lim & Ployhart, 2004; dyer et al., 2005; Orr, 2007; Ponnu & Tennakoon, 2009) have undertaken this task. In this research study items showed acceptable skewness and kurtosis and were able to be used in further analysis. The results are presented in the following chapter.

The importance of using skewness analysis is that it precisely measures the asymmetry of the probability distribution of data and the real value of the random mean (Groeneveld and Meeden, 1984; Blanca et al., 2013; Mardia, 1970). Skewness value can be positive, negative or undefined (Joanes and Gill, 1998), and it can be interpreted quantitatively in a much easier way compared to qualitative data (Srivastava, 1984). Skewness is not strictly connected with the relationship between the mean and median: a distribution with a negative skew can have a mean greater than or less than the median, and likewise for positive skew (Leech, Barrett and Morgan, 2005). Kurtosis is used to identify if a particular set of data has peaked or if it is flat relative to a normal distribution (Pallant, 2013). The dataset with a high level of kurtosis tends to have a distinct peak near the mean, declining rather rapidly (DeCarlo, 1997). According to Hazewinkel (2001) and Pallant (2013), the accepted range of kurtosis in +/- 3, while the accepted value for skewness is +/- 2.

Since in this study the size of the sample was reasonable enough, there was a belief that skewness and kurtosis would not make a strong impact on the final results or affect the accuracy of the data analysis. In this research study, leadership style, namely transformational leadership and transactional factors, was analysed for skewness and kurtosis, to see whether the data would be normally distributed. Productive organisational energy and job satisfaction factors were also analysed for skewness and kurtosis, again to see whether the data would be normally distributed. Multivariate normal distribution is often used to describe any set of possibly correlated data that clusters around the mean value (Schinka et al., 2003).

5.7 Multicollienarity

Multicollinearity is a phenomenon in which two or more predictor variables in a multiple regression model are highly correlated (Farrar and Glauber, 1967). Essentially, one can be linearly predicted from the others with a substantial degree of accuracy. In this situation the coefficient estimates of the multiple regression models may change erratically in response to small changes in the model or data (Kraha et al., 2012). There is no chance that this aspect will reduce the predictive power of reliability for the entire multiple regression done as whole (Cohen et al., 2013). When individual predictors are measured, it only affects the calculations. While Hill (2005) contends that correlations between independent variables exceeding 0.8, others (Pallant, 2005) argue that values exceeding 0.9 could indicate the presence of multicollinearity. Software such as SPSS and AMOS in correlational studies have been found extremely helpful in analysing collected information and conducting detailed and in-depth analyses such as multicollinearity. In this research project multicollinearity was tested using an independent variable correlation (Rizi, et al., 2013). Inter-variable correlation and determinant statistic for each construct was also examined. The results for inter-variable correlation showed that there was no multicollinearity, explained further in section 6.4.1.

5.8 Bartlett's Test of Sphericity

Bartlett's Test of Sphericity is basically used to verify the claim that variance are equal across samples and groups (Tobias and Carlson, 1969). Equal variance across samples or groups is present this has been assumed in many statistical analysis like analysis of variance and Bartlett's Test of Sphericity is mostly used for verify that assumption (Bartlett, 1950). According to Williams *et al*. (2010) study Bartlett's test is sensitive to departures from normality; this is why it was used in this research study. Through this test and analysis the researcher was able to verify whether how much the data was close to the normality and was able to be used for analysis. The test results are presented in the tables in section 6.4.1.

5.9 Reliability and Cronbach Alpha

Reliability in any statistical measurement can be explained as the overall consistency in a dataset and of the participants' responses to all items in a questionnaire (Eisinga, Grotenhuis and Pelzer, 2013; Cronbach, 1951; Gliem and Gliem, 2003). It is commonly used in various settings, including leadership (Grift, 1990; Howell and Avolio, 1993). A measure can only be said to be reliable if it consistently produces similar results irrespective of how many times a dataset is analysed, if conditions are similar (Malholtra and Birks, 2006; Feldt, 1980). As mentioned briefly in section 4.4.2, reliability could occur inter-rater when two different analysts obtain consistent results, even when they do the analysis separately, and secondly there is test-retest reliability, where repeat tests produce similar results to the first test and there is consistency in the data analysis (Santos, 1999; Westland, 2010). Cronbach's alpha is a lower bound estimate of reliability in a statistical test (Sekaran, 2003) and it provides an assessment on the reliability of a particular dataset. Cronbach's alpha is a function of the number of items in a test, the average covariance between item-pairs and the variance of the total score (Santos, 1999). The acceptable value for Cronbach's alpha is 0.7 and above (Serenko, 2008), with a score in the range of 0.6 considered poor and in the range of 0.8 good (Sekaran, 2003; Cortina, 1993, Pallant, 2013; Bland and Altman, 1997).

Based on the explanation above, these aspects were very important in this research study, because their assessment enables the reader to understand how reliable the data are and how decisions were made based on them (Tavakol and Dennick, 2011). It is also to be noted herein that the reliability of test results or data is not equivalent to the validity of data (Schmidt et al., 2000). The researcher took into account that data can be invalid but reliable in test results, which means that one should be sure about the approach used in data analysis and techniques but not necessarily about the data itself and its accuracy. In this research study the researcher carried out reliability and Cronbach's alpha tests to understand how much he could rely on the data and any interpretations made using SPSS. The results of the tests are presented in section 6.4.4 in the next chapter.

5.10 Regression Analysis

Regression analysis is one of the most widely used statistical tools for discovering relationships among variables (Draper and Smith, 2014). The primary aspect of this entire research study is to examine the relationship between different leadership styles, productive organisational energy and job satisfaction among academics and administrative staff of one public and one private university in Saudi Arabia. Although analysis for all types of variables can be done by using multiple regression analysis, the focus would be on relationship between independent variables and dependent variables. The regression analysis tool is commonly used in management and organisational leadership studies, especially in quantitative studies (Villa et al., 2003; Kernberg, 1979; Zorah, 2002; Irving and Longbotham, 2007; Hollenbeck, Ilgen and Sego, 1994), including the context of higher education (Kirby, Paradise and King, 1992; Prosser and Trigwell, 1999; Bates et al., 2003; Trivellas and Dargenidou, 2009).

On the other hand, linear regression can be defined and explained as an approach for modelling the relationship between a scalar-dependent variable and one or more explanatory variables (Seber and Lee, 2012). If there is only one explanatory variable it is known as a simple linear regression, while if there are more than one explanatory variables then it is called a multiple regression (Harrell, 2015; Neter et al., 1996). Like most regression analyses, linear regression focuses on conditional probability distribution rather than on joint probability distribution, which is common in multivariate analysis (Montgomery, Peck and Vining, 2015; Kline, 2011).

In this research study, variables and leadership styles, namely transformational and transactional, were independent variables and analysed on the basis of their relationship with dependent variables, namely productive organisational energy and job satisfaction.

In fact, in the present research study the researcher used structural equation modelling (SEM) over regression analysis for various reasons (Rosser, 2004):

- SEM allows for variables to correlate, whereas regression adjusts for other variables in the model.

- Regression assumes perfect measurement, whereas SEM assumes measurement errors.
- A lack of leadership studies in Saudi Arabia using SEM. To the best of the researcher's knowledge, this research is the first and one of a kind in the leadership literature and the Saudi Arabian higher educational context.

After justifying the research choice, it is necessary to understand the models used in structural equation analysis.

Path analysis is an extension of multiple regression in that it involves various multiple regression models or equations that are estimated simultaneously. This provides a more effective and direct way of modeling mediation, indirect effects, and other complex relationship among variables. Path analysis can be considered a special case of SEM in which structural relations among observed (vs. latent) variables are modeled. Structural relations are hypotheses about directional influences or causal relations of multiple variables (e.g., how independent variables affect dependent variables). Hence, path analysis (or the more generalized SEM) is sometimes referred to as causal modeling. Because analyzing interrelations among variables is a major part of SEM and these interrelations are hypothesized to generate specific observed covariance (or correlation) patterns among the variables, SEM is also sometimes called covariance structure analysis.

In SEM, a variable can serve both as a source variable (called an exogenous variable, which is analogous to an in- dependent variable) and a result variable (called an endogenous variable, which is analogous to a dependent variable) in a chain of causal hypotheses. This kind of variable is often called a mediator. As an example, suppose that family environment has a direct impact on learning motivation which, in turn, is hypothesized to affect achievement. In this case motivation is a mediator between family environment and achievement; it is the source variable for achievement and the result variable for family environment. Furthermore, feedback loops among variables (e.g., achievement can in turn affect family environment in the example) are permissible in SEM, as are reciprocal effects (e.g., learning motivation and achievement affect each other).[1]

In path analyses, observed variables are treated as if they are measured without error, which is an assumption that does not likely hold in most social and behavioral sciences. When observed variables contain error, estimates of path coefficient may be biased in unpredictable ways, especially for complex models (e.g., Bollen, 1989, p. 151–178). Estimates of reliability for the measured variables, if available, can be incorporated into the model to fix their error variances (e.g., squared standard error of measurement via classical test theory). Alternatively, if multiple observed variables that are supposed to measure the same latent constructs are available, then a measurement model can be used to separate the common variances of the observed variables from their error variances thus correcting the coefficients in the model for unreliability.[2]

Although SEM allows the testing of causal hypotheses, a well fitting SEM model does not and cannot prove causal relations without satisfying the necessary conditions for causal inference, partly because of the problems of equivalent models discussed above. The conditions necessary to establish causal relations include time precedence and robust relationship in the presence or absence of other variables (see Kenny, 1979, and Pearl, 2000, for more detailed discussions of causality). A selected well-fitting model in SEM is like a retained null hypothesis in conventional hypothesis testing. It remains plausible among perhaps many other models that are not tested but may produce the same or better level of fit. SEM users are cautioned not to make unwarranted causal claims. Replications of findings with independent samples are essential especially if the models are obtained based on post hoc modifications. Moreover, if the models are intended to be used in predicting future behaviors, their utility should be evaluated in that context.

5.11 Structural Equation Modelling

It is important to acknowledge that structural equation modelling is a multivariate analysis approach used in this research study (Ullman and Bentler, 2003; Kline, 2015), and in this analysis AMOS software was used effectively and efficiently (Byrne, 2013). Usually SEM examines the direct relationship between (Dependant Variable =DV) =

(Independent Variable= ID1) +(ID2) + (ID3) (Bowen and Guo, 2011). The regression equations corresponding to the SEM DV = k0 + β1 (IV-A) + eA → (5) DV = k1 + β2 (IV-A) + eB → (6) DV = k2 + β3 (IV-A) + eC → (7) where DV = Dependent variable, IV = Independent variable, k0 - k2 = Constants, β1 - β3 = Regression coefficients, eA - eC = Error components (Gefen, Straud and Boudreau, 2000). Structural equation modelling can be used for both confirmatory factor analysis and path analysis (Santoso, 2011). Various steps are followed while enetering the data for structural equation modelling, and this is the primary reason why it must not be done while using SPSS software (Blunch, 2012).

As mentioned previously, the present study involves different constructs: leadership style, productive organisational energy and job satisfaction. Factor analysis was also employed for all four major variables. Each construct was subjected to confirmatory factor analysis (CFA), to test if the data fitted the measurement and structural model (Harrington, 2009; Hoyle, 2000). According to Hooijberg and Lane (2005), confirmatory factor analysis is used mostly in leadership studies, and so this research study fulfils that requirement. Confirmatory factor analysis of CFA can be explained as a statistical technique used to verify the factor structure of a set of observed variables (McDonald & Ho, 2002).

Each variable in the study was constructed for SEM, and each variable consisted of a different number of items. SEM basically refers to a different set of mathematical models and computer algorithms and statistical methods (Kenny and McCoach, 2003), and yet it is usually done when a latent variable needs to be measured and compared against a more observed variable (Babyak & Green, 2010). It is noteworthy to mention that there are different types of models that are used in SEM like PRELIS, LISREL and SIMPLIS (Byrne, 2013, Kline, 1998; Fornell and Bookstein, 1982; McArdle and Epstein, 1987).

As mentioned previously, various steps were followed by the researcher while constructing the data for SEM modelling and assessment. It started with developing a hypothesis and ended with feedback and any changes in the model, if data analysis did not come out as predicted. Indeed, a chronological flow of activities was undertaken for SEM, the development of hypotheses, construction of the path diagram, specification of the construction model, identification of the model structure, parameter estimation, an evaluation of the results and, finally, modification of the model, if needed (Schumacker and Lomas, 2004). As it already mentioned, different variables were constructed for CFA and SEM, and each construct had different items in it, more details of which are presented in the following chapter.

5.12 Summary

In conclusion, this chapter is a blueprint for the upcoming chapter on the analysis and discussion of the data. In this chapter a brief idea about different data analysis techniques, approaches and which type of data are required is included.

In the next chapter, data will be analysed and then, through interpretation, meaningful sentences will be prepared. Data analysis and interpretation will ultimately aim at meeting the research questions and objectives.

It can also be said in conclusion that data analysis techniques and approaches which are decided in this chapter were chosen after a detailed consideration of various aspects and attributes of the collected data as well as its quality.

Chapter 6: Results

6. Data Analysis and Results

6.1 Introduction

After presenting the analysis approaches and tests to be employed in the research study, this chapter provides a detailed and in-depth analysis of the data gathered from the public King Abdulaziz University and the private Dar Alhekma University in Saudi Arabia.

Initially, the first section defines the research variables and its operational definitions, as it is important to understand variables, items and code labels before presenting the analysis results.

The second section illustrates the descriptive statistics, including frequencies for categorical variables, and descriptive statistics, including a measure of central tendency, and an analysis of skewness and kurtosis, reliability and validity.

The third section offers the results of the Kaiser-Meyer-Olkin (KMO) test followed by multicollinearity and Bartlett’s test of sphericity.

After ensuring that the data are appropriate and pass the required assumptions, the fourth section presents the results of the factor analysis and explains the reasons and results for conducting the reliability test, namely the Cronbach's alpha test.

Finally, the last section starts by showing the multivariate analysis, using structural equation modelling, and complementing the results with the various structural models.

6.2 Research Variables Operational Definitions

The previous chapters have established the problems that the research aims at addressing and the significance of the research study by choosing the higher educational sector in Saudi Arabia. While earlier discussions identified research-related concepts, further discussions present operational definitions of the key variables and constructs being studied and evaluated in the study. In addition, we look at the items and code labels that were used in SPSS and AMOS.

6.2.1 Transactional Leadership

According to Bass (1985), transactional leadership is a leadership style in which '*changes in degree or marginal improvement can be seen as the result of leadership that is an exchange process: a transaction in which followers' needs are met if their performance measures up to their explicit or implicit contracts with their leader (p:27)*'.

The key characteristics of transactional leadership are explained in the table below.

Variable	**Number of Items**	**Code used in SPSS and AMOS**	**Factors**
Transactional leadership	16	TS, TS1, TS2, TS3, TS4, TS5, TS6, TS7, TS8, TS9, TS10, TS11, TS12, TS13, TS14, TS15, TS16.	1) Contingent Reward. 2) Management by Exception.

Table 6.1 Transactional Leadership Characteristics

6.2.2 Transformational Leadership

The definition of transformational leadership was presented by Bass (1990), according to whom '*transformational leadership occurs when leaders broaden and elevate the interests of their employees, when they generate awareness and acceptance of the purposes and mission of the group, and when they stir their employees to look beyond their own self-interest for the good of the group'.*

The characteristics of transformational leadership are discussed in the table below.

Variable	Number of Items	Code used in SPSS and AMOS	Factors
Transformational leadership	20	TR, TR1, TR2, TR3, TR4, TR5, TR6, TR7, TR8, TR9, TR10,TR11, TR12, TR13, TR14, TR15, TR16, TR17, TR18, TR19, TR20.	1) Charisma. 2) Inspirational Motivation. 3) Intellectual Stimulation. 4) Individual Consideration.

Table 6.2 Transformational Leadership Characteristics

6.2.3 Productive Organizational Energy

The construct and the first definition of the concept of productive organisational energy was established by Cole et al. (2008), who defined it as '*the joint experience and demonstration of positive affect, cognitive activation and agentic behaviour among members of a collective in their shared pursuit of organizationally salient objectives'.*

The key characteristics of productive organizational energy are explained in the table below.

Variable	Number of Items	Code used in SPSS and AMOS	Factors
Productive organisational energy	14	POE, POE1, POE2, POE3, POE4, POE5, POE6, POE7, POE8, POE9, POE10, POE11, POE12, POE13, POE14.	1) Cognitive dimension. 2) Behavioural Dimension. 3) Affective Dimension.

Table 6.3 Productive Organizational Energy Characteristics

6.2.4 Job Satisfaction

One of the most commonly adopted definitions of job satisfaction was presented by Locke (1976), who described it as '*a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences'.* Weiss further defined job satisfaction as '*the general attitude, which is the result of many specific attitudes in three areas namely: specific job factors, individual characteristics and group relationship outside the job'.*

The key characteristics of job satisfaction are explained in the table below.

Variable	Number of Items	Code used in SPSS and AMOS
Job Satisfaction	8	JS, JS1, JS2, JS3, JS4, JS5, JS7, JS8

Table 6.4 Job Satisfaction Characteristics

After clarifying the research variables and its operational definitions the next section presents the deceptive statistics using the above code labels.

6.3 Descriptive Analysis

6.3.1 Demographic Profile of Respondents

The demographic profile of the respondents is presented in this section to provide an insight into their composition, age, gender, education, work level and work field for both sample universities.

6.3.1.1 Age

In this research, the respondents' ages were classified into five categories: 18-24, 25-34, 35-44, 45-54 and 55-64. For King Abdulaziz University, the demographic profile of respondents showed that the majority belonged to the 35-44 age group (139, 39.8%), while for Dar Alhekma University, similar to King Abdulaziz, the majority of the respondents belonged to the 35-44 (92, 45.1%) age bracket, the results for which are presented in the tables below.

King Abdulaziz Public University		
	Frequency	Percent
18-24	63	18.1
25-34	88	25.2
35-44	139	39.8
45-54	58	16.6
55-64	1	.3
Total	349	100.0

Table 6.5 Age Distribution of Respondents in King Abdulaziz Public University

Dar Alhekma Private University		
	Frequency	Percent
18-24	63	30.9
25-34	48	23.5
35-44	92	45.1
45-54	1	.5
Total	204	100.0

Table 6.6 Age Distribution of Respondents in Dar Alhekma Private University

6.3.1.2 Gender

Gender distribution showed that the majority of the respondents in the public university were female (214, 61.3%), while males were (n = 135), constituting 38.7% of the total sample. For the private university, the majority of the respondents were female (122, 59.8%) while males were 82, constituting 40.2% of the sample.

King Abdulaziz Public University		
	Frequency	Percent
Female	214	61.3
Male	135	38.7
Total	349	100.0

Table 6.7 Gender distribution of respondents in King Abdulaziz Public University

Dar Alhekma Private University		
	Frequency	Percent
Female	122	59.8
Male	82	40.2
Total	204	100.0

Table 6.8 Gender distribution of respondents in Dar Alhekma Private University

6.3.1.3 Level of Education

Respondents were asked to reveal their level of education. In the public university, the majority of the respondents held a Masters/Doctorate degree (240, 68.8%). Similar to the public university, in the private university the majority of the respondents held a Masters/Doctorate degree (147, 72.1%).

King Abdulaziz Public University		
	Frequency	Percent
Diploma	1	.3

Degree	108	30.9
Master/Doctorate	240	68.8
Total	349	100.0

Table 6.9 Level of Education of respondents in King Abdulaziz Public University

Dar Alhekma Private University		
	Frequency	Percent
Degree	57	27.9
Master/Doctorate	147	72.1
Total	204	100.0

Table 6.10 Level of Education of respondents in Dar Alhekma Private University

6.3.1.4 Work field

Respondents were asked to reveal their work field. In the public university, the majority of the respondents were academics (223, 63.9%). Similar to the public university, in the private university the majority of the respondents were also academics (132, 64.7%).

King Abdulaziz Public University		
	Frequency	Percent
Academics	223	63.9
Non-Academics/Administrative Staff	126	36.1
Total	349	100.0

Table 6.11 Work field of Respondents in King Abdulaziz Public University

Dar Alhekma Private University		
	Frequency	Percent

Academics	132	64.7
Non-Academics/Administrative Staff	72	35.3
Total	204	100.0

Table 6.12 Work field of respondents in Dar Alhekma Private University

4.1.1.1 Work level

Respondents were asked to reveal their work field. In the public university, the majority were at non-managerial level (222, 63.6%). Similar to the public university, in the private university the majority were also non-managerial level (134, 65.7%).

King Abdulaziz Public University		
	Frequency	Percent
Non-managerial level	222	63.6
Mid-level	127	36.4
Total	349	100.0

Table 6.13 Work Level of Respondents in King Abdulaziz Public University

Dar Alhekma Private University		
	Frequency	Percent
Non-managerial level	134	65.7
Mid-level	70	34.3
Total	204	100.0

Table 6.14 Work Level of Respondents in Dar Alhekma Private University

The previous sections covered the demographics of King Abdulaziz University and Dar Alhekma University within this research. The next section presents the descriptive statistics.

6.4 Descriptive Statistics

This section presents in detail a descriptive analysis of the different constructs. Sample size, minimum & maximum value, measure of central tendency and standard deviation are all presented. For normality distribution testing, skewness and kurtosis were performed. All the items showed acceptable skewness and kurtosis and can be used in further analysis.

6.4.1 Leadership

Transformational Leadership

The purpose of adopting transformational leadership in this research was to understand whether leaders working in public or private universities in Saudi Arabia work with academics and administrative staff, in order to identify needed change, create a vision to guide the change through inspiration and execute change in tandem with committed members of the group. In order to develop this understanding, descriptive statistics were employed.

The descriptive statistics table for transformational leadership reveals that at King Abdulaziz University there is a lack of transformational leadership; however, in comparison to the public sector, at Dar Alhekma University, academics and administrative staff perceive transformational characteristics of leadership to a greater extent.

The transformational leadership factor was also analysed for skewness and kurtosis, to see whether the data were normally distributed. The following table shows that all the items were normally distributed, as all of them fell within the range of ±2. Descriptive statistics results for transformational leadership at King Abdulaziz University and at Dar Alhekma University are shown in Appendix 6A.

Transactional Leadership

The purpose of adopting transactional leadership in this research is to understand whether leaders working in public or private universities in Saudi Arabia work with academics and administrative staff, by focusing on the role of supervision, organisation and group performance. Transactional leadership is a style of leadership in which the leader promotes compliance from his/her employees through rewards and punishment. In order to develop this understanding, descriptive statistics were employed.

Descriptive statistics for transactional leadership reveal that at King Abdulaziz University there is a higher level of transactional leadership practices; however, in comparison to the public university, at Dar Alhekma University there is a lower level of transactional leadership practices in place. The transactional leadership factor was also analysed for skewness and kurtosis, to see whether the data were normally distributed. The following table shows that all of the items were indeed normally distributed, as they were within the range of ±2. Descriptive statistics results for transactional leadership in the public and private universities are shown in Appendix 6B.

6.4.2 Productive Organizational Energy

Productive organisational energy refers to the joint experience and demonstration of agentic behaviour among members. Descriptive statistics for productive organisational energy reveal that in both public and private sector universities there is almost a similar level of productive organisational energy. This factor was also analysed for skewness and kurtosis, to see whether the data were normally distributed. The following table shows that all of the items were normally distributed, as they all fell within the range of ±2. Descriptive statistics results for productive organisational energy in public and private universities are shown in Appendix 6C.

6.4.3 Job Satisfaction

Job satisfaction refers to the level of content a respondent receives from their job. Descriptive statistics for job satisfaction reveal that in both public and private sector universities there is almost a similar level of job satisfaction. This factor was also analysed for skewness and kurtosis, to see whether the data were normally distributed. The following table shows that all the items were normally distributed, as they all fell within the range of ±2. Descriptive statistics results for job satisfaction in the public and private sector are shown in the tables in Appendix 6D.

6.4.4 Summary of the Descriptive Statistics

Prior to exploring and describing the factor analysis and structural equations, demographics modelling and descriptive analysis are presented. The demographic profile showed the majority of the respondents at King Abdulaziz University were within the range 35-44 years and the range 25-34, showing only one respondent between 55-64 years. In Dar Alhekma University similar results were presented, whereby the majority of the respondents fitted within the range 35-44, though in this case no respondents were over the age of 55 years. Concerning gender differences in the collected data, in both universities the majority of respondents were female. The level of education showed that most of the respondents at King Abdulaziz University were Masters/Doctorate holders, at a percentage of 68.8%, similar to Dar Alhekma with a percentage of 72.1%, with no employees being diploma holders. Furthermore, the field data for King Abdulaziz University illustrated that the respondents were academics, with a frequency of 223, whilst there were 132 academic respondents at Dar Alhekma University.

6.5 Factor Analysis

In the previous sections the research's descriptive analyses were presented for leadership style, productive organisational energy and job satisfaction at both universities.

After conducting the descriptive analyses, namely demographics and statistics, factor analysis was performed to identify any underlying factors. As mentioned previously in section 5.11, factor analysis is used to determine what items should be included in or excluded from further analysis.

6.5.1 Assumptions

Before the data were factor analysed, it was important to make sure that they were appropriate and would pass the required assumptions for the analysis. First, it was important to make sure that an adequate sample was available for factor analysis. Essentially, large enough samples were required to make sure that the correlations would offer a good representation of the population values. There are a number of "rules of thumb" proposed to indicate what constitutes a large enough dataset: there should be at least 200 scores overall (Hinton, 2004). Field (2005) suggests that a sample size of 300 or over should provide a stable factor solution. The current research study consists of 349 valid responses collected from King Abdulaziz University and 204 valid responses collected from Dar Alhekma University.

A method used to check sample adequacy is the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. The data are judged to be factorable if the KMO measure of sampling adequacy is greater than .60 (Huck, 2012). The KMO statistic ranges from 0 to 1. Any value over 0.6 is regarded as acceptable for factor analysis (Pallant, 2011), as values below this would mean that the factor analysis will not be able to account for much variability in the data, and so is not worth undertaking (Hinton, 2004). The results for the KMO measure of sampling adequacy revealed values for all constructs close to 1, indicating that the sampling conditions were satisfied for the analysis.

Once it was affirmed that the sample was adequate for factor analysis, inter-variable correlation analysis was conducted for the constructs to be factor analysed. To be considered suitable for factor analysis, the correlation matrix should show at least some correlations of $r = .3$ or greater (Pallant, 2011). A situation may arise whereby the inter-variable correlation may be too high, thereby resulting in multicollinearity. The correlation matrix along with the determinant statistics was examined, as this option is vital for testing multicollinearity. If the value of determinant is less than the prescribed value, variables that correlate highly shall be eliminated ($r > 0.8$). Inter-variable correlation and determinant statistics for each construct were examined. The results for inter-variable correlation are summarised in the table below.

	No. of Items	Multicollinearity	Item(s) removed	Items remaining
King Abdulaziz University				
Productive Organisational Energy	14	-	-	14
Job satisfaction	8	-	-	8

Transformational leadership	20	-	-	20
Transactional leadership	16	-	-	16

Table 6.15 Multicollinearity results at King Abdulaziz University

Dar Alhekma University				
Productive Organisational Energy	14	-	-	14
Job satisfaction	8	-	-	8
Transformational leadership	20	-	-	20
Transactional leadership	16	-	-	16

Table 6.16 Multicollinearity results at Dar Alhekma University

Based on the discussion above, items depicting multicollinearity should be deleted from further analysis. However, the table showed that there was no multicollinearity in either sample.

The second test is Bartlett's test of sphericity. This examines the correlation matrix. A significant Bartlett's test indicates that the correlation matrix is significantly different from the identity matrix. All constructs have a significant Bartlett's test of sphericity, and thus the correlation matrix is significantly different from an identity matrix. The results for the Bartlett's test of sphericity and KMO measure of sampling adequacy are summarised in the following table. Wherein (a) Kaiser-Meyer-Olkin Measure of Sampling Adequacy (b) Bartlett's test of sphericity and * p<.00.

King Abdulaziz University			
	KMO[a]	BTS[b]	
		Chi-Sq χ^2	Sig
Productive organisational energy	.931	2575.519	.000*
Job satisfaction	.908	1342.287	.000*

Transformational leadership	.920	1617.868	.000*
Transactional leadership	.952	3842.309	.000*

Table 6.17 KMO and Bartlett's Test results at King Abdulaziz University

Alhekma University			
	KMO[a]	BTS[b]	
		Chi-Sq χ^2	Sig
Productive organisational Energy	.931	1651.020	.000*
Job satisfaction	.888	872.854	.000*
Transformational leadership	.937	3647.738	.000*
Transactional Leadership	.901	1003.482	.000*

Table 6.18 KMO and Bartlett's Test results at Dar Alhekma University

For factor analysis in the present study, principal axis factoring with direct oblimin rotation was used. An important step in factor analysis is the decision on the number of factors that shall be extracted. One of the most commonly used techniques is known as Kaiser's criterion, or the eigenvalue rule. Using this rule, only factors with an eigenvalue of 1.0 or more are retained for further investigation (Pallant, 2011). Thus, big eigenvalues imply useful factors, whereas small eigenvalues imply superfluous factors. When researchers apply a Kaiser's criterion, factors are retained only if they have eigenvalues larger than 1.0. The present study utilised eigenvalues to retain factors. Tabachnick and Fidell (2001) cite 0.32 as a good rule of thumb for the minimum loading of an item. According to Costello & Osborne (2005), it is common in social science studies that a magnitude of 0.4 to 0.7 is acceptable, where communality of less than 0.4 may be not related to other items or suggests exploring a new factor. Hence, for the current research study the minimum factor loading criterion was set .40. The discussion above acts as an introduction to the next section, namely the component matrix and factor analysis.

6.5.2 Component Matrix

After testing the assumptions for each of the constructs, they were subjected to factor analysis. Factor analysis results for each construct are described in the section below.

6.5.2.1 Leadership

The leadership construct was made up of two different constructs, namely transformational and transactional leadership, and both constructs were subjected to factor analysis. The results of the analysis are summarised below.

Transformational Leadership

A total of 20 items made up the transformational leadership scale. For King Abdulaziz University, the items were subjected to factor analysis. Initially the factor structure revealed five factors, with three factors having fewer than three items. Items were removed stepwise and factor analysis was rerun. A total of eight items were removed. The factor structure is shown in the following table.

King Abdulaziz University

Factor	TR1	TR2	TR3	TR4	TR5	TR8	TR9	TR10	TR12	TR13	TR14	TR18
1	.592	.785	.697	.460	.633				.417			.522
2						.750	.672	.661		.573	.556	

Table 6.19 Transformational leadership component matrix result at King Abdulaziz University

For Alhekma University, the items were subjected to factor analysis. Initially the factor structure revealed two factors, with one factor having fewer than three items. Items were removed stepwise and factor analysis was rerun. A total of three items were removed. The factor structure is shown in the following table.

Alhekma University

Factor	TR 1	TR 2	TR 3	TR 4	TR 5	TR 6	TR 7	TR 8	TR 9	TR 10	TR 11	TR 12	TR 13	TR 14	TR 15	TR 16	TR 19
1	.738	.738	.801	.831	.767	.783	.801	.833	.671	.773	.781	.836	.792	.851	.678	.563	.821
2																	

Table 6.20 Transformational leadership component matrix result at Alhekma University

Transactional Leadership

A total of 16 items were subjected to factor analysis. For King Abdulaziz University all items in the scale loaded well onto the factor, and the analysis revealed a single factor solution. The results are in the table below.

King Abdulaziz University

Factor	TS 1	TS 2	TS 3	TS 4	TS 5	TS 6	TS 7	TS 8	TS 9	TS 10	TS 11	TS 12	TS 13	TS 14	TS 15	TS16
1	.807	.813	.794	.756	.739	.762	.812	.596	.716	.730	.787	.727	.796	.617	.714	.496
2																

Table 6.21 Transactional leadership component matrix result at King Abdulaziz University

For Alhekma University, transactional leadership revealed a three-factor solution. The results reveal that the third factor had only one item (TS9), while two items (TS8 and TS10) did not load well. The final factor structure for transactional leadership is shown in the following table.

Alhekma University

Factor	TS 1	TS2	TS3	TS4	TS5	TS6	TS7	TS11	TS12	TS13	TS14	TS 15	TS16

1		.594	.613	.600	.780	.754	.587						
2	.430							.639	.609	.638	.565	.796	.422

Table 6.22 Transactional leadership component matrix result at Alhekma University

6.5.2.2 Productive Organizational Energy

The productive organisational construct was subjected to factor analysis. A total of 14 items in the construct productive organisational energy were factor analysed. For King Abdulaziz University, the results showed two factor solutions. All items showed acceptable loadings. Two items (POE1 and POE14) were removed, due to low loading.

King Abdulaziz University

Factor	**POE 2**	**POE 3**	**POE 4**	**POE 5**	**POE 6**	**POE 7**	**POE 8**	**POE 9**	**POE 10**	**POE 11**	**POE 12**	**POE 13**
1	.401	.602	.821	.862	.800	.711						
2							.403	.612	.865	.804	.694	.518

Table 6.23 Productive organisational energy component matrix result at King Abdulaziz University

For Alhekma University, the results showed two factor solutions. All items showed acceptable loadings. One item (POE14) was removed, due to low loading.

Alhekma University

Factor	**POE 1**	**POE 2**	**POE 3**	**POE 4**	**POE 5**	**POE 6**	**POE 7**	**POE 8**	**POE 9**	**POE 10**	**POE 11**	**POE 12**	**POE 13**
1	.457	.508	.644	.822	.851	.911	.748						
2								.440	.659	.924	.757	.690	.532

Table 6.24 Productive organisational energy component matrix result in Alhekma University

6.5.2.3 Job Satisfaction

The job satisfaction construct comprised eight items. All items loaded well above the cut off score of .50 onto a single factor. Thus, all items in the factor represent the underlying latent variable job satisfaction.

King Abdulaziz University

Factor	JS1	JS2	JS3	JS4	JS5	JS6	JS7	JS8
1	.612	.823	.764	.713	.758	.761	.693	.580

Table 6.25 Job satisfaction component matrix result at King Abdulaziz University

Alhekma University

Factor	JS1	JS2	JS3	JS4	JS5	JS6	JS7	JS8
1	.561	.843	.760	.752	.784	.809	.690	.519

Table 6.26 Job satisfaction component matrix result at King Abdulaziz University

6.5.3 Factor Analysis Summary

Factor analysis is a collection of methods used for explaining correlations among variables in terms of more fundamental entities called "factors" (Cudeck, 2000; Gorsuch, 1988). In fact, exploratory factor analysis has played an important role in research studies conducted in the social sciences for more than 100 years (Fabrogar and Wegener, 2011).

Exploratory factor analysis was performed on productive organisational energy, job satisfaction and transformational and transactional leadership for both universities. Except for job satisfaction at both universities and transformational leadership at the private one, all constructs were multidimensional. The following table shows the summary of factor analysis for all the factors in the present study.

Constructs	No. of items	No. of items eliminated	Factors extracted

King Abdulaziz University			
Transformational leadership	20	8	2
Transactional leadership	16	-	1
Productive organisational energy	14	2	2
Job satisfaction	8	-	1

Table 6.27 Factor Analysis Summary Abdulaziz University

Constructs	No. of items	No. of items eliminated	Factors extracted
Alhekma University			
Transformational leadership	20	3	2
Transactional leadership	16	3	2
Productive organisational energy	14	1	2
Job satisfaction	8	-	1

Table 6.28 Factor Analysis Summary Alhekma University

6.5.4 Reliability

A Cronbach's alpha test was used to test the reliability of the constructs, which ranged between .886 and .964. The results indicate that the reliability of all the constructs was well above .8 (Field, 2005), which indicates good reliability was attained. Descriptive for scale item if deleted were also analysed, to check if there was a substantial increase in reliability upon the deletion of an item. It was found that removing an item would not improve construct reliability. The results of the alpha reliability test are shown in the following table.

Construct	Cronbach's Alpha	No. of Items
King Abdulaziz University		

Productive Organisational Energy	.915	12
Job satisfaction	.892	8
Transformational leadership	.889	12
Transactional leadership	.947	16

Table 6.29 Factor Analysis Summary King Abdulaziz University

Construct	Cronbach's Alpha	No. of Items
Alhekma University		
Productive organisational energy	.925	13
Job satisfaction	.894	8
Transformational leadership	.962	17
Transactional leadership	.886	13

Table 6.30 Factor Analysis Summary Alhekma University

Based on the analysis outline and objectives, the previous sections covered, in order: descriptive analysis, multicollinearity test, Kaiser-Meyer-Olkin Measure of Sampling Adequacy, Bartlett's test of sphericity, factor analysis and Cronbach's alpha reliability test. A good indication based on the tests' results that led to the second and main phases of analysis was structural equation modelling.

6.6 Structural Equation Modelling

This section focuses on the process of multivariate analysis, using structural equation modelling, and is divided into various subsections. The first section presents an evaluation of the measurement models, where all research variables are subjected to the confirmatory factor analysis test. The second and last sections illustrate the structural equation models for leadership style, namely transformation and transactional, productive organisational energy and job satisfaction.

6.6.1 Evaluations of Measurement Models

The present study involved different research variables, as illustrated. This section subjected each of the variables to confirmatory factor analysis (CFA), to test if the data fitted the measurement and structural model. After determining the optimum number of factors through (CFA) and testing the reliability and validity of the data, the next step taken was to confirm the fitness of the theoretical model to the data (Long & Perkins, 2003).

6.6.1.1 Transformational Leadership

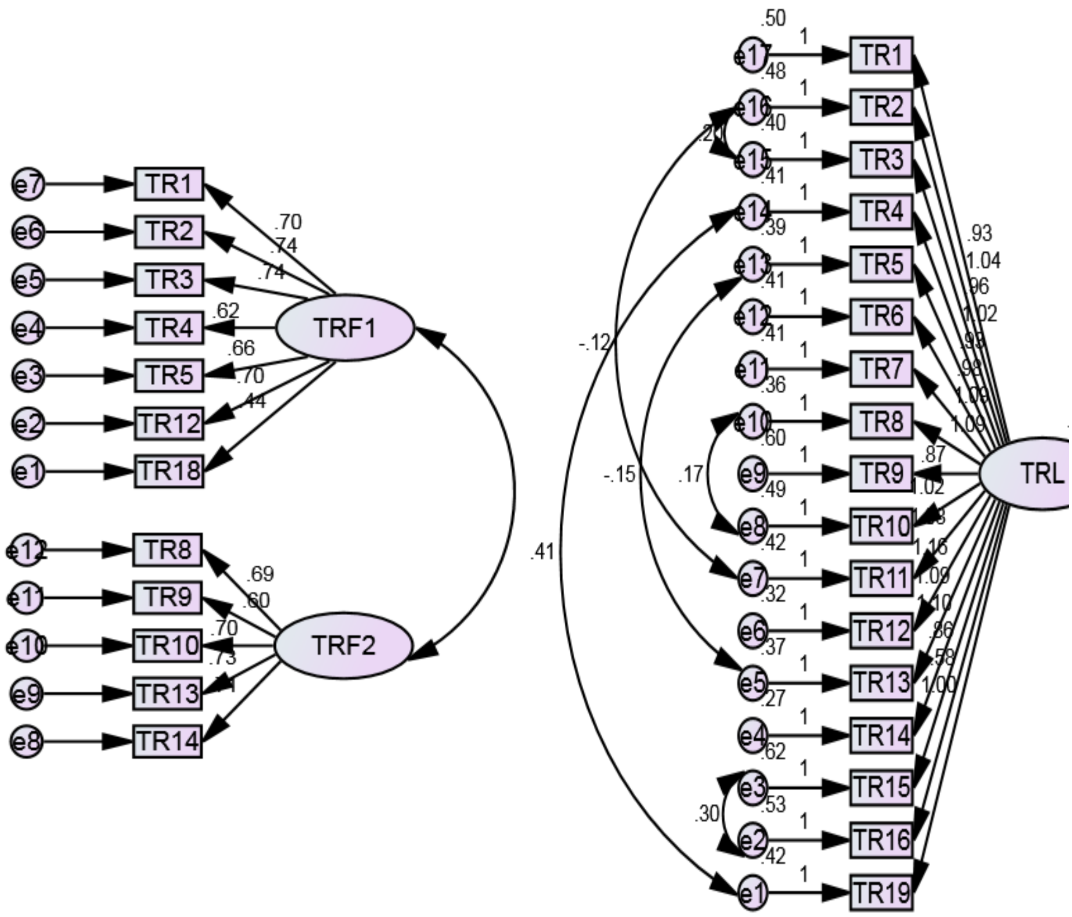
The transformational leadership variable comprised a total of 20 items. For King Abdulaziz University, in the exploratory factor analysis (EFA) the construct showed two factors, and a total of 12 items were subjected to CFA and eight items removed during EFA. None of the items was removed during CFA, and the final model did reveal an adequate fit.

For Dar Alhekma University, three items were removed during exploratory factor analysis (EFA); none of the items was removed during CFA. The final model did reveal an adequate fit.

RMSEA was slightly higher, while other indices showed good fit. A detailed transformational leadership table of attained findings is presented in Appendix 6E. The following table shows the loadings and fit indices for both universities with respect to the transformational leadership variable.

	Attained Fit Indices				
	CMIN/DF (χ^2/df)	**SRMR**	**CFI**	**TLI**	**RMSEA**
King Abdulaziz University	2.338(123.934/53)	.04	.95	.94	.06
Alhekma University	2.314(261.516/113)	.04	.96	.95	.08

Table 6.31 Transformational leadership summary of fit indicators



King Abdulaziz University Alhekma University

Figure 6.1 Transformational Leadership Measurement Model

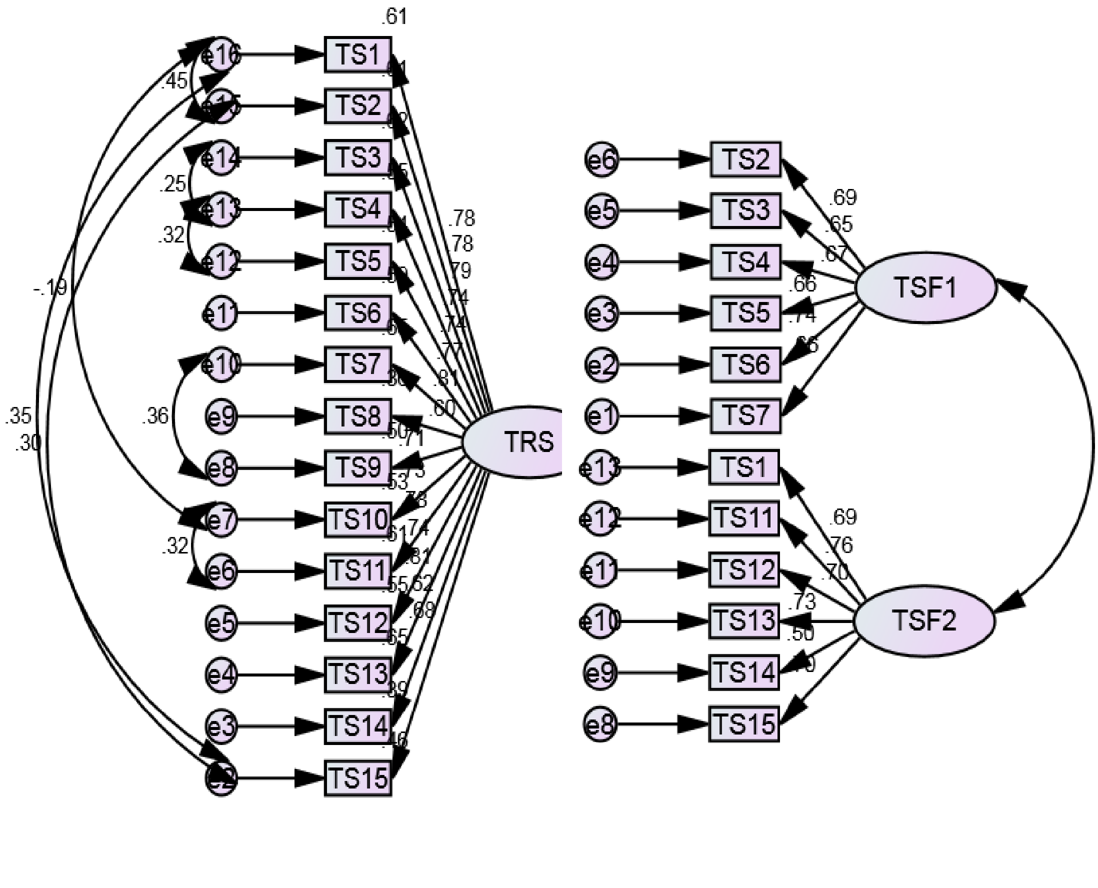
6.6.1.2 Transactional Leadership

The transactional leadership construct comprised a total of 16 items. For King Abdulaziz University, in the exploratory factor analysis, the construct showed one factor, and a total of 16 items were subjected to CFA. One item (TS16) was removed during CFA, due to low loading, and the final model did reveal an adequate fit. Modification indices were evaluated and covariance was drawn. For Dar Alhekma University, the exploratory factor analysis revealed two factors, the transactional leadership construct was subjected to CFA and only one item from factor two (TS16) was removed, due to low loading. The final model did reveal an adequate fit. The detailed transactional leadership table of attained findings is presented in Appendix

6F. The following table shows the loadings and fit indices for both universities with respect to the transactional leadership variable.

	Attained Fit Indices				
	CMIN/DF (χ^2/df)	**SRMR**	**CFI**	**TLI**	**RMSEA**
King Abdulaziz University	2.894(237.284/82)	.03	.96	.94	.07
Alhekma University	1.968(104.323/53)	.05	.95	.93	.06

Table 6.32 Transactional leadership summary of fit indicators



King Abdulaziz University **Alhekma University**

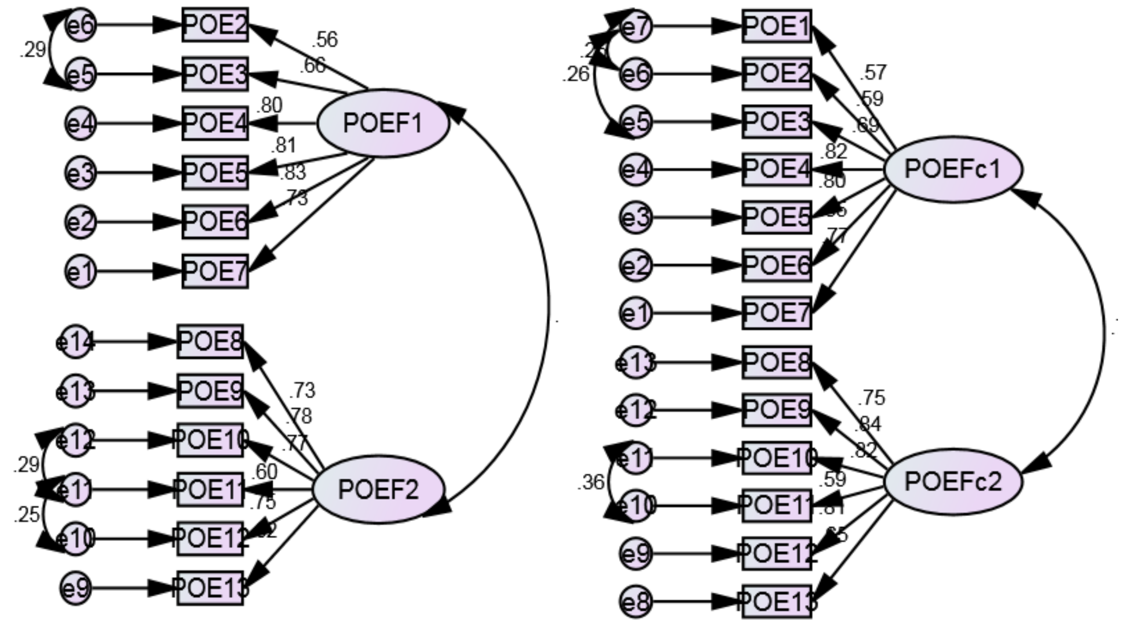
Figure 6.2 Transactional Leadership Measurement Model

6.6.1.3 Productive Organizational Energy

The productive organisational energy construct comprised 14 items. For King Abdulaziz University, two items were removed during exploratory factor analysis. The items were further subjected to CFA. The results indicate a good fit was attained for the productive organisational energy variable. For Dar Alhekma University, one item from the productive organisational energy variable was removed during exploratory factor analysis. The remaining 13 items were subjected to CFA, modification indices were examined and covariance was drawn between error terms of similar variables. The final model revealed a good fit. The productive detailed organisational energy table of attained findings is presented in Appendix 6G. The measurement model along with the factor loading is presented in the table below.

	Attained Fit Indices				
	CMIN/DF (χ^2/df)	**SRMR**	**CFI**	**TLI**	**RMSEA**
King Abdulaziz University	2.469(123.460/50)	.04	.96	.945	.06
Alhekma University	1.655 (100.955/61)	.04	.97	.967	.05

Table 6.33 Transactional leadership summary of fit indicators



King Abdulaziz University **Alhekma University**

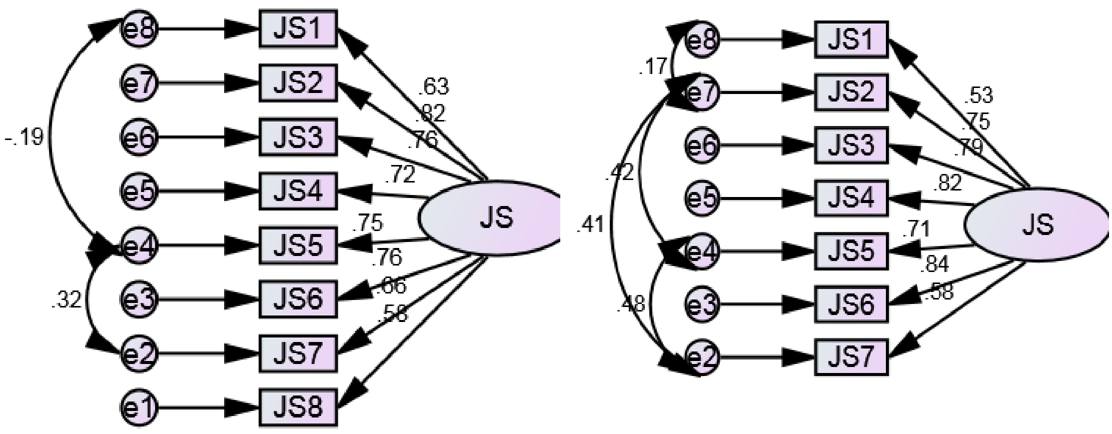
Figure 6.3 Productive Organisational Energy Measurement Model

6.6.1.4 Job Satisfaction

Job satisfaction comprised a total of eight items. For King Abdulaziz University, none of the items was removed during the exploratory factor analysis stage. The items were further subjected to CFA, and initially the model did not reveal an adequate fit. Loadings and modification indices were examined, covariances were drawn between error terms and the final model did show a good fit. For Dar Alhekma University, none of the items was removed during the exploratory factor analysis stage. The items were further subjected to CFA, and initially the model did not reveal an adequate fit. Loadings and modification indices were examined and one item (JS8) was removed, due to high covariance. Covariances were drawn between error terms; the final model for Dar Alhekma University did show a good fit. The detailed job satisfaction table of attained findings is presented in Appendix 6H.

	Attained Fit Indices				
	CMIN/DF (χ^2/df)	**SRMR**	**CFI**	**TLI**	**RMSEA**
King Abdulaziz University	2.544(45.793/18)	.03	.98	.96	.06
Alhekma University	2.274(22.736/10)	.02	.98	.96	.08

Table 6.34 Job satisfaction summary of fit indicators



King Abdulaziz University **Alhekma University**

Figure 6.4 Job Satisfaction Measurement Model

6.6.2 Summary

In the previous section the researcher presented the measurement model for the present research study, namely transformational, transactional leadership, productive organisational energy and job satisfaction. All models showed and revealed adequate and good fits. In other words, the datasets that were collected from the universities were ready to be examined and the research hypotheses could be tested. The next section presents analysis details, figures and tables for the analytical tests.

6.7 Regression Analysis

In the social sciences context, regression is one of the most commonly used predictive analysis tests (Seber & Lee, 2012). As mentioned previously in section 5.10, it was important to conduct regression analysis in order to describe the relationship between one dependent and one or more independent variables. The reasons for conducting the linear regression test before running the path analysis to develop finally the structural equation models were: analysing the direction of the data, estimating the model and evaluating the validity and usefulness of the model (Freedman, 1987; Duncan, 1966; Seber and Lee, 2012). This section presents the hypothesis testing, path analysis and development of the structural equation models.

Hypotheses tests code labels	
Transformational leadership	TRL
Transactional leadership	TSL
Productive Organizational Energy	POE
Job Satisfaction	JS

Table 6.35 Hypothesis Code Labels

Hypothesis 1: **Transformational and Transactional leadership predict Job Satisfaction in King Abdulaziz public university in Saudi Arabia.**

The research hypothesis (1) seeks to evaluate the influence of both forms of leadership on job satisfaction at King Abdulaziz University. The dependent variable (job satisfaction) was regressed on predicting variables of transformational and transactional leadership. The results reveal that the independent variables (transformational and transactional leadership) explain 45.8% (R-Square) of the variance in the dependent variable (job satisfaction). The results indicate that the 45.8% variation in job satisfaction can be attributed to transformational and transactional leadership.

As for the significance, the results show that overall the model was found to be significant F (2, 348) = 146.436, $p < .001$. Furthermore, the analysis of coefficients shows that at King Abdulaziz University, the influence of transformational leadership on job satisfaction was insignificant; however, the influence of transactional leadership was found to be significant.

Hypothesis	Regression Weights	t	R^2	F	p-value	Hypothesis Supported
			.458	146.436		
H_{1a}	TRL → JS	-.653			.514	No
H_{1b}	TSL → JS	16.318	.		.000	Yes

Table 6.36 Results of Hypothesis (1a, 1b)

Hypothesis 2: **Transformational and Transactional leadership predict Productive Organizational Energy in King Abdulaziz public university in Saudi Arabia.**

The research hypothesis (2) seeks to evaluate the influence of both forms of leadership on productive organisational energy at King Abdulaziz University. The dependent variable (productive organisational energy) was regressed on predicting variables of transformational and transactional leadership. The results reveal that the independent variables (transformational and transactional leadership) explain a 48.1% (R-Square) variance in the dependent variable (productive organisational energy), thereby indicating that 48.1% variation in productive organisational energy can be attributed to transformational and transactional leadership.

As for significance, the results shows that overall the model was found to be significant F (2, 348) = 160.169, $p < .001$. Furthermore, the analysis of coefficients showed that at King Abdulaziz University, the influence of transformational leadership on productive organisational energy was insignificant, albeit the influence of transactional leadership was found significant.

Hypothesis	Regression Weights	t	R^2	F	p-value	Hypothesis Supported
			.481	160.169		
H_{2a}	TRL → POE	-1.407			.160	No
H_{2b}	TSL → POE	16.834	.		.000	Yes

Table 6.37 Results of Hypothesis (2a, 2b)

Hypothesis 3: **Transformational and Transactional leadership predict Job Satisfaction in Dar Alhekma private university in Saudi Arabia.**

The research hypothesis (3) seeks to evaluate the influence of both forms of leadership on job satisfaction at Dar Alhekma University. The dependent variable (job satisfaction) was regressed on predicting variables of transformational and transactional leadership. The results reveal that the independent variables (transformational and transactional leadership) explain a 4.4% (R-Square) variance in the dependent variable (job satisfaction), indicating that the 42.4% variation in job satisfaction can be attributed to transformational and transactional leadership.

As for significance, the results show that overall the model was significant F (2, 203) = 73.927, $p < .001$. Furthermore, the analysis of coefficients showed that at Dar Alhekma University, the influence of transformational leadership on job satisfaction was significant, albeit the influence of transactional leadership was insignificant.

Hypothesis	Regression Weights	t	R^2	F	p-value	Hypothesis Supported
			.424	73.927		
H_{3a}	TRL → JS	11.747			.000	Yes
H_{3b}	TSL → JS	.456	.		.649	No

Table 6.38 Results of Hypothesis (3a, 3b)

Hypothesis 4: **Transformational and Transactional leadership predict Productive Organizational Energy in Dar Alhekma private university in Saudi Arabia.**

The research hypothesis (4) seeks to evaluate the influence of both forms of leadership on productive organisational energy at Dar Alhekma University. The dependent variable (productive organisational energy) was regressed on predicting variables of transformational and transactional leadership. The results reveal that the independent variables (transformational and transactional leadership) explain a 49% (R-Square) variance in the dependent variable (productive organisational energy). The resulting 49% variation in productive organisational energy can be attributed to transformational and transactional leadership.

As for significance, the results show that overall the model was significant F (2, 203) = 96.439, p < .001. Furthermore, the analysis of coefficients showed that at Dar Alhekma University, the influence of transformational leadership on productive organisational energy was significant, albeit the influence of transactional leadership was insignificant.

Hypothesis	**Regression Weights**	**t**	**R^2**	**F**	**p-value**	**Hypothesis Supported**
			.490	96.439	.000	
H_{4a}	TRL → POE	13.029			.000	Yes
H_{4b}	TSL → POE	-.760	.		.448	No

Table 6.39 Results of Hypothesis (4a, 4b)

6.7.1 Summary

The previous section can be considered a stepping stone for the research analysis chapter. The section covered the results of the initial analysis test, namely linear regression analysis using SPSS. Hypotheses 1, 2, 3 and 4 were tested, and the outcomes showed decent and acceptable results that contribute to the present research. The next section offers the tests for hypotheses 5 to 18 and also presents the structural equation models.

6.8 Structural Equation Modeling

Hypothesis 5: **There is a statistically significant positive relationship between transformational leadership and job satisfaction at King Abdulaziz public university in Saudi Arabia.**

The model evaluated the impact of transformational leadership on job satisfaction at King Abdulaziz University, revealing an adequate fit, and hence none of the items was removed from the analysis. The hypothesis was evaluated based on the standardised coefficient, its critical ratio and significance level. The estimation of hypothesis demonstrated that transformational leadership has a significant influence on job satisfaction at King Abdulaziz University, albeit reversed in direction. That is to say that adopting transformational leadership at King Abdulaziz University will lead to academic and administrative staff dissatisfaction of up to 22.3%. The following table shows the fit indices and path analysis.

CMIN/DF (χ^2/df)	SRMR	CFI	TLI	RMSEA	Path	Standardized loading	C.R	P
2.006(345.103/167)	.04	.94	.93	.05	TRL→JS	-.223	-3.180	.000

Table 6.40 Results of Hypothesis (5)

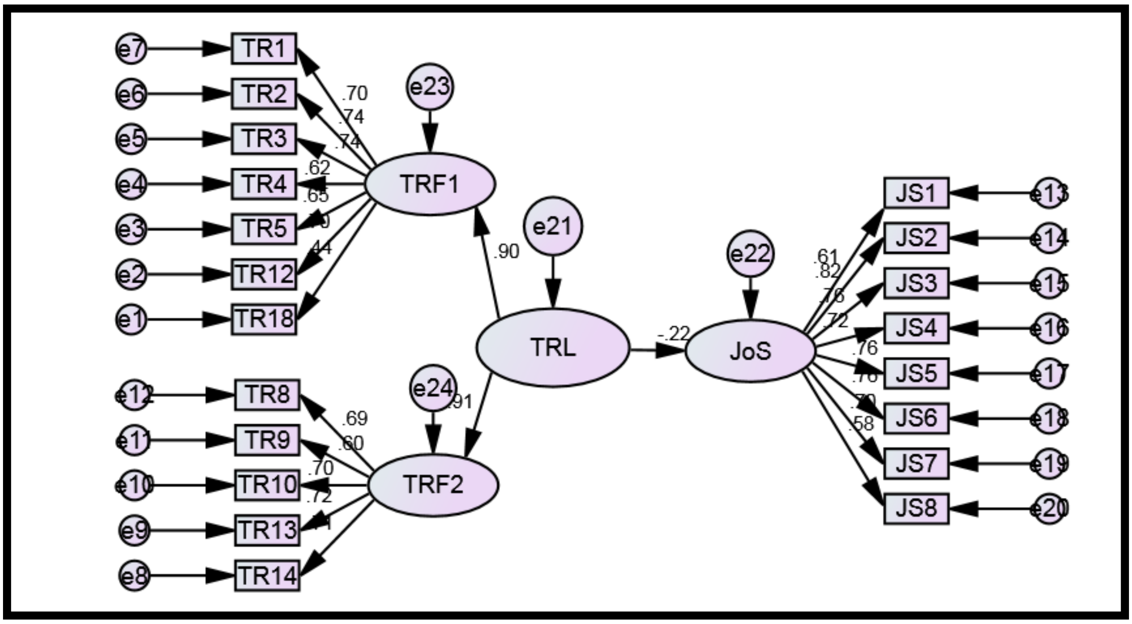


Figure 6.5 Structural Model (A) Transformational Leadership and Job Satisfaction in King Abdulaziz public university

Hypothesis 6: **There is a statistically significant positive relationship between transactional leadership and job satisfaction at King Abdulaziz public university in Saudi Arabia.**

The model evaluated the impact of transactional leadership on job satisfaction at King Abdulaziz University. Initially, it did not reveal an adequate fit, and so loadings, modification indices and covariances were analysed. One Item (JS8) was removed from the analysis, and then the final model showed an adequate fit. The hypothesis was evaluated based on the standardised coefficient, its critical ratio and significance level. The estimation of the hypothesis demonstrated that transactional leadership has a significant influence on job satisfaction at King Abdulaziz University. The following table shows the fit indices and path analysis.

CMIN/DF (χ^2/df)	SRMR	CFI	TLI	RMSEA	Path	Standardized loading	C.R	P
2.605(518.396/199)	.04	.94	.93	.07	TSL→JS	.673	8.714	.000

Table 6.41 Results of Hypothesis (6)

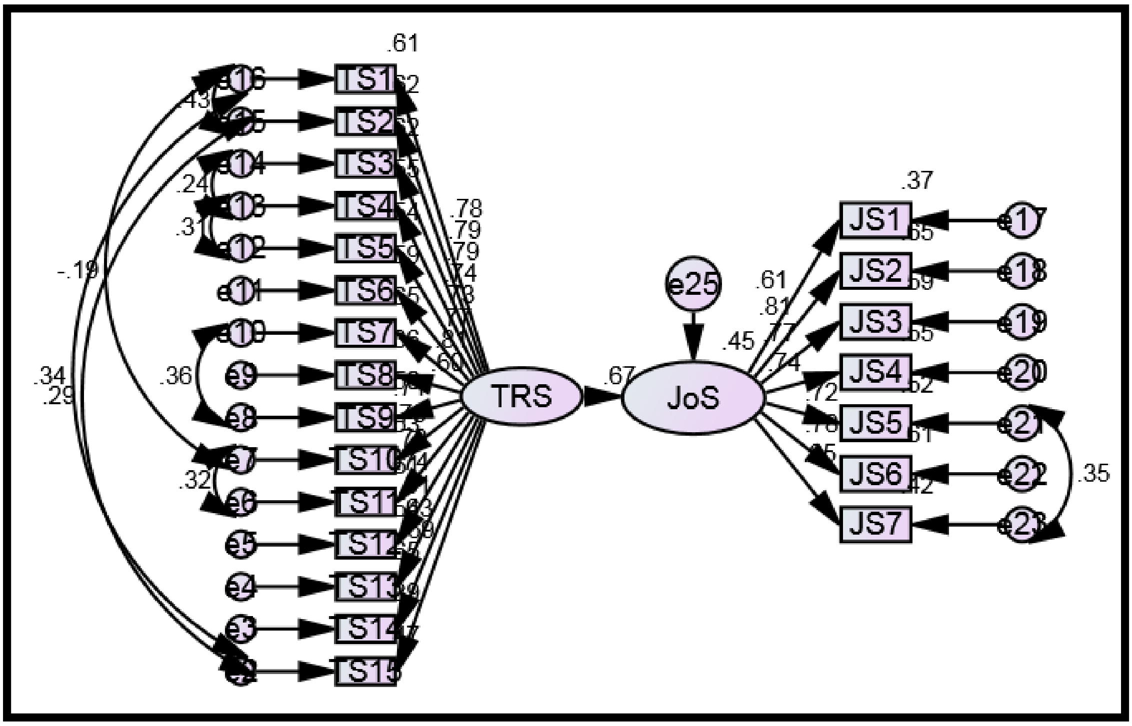


Figure 6.6 Structural Model (B) Transactional Leadership and Job Satisfaction in King Abdulaziz public university

Hypothesis 7: **There is a statistically significant positive relationship between Productive Organizational Energy and job satisfaction at King Abdulaziz public university in Saudi Arabia.**

The model evaluated the impact of productive organisational energy on job satisfaction at King Abdulaziz University. Initially, it did not reveal an adequate fit, and so loadings, modification indices and covariances were analysed. One Item (JS8) was removed from the analysis, and the final model showed an adequate fit. The hypothesis was evaluated based on the standardised coefficient, its critical ratio and significance level. The estimation of the hypothesis demonstrated that productive organisational energy has a significant influence on job satisfaction at King Abdulaziz University. The following table shows the fit indices and path analysis.

CMIN/DF (χ^2/df)	SRMR	CFI	TLI	RMSEA	Path	Standardized loading	C.R	P
2.556(370.577/145)	.04	.94	.93	.07	POE→JS	.746	7.863	.000

Table 6.42 Results of Hypothesis (7)

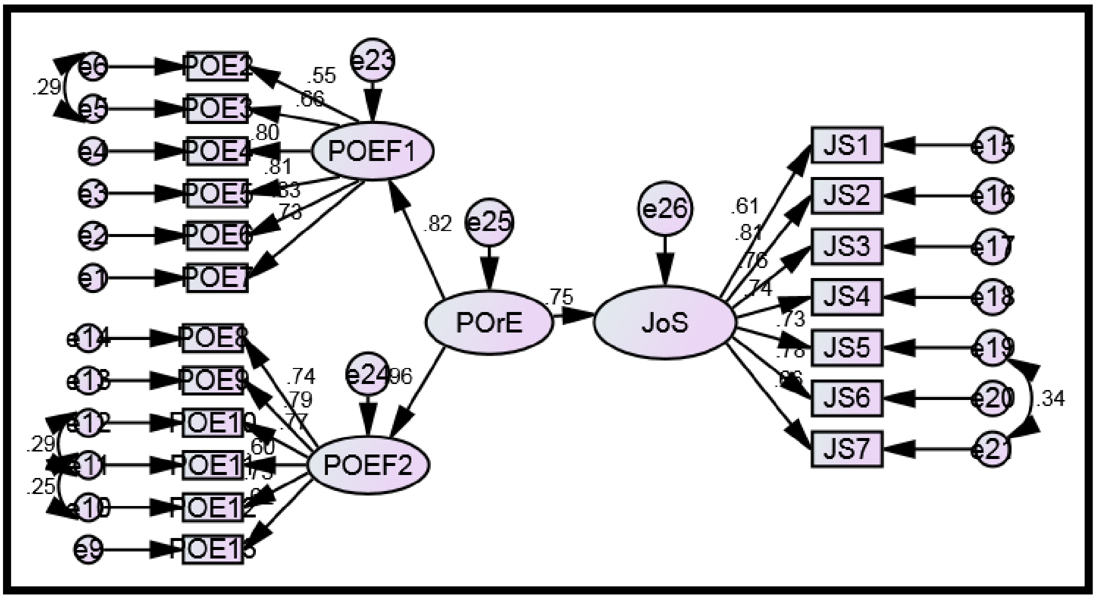


Figure 6.7 Structural Model (C) Productive Organizational Energy and Job Satisfaction in King Abdulaziz public university

Hypothesis 8: **There is a statistically significant positive relationship between Transformational leadership and Productive Organizational Energy at King Abdulaziz public university in Saudi Arabia.**

The model evaluated the impact of transformational leadership on productive organisational energy. It revealed an adequate fit, and hence none of the items was removed from the analysis. The hypothesis was evaluated based on the standardised coefficient, its critical ratio and significance level. The estimation of the hypothesis demonstrated that transformational leadership has a negative significant influence on productive organisational energy at King Abdulaziz University. The following table shows the fit indices and path analysis.

CMIN/DF (χ^2/df)	SRMR	CFI	TLI	RMSEA	Path	Standardized loading	C.R	P
1.707(416.449/244)	.05	.95	.95	.04	TRL→POE	-.260	-3.596	.000

Table 6.43 Results of Hypothesis (8)

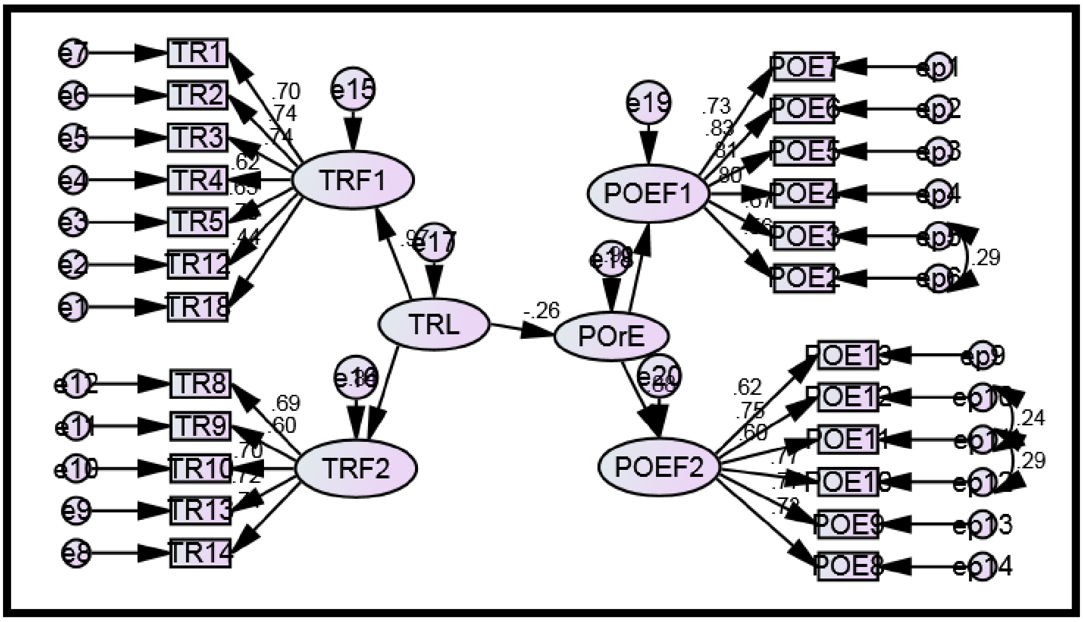


Figure 6.8 Structural Model (D) Transformational Leadership and Productive Organizational Energy in King Abdulaziz public university

Hypothesis 9: **There is a statistically significant positive relationship between transactional leadership and productive organisational energy at King Abdulaziz University in Saudi Arabia.**

The model evaluated the impact of transactional leadership on productive organisational energy and revealed an adequate fit; hence, none of the items was removed from the analysis. The hypothesis was evaluated based on the standardised coefficient, its critical ratio and significance level. The estimation of the hypothesis demonstrated that transactional leadership has a significant influence on productive organisational energy at King Abdulaziz University. The following table shows the fit indices and path analysis.

CMIN/DF (χ^2/df)	SRMR	CFI	TLI	RMSEA	Path	Standardized loading	C.R	P
2.318(716.152/309)	.05	.93	.93	.06	TSL→POE	.781	9.469	.000

Table 6.44 Results of Hypothesis (9)

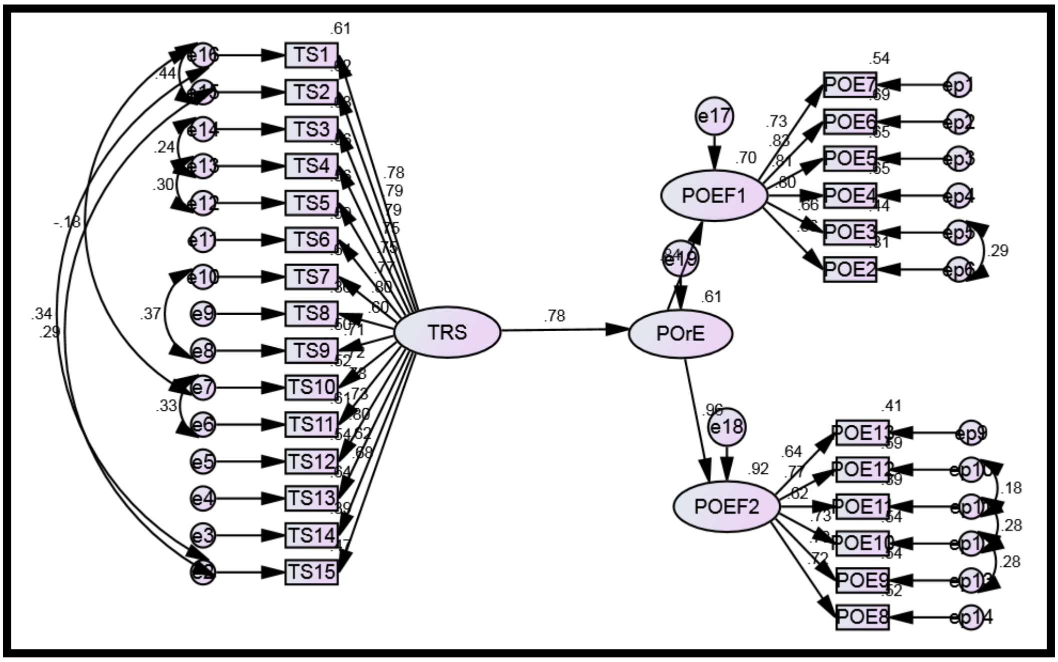


Figure 6.9 Structural Model (E) Transactional Leadership and Productive Organizational Energy in King Abdulaziz public university

Hypothesis 10: **There is a statistically significant positive relationship between transformational leadership and job satisfaction at Dar Alhekma University in Saudi Arabia.**

The model evaluated the impact of transformational leadership on job satisfaction at Dar Alhekma University, revealing an adequate fit, and hence none of the items was removed from the analysis. The hypothesis was evaluated based on the standardised coefficient, its critical ratio and significance level. The estimation of the hypothesis demonstrated that transformational leadership has a significant influence on job satisfaction at Dar Alhekma University. The following table shows the fit indices and path analysis.

CMIN/DF (χ^2/df)	SRMR	CFI	TLI	RMSEA	Path	Standardized loading	C.R	P
2.042(487.962/239)	.04	.95	.94	.07	TRL→JS	.718	7.105	.000

Table 6.45 Results of Hypothesis (10)

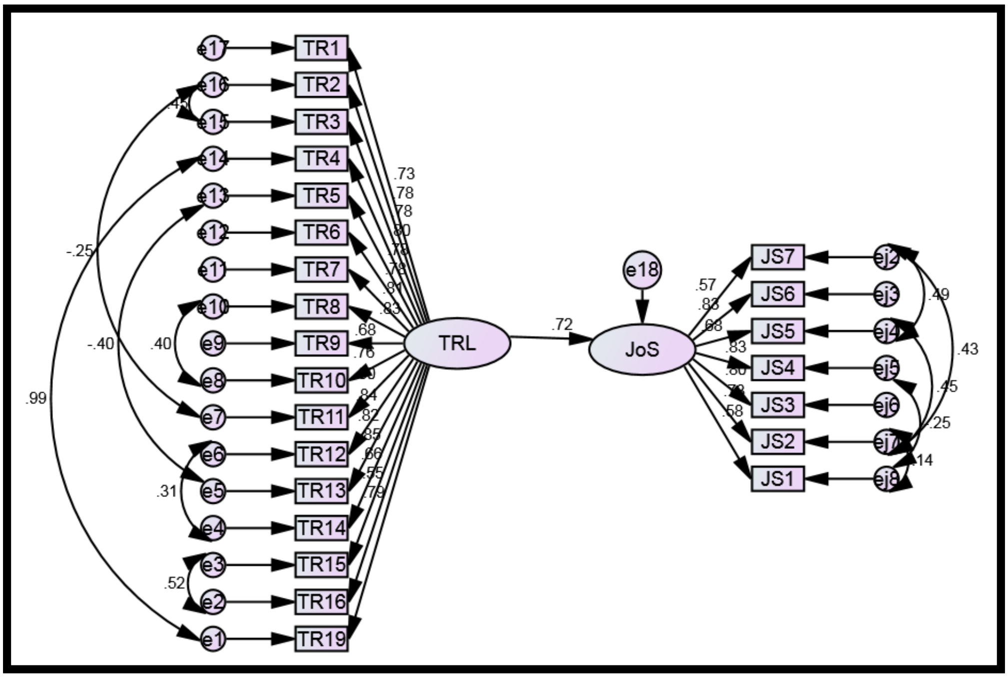


Figure 6.10 Structural Model (F) Transformational Leadership and job Satisfaction in Dar Alhekma private university

Hypothesis 11: **There is a statistically significant positive relationship between Transactional leadership and Job Satisfaction at Dar Alhekma private university in Saudi Arabia.**

The model evaluates the impact of transactional leadership on job satisfaction in Dar Alhekma private university. Initially the model revealed an adequate fit and hence no items were removed. The hypothesis was evaluated based on the standardized coefficient, its critical ratio, significance level. The estimation of hypotheses demonstrated that transactional leadership has an insignificant influence on job satisfaction in Dar Alhekma private university. The following table shows the fit indices and path analysis.

CMIN/DF (χ^2/df)	SRMR	CFI	TLI	RMSEA	Path	Standardized loading	C.R	P
1.642(-/-)	.06	.95	.94	.05	TSL→JS	-.089	-.306	.759

Table 6.46 Results of Hypothesis (11)

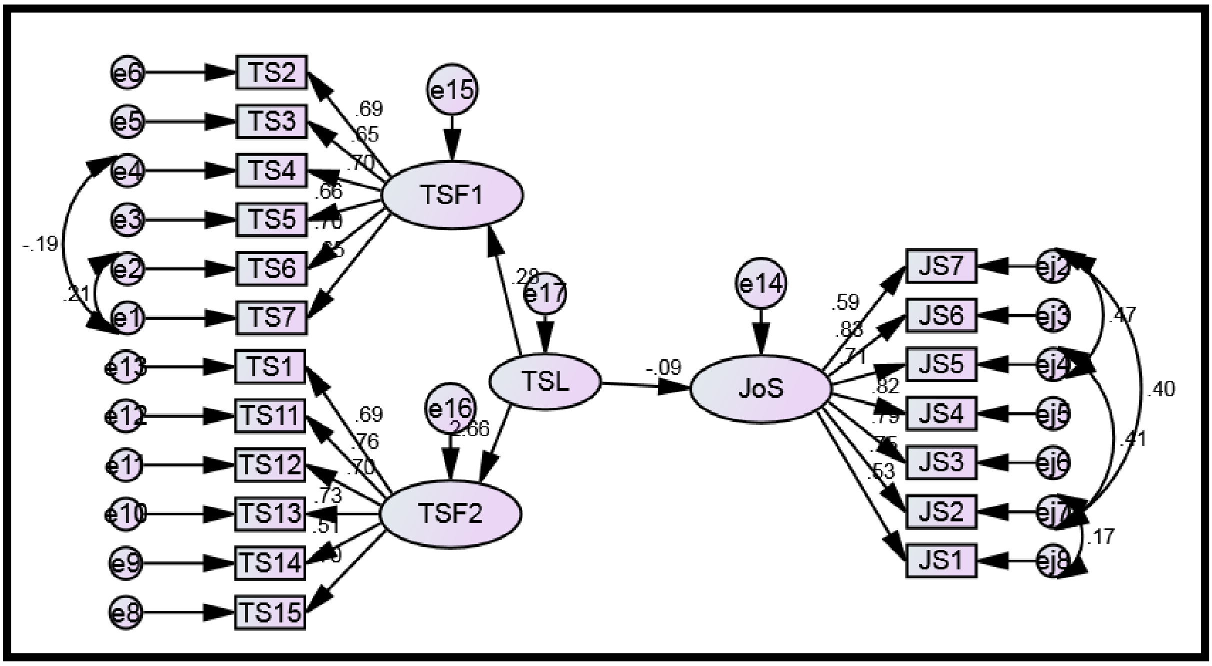


Figure 6.11 Structural Model (G) Transactional Leadership and job Satisfaction in Dar Alhekma private university

Hypothesis 12: **There is a statistically significant positive relationship between productive organisational energy and job satisfaction at Dar Alhekma University in Saudi Arabia.**

The model evaluated the impact of productive organisational energy on job satisfaction at Dar Alhekma University. Initially, it did reveal an adequate fit. Hence, none of the items were removed. The hypothesis was evaluated based on the standardised coefficient, its critical ratio and significance level. The estimation of the hypothesis demonstrated that productive organisational energy has a significant influence on job satisfaction at Dar Alhekma University. The following table shows the fit indices and path analysis.

CMIN/DF (χ^2/df)	SRMR	CFI	TLI	RMSEA	Path	Standardized loading	C.R	P
1.741(278.512/160)	.05	.95	.94	.06	POE→JS	.759	6.119	.000

Table 6.47 Results of Hypothesis (12)

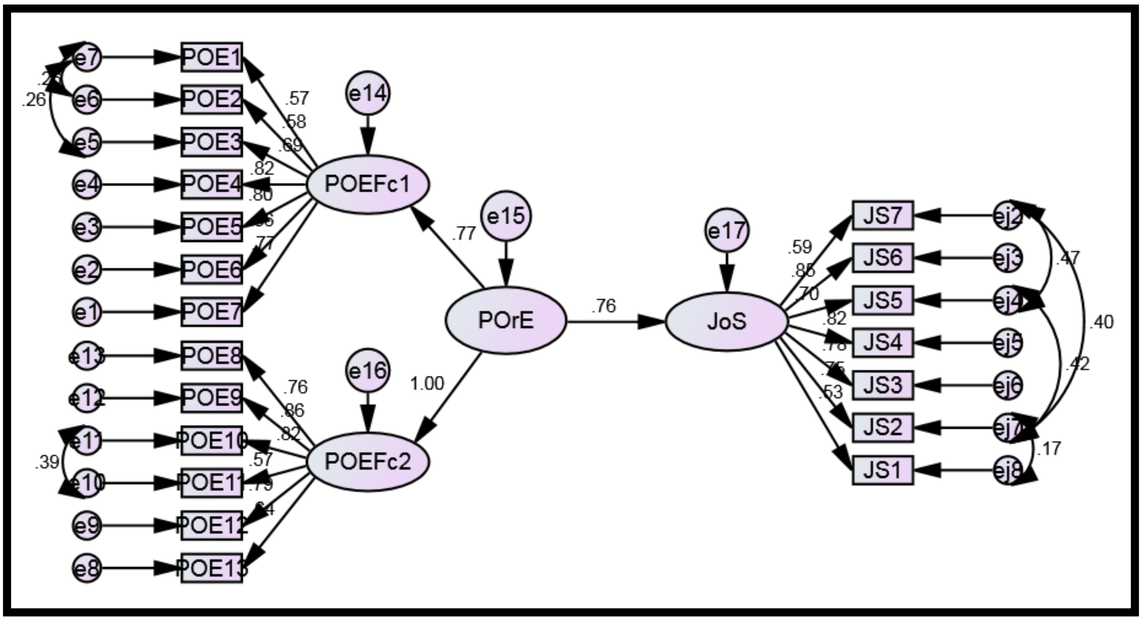


Figure 6.12 Structural Model (H) Productive Organizational Energy and job Satisfaction in Dar Alhekma private university

Hypothesis 13: **There is a statistically significant positive relationship between transformational leadership and productive organisational energy at Dar Alhekma University in Saudi Arabia.**

The model evaluated the impact of transformational leadership on productive organisational energy at Dar Alhekma University, revealing an adequate fit, and hence none of the items was removed from the analysis. The hypothesis was evaluated based on the standardised coefficient, its critical ratio and significance level. The estimation of the hypothesis demonstrated that transformational leadership has a significant influence on productive organisational energy at Dar Alhekma University. The following table shows the fit indices and path analysis.

CMIN/DF (χ^2/df)	SRMR	CFI	TLI	RMSEA	Path	Standardized loading	C.R	P
1.853(720.901/389)	.05	.94	.93	.06	TRL→POE	.791	8.023	.000

Table 6.48 Results of Hypothesis (13)

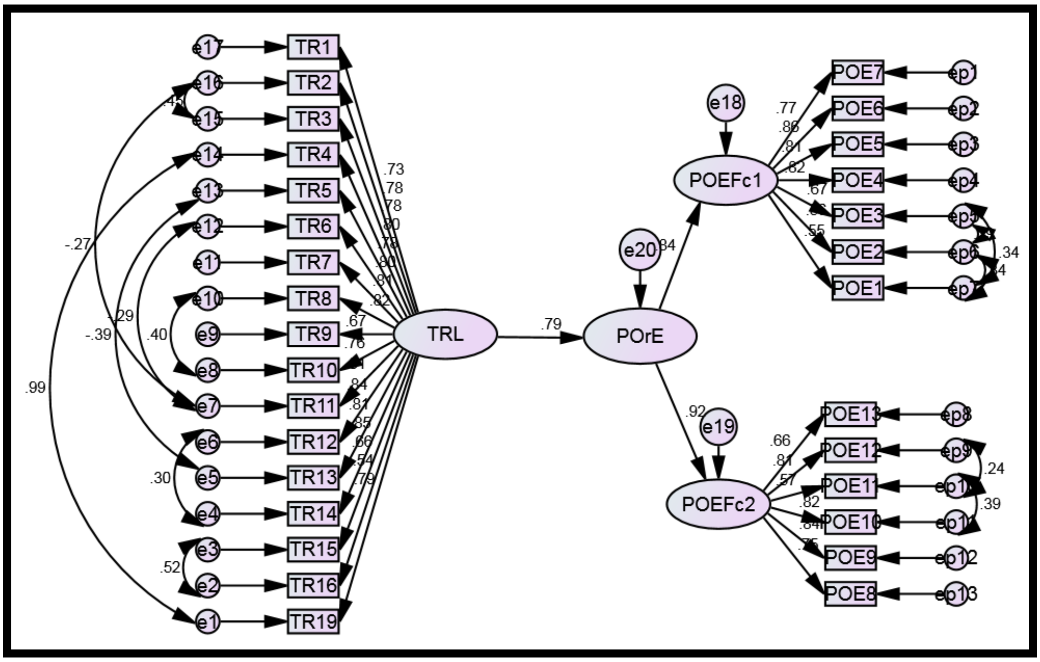


Figure 6.13 Structural Model (I) Transformational Leadership and Productive Organizational Energy in Dar Alhekma private university

***Hypothesis 14:* There is a statistically significant positive relationship between transactional leadership and productive organisational energy at Dar Alhekma University in Saudi Arabia.**

The model evaluated the impact of transactional leadership on productive organisational energy at Dar Alhekma University, revealing an adequate fit, and hence none of the items was removed from the analysis. The hypothesis was evaluated based on the standardised coefficient, its critical ratio and significance level. The estimation of the hypothesis demonstrated that transactional leadership has an insignificant influence on productive organisational energy at Dar Alhekma University. The following table shows the fit indices and path analysis.

CMIN/DF **(χ^2/df)**	**SRMR**	**CFI**	**TLI**	**RMSEA**	**Path**	**Standardized loading**	**C.R**	**P**
1.541(-/-)	.06	.94	.93	.05	TSL→POE	-.252	-1.598	.110

Table 6.49 Results of Hypothesis (14)

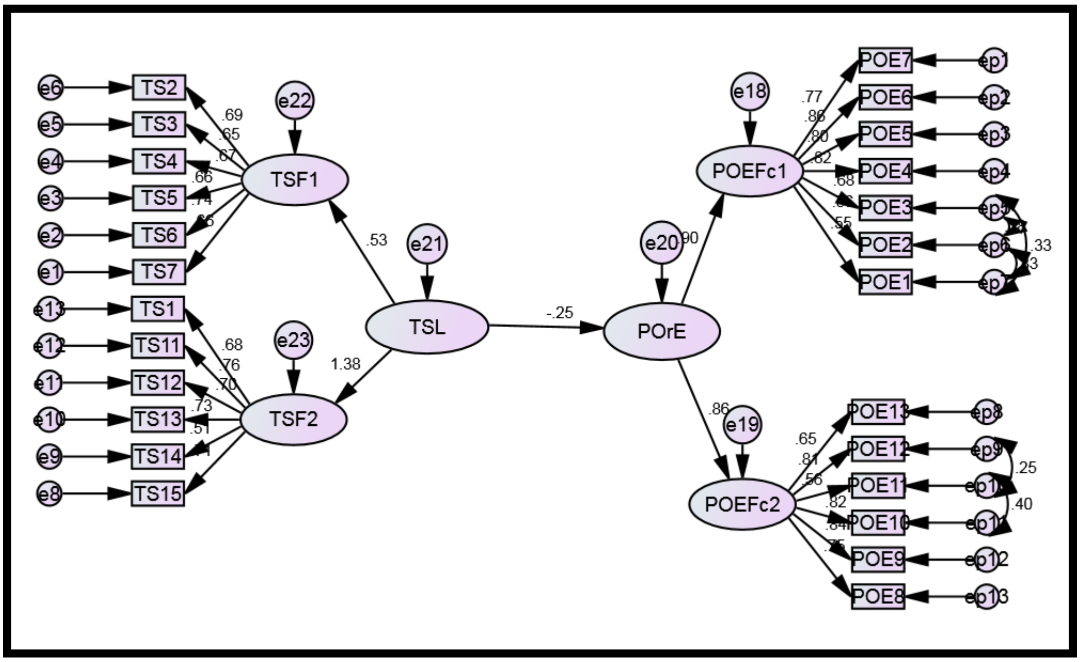


Figure 6.14 Structural Model (J) Transactional Leadership and Productive Organizational Energy in Dar Alhekma private university

Hypothesis 15: **Productive organisational energy fully mediates the relationship between transformational leadership style and job satisfaction at King Abdulaziz University in Saudi Arabia.**

Mediation analysis was performed using Baron and Kenny's (1986) causal approach. The initial causal variable was transformational leadership (TRL), the criterion variable was job satisfaction (JS) and the mediating variable was productive organisational energy (POE).

The results reveal that the total effect of transformational leadership on job satisfaction was significant at c = -.223, $p < .001$. Transformational leadership was significantly predictive of the hypothesised mediating variable, productive organisational energy at a = -.260, $p < .001$, and when controlling for transformational leadership, productive organisational energy was significantly predictive of job satisfaction at b = .746, $p < .001$. The estimated direct effect of transformational leadership on job satisfaction, controlling for productive organisational energy, was c' = -.028, P > .05. Since the direct effect of transformational leadership on job satisfaction with the mediator was found to be insignificant, the effects of transformational leadership on job satisfaction were completely mediated by productive organisational energy.

Analysis	**IV – MV (a) TRL - POE**		**MV – DV (b) POE - JS**		**Direct without Mediator (c)**		**Direct with Mediator (c')**		**Results**
	Est.	S.E	Est.	S.E	Est.	Sig	Est.	Sig	
TRL – POE - JS	-.260	.156	.746	.098	-.223	.000	-.028	.577	Complete Mediation

Table 6.50 Results of Hypothesis (15)

Hypothesis 16: **Productive organisational energy mediates the relationship between transactional leadership style and job satisfaction at King Abdulaziz University in Saudi Arabia.**

The initial causal variable was transactional leadership (TSL), the criterion variable was job satisfaction (JS) and the mediating variable was productive organisational energy (POE).

The results reveal that the total effect of transactional leadership on job satisfaction was significant at c = .673, *p*< .001. Transactional leadership was significantly predictive of the hypothesised mediating variable, productive organisational energy at a = .779, *p*< .001, and when controlling for transactional leadership, productive organisational energy was significantly predictive of job satisfaction at b = .546, *p*< .001. The estimated direct effect of transactional leadership on job satisfaction, controlling for productive organisational energy, was c' = .275, P > .05. Since the direct effect of transactional leadership on job satisfaction with the mediator was reduced but still found to be significant, the effects of transactional leadership on job satisfaction were partially mediated by productive organisational energy in the public sector.

Analysis	**IV – MV (a) TSL - POE**		**MV – DV (b) POE - JS**		**Direct without Mediator (c)**		**Direct with Mediator (c')**		**Results**
	Est.	S.E	Est.	S.E	Est.	Sig	Est.	Sig	
TSL – POE - JS	.779	.070	.546	.100	.673	.000	.275	.001	Partial Mediation

Table 6.51 Results of Hypothesis (16)

Hypothesis 17: **Productive organisational energy mediates the relationship between transformational leadership style and job satisfaction at Dar Alhekma University in Saudi Arabia.**

The initial causal variable was transformational leadership (TRL), the criterion variable was job satisfaction (JS) and the mediating variable was productive organisational energy (POE).

The results reveal that the total effect of transformational leadership on job satisfaction was significant at c = .718, $p < .001$. Transformational leadership was significantly predictive of the hypothesised mediating variable, productive organisational energy, at a = .778, $p < .001$, and when controlling for transformational leadership, productive organisational energy was significantly predictive of job satisfaction at b = .536, $p < .001$. The estimated direct effect of transformational leadership on job satisfaction, controlling for productive organisational energy, was c' = .301, P < .05. Since the direct effect of transformational leadership on job satisfaction with the mediator was found to be significant, the effects of transformational leadership on job satisfaction were partially mediated by productive organisational energy.

Analysis	**IV – MV (a) TRL - POE**		**MV – DV (b) POE - JS**		**Direct without Mediator (c)**		**Direct with Mediator (c')**		**Results**
	Est.	S.E	Est.	S.E	Est.	Sig	Est.	Sig	
TRL – POE - JS	.778	.070	.536	.131	.718	.000	.301	.005	Partial Mediation

Table 6.52 Results of Hypothesis (17)

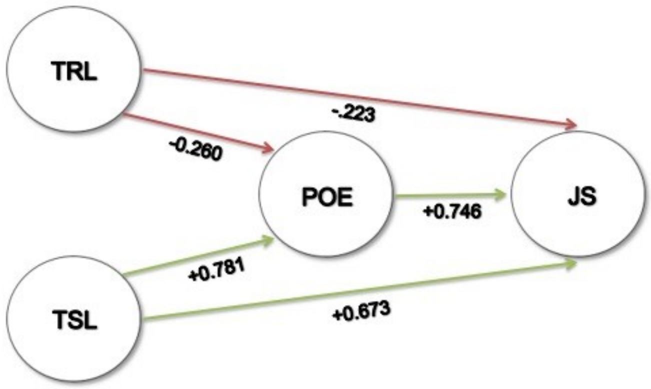
Hypothesis 18: **Productive organisational energy fully mediates the relationship between transactional leadership style and job satisfaction at Dar Alhekma University in Saudi Arabia.**

The mediating role of productive organisational energy on the relationship between transactional leadership and job satisfaction could not be evaluated, since direct transactional leadership on job satisfaction was found to be insignificant (p> .05).

6.8.1 Summary

The overall results of this research study are remarkably clear; however, they raise some questions that could lead to further research endeavours. This chapter has presented the research results and outcomes through various labelled figures and tables. Thus, it was necessary for the researcher to produce one general and inclusive figure that reviews the analysis outcomes.

King Abdulaziz public university in Saudi Arabia.



Dar Alhekma private university in Saudi Arabia.

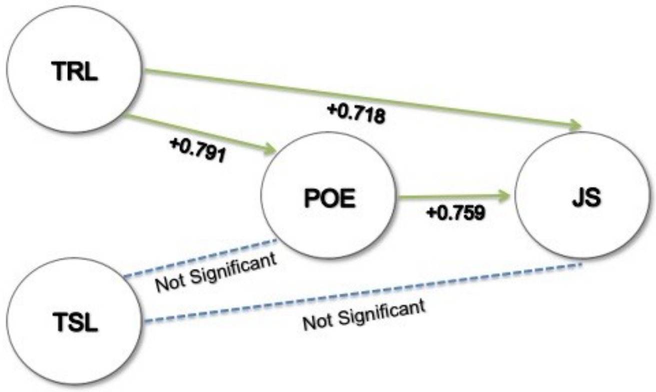


Figure 6.15 Summary of the Structural equation Models

Based on the results presented herein, the researcher notes that there is a clear delineation of perceived leadership styles between King Abdulaziz University and Dar Alhekma University that supports and demonstrates an extension of several key trends in the leadership literature (Wright and Pandey, 2009; Wart, 2003; Parry and Proctor-Thomson, 2002; Voon et al., 2011; Borins, 2002). In accordance with the widely conducted literature review and the research aims and objectives, the following hypotheses were developed and tested. A summary of the hypothesis tests can be found in the table below.

No.	Hypothesis	Result
H1a	Transformational leadership predicts Job Satisfaction in King Abdulaziz public university in Saudi Arabia.	Rejected
H1b	Transactional leadership predicts Job Satisfaction in King Abdulaziz public university in Saudi Arabia.	**Accepted**
H2a	Transformational leadership predicts Productive Organizational Energy in King Abdulaziz public university in Saudi Arabia.	Rejected
H2b	Transactional leadership predicts Productive Organizational Energy in King Abdulaziz public university in Saudi Arabia.	**Accepted**
H3a	Transformational leadership predicts Job Satisfaction in Dar Alhekma private university in Saudi Arabia.	**Accepted**
H3b	Transactional leadership predicts Job Satisfaction in Dar Alhekma private university in Saudi Arabia.	Rejected
H4a	Transformational leadership predicts Productive Organizational Energy in Dar Alhekma private university in Saudi Arabia.	**Accepted**
H4b	Transformational and Transactional leadership predict Productive Organizational Energy in Dar Alhekma private university in Saudi Arabia.	Rejected
H5	There is a statistically significant positive relationship between transformational leadership and job satisfaction at King Abdulaziz public university in Saudi Arabia.	Rejected
H6	There is a statistically significant positive relationship between transactional leadership and job satisfaction at King Abdulaziz public university in Saudi Arabia.	**Accepted**

H7	There is a statistically significant positive relationship between Productive Organizational Energy and job satisfaction at King Abdulaziz public university in Saudi Arabia.	**Accepted**
H8	There is a statistically significant positive relationship between Transformational leadership and Productive Organizational Energy at King Abdulaziz public university in Saudi Arabia.	Rejected
H9	There is a statistically significant positive relationship between Transactional leadership and Productive Organizational Energy at King Abdulaziz public university in Saudi Arabia.	**Accepted**
H10	There is a statistically significant positive relationship between Transformational leadership and Job Satisfaction at Dar Alhekma private university in Saudi Arabia.	**Accepted**
H11	There is a statistically significant positive relationship between Transactional leadership and Job Satisfaction at Dar Alhekma private university in Saudi Arabia.	Rejected
H12	There is a statistically significant positive relationship between Productive Organizational Energy and Job Satisfaction at Dar Alhekma private university in Saudi Arabia.	**Accepted**
H13	There is a statistically significant positive relationship between Transformational Leadership and Productive Organizational Energy at Dar Alhekma private university in Saudi Arabia.	**Accepted**
H14	There is a statistically significant positive relationship between Transactional Leadership and Productive Organizational Energy at Dar Alhekma private university in Saudi Arabia.	Rejected

H15	Productive Organizational Energy fully mediates the relationship between Transformational leadership style and Job satisfaction at King Abdulaziz public university in Saudi Arabia.	**Accepted**
H16	Productive Organizational Energy fully mediates the relationship between Transactional leadership style and Job satisfaction at King Abdulaziz public university in Saudi Arabia.	Rejected
H17	Productive Organizational Energy fully mediates the relationship between Transformational leadership style and Job satisfaction at Dar Alhekma private university in Saudi Arabia.	Rejected
H18	Productive Organizational Energy fully mediates the relationship between Transactional leadership style and Job satisfaction at Dar Alhekma private university in Saudi Arabia.	Rejected

Table 6.53 Summary of Research Objectives and Findings

The main aim of the present chapter was to uncover the underlying factors that have significant effects on this research. The chapter was divided into various sections, namely descriptive analysis, descriptive statistics, factor analysis, component matrix and, finally, structural equation modelling. The following chapter presents the research discussion and concludes on the findings. The discussion chapter also establishes the implementation of the theoretical and collected findings.

Chapter 7: Discussion

7. Research Discussion

7.1 Introduction

The overall picture of the results flags up a number of areas of interest that can be picked out from the rest of the analysis, and which can help sketch out where the initial conclusions of the present research study can be drawn. This chapter offers an extensive discussion on the statistical results presented in the previous chapter, such that they are contextualised within a wider understanding of leadership in higher education in Saudi Arabia. The chapter also addresses what this means for the research objectives identified earlier in the research.

The chapter also offers a research examination of not only the descriptive statistics, but also structural equations, to determine whether there is a relationship between leadership style, productive organisation energy and job satisfaction. Furthermore, it explains the mediating role played by productive organisational energy in the relationship between leadership style and academic and administrative staff's job satisfaction in public and private universities in Saudi Arabia.

The chapter proceeds through the results stage by stage, to develop an understanding of the association between individual variables, and then it outlines how the models of transformational and transactional leadership were developed. There is a comparison with other literature, to determine how well these results corroborate with work carried out by other researchers in the management and organisational behaviour field. The chapter also revisits the overall key findings provided by the descriptive statistics and hypothesis tests in the previous chapter, as a way of setting out the platform and bridging the results with the information provided in all chapters for the discussion that follows.

The discussion of key findings is split into different sections. The first section presents an overall summary of the research objectives achieved in the present study. The second section covers leadership style results obtained from the collected data via the developed research questionnaire, particularly to set them within a wider research context that offers some insights into why the results are as they are. In addition, it utilises the most suitable leadership style that can be implemented in Saudi Arabian universities to improve productive organisational energy and job satisfaction. The third section reflects on the analysis results in relation to the notion of productive organisational energy within the Saudi higher education sector, and the art of orchestrating energy at work, using a leadership style, is discussed. Eventually, the chapter presents the job satisfaction analysis results by focusing on the impact of both leadership styles in different contexts, including in the higher education institution sector.

7.2 Discussion of the Key Findings

Extracted from the outcomes, the first key finding of this research is that academic and administrative staff at King Abdulaziz University perceive a transactional leadership style, while Dar Alhekma University management clearly adopts transformational leadership. In both universities, the implemented leadership style has a significant impact on productive organisational energy and job satisfaction. Furthermore, and connected with the research objectives, a summary of the analysis results is illustrated in the table below:

Research Objectives	Results and analysis outcomes
"To ***identify*** *leadership style as perceived in the Saudi Arabian universities"*	Leadership style perceived in Saudi Arabian universities varied and was subject to whether they are public or private universities. King Abdulaziz University perceived a transactional style of leadership, while Dar Alhekma University perceived a transformational style.
"To ***measure*** *the level of productive organisational*	The level of productive organisational energy is broadly the same in private and public universities. This is not in agreement with most of the literature on

energy in Saudi Arabian universities"	productive organisational energy, but some analysis on this was offered, to the effect that public-sector organisations might actually be easier to move to a state of productive energy than their private-sector counterparts, so it can be done with a less effective leadership style.
*"To **test** the relationship between leadership style, productive organisational energy and job satisfaction in Saudi Arabian universities"*	The results demonstrated that there was a clear relationship between leadership style, productive organisational energy and job satisfaction. The results appeared to demonstrate that at King Abdulaziz University either style of leadership impacted productive organisational energy, which in turn boosted job satisfaction. At Dar Alhekma University, only transformational leadership impacted productive organisational energy and job satisfaction. This would be in line with much of the literature on both leadership styles.
*"To **examine** the mediating role of productive organisational energy and job satisfaction in Saudi Arabian universities."*	The research showed that when testing for the mediating role of productive organisational energy, the statistical significance of transformational leadership at King Abdulaziz University was reduced, as productive organisational energy fully mediates the relationship between transformational leadership style and job satisfaction.

Table 7.01 Summary of the research hypotheses

Prior to engaging in the discussions, and based on the analysis results above, it is necessary to sum up the findings of the analysis results on how well transformational and transactional leadership predict both job satisfaction and productive organisational energy at King Abdulaziz University and Dar Alhekma University.

The research determined that at the public King Abdulaziz University, transformational leadership did not predict either job satisfaction or productive organisational energy to a significant level, but transactional leadership did so. Conversely, for the private Dar Alhekma University, transformational leadership did predict job satisfaction and productive organisational energy to a significant level, but transactional leadership did not do so. The results above are supported by several scholars, who propose the preference for transformational leadership in the private sector (Hooijberg and Choi, 2001; Bodla and Nawaz, 2010; Alban-Metcalfe and Alimo-Metcalfe, 2007) and transaction leadership in the public sector (Voon et al., 2011; Alimo-Metcalfe and Alban-Metcalfe, 2004; Wart, 2003, Smith and Abouammoh, 2013; Drummond and Bani Al-Anazi, 1997).

Following this finding, a structural equation model for King Abdulaziz University was developed, whereby transformational leadership influenced job satisfaction negatively (-0.223) and transactional leadership influenced job satisfaction positively (+0.673), productive organisational energy influenced job satisfaction positively (+0.746) and transformational leadership influenced productive organisational energy negatively (-0.260) and, finally, transactional leadership influenced productive organisational energy positively (+0.781), all to a statistically significant level.

On the other hand, the structural equation model for Dar Alhekma University found that transformational leadership did influence job satisfaction positively (+0.718), but transactional did not do so, productive organisational energy influenced job satisfaction positively (+0.759), transformational leadership did influence productive organisational energy positively (+0.791), but transactional leadership did not do so.

When testing the mediating role of productive organisational energy on the relationship between leadership styles and job satisfaction at King Abdulaziz University, it was found that transactional leadership was still significant, but transformational leadership was reduced in influence to a statistically insignificant level. The construct of productive organisational energy mediates this issue to an extent, which can give the impression that there is a more progressive form of leadership when in reality there is not one.

A further discussion is presented next, in order to elaborate on the research results and examine whether or not they align with and support the previous literature.

7.3 Leadership Style in Saudi Arabia

This section starts by addressing a number of leadership research questions, and then it presents an interpretation of the analysis results with supportive literature arguments, to consider the significance of the research outcomes for the effective growth of Saudi Arabian universities by adopting suitable leadership styles.

Leadership Style Research Questions

Based on the literature review chapter and the research findings, this section presents valuable answers to the leadership style research questions as stated below.

- What are the current adopted leadership styles in Saudi Arabian universities?
- What makes the transformational and transactional leadership styles suitable for improving job satisfaction in Saudi Arabian universities?

Based on the previous discussions it can be summarised that the leadership style adopted in Saudi Arabia is considered to be traditional based on customs, religion and culture (Altbach and Knight, 2007; Saleh, 1986; Smith and Abouammoh, 2013). Leaders in Saudi Arabia tend to prefer a leadership style in which the authority of leaders is highly centralised in nature and which they can use to monitor closely their employees or subordinates (Clary and Karlin, 2011). Leadership style is even considered to be highly affected by Islam, which makes the risk-taking abilities of the people extremely low and the decision-making style becomes completely consultative in nature (Bjerke and Al-Meer, 1993). Saudi Arabia is governed by traditional rules, and these extend to higher educational institutions (Rugh, 2002; Nevo, 1988; Romani, 2009). This research deduced from the discussion that Saudi Arabia has traditional ways and conservative views in which organisations function (Ali, 2009; Rice, 2004). In recent years, Saudi Arabia has adopted more modern practices which have facilitated an improved higher educational system for all people (Smith and Abouammoh, 2013).

Based on the research population, which comprised 349 research participants, both male and females, in a public university in Saudi Arabia, and 204 participants, both male and female, in a private university in Saudi Arabia, the previous chapter presented descriptive statistics and regression tests that clearly identified that two forms of leadership are in evidence, namely transformational and transactional. Furthermore, there was a clear delineation between them, in that transactional leadership occurs within King Abdulaziz University and transformational leadership occurs within Dar Alhekma University. The average mean results showed at King Abdulaziz University a transformational leadership style score of (1.957), while transactional leadership style scored (3.547). This is in contrast to Dar Alhekma University, where the average mean for transformational leadership was (3.552) and (1.971) for the transactional leadership style.

The literature on these two leadership styles bears out this initial conclusion, in the sense that transactional leadership is something often associated with the public sector (Wart, 2003; Voon et al., 2011; Wright and Pandey, 2009). While not all contemporary literature is united on the view that transactional and transformational models are the best ways of conceptualising leadership (Kanungo, 2001; Wofford and Goodwin, 1994), where they are deployed it is noted that public-sector organisations are the last large-scale users of the transactional model (Wart, 2003). This is a value-laden statement in most pieces of research, since there is an overriding theme to the literature that transformational leadership is much more effective than its transactional counterpart (Bass and Avolio, 1993; Lowe, Kroeck and Sivasubramaniam, 1996). Yet, Bass (1985) argued that the transactional leadership style is the most prevalent style that can be adopted in modern organisations. In the higher education context, Muhammad et al. (2009) suggested that transactional leadership is the most suitable style that can be adopted in universities. In fact, commercial organisations tend to be much more responsive to developing new leadership styles and focusing on the ones that work rather than the ones that they are most used to; however, the literature review chapter of this study noted that transactional leadership tends to be less effective than transformational leadership (Wright, Moynihan & Pandey, 2012).

Therefore, it would be perfectly logical to extend the analysis to say that the reason why Dar Alhekma University deploys a transformational style of leadership is because it is considered a commercial organisation, and the weight of literature suggests that it should, by default, have this more effective model of leadership (Bass, 1999) and also have a more transactional environment, which is something replicated across many sectors, not just higher education (Wart, 2003). In fact, the transformational leadership style was found to be very efficient and also creates a positive impact in higher education institutions, due to the possibility that transformational leaders will support, inspire and achieve employee and organisational goals (Leithwood, 1994; Hallinger and Heck, 1998). Similar findings in the same context were presented by Gill et al. (2010), who argued that there is the significant relationship between transformational leadership and students' job satisfaction. Yukl (2009) also highlighted that transformational leaders are able to enhance employee motivation and performance more than transactional leaders. Another research was carried out by Hassan (2013), who proposed *'although transactional leadership style is prevalent and determine practices, there are few leaders in the higher education context who use exclusively one style or another'.*

It might seem that a very simple conclusion to draw from the above analysis is that private sector universities in Saudi Arabia have a more effective form of leadership than public ones, and that is likely to lead to better organisational performance and outcomes for academics, administrative staff and students. However, the literature, as a whole, and the exemplars used therein need to be taken in a wider context.

When discussing the literature for most academic fields, including leadership and management, there is a sense that it is global in nature, in that it represents the totality of work in the field and all available perspectives; in other words, one will always find arguments and previous research studies that support your findings or criticise them accordingly. However, what is really the case is that the literature represents a perspective from the essential ontological and epistemological traditions, through to the modes of data collection and analysis and on to the analytical frameworks deployed. No discipline exhibits this trend more strongly than that relating to organisational studies, management and leadership (Bjerke & Al-Meer, 1993). Many of the ontological assumptions about the nature of organisations, and particularly about the drivers of motivation, are distinctly "Western," and perhaps the best representations of this conception of organisations tend to be done along absolutely agnostic and atheist lines, whereby organisations have clear drivers – and religion is not one of them (Hopper and Powell, 1985; Uschold and Gruninger, 1996; Vasconcelos, Kimble and Rocha, 2003).

What this means is that, when considering the nature of leadership in a society that is deeply religious, as we find in the case of Saudi Arabia, care has to be taken when applying Western models of academic thought, as they cannot be exported to the Saudi Arabian context on a wholesale basis (Bass, 1996; Pillai, Scandura and Williams, 1999). This not unique to leadership, organisation and management studies but is common to any branch of academia that relies on critical thought (Krieger, 2007). The literature review noted that the higher education sector in Saudi Arabia is relatively young (Alamri, 2011), which means that there has been a comparatively truncated time period for the development of a Saudi Arabian body of literature – whereas Western academics have been developing critical models of virtually everything since the 1970s, Saudi Arabian academics have had approximately a decade to achieve the same task (Alkhazim, 2003).

What this means in the context of this analysis is that it is not supportable to simply take the preference for transformation leadership expressed in Western literature and apply it uncritically to the Saudi Arabian case. One cannot immediately move to the conclusion that private-sector universities in Saudi Arabia have a more effective style of leadership than their public-sector counterparts, based solely on the first part of the descriptive statistics. It is perfectly possible that transactional leadership is a more effective style of leadership in a very religious society with different organisational imperatives (Yaseen, 2010), and while in one sense there is a lack of evidence to support that claim (Prokop, 2003; Smith and Aboummoh, 2013), the paucity of literature is indicative of the need for this research and further research that focuses intrinsically on the Saudi Arabian perspective (Bjerke & Al-Meer, 1993).

On the other hand, by focusing on the present research's demographic elements and descriptive statistics, it also highlighted that a majority of respondents are female, as mentioned previously in the analysis chapter in section 6.3.1.2, and that they tend to be more academics than administrative staff. In King Abdulaziz University, females were (214, 61.3%), while males were (n = 135), constituting 38.7% of the total sample. For Dar Alhekma University, the majority of the respondents were also female (122, 59.8%), while males were 82, constituting 40.2% of the sample. There is a small amount of literature that would suggest that females have a greater tendency than men to become collectively engaged and work together (Ridgeway and Diekema, 1989), and it is likely that a similar effect is found with those who are engaged in public pursuits rather than private (Wart, 2003). This analysis is the logical extension of the literature on the results presented in the previous chapter, but there is a general lack of work available that substantiates it sufficiently (Korac-Kakabadse et al., 1998; Powell et al., 2008). In fact, the body of literature revealed that very limited studies have evidenced gender differences in leadership style studies (Helgesen, 1990; Henning and Jardim, 1977; Rosner, 1990).

These results offer an unusual juxtaposition of two forms of literatures – that relating to human resources generally, that relating to human resources in Saudi Arabia specifically and leadership in higher education. As noted above, the general literature on human resources generally supports the findings in this research study, in the sense that there is support for the idea of transformational leadership being more common to the private sector, and transactional to the public sector (Wart, 2003). This notion has been tested widely across many different industries, and although nothing is universal, the private sector tends to develop the most flexible and responsive style of leadership to drive competitive advantage, which is transformational leadership in this case (Wright and Pandey, 2009; Sarros, Cooper and Santora, 2008) and the higher education context (Bodla and Nawaz, 2010).

However, literature that engages with organisational studies in the Saudi Arabian context would suggest that local dynamics support this analysis to a certain extent, including higher education institutions (Krieger, 2007). The literature on Saudi Arabia suggests that the importance of religion and the wider Middle Eastern culture influences leadership style (Baki, 2004) and results in a heavy leaning toward the transactional model (Abualrub and Alghamdi, 2012); the transformational option does not work in heavily structured societies (Achoui, 2009; Ali & Al-Shakis, 1985). However, the first clue that this might not be the case herein is that the majority of the respondents in this study were female. Although the literature has noted the increasing numbers of women developing academic and management careers in Saudi Arabia (Al-Ahmadi, 2011), especially in higher education (Hamdan, 2005), it would not be anything like the level indicated in these results (Al-Ahmadi, 2011; Mellahi & Wood, 2001). However, there is further literature that notes that in Saudi Arabia there are a number of areas where there are very few members of the domestic population qualified to undertake academic and administrative positions in higher education and human resources management (AlMunajjed, 1997). What this means is that the respondents in this survey are not necessarily representative of the wider Saudi Arabian community, because even public-sector organisations recruit overseas people to these roles (Bhuian, Al-Shammari & Jefri, 1996; Bjerke & Al-Meer, 1993). Therefore, the point needs to be made that public universities exhibit a greater tendency toward transactional leadership, because they are public-sector organisations, not because they are controlled by or a represent a clear picture of the Saudi Arabian context; it would be unconvincing to argue simply that transactional leadership in public sector universities in this study is explained by the fact that they are conservative Saudi Arabian organisations, as it is likely that these results will be repeated in other countries (Bryman, 2007; Lowe, Kroeck and Sivasubramaniam, 1996; Lo, Ramayah and De Run, 2010; Spendlove, 2007). What needs to happen is an analysis of the relative efficacy of different styles of leadership on productive organisational energy, not only to understand whether transformational or transactional leadership (or both) drive it, but also to develop a more sophisticated understanding of how well they drive it (Yousef, 2000). There is a small sense of this notion in the data of the present research study, but the analysis suggested that they account for similar amounts of variation. Nonetheless, the literature suggests that this is unlikely to be the case and that transformational leadership should have a much stronger impact on productive organisational energy wherever it is deployed, especially in higher education (Abbas et al., 2012; Webb, 2009; Walter and Bruch, 2010; Dutton, 2003).

What may shed more light on this area is the notion of productive organisational energy, because it is through this type of framing that the idea of leadership efficacy – and thus how good Saudi Arabian universities are – in leadership terms is considering in more dynamic terms.

7.4 Productive Organizational Energy in Saudi Arabia

After highlighting the leadership style results and linking them with the current literature, using supportive claims and argument, this next section of the discussion focuses on answering the following research questions in relation to productive organisational energy.

- Does productive organisational energy exist in Saudi Arabian universities?
- Does productive organisational energy mediate the relationship that exists between leadership style and job satisfaction in an organisation?

Productive organisational energy was perhaps more interesting than leadership alone, because it was present in both types of universities, namely public and private, with an average mean of (3.545) in the King Abdulaziz University and (3.536) at Dar Alhekma University. The results offered additional support to studies 1 and 2 conducted by Cole, Bruch and Vogel (2012) and Cuff and Barkhuizen (2014), proving that the King Abdulaziz and Dar Alhekma universities understand the notion of energy in the workplace.

In fact, the theoretical foundation of the productive organisational energy concept is based on the affect, cognition and behaviour of academic and administrative staff in both universities (Quinn and Dutton, 2005) and amplified – or increased – via "interaction processes" (Morgeson and Hofmann, 1999). Therefore, the researcher analysed the notion of productive organisational energy, believing that "energy" is a social experience and not an individual one, namely a collective basis, as several routine tasks and conversations in higher education institutions can possibly be transformed into "energising actions" by charging them with more excitement and enjoyment (Quinn, 2007). Besides, productive organisational energy can be influential, as exchanging tasks and information from other energetic co-workers in the workplace can change the levels of energy (Morgeson and Hofmann, 1999). In other words, mutual interaction is known as the basic building block of productive organisational energy (Dutton and Heaphy, 2003). In this research productive organisational energy falls into the category of an emergent phenomenon (Marks, Mathieu and Zaccaro, 2000) that is common to all academic and administrative staff in both universities. In King Abdulaziz University, transformational leadership negatively affected productive organisational energy (-0.260), and transactional leadership positively impacted productive organisational energy (0.781). On the other hand, transformational leadership positively impacted productive organisational energy (0.791), where transactional leadership was statistically insignificant at Dar Alhekma University, proving that there is a relationship between leadership style and productive organisation energy in the context of higher education – as proposed by Kunze and Bruch (2010).

The second objective of this research study was simply to measure the level of productive organisational energy, and to determine whether or not it exists. There were some interesting results, because the level of productive organisational energy is broadly similar across both public and private universities, despite the fact that they appear to deploy different styles of leadership. There is nothing in the literature that would suggest that the predilection for transactional leadership in public-sector universities is unusual (Fernandez, 2005); however, the literature would suggest that the public sector couldn't experience the same level of productive organisational energy as the private sector (Wright, Moynihan & Pandey, 2012).

The analysis to make sense of this point is quite complex, because it would appear to be logical to say that transactional leadership drives productive organisational energy in a university, and transformational leadership drives productive organisational energy. In this respect, it is important to start with Luthans and Avolio (2009) study that suggests that the presence of productive organisational energy in such organisations is a result of leaders self-reinforcing (Cameron et al., 2003; Spreitzer,

2009) and fuelling the system through energised unit members (Porath, Spreitzer and Gibson, 2010). Based on the present research's results, both universities utilised a good level of productive organisational energy and yet adopted different leadership styles. However, this may reflect more on the imprecise nature of productive organisational energy than on anything else (Quinn and Dutton, 2005). The results do not demonstrate too much more than that transactional leadership in the university can positivity drive productive organisational energy, but why productive organisational energy may be observed as promoted being by transactional and decreased by transformational leadership is not possible to discern from these results (Yousef, 2000). More importantly, and based on the results, it can be concluded that adopting a transformational leadership style in a university can reduce the level of productive organisational energy, in contrast with adopting a transactional leadership style. A possible reason could be that transformational leaders in such a context frequently take the wheel of employees by reconciling their personal goals (Haslam, 2001), which is not favourable in the Saudi Arabian public working environment (Elyas and Picard, 2013), as mentioned previously in section 3.3. This may therefore explain, partially, why the productive organisational energy of public universities is influenced by either form of leadership; transactional leadership is what they perceive presently, whilst transformational leadership simply adds to it. A possibility could be that they are not use to it and may create a "change" shock or reflection from the administrative staff and academics (Fernandez, 2005) and base on the results leading to lower levels of productive organisational energy. Despite the perceived leadership style in both universities, the level of productive organisational energy presented herein is a well-defined sign of energised connections that enable academics and administrative staff to engage more, encourage each other to work cooperatively and strengthen their commitment to their institutions (Dutton and Ragins, 2007; Quinn, 2007).

On the other hand, Dar Alhekma University is perhaps easier to diagnose, because it is clear that transactional leadership does not affect productive organisational energy and the results were found to be insignificant, possibly because they have experience of transformational leadership and view it as superior to transactional leadership, and therefore they would find the exercise of transactional leadership debilitating (Javidan

& Waldman, 2003). This would tie in with the literature in the field quite nicely (Kunze and Bruch, 2010), in the sense that the literature would argue that the private sector perceives transformational leadership more readily, and that transformational leadership has been shown to be more effective. Therefore, using a less intrusive form of leadership style would not add to the collective sense of purpose and agency in an organisation (Wright, Moynihan & Pandey, 2012). The effects of transformational leadership style on the level of productive organisational energy were conceptualised (Kark and Van, Dijk, 2007) and proven to cause an increase in overall organisational success (Harter, Schmidt and Hayes, 2002; Ostroff, 1992). Moreover, Kunze and Bruch (2010) highlighted that the level of productive organisational energy is very likely to increase in institutions with higher perceived transformational leadership. Yukl (2002) also suggests that such a leadership style can result in strengthening the “we-feeling,” which is necessary in higher education institutions. Furthermore, transformational leadership enhances employees’ self- and collective efficiency in achieving organisational goals (Jung and Sosik, 2002).

It is noticeable that Dar Alhekma University has a tendency to lead the public sector in the conception and exercise of leadership styles, which in this case means that the university perceives transformational leadership as being valued more highly than the transactional style used in the university. The literature from across different fields identifies transformational leadership as having greater efficacy (Wart, 2003). Given that it is also evident from the results that productive organisational energy is driven by both leadership styles, it should be a logical extension to suggest that transformational leadership drives productive organisational energy to a higher level (Kunze and Bruch, 2010), though the results herein for the public and private university suggest that it is about the same.

Furthermore, the anomaly cannot be explained by any computational errors in the statistics, or the sample size, but there are some possible explanations. To return to the idea of organisational maturity, the reason why productive organisational energy might be easier to promote in a public university is because they have lower expectations (Manning, 2001); this was referred to in previous sections as a means of explaining why transactional leadership was only evident in the public university, since the private university would be unlikely to put up with it. Following the same line of argumentation, it could be said that it is easier to develop a sense of collective purpose and energy among a group of people who have relatively limited expectations (Javidan & Waldman, 2003). Although the literature does not offer much corroboration on that point exactly, there are several scholars who suggest that it is easier to develop a sense of collective energy in a public-sector organisation more generally than a private sector one (Wart, 2003). Indeed, the previous statement is considerably general, and in the present research study examining only two institutions that represent both public and private universities in Saudi Arabia, one must be cautious. Rather prosaically, however, private universities operate on a profit basis (Geiger, 1986), including in the Saudi Arabian context (Alamri, 2011; Alkhazim, 2003), and they tend to promote rather individualistic models of reward, not in the sense of transactional leadership (Elyas and Picard, 2010), but compared to the public universities which have entirely different organisational objectives (Krieger, 2007), there is comparatively little reason to work together as a team (Wart, 2003). For that reason, it might be logical to argue that what the results of this research illustrate is that levels of productive organisational energy are the same across private and public higher education institutions in part, because the public university finds it easier to engender this state of collective energy (Javidan & Waldman, 2003). Clearly, this research study set out to demonstrate how leadership styles promote and enhance this collective productive energy, but the results can only suggest that in public universities transaction leadership has a positive impact, whereas it does have to be transformational in private universities.

Many scholars have highlighted the importance of studying various aspects of collective interaction constructs rather than single variables, in order to present a clearer image of the complexity of how teams work together to achieve organisational goals (Arrow, McGrath and Berdahl, 2000; Hambrick, 1994; McGrath, arrow and Berdahl, 2000). Ultimately, productive organisational energy will always be tricky to utilise in such a scenario and unique context (Cole et al., 2005; Cuff and Barkhuizen, 2014); however, measuring integrated perceptions such as productive organisational energy contributes to the positive organisational literature (Cameron and Cazan, 2004; Luthans and Youssef, 2007).

None of this sets out to diminish the results found in the present research study, which corroborate some findings in the literature with regard to the actual presence of productive organisational energy (Cuff and Barkhuizen, 2014; Barkhuizen and Stanz, 2010; Derman, 2009; Dutton, 2003; Bruch and Vogel, 2011; Cross, Baker and Parker, 2003) in a specific context. There is a general theme within the human resources literature that the idea of organisational energy and some kind of collective energy construct remains scant (Vogel and Bruch, 2011) – not that it doesn't exist as such, but that it resists any kind of easy research quantification, due to the lack of a valid and reliable measurement instrument (Cole et al., 2012). However, there are many researches that demonstrate that not only does productive organisational energy exist, but also it is quite powerful, where found (Bruch and Vogel, 2011; Bruch and Ghoshal, 2003). This has been examined in the context of both large and small organisations (Cole et al., 2012), and therefore there is some substance to the suggestion, in that there is genuine advancement in the capability of an organisation when all of the productive organisational energy dimensions are brought together in a collective manner (Javidan & Waldman, 2003).

The arguments in the following section are not very complex and are quite vague, and there is a much stronger academic body of research that suggests a relationship between what is known as "internal criteria commitment," namely job satisfaction and productive organisational energy (Mathieu et al., 2008), and also between leadership style and job satisfaction (Saif et al., 2016; Bhatti et al., 2012).

7.5 Job Satisfaction

The previous section covered the relationship between productive organisational energy and leadership style, namely transformational and transactional, showing interesting results and various arguments. After presenting the productive organisational energy results and linking them with the current literature, using supportive claims, the present section of the discussion chapter focuses on answering the following research question in relation to academic and administrative staff job satisfaction in the research context.

- Does implementing transformational or transactional leadership styles influence job satisfaction in public and private sector universities in Saudi Arabia?

Based on the research analysis outcomes, results and as highlighted in section 7.2, it can be emphasised that at King Abdulaziz University there is a direct positive relationship between transactional leadership style and academic and administrative staff job satisfaction (0.673), and a negative impact in relation to transformational leadership (-0.223). On the other hand, at Dar Alhekma University, a direct positive relationship between transformational leadership and job satisfaction is noted (0.718) as well as a non-significant relationship with transactional leadership.

One of the main research objectives in the present research is to test the relationship between leadership style and job satisfaction in Saudi Arabian higher educational institutions. For decades, several studies have shown that there is a direct relationship between leadership style and job satisfaction (Halpin, 1954; Greene and Schriesheim, 1977; Griffith, 2002; Bartolo and Furlonger, 2000; Bogler, 2001; Lok and Crawford, 2004; Hamidifar, 2015; Girma, 2016), including higher education (Oshagbemi, 1997; Bryman, 2007).

Based on the self-assessment, the result of the average mean of the job satisfaction construct in the public university was (3.720) and (3.715) for the private university, thereby indicating an approximately identical level in spite of the altered adopted leadership styles. These results were compared to Al-Rubaish et al.’s (2011) study that was conducted in a higher education context in the eastern region of Saudi Arabia and showed a direct link between job satisfaction and ‘supervision, policies and facilities’, where the higher correlation went to supervision (0.90), then salary (0.63) and workload. The rejection of H5 was due to the fact that job satisfaction in the public university was negatively impacted by transformational leadership (Savery, 1991; Chang and Lee, 2007), including in the Saudi Arabian context (Bhuin, Al-Shammari, Jefri, 1996). This agrees with the previous argument that adopting transformational leadership at King Abdulaziz University could lead to the dissatisfaction of academics and administrative staff. On the other hand, adopting a transactional leadership style would enhance job satisfaction, as there is a positive significant relationship between transaction leadership and job satisfaction, as posited in H6.

As mentioned in section 2.10.2, several scholars have focused on examining the relationship between leadership style, namely transformational and transactional, in different settings (Reid, 2016; Bents and Blank, 1997; Gorsso, 2008; Judge and Piccolo, 2004). On the other hand, at Dar Alhekma University, the relationship between transactional leadership style and job satisfaction was not significant, in contrast to transformational leadership, which showed positive results (0.718), thereby supporting Jensen and Jacobsen (2015) and Podsakoff et al.'s (1990) research studies.

Furthermore, the findings demonstrate that the relationship between leadership style and job satisfaction is positive and significant when adopting a specific leadership style (Medley and Larochelle, 1995) in public and private universities in Saudi Arabia. The findings are also consistent with the results in a number of studies that produced similar outcomes (Kim, 2002; Nguni, Sleegers and Denessen, 2006; Euske and Jackson, 1980; storey, 1954; Morrison, Jones and Fuller, 1997).

The literature review reveals, generally, that whilst transformational and transactional leadership styles have been predicted to be linked to job satisfaction, another important variable that can merge with leadership style and enhance the level of job satisfaction is productive organisational energy.

The results of the present study further highlight the positive impact of productive organisational energy on job satisfaction in both public and private universities, with (0.746) at the King Abdulaziz University and (0.759) at Dar Alhekma University, thereby indicating the existence of a significant and positive relationship between productive organisational energy and job satisfaction in both private and public Saudi higher education institutions.

As mentioned previously, Cole et al. (2005) pointed out that boosting productive organisational energy in such dynamic organisations and institutions would lead to a better environment and higher job satisfaction. Another case was addressed by Cross, Baker and Parker (2016), who determined that persuasive and believable leaders are considered energisers who can spark progress on projects within teams, subsequently increasing employee satisfaction and working experiences.

Moreover, it was noted that there is a direct link between productive organisational energy, team performance and job satisfaction (Cross, Baker and Parker, 2003). Besides, in order to increase satisfaction in any organisation, it is necessary to focus on employees’ energy levels and the leadership employed by top management (Quinn and Dutton, 2005). In regards to the present research context, it can be endorsed that higher education institutions are a great source of productive energy – an important factor in maximising overall academic and administrative staff satisfaction (Schiuma, Mason and Kennerley, 2007; Fitzgerald et al., 2016).

7.6 Summary

The results of the current study indicate that there is a reasonable, statistically important relationship among leadership style, productive organisational energy and job satisfaction in Saudi Arabia. This chapter covered and addressed the research discussions and made sense of the analytical results and outcomes. The chapter’s main focus was on highlighting the key findings of the research (Table 7.01) and answering the research questions. The discussion chapter indicated that the present research results aligned with several studies and indeed contradicted others, as expected.

In fact, producing a unique study is not a difficult step, as “unique” does not mean special or excellent in research terms, as all researches are unique and comparison is irrelevant. The author therefore believes that the results of the present study to in *light others* and to be compared to a certain extent. All four variable results in this research were presented and illustrated and linked with the literature review chapter presented in this Doctorate research project.

Chapter 8: Conclusion

8. Conclusion

8.1 Introduction

The final chapter presents the research conclusion and a full summary of the present research. It also highlights the practical, methodological and theoretical contributions and eventually summarises the research limitations and makes suggestions for further research.

8.2 Thesis Summary

Chapter one pointed out that the education sector plays a vital role in the ways universities in Saudi Arabia are moving towards industry trends of adopting different and Western organisational leadership practices and styles. The aim of the study is to examine the relationship between leadership style, production organisational energy and job satisfaction and to test the mediating role played by productive organisational energy in the relationship between leadership style and academic and administrative staff job satisfaction in public and private universities in Saudi Arabia.

The key objectives of this research are:

- To identify leadership styles as perceived in Saudi Arabian universities.
- To measure the level of productive organisational energy in the Saudi Arabian universities.
- To test the relationship between leadership style, productive organisational energy and job satisfaction in Saudi Arabian universities.
- To examine the mediating role of productive organisational energy in the relationship between leadership style and job satisfaction in Saudi Arabian universities.

In Chapter 2, the discussion highlighted how leadership has developed and evolved over time. This study explored the meaning and development of transformational and transactional leadership styles, two of the main constructs being studied and measured throughout this research. The chapter provided a literature background which identifies and defines transformational and transaction leadership and how the different styles are perceived in Saudi Arabian universities and how they predict job satisfaction. It also addressed the differences between managers and leaders and what commonly used instruments are utilised to measure leadership style. Academics have investigated the definitions of leadership and identified transformational leadership as a commonly used practice to study organisational behaviour.

Furthermore, the definition of energy at work and the energy matrix were covered and supported by practical examples. In addition, it provided the conceptualisation of productive organisational energy and its measurement tools. The relationship between leadership style and productive organisational energy was discussed and illustrated throughout the previous literature. The chapter ended by exploring the history, definitions and theories of the last variable in this research job satisfaction.

In Chapter 3, the research presented background information on Saudi Arabia's geography, population, culture and leadership, religion, political system and educational system and how these elements affect leadership styles. It was also drawn from the discussion that the overall culture of Saudi Arabia is considered to be highly conservative and is completely based on religion, whereby social and etiquette traditions are very definitive regarding interactions between men and women. It was noticeable that this can have an effect on leadership style and its delivery in the workplace. The chapter explored evidence that Saudi Arabian educational institutions tend to adopt and implement leadership approaches and methods to improve their universities. Furthermore, the adoption of leadership styles in different educational institutions in Saudi Arabia was evaluated. The chapter eventually summarised the importance of understanding the context of the characteristics of the environment associated with this country.

Chapter 4 presented the research methods used for achieving the research aims and objectives. The philosophical stance and research approach were discussed. Based on extensive arguments, the research justified the utilisation of quantitative research that fused with the research approach and positivism epistemology. A self-administrated web-based questionnaire was developed to survey academics and administrative staff working in two selected Saudi Arabian universities, to analyse quantitatively and test research hypotheses. The chapter also presented the data collection procedure, sample size, strategy and the chosen population of this research.

Chapter 5 presented different data analysis techniques, approaches and the required type of data. The chapter explained the analytical tools to be used for selecting the most appropriate statistical technique. Furthermore, selection of statistical system package, selection of statistical technique, objective of analysis, level of measurement, tests employed, missing data and some common bias tests were provided and justified.

Chapter 6 presented the data gathered from King Abdulaziz University and Dar Alhekma University located in Saudi Arabia. The chapter presented descriptive statistics, including frequencies for categorical variables, and descriptive statistics, including the measuring of central tendency, an analysis of skewness and kurtosis, reliability and validity. The required assumptions for the research analysis were designed to produce valuable results and make sense of the collected data. Numerous tables and figures were presented to answer the research questions. The first section focused on how well the two measures of transformational and transactional leadership predict job satisfaction at King Abdulaziz University and Dar Alhekma University. The second section illustrated results on the impact of the independent variables for leadership style, namely transformation and transaction, on productive organisational energy and job satisfaction in both universities. Eventually, the results of the mediation test showed the mediating role of productive organisational energy on the relationship between leadership style and job satisfaction.

Last but not least, Chapter 7 stitched together every chapter in this study. It started with an overview of the research findings. Furthermore, the link between the literature review, methodology and analysis was established and justified. The first section illustrated the summary of the hypothesis tests. The second section provided a discussion on the research key findings, namely leadership style and its relationship with other research variables. Moreover, it connected the context of Saudi Arabia to the findings, to make more sense and to produce decent outcomes.

8.3 Theoretical Contribution

In the present research study, and as an assessment of the previous literature, the literature review chapter illustrated leadership development in general and in higher education institutions in particular, showing various results and altered outcomes (section 2.2) and leaving a gap with reference to different contexts and settings.

Higher education institutions require further research in respect to the leadership literature, which was the focus of the present research study as a theoretical contribution.

The most distinct contribution to knowledge is an examination of the relationship between leadership style, namely transformational and transaction, productive organisational energy and academic and administrative staff job satisfaction in public and private universities in such a challenging context that is driven by a strong culture and a conservative working environment, namely Saudi Arabia. The consideration of the perspectives of academic and administrative staff with mid-level and with non-managerial roles is limited in the literature, although several studies have attempted to concentrate on top and senior management within higher education. Principally, the researcher has identified the perceived leadership style in public and private Saudi Arabian universities, by looking at what type of leadership style is practised and questioning whether the level of productive organisational energy and job satisfaction could be influenced by various styles.

Moreover, arising from the researcher’s broad literature review, the research provided a wide discussion on several leadership styles, indicating that leadership studies have shifted from critical theories and operational approaches to softer factors. Adopting this position helped the research open up a way to study the impact of leadership style on such factors, namely energy and satisfaction (section 2.7.5).

Furthermore, the researcher conducted a systematic analysis in the literature review chapter to understand the size and trends of the research focusing on the link and correlation between leadership style and soft factors, namely productive organisational energy and job satisfaction, showing the existing research limitations, especially in higher education institutions. This is a significant step that showed the current trend in leadership literature merging with softer factors within the management field (section 2.8). The researcher also offered a conceptualisation of the new concept “productive organisational energy” and a comparison with the construct “engagement,” which is an important model from the human resource management point of view (sections 2.8.1 and 2.8.2).

Another central contribution is the determination of the mediating role of productive organisational energy on the leadership style and job satisfaction relationship. In fact, interesting results were found, as productive organisational energy fully mediates the relationship between transformational leadership and job satisfaction in the public university only (section 6.7).

Most importantly, the research study presented a unique theoretical framework, in an attempt to fulfil the gap in the literature and contribute to and enrich the body of literature. The framework examined the relationship between leadership style (transformational and transactional) and productive organisational energy. Furthermore, it looked at the relationship between productive organisational energy and academic and administrative staff job satisfaction and, eventually, the relationship between leadership style (transformational and transactional) and academic and administrative staff job satisfaction mediated by productive organisational energy (Figure 2.2 in section 2.10.2). Saudi Arabian higher education institutions were chosen as a context for the present research (chapter 3). As mentioned previously, this is the first attempt to examine such relationships and as such creates an important by-product, namely knowledge contributed in regards to testing the relationship of two different leadership styles based on two variables concurrently. The findings of the present research study are supported by some and contradicted by others (Chapter 7).

In summary, the theoretical contribution of the present research study is stated below:

- Public and private universities in Saudi Arabia exhibit altered leadership styles.
- Transactional leadership predicts productive organisational energy and job satisfaction at King Abdulaziz University.
- Transformational leadership predicts productive organisational energy and job satisfaction at Dar Alhekma University.
- The level of academic and administrative staff job satisfaction and productive organisational energy is similar in both public and private universities.

- Transformational leadership negatively impacts job satisfaction at King Abdulaziz University.
- Transactional leadership is insignificant in relation to job satisfaction at Dar Alhekma University.
- Productive organisational energy partially mediates the relationship between leadership and job satisfaction in both universities (transactional in public and transformational in private universities).
- The framework that was tested in Chapter 2 provides a unique way of linking, relating and mediating various variables and factors to leadership styles.

8.4 Methodological Contribution

After focusing on the theoretical contribution, it is necessary to highlight the methodological contribution. Firstly, the use of the questionnaire that was validated in various contexts and tested in the Saudi Arabian context contributes to leadership studies in general (section 4.6). MLQ, PEM and MCMJSS are widely used surveys, and yet the present research contributed to the validation and reliability of these measurement tools in the Saudi Arabian context in general and higher education institutions in particular. The methodological contribution was made by using various analytical software suites to test the numerical quantitative data. The researcher proposed using SPSS and AMOS to analyse the data and build a structural equation model that demonstrated the designed theoretical framework. The adoption of AMOS allowed for variables to correlate, in order to study the relationship between the dependent and independent variables. Furthermore, by using AMOS in building the structural equation model, it was assumed for measurement errors and not perfect measures (chapter 5). The use of AMOS and SPSS contributes to leadership studies in the Saudi Arabian higher education institutions, because, as mentioned previously, as far as the researcher knows, this research is considered the first and one of a kind in the leadership literature and the Saudi Arabian higher educational context that implements SPSS and AMOS in examining such relations.

8.5 Practical Contribution

The final contribution is made to human resource development practice. The present research is unitised to diverse stakeholders within the human recourse field in higher educational institutions, such as top management, academics and administrative staff, and provides many opportunities.

Initially, top management in various universities can spot the most suitable leadership style for their institutions and can use styles that have been identified in the present research to overcome the challenges and the knowledge required. The developed framework illustrates the effectiveness of both leadership styles, namely transformational and transaction, in public and private universities, which can provide a practical way to implement a leadership style by senior management. Besides, in the position of changing from a particular style to another, the framework gives a clear indication of the other affected aspects, such as energy and satisfaction.

Due to the context chosen for this research study, the framework and analytical results offer a clear overview of the difference between the public and private sector in Saudi Arabia. Furthermore, in order to gain an insight into distinctive settings, the theoretical framework can be implemented in various sectors and fields, not only higher education institutions. The framework can also be used to identify the perceived leadership style in a particular context or organisation and examine the influence of the style adopted at the employee level or productive organisational energy and job satisfaction.

In regards to academic and administrative staff in particular, understanding the adopted leadership style was important to them, which is necessary and reflects on their satisfaction and levels of energy at work. Academics and administrative staff were also considered the key aspects of the present research, due to their special position in judging perceived leadership styles. Additionally, the study offers clear guidance to employee and employees in a particular context about the implemented leadership style, whereby specific leadership styles and can be more effective in certain settings.

Finally, the research study also contributes to managers in higher education institutions, by gaining a better understanding of what leadership style will influence employees' satisfaction and how to boost employee energy, alongside creating a better organisational culture and structure.

8.6 Limitations

As with every research study, this one also has some limitations in theoretical, methodological and practical areas. In the case of this research study, the limitations are highlighted as follows.

The main aim of the current research was to examine the relationship between various variables, with a particular focus on leadership. By adopting the positivist epistemological stance the researcher acted as an outsider and was completely detached from the research, a strategy which is supported by several scholars, in that the majority of organisational science studies, namely leadership, believe that reality is objective yet contradicted by others (section 4.2.1).

The researcher also adopted the fact that *'realities of the world that are not merely the interpretations or perceptions of the human mind',* which was again challenged by several authors stating that human beings are extremely important, identifying that their feelings and perceptions can prevent commonly superficial outcomes (section 4.2.2.1). Therefore, arguably, various philosophical stances could reduce validity and the researcher's voice, if reasoning and justifications are not clear enough.

Furthermore, and due to the complexity of the chosen variables in the present research study, namely leadership and energy, the incorporation of subjectivity in the literature review is inevitable. The literature review presented in the current research showed widely diverse and inconsistent arguments, especially when examining leadership in the higher education context, and yet the merger between the framework extracted from the literature review chapter and the empirical results strengthened the research process by understanding the aspects of the analysis outcomes, in order to address the research gap.

From the methodological point of view, it is also to be considered that the primary orientation of this research study is academic exercise and there could be some inaccuracy in the data analysis which might impact the interpretation and results slightly.

All of the measures are in place to ensure that this impact should be kept to a minimum, and the results should be within acceptable range. However, there are some limitations, in other words a few sensitive issues, which could have affected the overall data collection process. Some of these were the reliability of the information that was being collected, differences in the dynamics of each organisation, differences in dynamics within the same organisation, the time of administration by the director of the research centre and, lastly, the length of the questionnaire and the time taken by the respondents to fill it in. However, obtaining responses from a large number of participants helps eliminate or at least reduce these issues.

Sample size is a frequent limitation in most doctorate projects, and due to time constraints and data access processes, this research is no exception. The data were collected from only two different universities, one representing the public sector and the other the private sector. The generalisation of the research findings and results is limited, as many scholars have argued that two samples are not enough to provide a clear insight into every Saudi Arabian university (section 4.5.2).

Furthermore, the demographic aspects of age, gender and level of education were not taken into consideration, which can be noted as a potential limitation of this research study (section 6.3.1).

The significance of the research context, based on epistemological, ontological and methodological positions, is particularly relevant in the Saudi Arabian higher education context. Nonetheless, knowledge can always be expandable by adopting a contrasting methodological method, i.e. qualitative, for example by looking at why the Saudi Arabian public sector does not adopt a transformational leadership style and how it is possible to change different styles in altered cultures.

8.7 Further Research

As this study highlighted and examined the relationship between leadership styles, productive organisational energy and job satisfaction, the most obvious extension would be suggesting other variables, such as change management, talent management, employee efficiency or even creativity. For further investigation, and in such a context, it can be proposed that examining organisational culture is variable and can add more to the current study. Future studies can also implement various styles of leadership, especially in the Saudi context, such as an autocratic style. However, the researcher also had no influence on the research, and so it is also worth suggesting that an observational supplemented perspective, by interviewing the target sample, would help confirm the quantitative data. Another point that could be extracted from the present results into further research is why transformation is perceived in the private university in contrast to the public university. As mentioned previously, it has been always argued that transaction leadership is practiced more by top management in the education sector.

Another research study could adopt a triangulation method, and besides carrying out quantitative and statistical tests, it may also be worthwhile conducting a 360 degree interview with managers, administrative staff and academics, in order to generate a rounded argument and understand the implemented leadership style. In other words, the use of altered philosophy, namely interpretive that is linked to subjective ontology and inductive approach, is also recommended for further research, to acknowledge and observe real-life events affecting both managers and employees.

Furthermore, an interesting extension to this study would be choosing more universities in different regions in Saudi Arabia, or even spreading the study across the whole Gulf region within altered higher education institutions. Finally, as mentioned briefly in section 8.6, further research would require a bigger sample that focuses more on gender issues in society, to investigate different understandings of leadership.

8.8 Final word and Overall Epilogue

The findings of the research show that the impact of leadership styles on productive organisational energy and job satisfaction is more complex than previously assumed. Traditional approaches present multiple problems, such as inconsistent findings, causality issues and problems measuring them, so the present study focused on the new leadership approach with an emphasis on transformation and transactional leadership.

Furthermore, there are major gaps in the current literature and studies which have focused on leadership styles and productive organisational energy in the context of higher education institutions in Saudi Arabian public or private sectors. The study aims at bridging the gap in the literature, which may lead to further research and recommendations for educational organisation looking to improve their overall leadership style and management practices in Saudi universities, as well as in those based in other countries.

The research used a quantitative approach and an extensive literature review. The quantitative research included gathering data by utilising a questionnaire survey completed by 349 respondents in a public-sector university in Saudi Arabia and by 204 employees in a Saudi private-sector university. The data analysis was performed in three stages. In the first stage's descriptive statistical approach, data analysis examined and summarised the respondents' demographics as well as characteristics as they relate to frequencies, standard deviation, reliability tests, mean, skewness, and kurtosis. In the second stage the researcher used SPSS and AMOS and, lastly, structural equation modelling (SEM), to analyse further the empirical data. In addition, different structural models were used to test the hypotheses of this research. The researcher developed a conclusion for the transformational and transactional variables, in that there is a clear delineation between them because transactional leadership is associated with King Abdulaziz University and transformational leadership with Dar Alhekma University. The mediating role of productive organisational energy on leadership styles at King Abdulaziz University found that transactional leadership was still significant, but that transformational leadership was reduced in influence to a statistically insignificant level. This brings the results back into line with what the literature would suggest would be the case for King Abdulaziz University, i.e. that transactional leadership is likely to be the dominant leadership style in evidence. The drivers of motivation in organisations are distinctly Western, and perhaps the best representation of the conceptions of organisations tends to be done on an absolutely agnostic basis, since organisations have clear drivers, and religion is not one of them.

In contrast to private sector universities, it is my contention that transactional leadership is a more effective style of leadership in public sector universities, in a country where there are strict religious and culture norms; however, religion is not a clear driver of productive organisational energy and job satisfaction. As one of the limitations of the present research study is the lack of literature to support leadership styles in public and private higher educational sector in Saudi Arabia, this is an opportunity for further research. Consequently, scholars and researchers from Saudi Arabia or other countries should be willing to conduct studies for a period of time to continue determining and examining transactional and transformational leadership and their effects on job satisfaction, motivation, talent management and more.

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Appendices

Appendix 1A: Measurement Tools Review

Leader Behaviour Description Questionnaire (LBDQ) is one of the oldest instruments used for measuring and determining leadership style in an organisation (Szilagyi and Keller, 1976). The instrument has been in use for more than 50 years and its validity and reliability have been tested multiple times (Yunker and Hunt, 1976; Vito, Suresh and Richards, 2011; Kent, 2015; McGuire, 2015; Bin Mat Zin and Fahd, 2016), yet it has not been utilised in the context of higher education. The instrument is designed in such a way that the team members of a given group define and explain the behaviour of their leaders, thus identifying their leadership style (Rodriguez, 2011). The questionnaire consists of two major scales that are used to measure, namely consideration and initiation (Lauber, 2014), which are subdivided further into multiple subscales, including multiple factors such as representation, persuasiveness, role assumption and superior orientation (Yeh et al., 2016). Yukl (2012) explains that researchers came to the conclusion that personal traits were not enough to measure the style of leadership and hence developed this instrument to allow employees to measure and analyse the behaviours exhibited by leaders. It has thus helped in establishing that the views and behaviours of leaders tend to differ significantly from those of their subordinates (Mann, 2013).

As discussed by Yukl (2012), the biggest strength of the LBDQ instrument is that it measures leadership style on the basis of the views and perceptions of subordinates, and it is therefore the best judge of the leadership approach adopted by leaders or managers in an organisation. Another advantage of using the instrument was discussed by Bryman (2013), who explained that the LBDQ questionnaire has been proven to be consistent in relation to used scales. While these discussions highlight and establish LBDQ as an effective leadership measuring instrument, Keller (2006) criticised it and argued that the instrument is not effective in measuring the actual behaviour exhibited by leaders but is rather a representation of the stereotypes associated with the same. However, LBDQ has been used in various contexts, including in Asia (Littrell, Alon and Wai, 2012), but unfortunately its reputation was ruined and damaged by several researchers (Littrell, 2013). Another critique was pointed out by Stogdill (1974), in that '*It cannot be acceptable that only two leader behaviour factors, i.e. initiating structure and consideration, are capable of producing a coherent overview on leaders' behaviours'.* Keller (2006) also states that the instrument does not help measure leaders' overall behaviour and is very limited, and so researchers must focus upon the adoption of scales that use the behavioural approach for measuring leadership. Some of the instruments developed thereafter are now discussed further.

LMX-7 (Leader-Member Exchange) questionnaire is yet another instrument used to measure leadership style in organisations. The instrument was developed by Scandura and Graen (1984) and Graen and Uhl-Bien (1995) and is based on leader-member exchange (LMX) theory, which states that leadership involves the formation of relationships between leaders and their employees based on things such as trust (Brower et al., 2000) and loyalty (Ilies et al., 2007). Thus, the (LMX-7) scale is primarily used and incorporated for measuring the respect of subordinates and leaders for the capabilities shown by the other person (Harris and Kirkman, 2014). In fact, Schriesheim et al. (1999) argue that leader member exchange (LMX) theory is not clear enough, comparing it to vertical dyad linkage (VDL).

The (LMX-7) instrument was designed to include seven key elements, six of which are used to measure obligation (Hassan et al., 2013), trust and respect as observed among subordinates and leaders and the last item is beneficial and incorporated for determining the overall quality of the relationship that exists between them (Ilies et al., 2007; Antonakis et al., 2003). Yoon et al. (2016) explain that the three factors used in the instrument for measuring organisational trust are among the most important and fundamental items crucial for the establishment of a healthy relationship between leaders and their subordinates, in which case the instrument can be used by both leaders as well as subordinates, in order to make a better assessment and study of the relationship forms between them.

According to Hooper and Martin (2008), the LMX-7 questionnaire is an effective instrument for measuring leadership, as it provides an extremely practical approach and scale for measuring leadership in which the key factor in the success of a leader is the establishment of a strong and positive relationship between said leader and his/her employees. Another benefit of the instrument was identified by Lee (2005), who argues that the questionnaire is effective because it also helps in simultaneously identifying any form of problem that exists within the group or team. However, LMX-7 has been used in several occupations and settings (Cliskan, 2015; Furunes et al., 2015; Yukl et al., 2013), including higher education institutions (Davis, Bryant and Zaharieva, 2013; Chen, 2015). Bernerth et al. (2007) argue that LMX-7 questionnaire is not effective in the modern-day scenario, because it is not efficient in measuring the attributes that affect the relationship formed between leaders and their subordinates. Based on the present research study’s objectives, the focus is on perceived leadership style within the Saudi Arabian higher education institutions, not on the relationship between leaders and employees, and so the LMX-theory is irrelevant and other measures or instruments must be developed and utilised in order to justify the suitable leadership measurement tool.

The Path-Goal Leadership Grid is yet another commonly adopted leadership model which was developed into an instrument for measuring leadership style (Tonsberg and Henderson, 2016). The grid is based on the path-goal model that helps define the behaviour of leaders that is suitable for subordinates to achieve their goals and objectives (Schriesheim et al., 2006; Kerr and Jermier, 1978). The four leadership styles proposed by the model are supportive, participative, directive and achievement-oriented (Gregoire and Arendt, 2014), yet it does not fit with the present research's aim and objectives.

The grid thus helps measure the style of leadership adopted by leaders on the basis of two key variables, the personal characteristics of subordinates and the pressures and demands exerted by the environment (Schriesheim et al., 2006). The questionnaire that was developed based on the model consisted of around 20 questions, and the respondents were required to rate themselves on a scale of 1 to 7 (Zhao, Hwang and Lee, 2016). Hunter et al. (2007) explain that the final scores that are obtained by the respondents are then used to assess and identify a leadership style, where a score of 18 and above is considered directive leadership, a score of 23 and above is considered supportive and a score of 16 and above is considered participative.

According to Hunter et al. (2007), the measurement instrument is beneficial because it not only helps in the identification of factors that contribute to higher motivation, but it also helps define and identify the reasons behind the best fit of a given leadership style in a given situation. On the other hand, Neck et al. (2006) argue that the instrument has not been consistent in the studies in which it was used and has failed to account for the fact that changes in subordinates can also cause changes in the style of adopted leadership. To the researcher's knowledge, the use of the path-goal leadership grid is very limited, especially in a higher education institution context where the model still requires further development before it can be used and adopted in research. Hence, the instrument must not be used or adopted, and further research in required.

Minnesota Satisfaction Questionnaire (MSQ) One of the most commonly used and adopted instruments for measuring job satisfaction among employees (Weiss et al., 1967; Hirschfeld, 2000). The instrument was developed in 1967 by Weiss et al. and was created by the authors as part of the "Work Adjustment Project". As explained by Golbasi et al. (2008), the MSQ instrument used for measuring job satisfaction is based on the basic assumption that the fit of employees for a given work role is highly dependent on not only the skills of individuals, but also on the work environment in which they operate or work. Golbasi et al. (2008) and Hancer and George (2003) discuss that the questionnaire is primarily a self-reporting instrument and was developed on the basis of multiple scales, which are further subdivided into subscales for adequate measurement. The three scales that are usually measured by the questionnaire or the instrument are intrinsic and extrinsic job satisfaction and the generation of job satisfaction.

As discussed by Buitendach and Rothmann (2009), there are multiple advantages to using MSQ for measuring job satisfaction, the biggest one being that the instrument consists of multiple scales and subscales and hence helps measure different aspects in an accurate way. Also, the questionnaire has been validated by multiple studies and researches and can be applied to or incorporated in any given organisation and can even be used for employees working at all levels of an organisational hierarchy (Spector, 1997; Ghiselli, LaLopa and Bai, 2001; Thompson, 2015). However, Gunlu et al. (2010) claim that the questionnaire is very long, and the fact that it contains so many dimensions for measuring satisfaction levels is not only become confusing, but it can also lead to overlapping the aspects of satisfaction that are being measured and evaluated.

Though there have been multiple modifications to the MSQ scale of job satisfaction over time by different researchers, Qzyurt et al. (2006) maintain that the use of the short version is valid in contexts such as Turkish higher education. Baycan (1985) proved the validity of the Turkish MSQ version, and one could argue that the Saudi Arabian culture is similar to the Turkish one, in that higher education systems are completely diverse and employ altered approaches and styles. In fact, several Saudi Arabian studies have adopted MSQ instrument in different contexts, such as healthcare (Alahmadi, 2002; Azeem and Altalhi, 2015) hospitality (Almutairi et al., 2013) and higher education institutions (Almutairi, 2013). In contract, Golbasi et al. (2010) reason that other instruments such as the job descriptive index developed some time after MSQ are much more effective and beneficial.

Job Descriptive Index (JDI) is a Likert scale-based questionnaire, which was developed by Smith et al. (1969) and has been used for measuring the satisfaction levels of employees based on different aspects of organisational working and development. The instrument was developed to measure the level of job satisfaction on the basis of five different aspects: supervision, payments made to employees, promotions, co-workers and the work that is done (Wang and Russell, 2005). According to the discussions presented by Wang and Russell (2005) and Kinicki et al. (2002), JDI is an efficient and commonly used tool for measuring job satisfaction. Carter et al. (2011) explain that the instrument has not only been commonly used but also validated in different industries, including healthcare (Bormann and Abrahamson, 2014), retail (Salleh, Nair and Harun, 2012) and higher education (Oshagbemi, 2000). Also, the 72 items that have been included in the study are beneficial for use in different dialects as well as languages. However, Edwards et al. (2008) have criticised the instrument and suggested that it is not completely valid in current organisational scenarios, because contemporary organisations and employees need multiple other aspects such as personal development to be completely satisfied with their jobs, and hence the instrument is not completely valid in the Saudi Arabian context. Furthermore, several leadership studies suggest the use (Rahim and Afza, 19993) and suitability to examine leadership style using (LMX) instrument and job satisfaction (JDI) (Graen, Liden and Hoel, 1982), and leadership (LBDQ) and job satisfaction (JDI) (Packard and Kauppi, 1999).

Another commonly used and adopted instrument used to measure job satisfaction among employees is the *job satisfaction survey (JSS)* (Spector, 1985)**.** This multidimensional instrument, which was developed by Paul E. Spector, has been found to be beneficial for analysing and evaluating different job-related aspects as well as the attitudes of employees that contribute to higher satisfaction (Rowden and Conine, 2005). The instrument was designed to include around 36 different items, including different factors affecting satisfaction, such as contingent rewards, supervision, promotions, co-workers, communication and the kind of work that is done by employees (Hamidifar, 2015; Leiba, 2016). While Rowden and Conine (2005) argue that the JSS instrument has been tested and validated in different situations

(Yelbog and Gokalp, 2009; Lok and Crawford, 2001) and is completely reliable, the study by Hwang and Der-Jang (2005) notes that the instrument is not valid in the case of evaluating the satisfaction levels of teachers in an educational setting, which makes it ineffective and inconsistent in relation to higher educational institutions and the present study in particular.

Appendix 4A: Questionnaire

MINISTRY OF HIGHER EDUCATION

Manchester Metropolitan University

Dear Participant,

Leadership is one of the most extensively researched phenomenons in organizational behaviour and social studies. I am trying to study the impact of leadership style on Job Satisfaction and the mediating role of productive organisational energy in the educational institutions in Saudi Arabia. Saudi Arabia has large number of expatriates and is focusing a lot on the development of its education system. Hence, the study would help in identifying the way leadership styles can affect the performance of employees in these organisations for further development.

I will be pleased if you can be part of my research and can spend 15 minutes to help me and complete the presented questionnaire. All participants' answers are confidential. Sixty-six descriptive statements are listed on the following pages. Kindly, judge how frequently each statement fits you and your manager. The scale consists of a Likert-type response scale based on five points, ranging from point 1 that represents not at all to 5 that represents frequently, if not always.

For more information and more details about this study, please do not hesitate to contact me.

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Thanks for your contribution to my PhD research.

Judge how frequently each statement suits you. If any item is irrelevant or unclear, please leave it blank.

Please answer according to the rating scale bellow

1	2	3	4	5
Not at all	Once in a while	Sometimes	Fairly Often	Frequently, if not always

Which *leadership* style do you perceive?

These questions are used to describe the leadership style of the management/manager, as you perceive it.

1. My manager provides me with assistance in exchange for my efforts. 1 2 3 4 5
2. My manager re-examines critical assumptions to question whether they are appropriate. 1 2 3 4 5
3. My manager fails to interfere until problems become serious. 1 2 3 4 5
4. My manager focuses attention on irregularities, mistakes and deviations from standards. 1 2 3 4 5
5. My manager avoids getting involved when important issues arise. 1 2 3 4 5
6. My manager talks about his/her most important values and beliefs. 1 2 3 4 5
7. My manager is absent when needed. 1 2 3 4 5
8. My manager seeks differing perspectives w/n solving problems. 1 2 3 4 5
9. My manager talks optimistically about the future. 1 2 3 4 5
10. My manager Instills pride in me for being associated with him. 1 2 3 4 5
11. My manager discusses in specific terms that is responsible for achieving performance target. 1 2 3 4 5
12. My manager waits for things to go wrong before taking action. 1 2 3 4 5
13. My manager talks enthusiastically about what needs to be accomplished. 1 2 3 4 5
14. My manager specifies the importance of having a strong sense of purpose. 1 2 3 4 5
15. My manager spends time teaching and coaching. 1 2 3 4 5
16. My manager makes clear what one can expect to receive when performance goals are achieved. 1 2 3 4 5
17. My manager shows that he/she is firm believer in "If it isn't broke, don't fix it". 1 2 3 4 5
18. My manager goes beyond self-interest for the good of the group. 1 2 3 4 5
19. My manager treats me as individual rather than just as a member of a group. 1 2 3 4 5
20. My manager demonstrates that problems must become chronic before taking action. 1 2 3 4 5
21. My manager acts in ways that builds my respect. 1 2 3 4 5
22. My manager concentrates my full intention on dealing with mistakes, complaints, and failures. 1 2 3 4 5

Judge how frequently each statement suits you. If any item is irrelevant or unclear, please leave it blank.

Please answer according to the rating scale bellow

1	2	3	4	5
Not at all	Once in a while	Sometimes	Fairly Often	Frequently, if not always

23. My manager considers the moral and ethical consequences of decisions. 1 2 3 4 5
24. My manager keeps track of all mistakes. 1 2 3 4 5
25. My manager display a sense of power and confidence 1 2 3 4 5
26. My manager articulates a compelling version of the future. 1 2 3 4 5
27. My manager directs my attention toward failures to meet standards. 1 2 3 4 5
28. My manager avoids making decisions. 1 2 3 4 5
29. My manager considers me as having different needs, abilities, and aspirations from other. 1 2 3 4 5
30. My manager gets me to look at problems from many different angles. 1 2 3 4 5
31. My manager helps me to develop my strengths. 1 2 3 4 5
32. My manager suggests new ways of looking at how to complete assignments. 1 2 3 4 5
33. My manager delays responding to urgent questions. 1 2 3 4 5
34. My manager emphasizes the importance of having a collective sense of mission. 1 2 3 4 5
35. My manager expresses satisfaction when I meet expectations. 1 2 3 4 5
36. My manager expresses confidence that goals will be achieved. 1 2 3 4 5

Judge how frequently each statement suits you. If any item is irrelevant or unclear, please leave it blank.

Please answer according to the rating scale bellow

1	2	3	4	5
Not at all	Once in a while	Sometimes	Fairly Often	Frequently, if not always

What is the level of your Productive Organizational *Energy*?
These questions measure different dimensions of productive organisational energy, namely emotional dimension, cognitive dimension and behavioural dimension.

37. People in my work group feel excited in their job. 1 2 3 4 5
38. People in my work group feel enthusiastic in their job. 1 2 3 4 5
39. People in my work group feel energetic in their job. 1 2 3 4 5
40. People in my work group feel inspired in their job. 1 2 3 4 5
41. People in my work group feel ecstatic in their job. 1 2 3 4 5
42. My work group is ready to act at any given time. 1 2 3 4 5
43. People in my work group are mentally alert. 1 2 3 4 5
44. In my work group, there is a collective desire to make something happen. 1 2 3 4 5
45. People in my work group really care about the fate of this company. 1 2 3 4 5
46. People in my work group are always on the lookout for new opportunities. 1 2 3 4 5
47. People in my work group go out of their way to ensure the company succeeds. 1 2 3 4 5
48. People in my group often work extremely long hours without complaining. 1 2 3 4 5
49. There has been a great deal of activity in my work group. 1 2 3 4 5
50. People in my work group act at a very fast pace. 1 2 3 4 5

Explain your *Job Satisfaction*
These questions are presented to explain your satisfaction with supervision based on Intrinsic and Extrinsic factors

51. I feel of self-esteem and self-respect in my job 1 2 3 4 5
52. I feel that my self-development is growing in my job. 1 2 3 4 5
53. I feel a sense of personal satisfaction when I do this job. 1 2 3 4 5
54. I find that my job meets my expectations. 1 2 3 4 5

55. I receive a fairly amount of respect and treatment from my supervision. 1 2 3 4 5

56. My supervision keep me informed in my job. 1 2 3 4 5

57. I feel satisfied about the supervision I receive. 1 2 3 4 5

58. I have a fair chance to participate in procedures, determination of methods and goals. 1 2 3 4 5

Tell me about your *self*

Please answer the following questions by checking the desired box. Please do not check more than one box.

59. Gender	☐Female	☐Male				
60. Age	☐18-24	☐25-34	☐35-44	☐45-54	☐55-64	☐Over
61. Work Field	☐Academics		☐ Non-Academics			
62. Work level	☐Non-managerial level		☐Mid-level	☐Board level		
63. Education	☐High School		☐Diploma	☐Degree	☐Master/Doctorate	

Once again thank you for your contribution and your time.
Your help really appreciated.
*For more information, do not hesitate to contact me **z.abualahamael@mmu.ac.uk***

Appendix 4b: Letters

ROYAL EMBASSY OF SAUDI ARABIA
CULTURAL BUREAU
LONDON

سفارة المملكة العربية السعودية
الملحقية الثقافية
لندن

2015/04/23م

رقم الملف: S14654

إفـــــــادة

تفيد الملحقية الثقافية بسفارة المملكة العربية السعودية في لندن بأن الطالب/ *زياد وليد حسين ابو الحمائل* (رقم الهوية الوطنية 1063147415) ، مبتعث من قبل وزارة التعليم العالي لدراسة الدكتوراه في تخصص Management في جامعة Manchester Metropolitan وأنه لا يزال على رأس البعثة التي ستنتهي 1437/12/14هـ.

وبناء على توصية المشرف الدراسي على بحث الدكتوراه ، بطلب القيام برحلة علمية الى المملكة العربية السعودية لإكمال إجراءات بحثه بعنوان:

".The Impact of leadership style on employee performance"

و لضرورة إرفاق موافقة من الجهة المستضيفة في المملكة لإستكمال طلب الموافقة على الرحلة العلمية تم منحه هذا الخطاب بناء على طلبه وذلك لتقديمه إلى جامعة الملك عبدالعزيز في جدة - قسم الدراسات العليا.

وتقبلوا خالص التحية والتقدير،،،

الملحق الثقافي

بسفارة المملكة العربية السعودية في لندن

فيصل بن محمد المهنا أباالخيل

الرقم : .... التاريخ : .... الموافق : .... المرفقات : ....

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Notice of an acceptance provided by the sponsor for "data collection"

Manchester Metropolitan University

22 May 2015

To whom it may concern,

I am writing to confirm that **Zeyad Waleed H Abualhamael**, is one of our PhD research students here at Manchester Metropolitan University Business School, and the title of his research Thesis is:

The Power of Productive Energy

Mr Abualhamael will be away from the U.K. in Saudi Arabia for 90 days starting in June 2015 in order to collect data which is important to his research. His Director of Studies, Dr Linda Alker, has approved Mr Abualhamael's travel request.

If you require any further information please do not hesitate to contact me.

Yours sincerely,

Maria Manifava
Research Degrees Officer
Faculty of Business and Law
Manchester Metropolitan University

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Notice of an acceptance provided by the MMU for "data collection"

KINGDOM OF SAUDI ARABIA
Ministry of Higher Education
KING ABDULAZIZ UNIVERSITY
Vice presidency for Graduate
Studies & Academic Research
Deanship of Graduate Studies

المملكة العربية السعودية
وزارة التعليم العالي
جامعة الملك عبد العزيز
وكالة الجامعة للدراسات العليا والبحث العلمي
عمادة الدراسات العليا

إفــادة

بناءً على موافقة سعادة وكيل الجامعة للدراسات العليا والبحث العلمي المشفوع بخطاب الملحق الثقافي بسفارة المملكة العربية السعودية في لندن بشأن المبتعث/ زياد حسين أبو الحمائل رقم الهوية ١٠٦٣١٤٧٤١٥ مقترح اطروحة الدكتوراه بعنوان" :

The Impact Of leadership Style OnEmployee Performance

عليه تفيد عمادة الدراسات العليا بأن الباحث/ زياد حسين أبو الحمائل قد قام بجمع البيانات اللازمة لبحثه المتعلق ببحثه في جامعة الملك عبد العزيز من تاريخ ٢٠/٦/٢٠١٥م حتى نهاية الفترة بتاريخ ٨/٩/٢٠١٥م.

وقد أعطي هذه الإفادة للباحث بناءً على طلبه دون أدنى مسئولية على الجامعة.

وتقبلوا خالص تحياتي وتقديري!!!

مدير وحدة الرسائل العلمية والاستبانات

أ / عمر بن مبارك البلادي

Encl.: ______ المشفوعات: Date: ______ التاريخ: Ref.: ______ الرقم:
عمر البلادي "افادة تطبيق بحث"

ص.ب: ٨٠٢١٧ جدة ٢١٥٨٩ ت: ٦٩٥١٢٦٦ / ٦٤٠٠٠٠٠ - ٦١٣٨٧ فاكس: ٠٢ ٦٩٥٢٨٩٦
P.O.Box: 80217 Jeddah 21589 Tel.: 6951266 / 6400000 - 61387 Fax.: 02 6952896

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DAR AL-HEKMA UNIVERSITY
GRADUATE STUDIES & SCIENTIFIC RESEARCH
RESEARCH CENTER

ةيلكراد ةمكحلا

Section 3: DECLARATIONS AND SIGNATURES

All researchers are required to read and sign this portion of the research application.

3.1 Required Acknowledgment:
The Principal Researcher/Researcher(s) must include mention of DAH and its role in this project as an Acknowledgment in the project's finished form.

3.2 Declaration:
By signing this form all researchers agree to abide by the principles of academic integrity and understand the consequences for violation of these principles. All researchers also acknowledge DAH's Intellectual Property Rights and Ethics Policy.

3.3 Disclaimer:
I hereby absolve Dar Al Hekma University of responsibility for any negative consequences of the conduct and findings of this project.

3.4 Application Signature:
All Researchers (including students), please duplicate signature lines as needed to obtain signatures from all authors

Researcher's name:	Zeyad Abualhamael
Researcher's signature:	Zeyad
Date:	15-09-2015

3.5 Submitting Your Application:

Please submit the required sections of this application to the Research Center by emailing the ***signed*** and ***completed*** documents (including any required ***attachments*** if applicable) to Dr. Khawla Zahran at kzahran@dah.edu.sa

If you do not have a digital signature, you are additionally required to provide the signed copy of your application either as a scanned copy (to email above), or send a hard copy by fax, in person or by post to the following address:

Dr. Khawla Zahran
Research Office, office # 289-A
Dar Al Hekma University
P.O. Box: 34801, Jeddah 21478
Saudi Arabia
Telephone: +966-2-630 3333 Ext. 744
Fax: +966-2-Fax: 966-2-631-6270

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Appendix 6A: Transformational leadership Descriptive Statistics of Respondents in King Abdulaziz Public University

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
King Abdulaziz Public University							
TR1	349	1.9140	.55559	-.035	.131	.180	.260
TR2	349	1.9112	.53134	-.088	.131	.448	.260
TR3	349	1.9484	.54948	-.030	.131	.308	.260
TR4	349	1.9456	.54658	-.035	.131	.339	.260
TR5	349	1.9828	.54640	-.011	.131	.378	.260
TR6	349	2.0287	.54063	.023	.131	.443	.260
TR7	349	1.9542	.53944	-.038	.131	.438	.260
TR8	349	1.9828	.54640	-.011	.131	.378	.260
TR9	349	2.0401	.54519	.027	.131	.374	.260
TR10	349	1.9971	.56476	-.001	.131	.164	.260
TR11	349	1.9914	.55959	-.003	.131	.222	.260
TR12	349	2.0229	.53556	.021	.131	.513	.260
TR13	349	2.0057	.54664	.004	.131	.378	.260
TR14	349	1.9914	.51129	-.014	.131	.864	.260
TR15	349	1.8940	.58496	.019	.131	-.143	.260
TR16	349	1.9713	.55116	-.016	.131	.312	.260
TR17	349	1.8309	.60417	.093	.131	-.399	.260
TR18	349	1.9198	.54602	-.051	.131	.298	.260
TR19	349	1.9656	.55602	-.015	.131	.250	.260
TR20	349	1.8539	.61013	.088	.131	-.404	.260

Transformational Leadership Descriptive Statistics of Respondents in Dar Alhekma Private University

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Dar Alhekma Private University							
TR1	204	3.6324	1.03492	-.938	.170	.235	.339
TR2	204	3.6127	1.09276	-1.012	.170	.197	.339
TR3	204	3.7157	1.00616	-1.163	.170	.967	.339
TR4	204	3.6078	1.05192	-.878	.170	.029	.339
TR5	204	3.6029	.98471	-1.041	.170	.563	.339
TR6	204	3.4804	1.02415	-.655	.170	-.397	.339
TR7	204	3.4902	1.09405	-.773	.170	-.224	.339
TR8	204	3.4314	1.06914	-.638	.170	-.489	.339
TR9	204	3.3235	1.05197	-.731	.170	-.410	.339
TR10	204	3.3725	1.08661	-.576	.170	-.651	.339
TR11	204	3.4559	1.09320	-.777	.170	-.239	.339
TR12	204	3.4412	1.10149	-.743	.170	-.416	.339
TR13	204	3.4804	1.07576	-.740	.170	-.311	.339
TR14	204	3.5049	1.03390	-.891	.170	-.063	.339
TR15	204	3.6422	1.05718	-.910	.170	.197	.339
TR16	204	3.6716	.86814	-.768	.170	.072	.339
TR17	204	3.6765	1.12440	-.910	.170	.098	.339
TR18	204	3.5539	1.08371	-.726	.170	-.342	.339
TR19	204	3.6176	1.04145	-.899	.170	.132	.339
TR20	204	3.7206	1.06691	-.921	.170	.316	.339

Appendix 6B: Transactional leadership Descriptive Statistics of Respondents in King Abdulaziz Public University

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
King Abdulaziz Public University							
TS1	349	3.5903	1.03447	-.948	.131	.259	.260
TS2	349	3.6848	.95792	-1.010	.131	.727	.260
TS3	349	3.6103	1.00431	-.802	.131	.003	.260
TS4	349	3.5788	.99001	-.792	.131	.008	.260
TS5	349	3.4957	.98442	-.597	.131	-.425	.260
TS6	349	3.5215	1.02426	-.744	.131	-.233	.260
TS7	349	3.4470	1.05899	-.678	.131	-.413	.260
TS8	349	3.3123	1.03246	-.607	.131	-.542	.260
TS9	349	3.4871	1.01028	-.654	.131	-.311	.260
TS10	349	3.4670	1.02395	-.775	.131	-.142	.260
TS11	349	3.4527	.99492	-.687	.131	-.323	.260
TS12	349	3.5473	.94149	-.750	.131	-.028	.260
TS13	349	3.5358	.97792	-.870	.131	.051	.260
TS14	349	3.6934	1.03140	-.955	.131	.443	.260
TS15	349	3.6017	1.02222	-.780	.131	-.069	.260
TS16	349	3.7278	1.07631	-.901	.131	.173	.260

Transactional leadership Descriptive Statistics of Respondents in Dar Alhekma Private University

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Dar Alhekma Private University							
TS1	204	1.8676	.51302	-.196	.170	.509	.339
TS2	204	1.8971	.54744	-.060	.170	.248	.339
TS3	204	1.9216	.54703	-.049	.170	.312	.339
TS4	204	1.9853	.53891	-.013	.170	.498	.339
TS5	204	2.0294	.56072	.010	.170	.221	.339
TS6	204	1.9657	.58200	.002	.170	-.014	.339
TS7	204	2.0000	.55265	.000	.170	.328	.339
TS8	204	2.0637	.55341	.031	.170	.266	.339
TS9	204	2.0245	.54762	.016	.170	.381	.339
TS10	204	2.0000	.57877	.000	.170	.030	.339
TS11	204	1.9755	.53855	-.021	.170	.497	.339
TS12	204	2.0245	.56533	.006	.170	.171	.339
TS13	204	2.0000	.50612	.000	.170	.976	.339
TS14	204	1.9314	.59156	.017	.170	-.137	.339
TS15	204	1.9706	.55186	-.016	.170	.326	.339
TS16	204	1.8775	.62751	.096	.170	-.490	.339

Appendix 6C: Productive Organizational Energy Descriptive Statistics of Respondents in King Abdulaziz Public University

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
King Abdulaziz Public University							
POE1	349	3.5244	1.08416	-.682	.131	-.456	.260
POE2	349	3.4011	1.05023	-.650	.131	-.550	.260
POE3	349	3.5702	1.03325	-.747	.131	-.220	.260
POE4	349	3.7020	1.05999	-.969	.131	.390	.260
POE5	349	3.6189	.99180	-.955	.131	.394	.260
POE6	349	3.5960	.97973	-1.055	.131	.604	.260
POE7	349	3.7049	1.00659	-1.048	.131	.868	.260
POE8	349	3.5244	1.04365	-.874	.131	.089	.260
POE9	349	3.4040	1.09076	-.614	.131	-.601	.260
POE10	349	3.3381	1.11431	-.685	.131	-.564	.260
POE11	349	3.3352	1.08778	-.589	.131	-.586	.260
POE12	349	3.5358	1.00402	-.818	.131	.013	.260
POE13	349	3.6275	.99073	-.928	.131	.268	.260
POE14	349	3.7479	1.03086	-.888	.131	.251	.260

Productive Organizational Energy Descriptive Statistics of Respondents in Dar Alhekma Private University

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Dar Alhekma Private University							
POE1	204	3.5490	1.07939	-.733	.170	-.329	.339
POE2	204	3.3922	1.04723	-.867	.170	-.270	.339
POE3	204	3.5637	1.03193	-.757	.170	-.212	.339
POE4	204	3.6765	1.04727	-1.087	.170	.672	.339
POE5	204	3.6569	.95200	-1.132	.170	.944	.339
POE6	204	3.5735	.98235	-1.042	.170	.604	.339
POE7	204	3.6765	1.01381	-1.149	.170	1.112	.339
POE8	204	3.5392	1.04737	-.962	.170	.276	.339
POE9	204	3.4608	1.11126	-.749	.170	-.416	.339
POE10	204	3.3186	1.14533	-.669	.170	-.543	.339
POE11	204	3.2892	1.10515	-.571	.170	-.615	.339
POE12	204	3.4755	1.08022	-.753	.170	-.264	.339
POE13	204	3.6765	.96910	-1.214	.170	1.066	.339
POE14	204	3.6618	1.05900	-.796	.170	-.032	.339

Appendix 6D: Job Satisfaction Descriptive Statistics of Respondents in King Abdulaziz Public University

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
King Abdulaziz Public University							
JS1	349		1.00222	-1.133	.131	1.209	.260
JS2	349	3.7049	1.09413	-.903	.131	.074	.260
JS3	349	3.6934	1.11957	-.893	.131	.033	.260
JS4	349	3.5158	1.07367	-.637	.131	-.370	.260
JS5	349	3.9255	.97683	-1.134	.131	1.090	.260
JS6	349	3.6132	1.07048	-.834	.131	-.022	.260
JS7	349	3.8968	.96830	-1.129	.131	1.187	.260
JS8	349	3.5587	1.08549	-.816	.131	-.153	.260

Job Satisfaction Descriptive Statistics of Respondents in Dar Alhekma Private University

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Dar Alhekma Private University							
JS1	204	3.715075	.93871	-1.156	.170	1.529	.339
JS2	204	3.715075	1.05595	-.959	.170	.293	.339
JS3	204	3.715075	1.12440	-.910	.170	.098	.339
JS4	204	3.715075	1.07481	-.753	.170	-.116	.339
JS5	204	3.715075	1.03725	-1.190	.170	1.058	.339
JS6	204	3.715075	1.11729	-.844	.170	-.093	.339
JS7	204	3.715075	1.01138	-.995	.170	.645	.339
JS8	204	3.715075	1.03492	-.938	.170	.235	.339

Appendix 6E: Transformational Leadership Summary of Attained Findings

Items	King Abdulaziz public university		Items	Alhekma private university	
	Loadings	C.R (t)		Loadings	C.R (t)
Factor1			**TR1**	0.728	11.295
TR1	.696	7.551	**TR2**	0.776	12.219
TR2	0.735	7.702	**TR3**	0.774	12.2
TR3	0.737	7.71	**TR4**	0.792	115.907
TR4	0.622	7.209	**TR5**	0.771	12.105
TR5	0.656	7.375	**TR6**	0.777	12.269
TR12	.701	7.57	**TR7**	0.809	12.913
TR18	.438	--	**TR8**	0.826	13.263
Factor2			**TR9**	0.675	10.321
TR8	0.687	11.472	**TR10**	0.765	12.023
TR9	0.597	10.065	**TR11**	0.804	12.803
TR10	.702	11.7	**TR12**	0.856	13.913
TR13	.725	12.038	**TR13**	0.823	13.19
TR14	.708	--	**TR14**	0.862	14.057
			TR15	0.662	10.078
			TR16	0.54	7.972
			TR19	0.781	--

Transformational Leadership Summary of Attained Findings

Appendix 6F: Transactional Leadership Summary of Attained Findings

Items	King Abdulaziz public university		Alhekma private university	
	Loadings	C.R (t)	Loadings	C.R (t)
TS1	.778	16.373	0.689	8.827
TS2	0.781	15.887	0.686	8.215
TS3	0.789	13.47	0.647	7.833
TS4	0.739	12.691	0.667	8.024
TS5	0.736	12.656	0.659	7.95
TS6	0.768	13.158	0.738	8.697
TS7	0.808	13.756	0.656	--
TS8	0.604	10.554		
TS9	0.709	12.217	--	
TS10	0.729	12.53	--	
TS11	0.784	13.388	0.759	9.618
TS12	0.74	12.734	0.705	9.01
TS13	0.808	13.765	0.729	9.287
TS14	0.621	10.84	0.499	6.511
TS15	0.68	--	0.7	--
TS16	--		--	

Transactional Leadership Summary of Attained Findings

Appendix 6G: Productive Organizational Energy Summary of Attained Findings

Items	King Abdulaziz public university		Alhekma private university	
	Loadings	C.R (t)	Loadings	C.R (t)
Factor1				
POE1	--	--	.57	8.088
POE2	0.557	9.948	.58	8.351
POE3	0.663	11.9	.69	10.027
POE4	0.805	14.504	.82	12.292
POE5	0.81	14.597	.80	11.932
POE6	0.829	14.94	.85	12.795
POE7	0.729	--	.76	--
Factor2				
POE8	0.733	10.94	0.746	9.167
POE9	0.776	11.379	0.843	10.08
POE10	0.774	11.359	0.825	9.916
POE11	0.598	9.232	0.594	7.505
POE12	0.75	11.114	0.81	9.788
POE13	0.619	--	0.653	--
POE14	--	--	--	--

Productive Organizational Energy Summary of Attained Findings

Appendix 6H: Job Satisfaction Summary of Attained Findings

Items	**King Abdulaziz public university**		**Alhekma private university**	
	Loadings	C.R (t)	Loadings	C.R (t)
JS1	0.632	9.429	0.531	6.249
JS2	0.82	11.22	0.747	10.108
JS3	0.765	10.764	0.789	8.217
JS4	0.721	10.368	0.82	8.387
JS5	0.748	10.556	0.705	10.424
JS6	0.762	10.742	0.839	8.483
JS7	0.662	9.743	0.583	--
JS8	0.583	--	DEL	

Job Satisfaction Summary of Attained Findings