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UNIVERSITY OF SOUTHAMPTON

FACULTY OF SOCIAL SCIENCES

SOUTHAMPTON BUSINESS SCHOOL

**The Impact of High-Performance Human Resource Practices on
Research Performance and Career Success in the Saudi Arabia
Higher Education Sector**

By

Mr. Abdulrahman Alshaikhmubarak

Thesis for the degree of Philosophy

December 2018

UNIVERSITY OF SOUTHAMPTON

FACULTY OF SOCIAL SCIENCES

SOUTHAMPTON BUSINESS SCHOOL

Thesis for the degree of PhD of Philosophy

ABSTRACT

The Impact of High-Performance Human Resource Practices on Research Performance and Career Success in the Saudi Arabian Higher Education Sector

Mr. Abdulrahman Alshaikhmubarak

This study examines the link between High-Performance Human Resource practices (HPHRPS) namely training, internal mobility, recognition and participation and the research productivity and career success of faculty members in Saudi Arabian Higher Education sector. Contemporary Career theory is adopted, with the purpose of examining the extent to which faculty member career orientation impact the relationship between their research performance and career success.

From a theoretical contribution standpoint, this study advances the literature in three main streams. First, this study advances the theory of HPHRPS by examining its impact at the individual level in the public sector of a developing country, an area recognized by researchers as needing more investigation. Second, career theory is progressed by examining the moderating role of career orientation on the relationship between performance and career success. Finally, this study builds on previous findings in research productivity literature and further develops the literature by examining additional managerial factors missing in current research productivity literature, such as HPHRPS (training, internal mobility, recognition and participation)

From a practical standpoint, this study is of significance to higher education leaders as well as to human resource decision-makers in Saudi Arabian higher education sector because it offers insights on the factors affecting faculty members' research productivity and success in this context.

A quantitative methodology approach using survey strategy is utilized in this study. Faculty members working in five of the largest and prestigious Saudi universities are the target of this study. Questionnaire is adopted as the data collection instrument. Structural Equation Modelling is utilised for testing hypothesis using Mplus version 8. For the analysis stage, 586 usable questionnaires were used.

The results of this study revealed that among the four investigated HPHRPS, only training and recognition were positively linked to faculty member research performance. In addition, the results showed that only internal mobility had a positive and significant paths to salary progression/increases, whereas internal mobility and recognition positively link with faculty member promotion. The results illustrated also positive and significant relationship only between internal mobility and recognition and faculty member career satisfaction. Furthermore, the study found that academics research performance do mediate the relationship between the practices of training and recognition with objective career success and the practices of recognition and subjective career success.

The study is original in bringing together research from the fields of HRM and Academic Career Studies in order to develop a model for the factors play a crucial role in the research performance and career success of academics from the lens of HPHRPS.

The study makes important contributions to the fields of Human Resources Management and Academic Career Studies and provides critical evidence for the implementation of Human Resources Management in the academic sector. This study has expanded understanding of the AMO theory (Appelbaum et al., 2000; Jiang et al., 2013; Boxall and Purcell, 2016) to the academia sector. It is hoped that the study will encourage researchers in Human Resources Management to continue researching the role of HPHRPS as mean of academics superior performance and career success in academia. Universities can develop a good research output as a result of developing academics' abilities and motivation, and provide them with opportunities to perform their job. This thesis also inform practitioners of the critical role of HPHRPS in academia.

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Academic Thesis: Declaration of Authorship

I, Alshaikhmubarak Abdulrahman declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

The Impact of High-Performance Human Resource Practices on Research Performance and Career Success in the Saudi Arabian Higher Education Sector

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. Parts of this work have been published as:
 - Alshaikhmubarak, A., Baruch, Y., Da Camara, N. (2018) The Impact of High Performance Work Practices on Academic Research Performance and Career Success. Paper presented at British Academy of Management 2018 Annual Conference, Bristol, UK, 4-6 September, 2018
 - Alshaikhmubarak, A., Baruch, Y., Da Camara, N. (2018) Increasing Research Productivity through Human Resource Management. Paper presented at Breaking Silos Conference, the Southampton Business School, UK, 10 -11 April, 2018.
8. Another manuscript is under review:
 - Alshaikhmubarak, A., Da Camara, N., Baruch, Y. (2018) High-Performance Human Resource Practices, Research Performance, and Career Success:

Higher Education Sector in Saudi Arabia, Studies in Higher Education
(under review)

Signed: Abdulrahman Alshaikhmubarak

Date: 15th December 2018

Acknowledgements

First and foremost, I offer great thankfulness, sincere and deep, to ALLAH, for providing me with the patience, guidance, inspiration, and perseverance needed throughout my PhD journey.

Secondly, I would like to thank my supervisors Professor Yehuda Baruch and Dr Nuno Da Camara, for their continuing support, guidance, encouragement and patience throughout my study. Their extensive knowledge and assistance has enabled me to complete this thesis, and I am very grateful for the support and expertise they offered me.

I am grateful and unable to thank my mother Fatima for her continuous support and continuous encouragement. She has been my biggest supporter by her daily call to encourage me throughout my studies. I would also like to thank my uncle Emad Al Jabr and Wafa Al Jaber for their encouragement and frequent visits to me during my studies.

I would also like to especially thank my wonderful wife Njod for her unlimited support during my PhD program. She was there for me when times were tough. She was always the first person to ask me how I was doing, if I needed help with anything, or if I wanted to talk with someone regarding my research. She always asks how my research is going, and I always tell her that I was fine. Because I was, knowing that I had her support. Now at the end of my PhD journey, I know that I can count on you for anything. Thank you for being that person for me.

I am also grateful to my colleagues, administrative staff and to my fellow PhD students at Southampton Business School who have supported me during the time I conducted this research, especially Dr Bandar Al Rubaie, Dr Rashed Al Mataani and Mrs Debbie Evans for their generous support.

Special thanks are due to all the academics and administrative staff at King Saud, King Abdulaziz, Umm Al-Qura, King Faisal, and King Fahd of Petroleum and Minerals Universities in Saudi Arabia for their support and assistance with the data collection. Last, but not least, I would like to also thank my brothers and sisters who have motivated me during the time I undertook this research, particularly Fahmi, Kamal, Ibrahim, Haifa, Zainab, and Maryam. I would also like to thank my lovely daughter, Layla, who forced me to manage my time effectively.

Definitions and Abbreviations

Abbreviation	Definition
HRM	Human Resource Management
HPHRPS	High Performance HR Practices
SEPT	Skills -Enhancing Practices Training
MEPIM	Motivation -Enhancing Practices Internal mobility
MEPR	Motivation -Enhancing Practices Recognition
EEPP	Empowerment -Enhancing Practices participation
KSU	King Saud University
KAU	King Abdulaziz University
UQU	Umm Al-Qura University
KFU	King Faisal University
KFUPM	King Fahd University of Petroleum and Minerals
PCO	Refers to Protean career orientation Hall (1996)
BCO	Refers to Boundaryless career orientation Arthur and Roussey (1996)
KCM	Refers to kaleidoscope Career model Mainiero and Sullivan (2006)
Research performance/productivity	Refers to all publications for faculty member
Career success	refers to objective career success including promotions and income and subjective career success including career satisfaction
SEM	Structural equation modelling
CFA	Confirmatory Factor Analysis
EFA	Exploratory Factor Analysis

Chapter 1: Introduction

Science and knowledge is a powerful weapon for nations across many civilisations. It was said in Arabic poetry that ‘knowledge can make a home even without infrastructure, while ignorance destroys the home of glory and honour’- Ahmad Shawqi. This saying suggests that knowledge creation contributes to the establishments of nations and civilisations, whereas ignorance of knowledge contributes to nations’ backwardness, regardless of any previous historical achievements. Indeed, there is no doubt that knowledge can act as a competitive advantage for countries (Baruch, 2013). Since one of the major sources of knowledge creation is universities, it is necessary to devote efforts to investigating factors that enhance academic performance and productivity (Webber, 2013). That is because the scholars are the main players in the task of creating knowledge to contribute to the development of their country and benefit humanity in general. Therefore, studying the factors that might contribute to raising the academic productivity of scholars is crucial. This study sheds light on this important subject by examining high-performance HR practices (HPHRPS) as an important factor affecting faculty members’ research productivity and career success in Saudi Arabia. The reason for only focusing on research performance is because it is one of the major problems that Saudi public universities suffer from, and this contributes to the low world ranking and reputation of Saudi universities. Although the Saudi government has spent large amounts of money to develop the higher education sector, and although most Saudi universities have the newest infrastructure and most luxurious buildings and libraries, still the rate of research productivity and the universities’ reputation and ranking are very low compared to other developed countries, as will be discussed in chapter one .

1.1 The Motivation for this Research

Through the early years in a career within academia, I (the researcher) noticed that the academic sector and, in particular, the faculty members’ research performance is not compatible with the new direction of the country, which is the transition to a knowledge-based economy. The government devoted a substantial part of its overall budget to the higher education sector, including research funding; however, the research output level remains disappointing. Thus, this evoked my eagerness and desire to investigate the factors that affect the productivity and success of faculty members.

1.2 Research Context

The higher education in Saudi Arabia is the postsecondary degree, and it is similar to the educational system of most developed countries. However, it differs in some aspects that relate to Islamic law, traditions, and customs (e.g. gender segregation). The higher education sector is run by the Ministry of Education, which oversees the education system in Saudi Arabia.

The Ministry of Education was founded in 1975 to oversee the planning, managing, supervising and monitoring of the education system, in order to develop the national human capital to the level set out by the National Development Plan. The Ministry of Education transfers learning, training, and research through different educational institutions that belong to them, including public and private universities, college, and institutes (Ministry of Education, 2016). One role within the framework of responsibilities of the higher education sector in Saudi Arabia is knowledge creation. Thus, to promote academic research productivity, the Ministry of Education supports many initiatives including investments in initiating specialised research centres and conducting scientific conferences and seminars to enhance and improve academic awareness of the newest developments in their fields (Ministry of Education, 2016).

In line with the main objectives of the country to become a knowledge-based society (Ministry of Economy and Planning, 2014), the Saudi Ministry of Education has established strategic goals to develop research and innovation in Higher Education Institutions in Saudi Arabia in its Future plan (Ministry of Education, 2014). These goals are the following:

- 1- Provide sufficient numbers of researchers commensurate with global averages.
- 2- Spending on scientific research to be in line with the best global practices.
- 3- Increase research productivity and innovation and raise its quality.
- 4- Enhance the management of scientific research methodology and develop the research environment.

1.3 Saudi Higher Education Development

In the 1990s, the attention and spending of the Saudi government were mainly directed to the oil sector, whereas other sectors, including education, were given less focus (Khatib, 2011). However, the inspiration to become a developed country by 2025 (Ministry of Economy and Planning, n.d.), has increased Saudi's

government investment in education recent years (Qureshi, 2014; Yusuf, 2014). As a result, the education sector, including the higher education sector, has developed in many scientific areas, and the number of public universities and colleges have increased.

However, despite these government efforts to shift the country to be a knowledge-based economy and the increase in investment in the higher education sector, the academic research output from Saudi universities are still low. Some Saudi universities even failed to produce any academic publications at all within the period between 2003 to 2007 (King Abdulaziz City for Science and Technology 2013). There is a clear gap between the country's strategic development plan and the scientific research output of universities. Thus, researching to investigate this phenomenon and identify factors stimulating academic research productivity is crucial if we are to achieve long-term country goals.

1.4 Background and Statement of the Problem

There is a positive relationship established between national development and economic growth on one side, and the investment in education including teaching and research on the other side (Jaffe, 1989; Barro, 2001; Salter and Martin, 2001; Frenkel, 2006; Puukka and Marmolejo, 2008; Maja, 2014; Ekinici and Ön, 2015) . The association between economic growth and investment in education was validated in most developed countries, such as the U.S. and the U.K. (Chatterji, 1998; Frenkel, 2006). Therefore, governments in emerging economy societies, including the Middle East countries have to pay attention to the significance of knowledge creation and research outcomes. This investment is expected to return on socioeconomic status because of the essential role that academia plays in influencing other sectors in societies (Baruch and Hall, 2004; Baruch, 2013). Besides, at the national level, education and scientific research can create a competitive advantage (Baruch, 2013), thereby enhancing economic power and helping to make countries independent. Thus, there is an essential need to encourage scholars and researchers to develop education quality and research outcomes to contribute to the development of their countries.

The Middle East has a strong influence on global economic activity, and now is witnessing a transition to the knowledge-based economy instead of an oil-based economy (Forstenlechner and Baruch, 2013). Saudi Arabia is one of the major

Chapter 1

developing countries of the Middle East (Allothman and Busch, 2009; Bukenya and Labys, 2009), and it is one of the most promising emerging economies.

The economic trend (being knowledge-based economy) conversion requires the Saudi government to give more consideration to improve the higher education performance, especially the production of research, as it is the main source of knowledge creation. Thus, being a knowledge-based economy was stipulated as one of the main goals of Tenth (2015-2019) Saudi National Development Plans for achieving the socioeconomic desires of the nation (Ministry of Economy and Planning, 2014).

However, there is still a gap between Saudi Arabia and developed countries regarding higher education institutions. Comparing the number of higher education institutions, most of the developed countries have more universities than Saudi Arabia has, taking into account the number of people in the population. For example, in a country of 23 million people, such as Australia, there are about 207 higher education institutions (Ranking Web of Universities, 2015), whereas in Saudi Arabia, with 30 million habitants, there are only 55 higher education institutions (Ranking Web of Universities, 2015). Saudi's government, however, has started to pay more attention to the importance of higher education and knowledge creation, as part of the transition to be a knowledge-based economy (Allothman and Busch, 2009; Ministry of Economy and Planning, 2014).

Although in the past years higher education institutions in Saudi Arabia have gained the government's attention and have experienced great financial support, they still suffer from many problems that lead to their poor reputation and low world rankings. According to Shanghai Ranking (2015), none of the Saudi universities is in the top 100 universities in the world. Further, only two Saudi universities are in the top 200 universities, and another two are in the top 300 universities in the world. Comparing these statistics with other countries of similar (or even smaller) size to Saudi Arabia, it is obvious that Saudi public universities are way behind most of the universities in developed countries. For instance, the Netherlands, with 16.8 million people and 41,543 square km², has four universities in the top 100 universities in the world and three in the top 150 universities (Shanghai Ranking, 2015). Thus, it is critical for the Saudi Ministry of Education to take serious actions to investigate the root causes of this problem and work to improve the performance and reputation of the higher education sector.

This circumstance is disappointing, not only for the higher education institutions leaders but also academics and students; as the low reputation and low world ranking most likely signal a weakness in the quality of education and academic performance. One explanation for the latter is the low academic research productivity in Saudi public universities, which is the problem investigated in this research. There are many reasons why low academic research productivity could lead to lower rankings. For example, academic publications are one of the main criteria that affects universities global ranking. Also, knowledge creation contributes to improving universities reputations and creates a competitive advantage for the nation (Baruch, 2013). According to a study by Al-Zahrani (1997), which focused on academic staff at Umm Alqura University, 38.4% of the academic staff had not produced any research since they obtained their PhDs. Although this study is quite old, the Saudi Ministry of Higher Education report (2013) also illustrates the lack of research outcome at Saudi public universities (see Table 1-1).

Table 1-1 Research Outcome at Saudi Public Universities 2013

	Public university	No. published research	No. faculty members
1	King Saud University	2,594	7,353
2	King Khalid University	443	2,212
3	King Abdulaziz University	432	6,865
4	King Faisal University	332	1,432
5	Dammam University	310	1,990
6	Taif University	221	1,934
7	Taibah University	175	1,040
8	King Saud University for Health Specialists	130	406
9	Prince Noura University	86	1,511
10	Almajmaa University	70	676
11	Prince Salman University	65	1,521
12	Imama Mohammad bin Saud University	63	3,768
13	Aljouf University	58	962
14	Najran University	52	1,026
15	Umm Alqura University	51	3,799
16	Albaha University	42	1,042
17	Jezaan University	40	2,187
18	Islamic University	32	644
19	Tabouk University	20	1,102
20	Shaqra University	11	931
21	Hail University	10	1,632
22	Northern Borders University	10	525
23	Qaseem University	0	3,152
24	King Fahd University of Petroleum & Minerals	NA	1,078
Total		5,247	48,788

Source: Saudi Ministry of Higher Education Report (2013).

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There were some empirical studies conducted to investigate and address the phenomenon of low academic research productivity in Saudi Arabia (Azad and Seyyed, 2007; Alghanim and Alhamali, 2011; Al-Bishri, 2013). These studies tried to examine this phenomenon through investigating different obstacles that may limit academics research productivity, for example, the overload of managerial responsibilities and discouraging a research atmosphere (Azad and Seyyed, 2007; Alghanim and Alhamali, 2011; Al-Bishri, 2013). However, these studies did not investigate other critical factors that may be associated with a low level of faculty members' research. Although the organisational factors including High-Performance Human Resources Practices (HPHRPS) have been empirically proven to improve productivity and enhance performance amongst employees (Jiang *et al.*, 2012; Jiang, Takeuchi and Lepak, 2013), no study we are aware of yet has investigated the issue of low academic research productivity through the lens of HPHRPS. Thus, this current research is an attempt to investigate the effects of HPHRPS on faculty research performance and career success. Also, this research investigates the impact of faculty members' career orientations on the relationship between their research performance and career success. This will be discussed in more detail in the literature review section.

1.5 Purpose and Significance of the Study

The purpose of this study is to examine the relationship between several institutional and individual factors that may influence faculty research performance and career success. At the institutional level, this research intends to examine the extent to which HPHRPS has an impact on faculty members' research performance and career success. At the individual level, this study intends to examine the extent to which an individual career orientation has a moderating role on the relationship between faculty members' research performance and career success in a non-western context. This research is of significance to higher education leaders as well as the human resource decision-makers in Saudi Arabian public universities and Ministry of Education because it can offer new research-based insights into aspects that could affect academic staff research productivity and success. Recognising, at the institutional level, the impact of HPHRPS on faculty research performance is essential for understanding which factors are associated with high research performance and contribute more to faculty members' career success. Such results will encourage higher education leaders to rethink established policies related to managing academic staff and focus on practices that stimulate and improve academic research performance

and career success. At the individual level, understanding the impact of different individual career orientations on faculty members' research productivity and career success is also critical; since this can enable decision-makers in higher education institutions to reform recruitment and career development policies and practices to better support higher-level research performance and career success.

1.6 Outline of the Thesis

This thesis is divided into seven stages across seven chapters. The following figure shows the main topics for each stage and chapter.

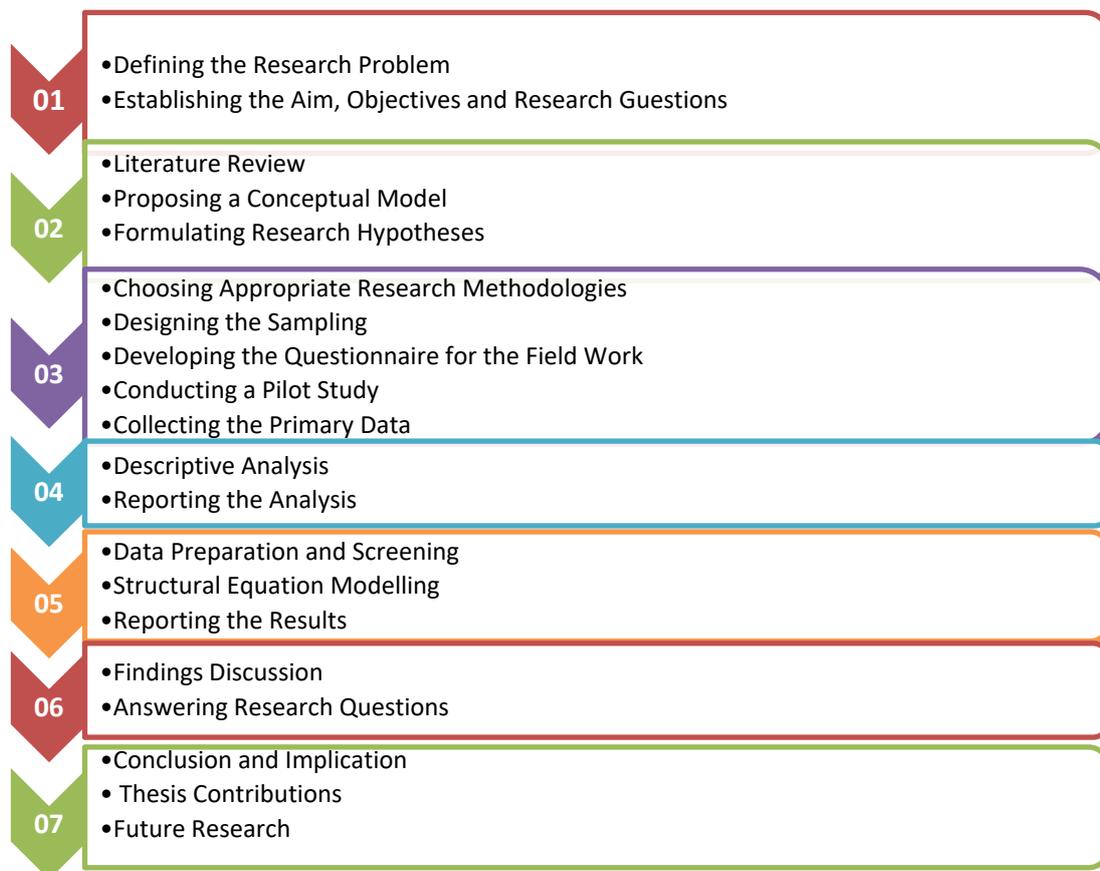


Figure 1 Outline of the Thesis

1.7 Objectives of the Study

1. To empirically examine the impact of High-Performance HR Practices (HPHRPS) on academic research performance.

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2. To empirically investigate the mediating role of academic research performance on the relationship between High-Performance HR Practices (HPHRPS) and career success.
3. To empirically investigate the moderating role of individual career orientation on the relationship between academic research performance and career success in the Saudi higher education sector.
4. To determine the most influential factor(s) in determining academic research performance and career success, in order to provide stakeholders in the Saudi higher education sector with research-based recommendations to enhance institutional performance.
5. To extend the theory of HRM-performance relationships to a new context of the Middle East

1.8 Research Questions

In pursuit of the above objectives, a set of research questions were developed.

The major research question of this study is:

- To what extent do High-Performance HR Practices (HPHRPS) have an impact on academic research performance and career success?

In order to address the major research question, the following sub-questions were created:

1. Which HPHRPS is/are significantly associated with academic research performance at Saudi Arabian public universities?
2. Which HPHRPS is/are significantly associated with academic career success at Saudi Arabian public universities?
3. Does academic research performance mediate the relationship between HPHRPS and career success?
4. Does individual career orientation moderate the relationship between academic research performance and career success?

Chapter 2: Literature Review

2.1 Part One: Job Performance

2.1.1 Why is Job Performance Important?

Job Performance is a very important element for organisations and the individuals within them. At the organisational level, organisations depend on their employees' performance in order to achieve their goals of delivering the products or services they specialise in and to compete with others (Sonnentag, 2003). At the individual level, performance is critical for career development and satisfaction. According to Sonnentag (2003), job satisfaction can be reached through high performance and task accomplishment, while dissatisfaction and personal failure might be caused by low performance and failing to achieve goals and tasks. Also, there is also a positive relationship between high performance, financial rewards and career advancement. Van Scotter, Motowidlo and Cross (2000) concluded that high performing employees were most likely to have a better chance of promotion and greater opportunities for career progression than low performing employees.

2.1.2 What is an Individual Performance?

Performance is a very complex term because it has different dimensions (Campbell, McHenry and Wise, 1990; Bates and Holton, 1996; Sonnentag, 2003; Armstrong, 2010). It is characterised by the ambiguity of the term when identifying performance indicators, measurement and evaluation. There is no one specific definition of the term performance because scholars have differences of opinion about it. A simplified definition, from the online Oxford English Dictionary, states that performance is 'the accomplishment or carrying out of something commanded or undertaken; the doing of an action or operation'. This definition combines the two important concepts of performance, which are the outcomes (accomplishment) and the doing (action). According to Campbell *et al.* (1993, p.40), 'performance is what the organisation hires one to do, and do well'. Thus, performance is not only about finishing the job, but it is also about the quality of the results.

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Job performance is also defined as the process of employees performing assigned tasks and responsibilities (Imundo, 1993). Other scholars have different perspectives on performance. For example, Kane (1996, p 478) indicated that performance 'is something that the person leaves behind and that exists apart from the purpose'. Thus, it can be defined as a record of an individual's accomplishments. Similarly to Kane (1996), Armstrong (2010) puts the whole emphasis on the achievement aspect as a major component of performance. Other scholars, therefore, define performance as the outcome of an effort. For example, Bernardin *et al.* (1995, p. 258) argued that 'Performance should be defined as the outcomes of work because they provide the strongest linkage to the strategic goals of the organisation, customer satisfaction, and economic contributions'.

While on the other hands, Campbell, McHenry and Wise (1990) emphasised the distinction between performance as behaviour and performance as results, because the results can be "contaminated" by other factors around the performance. For example, an employee might have the ability to behave and perform his or her work in the correct way (performance as behaviour), but he or she may have low-performance outcomes, as other associated factors may impact individual performance, such as a bad workplace environment, or unsupportive managers or co-workers (performance as results). In this context, Sonnentag (2003, p.5) argues that performance consists of the behaviours which lead to the outcomes, although 'outcome aspects of performance also depend on factors other than the individual's behaviour.'

A more comprehensive overview of performance was provided by Brumbach (1988). He believed that:

Performance means both behaviours and results. Behaviours emanate from the performer and transform performance from abstraction to action. Not just the instruments for results, behaviours are also outcomes in their own right - the product of mental and physical effort applied to tasks - and can be judged apart from results (Brumbach, 1988, p5).

More recently, Jamal (2007), argued that job performance is a function that an employee can successfully undertake within the framework of normal constraints and available resources. Despite the differing points of view of performance among scholars, performance as the outcome is the focus in the real-life workplace, because organisations rely on their employees' performance outcomes in order to provide their products or services. Equally, employee performance outcomes are a great source of individuals' internal and external career success

(Van Scotter, Motowidlo and Cross, 2000; Sonnentag, 2003). Thus, this study adopted Bernardin et al. (1995)'s a definition which defined Performance as outcomes.

2.1.3 Performance Dimensions

Performance is an 'umbrella' term that can be represented by different dimensions. To date, there has been little agreement on what are the main dimension of job performance. Many researchers contributed effort in identifying these dimensions of job performance. For example, Campbell *et al.* (1993) developed a hierarchical model that illustrates and classifies performance into eight dimensions. These dimensions are: (1) job-specific task proficiency, (2) non-job-specific proficiency, (3) written and oral communication proficiency, (4) demonstration of effort, (5) maintenance of personal discipline, (6) facilitation of peer and team performance, (7) supervision and leadership, and (8) management or administration. Although this model includes several critical dimensions of job performance, this model does not take account of important elements of performance such as quality and productivity. Some researchers classify these elements as key dimensions of job performance. For example, Viswesvaran, Ones and Schmidt (1996) suggested ten dimensions of job performance. Those dimensions include the rating of: (1) overall job performance, (2) productivity, (3) quality, (4) leadership, (5) communication competence, (6) administrative competence, (7) effort, (8) interpersonal competence, (9) job knowledge, and (10) compliance with or acceptance of authority.

Many of the established models do not capture the variation in the significance of performance dimensions across different sectors. For example, performance dimensions like productivity and knowledge may surpass the significance of the effort dimension in the academic field. Also, some performance dimensions may not be applicable in the academic sector, such as compliance with our acceptance of authority.

There is still disagreement and differences in perspectives among scholars about performance dimensions. Developing a standardised model for job performance may be challenging due to the complex nature of performance and to the fact that some dimensions of job performance vary from job to job and from sector to sector. Thus, other scholars differentiate between the concept of task performance and the concept of contextual performance (Borman and Motowidlo, 1993; Conway, 1996) as two general dimensions of job performance. Borman and

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Motowidlo (1993) believed that task performance is related to an action that has a direct association with task completion, whereas contextual performance is related to actions that have an indirect relationship with task completion, for example, actions such as enthusiasm, perseverance, dedication and cooperation. Based on this differentiation between these two concepts, task performance and contextual performance, Borman and Motowidlo (1997) came to three key assumptions presenting in Table 2-1.

Table 2-1 Task Performance and Contextual Performance Assumptions

Assumption 1	Activities relevant to task performance vary between jobs, whereas contextual performance activities are relatively similar across jobs.
Assumption 2	Task performance is related to ability, whereas contextual performance is related to personality and motivation.
Assumption 3	Task performance is more prescribed and constitutes in-role behaviour, whereas contextual performance is more discretionary and extra-role

Source: Sonnentag (2003, p.6)

Borman and Motowidlo (1993) developed their model based on contextual performance. This model comprises five dimensions. The first dimension is the persistence of high levels of enthusiasm and additional effort as being essential in order for an individual to perform and complete his or her job activities successfully. The second dimension is volunteering to take responsibility for some task activities that are not officially part of an individuals' job. The third dimension is helping and collaborating with co-workers and other members within the organisation. The fourth dimension is following and committing to organisational instructions and procedures. The last dimension is loyalty, defending and supporting organisational ideas, strategies and objectives. Perhaps this model is more realistic and comprehensive compared to others. Borman and Motowidlo's model provides an easy framework for understanding job performance dimensions, especially since it was able to separate the task performance that directly related to the job and the contextual performance to which any job is shared. Thus, this model could fit the academic work.

Given the above discussion, it is clear that many factors affect the level of job performance. This leads to the question of what are these factors that influence job performance. The following section will highlight the factors affecting the performance of individuals.

2.1.4 What Factors Influence Individual Performance?

Researchers identified many factors that have a direct impact on individuals' performance. For example, Vroom (1964) argued that ability and motivation are the main functions of performance. He devised the following equation: $\text{Performance} = f(\text{Ability} \times \text{Motivation})$. According to this formula, individuals need to have both ability and motivation in order to perform well, and the absence of one of these two factors will negatively influence individuals' performance effectiveness. In keeping with Vroom (1964)'s perception of individual work performance, Moorhead and Griffin (1998) believed that performance is the final product of ability, environment, and motivation. Hence, in order to reach a high-performance level, individuals must have the ability to perform the job, the proper environment with access to both the resources and materials needed to complete the job and for them to have the motivation that makes them want to do the job (Moorhead and Griffin, 1998). Thus, the following equation was established to define the relationship: $\text{Performance} = \text{Motivation} + \text{Ability} + \text{Environment}$.

On the same subject, Blumberg and Pringle (1982) argued that organisational factors were missing from the job performance formula. Thus, in their study, they considered the following equation (see Fig 1, below): $\text{Performance} = \text{Capacity} + \text{Willingness} + \text{Opportunity}$.

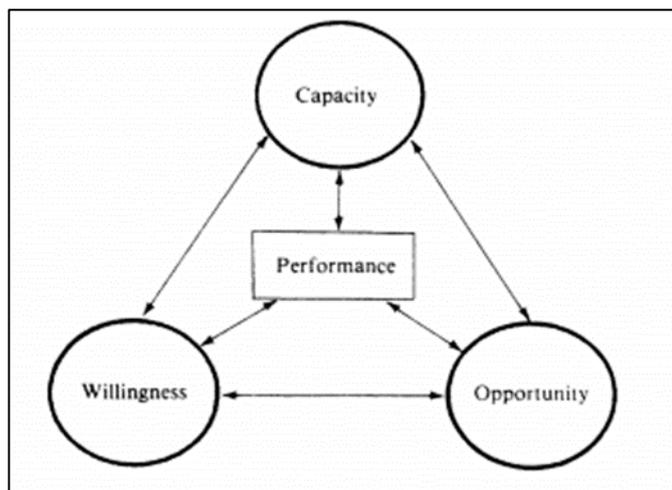


Figure 2-1: The Performance Equation

They believed that these three factors of performance must be present at some level in order for individuals to perform their job. The first factor is the capacity to perform, which includes variables such as ability, age, health, knowledge, skill, intelligence, level of education, stamina and energy level motor skills. The second

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factor is the willingness to perform. This factor may include variables such as job satisfaction, job status, anxiety, the legitimacy of participation, attitude, perceived task characteristics, job involvement, ego involvement, self-image, personality, norms, values, perceived role expectations and feelings of equity. The last factor is the opportunity to perform, which includes variables such as tools, equipment, materials, supplies, working conditions, actions of co-workers, leader behaviour, organisational policies, rules and procedures, information, time, and pay.

Another framework was provided by Boxall and Purcell (2003). They developed a formula for performance function, which they called the 'AMO' framework (see Fig 2 below). The following are the components of their performance formula: $P = \text{Ability} + \text{Motivation} + \text{Opportunity}$.

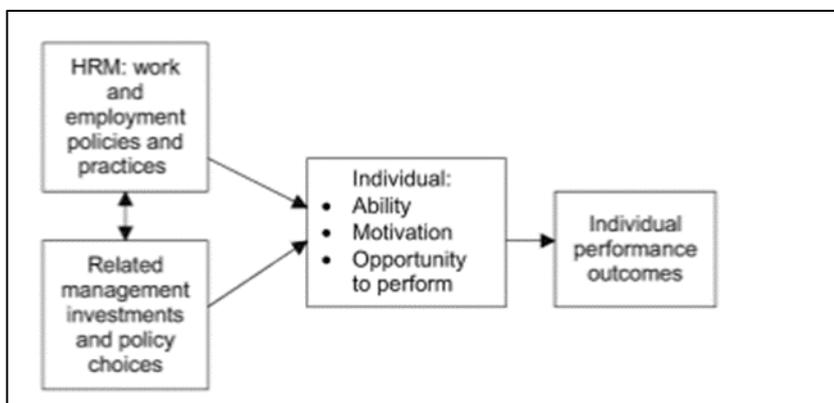


Figure: 2-2 AMO Framework

In order to increase an individual's performance, managers need to enhance these three performance factors positively (Blumberg and Pringle, 1982; Campbell *et al.*, 1993; Boxall and Purcell, 2016). According to the AMO framework, individuals need to have those three factors in order to perform. The first factor is having the ability to perform, which may include the necessary knowledge, skills, and aptitudes. The second factor is the motivation to perform, which may include different types of incentive. The last factor is the opportunity to perform, which may include work structure, an environment which provides the necessary support, and ways for expression. These three factors are required simultaneously in order for the employee to perform his or her work. For example, when an employee has good ability alone, this will not be enough to bring out his or her best performance, as he or she also needs the other two factors, motivation and opportunity to perform his or her work to the best of their ability (Boxall and Purcell, 2016).

All previous models shared ability and motivation as the key element to perform the job. However, Vroom's model omitted a critical role of the organisation in the performance equation. For example, the 'environment' factor in Moorhead and Griffin (1998) is similar to the 'opportunity to perform' in Blumberg and Pringle (1982), and Boxall and Purcell (2016) is a critical factor and affects performance directly. For instance, if an employee had the ability, skill, and motivation to perform the job, without the support of the organisation and the availability of an appropriate environment, the employee may be unable to perform the job as required. Thus, Moorhead and Griffin (1998), Blumberg and Pringle (1982), and Boxall and Purcell (2016) work are both useful developments of Vroom's original model as they consider the critical role of organisations and they are complementary to Vroom's work.

Another important factor that may have an impact on individuals' job performance is their identification. For example, Van Knippenberg (2000) explained the influence of identification on employees' motivation and work performance through the view of Social Identity theory. This theory addresses how individuals' social identity influences employees' work performance and motivation. Van Knippenberg (2000, p.357) came to conclusion that "an employee's social identity is positively related to work motivation, task performance, and contextual performance to the extent that (a) social identity is salient, and (b) high performance is perceived to be in the group's or organisation's interest".

In summary, individual performance is very a complex aspect, and it comprises of several factors. It is also important for both employees' career success and organisations' success. Although the nature of occupations differs from sector to sector and from job to job, the components of performance and its determinants are often similar across sectors and jobs. The focus of this current research is academic staff performance. Academic staff have a unique work role, which is different from other industrial jobs (Baruch and Hall, 2004; Baruch, 2013). Academics' work and job performance will be discussed in the next section.

2.2 What Is Performance In Academia?

2.2.1 The Nature of Faculty Work

The components of task performance differ from job to job. In this section, academic staff work and performance in higher education will be reviewed.

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Academic staff hold a very critical position in society, as the outcomes of their performance can have an impact on several levels beyond their profession (Baruch and Hall, 2004). For example, the industry will be influenced by academic outcomes, as faculty members are in charge of teaching the next generations different sciences, such as medicine, engineering and business administration, in order to carry these sciences to practical application. Thus the quality of teaching has an indirect impact on different industries, as well as public and private organisations, as the new generations of students will work across different industries following graduation (Sutherland, 2017). Also, academic research production, which is part of faculty job responsibility, will influence industrial development and problem-solving. Moreover, academic staff research outcomes contribute to the development of nations. Academics' efforts, regarding knowledge creation, can also have an impact at a national level, as some scholars have argued that knowledge creation can be used to competitive advantage at the national level (Baruch, 2013).

Academic work depends on multiple skills, due to the nature of the work (teaching, research, service) (Baruch and Hall, 2004; Baruch, 2013). Academic staff have to allocate their work time and performance between three tasks, namely, teaching, service, and research, which are the major responsibilities of academic work (Marsh and Hattie, 2002). However, for this study, the focus will be only on one part of faculty members' work responsibilities, which is the performance of research.

Research productivity is mostly recognised to be the main element of an academic's career (Salthouse, Mckeachie and Lin, 1978). Research production has a positive impact on both the academics, as it is associated with career advancement and income progression, and the university, as it is associated with increased university ranking and reputation. Research productivity has been recognised to have a great influence on individual advancement and reputation within academia, as well as departmental and institutional prestige (Creamer, 1998). Academics' research productivity has also been recognised as a critical aspect of academics job because it is the key indicator of faculty strength, disciplinary knowledge and expertise (Middaugh, 2001; Kraimer *et al.*, 2019).

However, faculty research productivity is interdependent on other factors within the institutional system (Latham and Wexley 1993; Blackburn and Lawrence, 1995). Institutional leadership, departmental directors and decision-makers, who set and develop institutional policy, need to understand how those policies and

practices might influence a faculty's research productivity (O'Meara and Rice, 2005). The academic staff play a major role in increasing academic reputation and ranking, as they are a key resource through which academic institutions can achieve their goals (Machado-Taylor, Meira Soares and Gouveia, 2010; Machado-Taylor *et al.*, 2011). It is not true that high pay alone is associated with high levels of motivation and overall job satisfaction (Machado-Taylor *et al.*, 2016) that will contribute to increasing faculty research performance. There are other factors which can influence the research performance of academic staff such as on-going training, institutional support and availability of resources. The following sections define academics research performance and then discuss the factors that may influence them.

2.2.2 Defining Research Performance

This section will review previous studies on research performance (productivity) in order to understand the elements of the concept. Research performance is one of the major components of the research questions that are to be investigated by this study, in order to address the problem of low research performance by Saudi academic staff.

To understand the concept of research productivity, it is important firstly to comprehend the meaning of each concept separately. The word "research" has been defined as 'The systematic investigation into, and study of, materials and sources in order to establish facts and reach new conclusions' (Oxford online). The word "productivity" has been defined as 'The amount of output per unit of input achieved by a business organisation, industrial sector, or national economy.' (Oxford online). Indeed, in terms of human resource management, productivity refers to 'the amount of output per unit of labour input. Labour productivity can be expressed in a variety of different ways, including the volume or value of output per worker, per day, per shift, or per person-hour' (Heery and Noon, 2008,p.366).

However, when combining the two concepts as "research productivity", the meaning refers to a different concept. Many definitions of the research productivity have been provided and discussed by many scholars and researchers.

Some scholars have distinguished between the two dimensions of the concept of faculty research productivity. For example, the outcome of scientists' work has two components according to Gaston (1970): (1) knowledge creation, which can

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be achieved through research, and (2) knowledge distribution (productivity), which can be achieved through publication. Print and Hattie (1997) outline the notion of research productivity as the total amount of research and related contents that are conducted by faculty members in institutions within a specific, allocated period. This definition can explain what some institutions do when they request their faculty to produce a defined number of research projects per year as part of their work contract. However, Jacobs, Hartgraves and Beard (1986) and Kurz *et al.* (1989) referred to research productivity as the outcome measurement of scholarly work. This perspective may confine and narrow the concept of scholarly work measurement, as there are different elements that academics and scholarly work can be involved in, which are not necessarily associated with faculty and scholastic research production, such as teaching courses and seminars. However, some scholars assert that research productivity is a major indicator of scholastic strength (Middaugh, 2001) and it has been used as an indicator of scholars' performance.

This section has attempted to provide a summary of the literature relating to the definition of research productivity. In summary, it has been shown from this review that the concept of research involves the process of outlining the investigated problem and collecting, as well as analysing, the data to form a solution and create new knowledge. On the other hand, productivity is more related to what Gaston (1970) called "knowledge distribution" and referred to the publication as the means to make new knowledge available to the public.

As far as knowledge distribution is concerned, researchers have identified many ways in which the researcher can distribute knowledge (research outcomes). Those means may include journal articles, books, and conferences. According to Creswell (1986), research productivity comprises many forms, including publication in refereed journals, conference proceedings, writing a book or a chapter, gathering and analysing original evidence, working with postgraduate students on dissertations and class projects, obtaining research grants, carrying out editorial duties, obtaining patents and licenses, writing monographs, developing experimental designs, producing works of an artistic or a creative nature, and engaging in public debates and commentaries. The following section will highlight the previous literature that has discussed and investigated the factors that may impact research productivity of faculty members.

2.2.3 Previous Studies on factors influencing Research Performance

Several researchers have conducted studies to investigate the factors that may influence academic research performance in order to help and improve academic research productivity. In this section, some of those studies will be reviewed, in order to determine where the previous studies have reached in this matter and to identify the research gap that this current research aims to fill. It will also identify what this current research will add to the literature in this field.

2.2.3.1 Research Performance and Self-Efficacy

Many researchers attempt to determine what individual factors might influence faculty members' research performance. For example, Vasil (1992;(1996) conclude that faculty members' self-efficacy has a positive and significant impact on their research productivity. The more a faculty member believes that he or she has self-efficacy, the more research productive he or she is. This finding can be explained by understanding the nature of academic work. The nature of academic work requires faculty members to manage their work and time by themselves (Baruch and Hall, 2004). Thus, they need to have a high level of self-efficacy, which should be reflected in their performance level.

However, some researchers have found gender differences regarding the levels of self-efficacy and research performance among academic staff. For example, research findings show that male faculty members tend to have more self-efficacy beliefs, a greater total time spent on research work, and greater research outcomes than females (Vasil, 1992;1996), and that males are more confident in terms of the research task than females (Schoen and Winocur, 1988). These results were in contrast to what was found in other studies. For instance, unlike Schoen and Winocur (1988); Vasil (1992;(1996)'s findings, Bailey (1999)'s research conclusion showed that there was no difference between males and females at the level of research self-efficacy. Bailey (1999) tested the relationship between academic staff motivation and self-efficacy and academic teaching and research performance using post-1987 Australian university academic staff. The research found a positive relationship between research motivation and self-efficacy and faculty level of degree and research productivity. Faculty members with higher levels of degree, motivation and self-efficacy were more productive regarding research outcomes. Another study was conducted by Pasupathy and Siwatu (2014). They also examined the relationship between research self-efficacy beliefs and academic staff research productivity using 109 academic staff at an

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emerging research university in the U.S.A. The quantitative results showed a positive but small positive relationship between the level of academic staff research self-efficacy and the level of their research productivity. One criticism of much of the previous studies is that they did not consider the role of other factors that may affect the study of this relationship between self-efficacy and academic staff research productivity. For example, institutional factors such as institutional support and work environment may have a significant influence on such a relationship. Having a high level of self-efficacy in the absence of a healthy working environment may have a very limited impact on individual performance. The following section highlights the different important institutional factors that may influence faculty research performance.

2.2.3.2 Research Performance and Institutional Factors

There is no doubt that the institutional environment and culture play an important role in the level of faculty research performance. Several studies were conducted at the institutional level in order to investigate institutions' roles to enhance academics' ability to engage in research activities. For example, Bland and Ruffin (1992) conducted an extensive literature review in order to answer the question of what environmental factors motivate and maintain high levels of research productivity. They reviewed research articles, as well as books, that were published on the topic of research productivity from the mid-1960s to 1990. The research results found that 12 environmental factors were associated with research productivity. Those factors were: (1) clear objectives that assist a coordinating function, (2) research emphasis, (3) a distinctive organisational culture, (4) an encouraging group climate, (5) assertive participative governance, (6) a decentralized institution, (7) frequent communication, (8) accessible resources, mainly human, (9) appropriate size, age, and diversity among the research group, (10) sufficient rewards, (11) an emphasis on recruitment and selection, and (12) leadership with research proficiency and skills in both setting suitable organisational structures and utilizing participatory management practices. The presence of these factors in the universities are linked to a high level of research performance.

Similarly, McGill and Settle (2012) study institutional factors that may have an influence on computer science academic staff in the U.S.A. They concluded that institutional factors such as staff support, release time, and funding to attend conferences had a positive impact on academics' research productivity and enabled them to conduct more research. Also, it is worth mentioning here that

the study results showed that untenured faculties received less institutional support, including less staff support, less funding for summer salaries, and workshops and training, and less funding for improvements to office space or facilities, than their tenured colleagues. In the same manner, Nguyen and Klopper (2014) applied a qualitative approach to examine factors that may contribute to developing an enriched research environment in institutions. Besides, they aimed to investigate how the absence of such institutional factors might be associated with low research performance among faculty members in Vietnam. For their study eighteen interviews were conducted with academic staff from different disciplines, administrative positions, academic rank and qualification. The findings suggest that three themes emerged that were associated with a highly productive research environment, namely, intellectual climate, resources, and a reward system.

Correspondingly, Ryan and Hurley (2007) found that the component characteristics of an organisations' culture might have negative or positive influences upon scholars' research performance. Employees do not work separately from the organisation environment, the environmental dimension of the work, therefore, will have a direct and indirect impact on their productivity. Work environment includes many factors that are not limited to climate and offices but are broader to include aspects such as cooperation, sources and motivation

2.2.3.3 Research Performance and the Nature of Motivation

Another institutional concept that was discussed in the literature about factors impacting faculty research performance was motivation. Several studies dealt with the role of motivation and its relation to research performance. For example, Fox (1992) found that motivational factor, such as salary and promotion, were associated with a high level of academic research productivity. Chen, Gupta and Hoshower (2006)s' study supports Fox (1992)'s findings. Their study was conducted across 10 Western business schools, with surveys being collected from 320 academic staff. Their study aimed to investigate the main factors that stimulate faculty members to write research papers. The study found that both extrinsic and intrinsic rewards were associated with high levels of research productivity among academic staff. The results showed that tenured academic staff were more motivated by intrinsic incentives, whereas untenured academic staff were more motivated by extrinsic incentives.

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Similarly, Chen and Zhao (2013) developed their study in Midwestern business schools, where their data was collected from 320 faculty members. The findings illustrated that there was a significant relationship between the levels of motivation and academic research productivity for both males and females. The study results showed that pre-tenure faculty research productivity was linked to extrinsic rewards as motivating factors, whereas post-tenure faculty research productivity was linked to intrinsic rewards as motivating factors. This study's results support Chen, Gupta and Hoshower (2006)s' research findings regarding the differences between tenured and untenured faculty members' research productivity motivational factors. Moreover, Chen and Zhao (2013) found that female researcher was more motivated by intrinsic rewards than that of males. However, both faculty men and women ranked factors such as obtaining tenure and promotion as the most motivational factors.

On the same subject, Horodnic and Zaiț (2015) investigated whether there was a correlation, or not, between extrinsic and intrinsic motivation and research productivity among Romanian economics and business academics. They found that intrinsic motivation was positively associated with high academic staff research productivity, whereas extrinsic motivation was negatively associated with academic staff research productivity. Their results suggest that scholars who take a strong interest in their job are more productive regarding research production, while scholars who overall value extrinsic motivation will, however, shift their efforts to activities which provide them with a more financial benefit in an economy experiencing transition. These findings could explain why a faculty member who is motivated by intrinsic motivational factors, such as taking responsibility for, and contributing to, his or her discipline and seeking success and accomplishments, will be more productive in terms of research production. In contrast, a faculty member who is motivated by extrinsic motivational factors, such as seeking extra income, will not be a productive researcher if his or her research outcomes are not associated with extrinsic rewards. This prospect is compatible with the concept of contemporary career orientations, which will be discussed later in more detail. Individuals with contemporary career orientations may seek subjective career success, more than objective career success, regarding their career progression.

In the same context, Butler and Cantrell (1989) investigated the relationship between six extrinsic rewards and business academics' research productivity. Those rewards were money, reduced teaching load, tenure, mobility, recognition

and promotion. Vroom's Expectancy theory (Vroom, 1964) was used in this study to guide the research. Significant links were observed between the academics' research productivity, mobility and promotion. Also, the academics' rank was moderating the relationships between research productivity and the factor of money and mobility. The results showed that there was a larger positive relationship between research productivity and the factor of money among assistant professors than among associate professors. However, the study found a more significant relationship between research productivity and the factor of mobility among associate professors than among the assistant professors. The empirical evidence shows that rewards can play an important role in influencing research productivity.

Some other studies have also addressed the motivational factors that may affect the performance of a faculty member. For example, Tien and Blackburn (1996) investigated the relationship between the rank of academic staff and research motivational factors and their association with academics' research productivity. They utilised several motivational theories for their study, including Behavioural Reinforcement theory, Cognitive Evaluation theory and Expectancy theory. The data was collected from a tenured non-tenured assistant, associated, and full academic, professors. The results suggested that academic rank acted as a motivational factor when it was linked to the level of performance. Also, the promotion had a significant influence on academics' publication productivity. Tien and Blackburn (1996) indicated that the motivation of academics' research performance is at a higher level when they believe that the desired level of research performance is achievable and will lead them to value outcomes which correspond to the level of effort expended. The results also showed that full professors' research productivity in publishing was significantly more than that of assistant and associate professors. However, there were no differences between associates and assistance regarding research production.

Indeed, Ayd (2012) conducted a study of the research performance of the Foundation University faculty member in Turkey, which was aimed at investigating the differences in the effect of the two factors of the theory of motivation developed by Herzberg (1959). The data was collected from 150 faculty members. The results showed that both motivation and hygiene factors were associated positively with academics' research performance. The hygiene factors were salary, job security, company policy administration, supervision, interpersonal relations, status and working conditions. The motivational factors

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were the opportunity for growth, the work itself, responsibility, achievement, advancement and recognition.

Most previous studies agree on the role of motivation in increasing research productivity for academics. However, there is a difference in the type of incentives, while some researcher will be more motivated through intrinsic incentives, others are more motivated by extrinsic incentives. Thus, this puts universities to the importance of understanding their academics needs when developing the incentive system taking into account that the system should have a balance between the two sides.

2.2.3.4 Research performance and Individual/Organisational Factors

Other scholars have investigated factors that may influence academic research productivity by using a more comprehensive view. They consider both the dimensions of the individual, as well as organisational factors that may have an impact on faculty research productivity. For instance, Babu and Singh (1998) tested the relationship between 80 variables and scholars' research productivity and used participants ranging from Fellows of India National Science Academy to young agricultural scholars. The data was collected from 325 participants. The results showed that among the 80 factors, only 11 personal and organisational factors had a positive impact on scholars' research productivity. Seven out of the eleven factors were associated with the individual factor. These factors included persistence, initiative, intelligence, creativity, learning capability, concern for advancement, and professional commitment. The remaining four factors were associated with the organisational side. These factors were resource adequacy, access to the literature, stimulating or facilitative leadership, and external orientation, which referred to adequate contact with superior scientists and participation in seminars/conferences.

Similarly, Ramsden (1994) investigated factors that may influence research productivity among Australian academics. He found that the level of academic research performance was associated with both organisational and personal factors. Examples of organisational factors were the way that faculty departments were managed or led, while examples of personal factors included core interest in the subject of the academic's specialisation. Another study aimed to explore individual and institutional environmental factors among academics was developed by Baldwin (1990). In this study, participants were selected from four high reputation, non-public, higher education institutions in the southeast of the

U.S.A. For this research, Baldwin (1990) used a qualitative method and employed Career Development theory in order to identify which of those factors might distinguish “between ‘vita’ professors and the ‘representative’ cohort of their colleagues” (Baldwin, 1990,p.160). Career Development Theory (Hall and Nougaim, 1968) suggests that employees in many fields eventually will reach a less goal-directed position after an initial period of professional progress. According to Baldwin (1990), the principles of Career Development theory certainly could be seen within the academic career structure. He stated that “Some faculty members remain professionally active and vital to the end of their careers. Others seem to plateau long before retirement and become less innovative and less productive (Baldwin, 1990,p.161). His results show that academic vita’ professors spent more time in research, managerial and institutional service activities than the representative cohort professors, who put more emphasis on balancing work/life activities. Also, Vita professors were more engaged in professional activities, including research publication.

Blackburn *et al.* (1991), using Cognitive Motivation theory, found that several individuals and environmental variables were associated with a high level of publishing productivity. Those factors were self-competence, financial support through gaining scholarships, career age, self-efficacy, self-evaluations and perceptions of the environment. It is worth mentioning here that this study found no gender differences regarding research productivity. Blackburn *et al.* (1991) concluded that appropriate leadership of universities could also enhance academic staff progression and performance.

As far as leadership is concerned, some scholars have divided the factors that impact on faculty research productivity into three characteristics. For example, Bland *et al.* (2005) investigated three groups of characteristics that may have an impact on academics’ research performance, specifically, individual, institutional, and leadership variables. They concluded that individual and institutional characteristics were more associated with faculty members’ research performance, whereas leadership characteristics were more associated with group research performance.

Additionally, it has been recognised that personal qualities and research patterns and research disciplines were linked to faculty research performance (Wood, 1990). Similarly, Hesli and Lee (2011) and Jung (2012) found that researcher characteristics, demographic factors, work environment and workload,

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researcher characteristics among the critical factors that affect the research performance of a faculty member.

On the question of characteristics that distinguish the productive researcher from the less productive researcher, Hunter and Kuh (1987) conducted a study to determine the characteristics of prolific contributors to literature in higher education. This study was conducted through three main stages. In the first stage, they identified the most productive contributors by looking at the frequency of the number of articles by each author published between 1979 and 1983 in seven chosen scientific journals. After that, they identified 85 scholars. At stage two they developed survey questionnaires to collect the data from those scholars about the most influential factors that contributed to their work. Lastly, semi-structured interviews by telephone were conducted with eighteen of the participants in order to obtain more in-depth information about factors associated with knowledge creation. The study results suggest that creativity involvement in publication activities having a high interest in contributing to knowledge, needing to gain academic promotion, having desire to develop personal prestige and respect, and needing to achieve scientific commitment to their career as key aspects of the productive researcher. Also, the study found that having experience in publishing with academics in a graduate college, working with students on writing assignments, institutional expectations of publishing output, having support or a sponsor, and career satisfaction among the factors that led to higher research performance.

Similarly to Hunter and Kuh (1987), White *et al.* (2012) examined what factors contributed to high or low research productivity for academic business staff in the U.S.A. They found that high-performing researchers had higher academic rank, had more time management skills, placed a high value on research, reported greater amounts of time given to conduct research, had more support from their universities, had fewer teaching commitments, and, worked for departments which placed comparable importance to research as they did themselves. Both studies Hunter and Kuh (1987) and White *et al.* (2012) share some aspects that characterise the most productive researchers, for example, the self-motivation that stems from their interest in research toward achieving career commitment. Some researchers criticise the lack of studies on determining the strategy of productive researchers. For example, Ito and Brotheridge (2007) argued that there had been limited research to investigate the strategies that researchers employ to improve their research productivity. They developed their

study based on an exploratory questionnaire, collected from Canadian professors, to examine the relationship between faculty research strategies and their levels of research productivity. The results showed that there was a positive relationship between the amounts of time that faculty member devoted to research activities and the level of their research productivity. Besides, strategic focus, as a researchers' strategy, was found to have a significant impact on faculty member's research productivity and was positively associated with the levels of publication in journals.

Other research links research productivity to relationships and collaboration among co-workers. For instance, Lee and Bozeman (2005)s' study investigated the impact of academic collaboration regarding publications and research productivity. They found a strong significant relationship between academics' collaboration and academics' research productivity. One major criticism of these findings is the ability to provide a generalizable framework. The findings may not be fully transferable from culture to culture or from individual to individual. For example, some faculty members were more productive regarding research production when they worked alone, while other faculty members were more productive in collaborative. This finding might be due to the facts that in collaborative work several issues can hinder productivity, such as the need for agreement and communication among the researchers. However, on the other side, research productivity may be higher in collaborative work, because the effort and the work will be divided among the researchers so that each researcher will contribute a part to the research.

Other scholars divided the factors that could play a major role in influencing faculty member's research performance into more than three dimensions. For example, Hughes (1998) explored factors related to academics' publishing productivity. This study was developed in part to examine the factors that were identified in the theoretical model created by Blackburn and Lawrence (1995). Several factors in four main categories were found to be associated with academics' research productivity. The first group was sociodemographic factors, including gender, ethnicity and age. The second group was individual career factors, including where the academics gained their PhD degree, their academic discipline, previous publication experience, career stage, academic rank, tenure position, types of university, and academics managerial position. The third group was environmental factors, including the university itself, the institutional financial base, location, student body and governance structure, system of

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rewards, performance evaluation and incentives that academics obtained for specific behaviour. The fourth group was social contingency factors, including the events that occur within the individual environment of the academic staff, for example, the birth of a child or illness of a spouse, domestic strife, or death of a family member. This study provided a comprehensive summary of many factors that may play an influential role in impacting the research performance of a faculty member.

Various factors affecting the research performance were reviewed and determined in the previous section. However, most of the previous work was based on western context research. This present research aimed at studying the factors that may influence faculty member's research performance in the Middle Eastern context. Therefore, it is important to review also the factors that have already considered in this context, in order to determine the gap. Next section highlights studies that have been investigated factors influencing research performance in Saudi Arabia context.

2.2.4 Previous Studies on Research Performance in the Context of Higher Education in Saudi Arabia

Academic research performance has been the subject of many studies in higher education universities in Saudi. Several studies have been conducted to investigate the problem of low academic research performance. The studies report many associated obstacles and factors that contribute to the low research performance which, in turn, impact on the Saudi universities' reputation, as well as their world ranking. Although Saudi Arabia is one of the largest countries in the Middle East, its research outcomes remain very low on average when compared to other countries in the region or the world (Al-Bishri, 2013). Over the last five years, the academic staff at Saudi universities were found to be less productive regarding research publications compared to their colleagues' research output in other developed countries (Alzahrani, 2011). This fact has also been previously recognised by several researchers (Touq and Zaher, 1989; Al-Zahrani, 1997; AlSalem, 1997). The following discussion reviews some of the previous studies that have tried to investigate and address this problem.

As a result of the low level of research performance, several researchers have tried to understand what the barriers are which have contributed to this phenomenon. For example, Al-Zahrani (1997) investigated the low research performance by Saudi faculties. His research aimed to understand the current

situation and identify the most significant obstacles that hinder research productivity. The study showed that there was a positive relationship between a faculty member's years of experience and his or her research productivity. Additionally, the results showed that 61% of the research population was not satisfied with their level of research productivity. Several obstacles, at institutional, social and individual, levels were observed in this study. For example, factors such as lack of opportunities to attend conferences abroad, poor library facilities, lack of research assistants and support staff, and low encouragement and motivation are given to researchers were the most reported obstacles by the faculty members at the institutional level.

However, social obstacles included factors such as low social priority and demand placed on research. Lastly, factors such as faculty members holding the idea that conducting research was not financially worthwhile for them was one of the most important obstacles reported at the individual level. While this research represents the obstacles faced by researchers in Saudi universities in a comprehensive manner, it was conducted before the education boom witnessed in Saudi Arabia in the past years. Thus, it does not take account of the current financial and intellectual support dedicated to improving academic research in Saudi Arabia. One question that needs to be asked, however, is whether the government financial support for higher education has influenced research outputs.

The results of the following study may answer part of this question. Alghanim and Alhamali (2011) developed a quantitative study to investigate the factors and barriers that may influence faculty research productivity. The data collected from 389 faculty members in medical and health colleges in Saudi Arabia. The results indicated that 61.4% of the study sample had not published any research over the two years before the study. The findings showed the dominance of individual work over collegial work regarding research production, which is in contrast to Hofstede (1990) characterisation of Arab countries as a collective culture. Also, gender differences were found regarding research productivity, with males having significantly more publications than females. Also, it was found that younger faculty members were more productive than older members. The study indicated that factors such as higher academic rank, longer years of experience and involvement in administrative activities were associated negatively with academic research productivity, whereas, factors such as supervising postgraduate research projects and attending training on research methods were observed to be

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associated positively to academic research productivity. Some of these results are incompatible with some of the results of previous research in western countries, which has been reviewed in the previous section (2.2.3). For example, several studies in the western context indicate that collaborative work increases research productivity, but this study shows that academics are more productive when working individually. In addition, western studies show that factors such as work experience and academic rank have positively influence academics performance. In contrast, this study linked these two factors with a negative impact on research performance. These differences, however, may be explained by considering the fact that the nature of the culture where these studies are based on is somewhat different from the western culture.

In the same discipline of the previous study, Al-Gindan *et al.* (2002) conducted a study to understand the perspectives of academic staff regarding different aspects of their research outcomes. The data gathered from the faculty members of the Medicine College at King Faisal University. The results showed that factors such as lack of research infrastructure, administrative and teaching overload, lack of clear objectives/guidelines, complicated procedures and engaging in part-time activities in the private sector were negatively linked to research performance. However, factors such as offering more symposia devoted to research, providing start-up guidance for new faculty members, simplifying procedures, establishing an infrastructure, providing faculty members with protected research time, and employing faculty members specifically for research were recognised to be positively enhancing for research performance. This study is similar to a study of Al-Zahrani (1997) mentioned above.

However, a large part of these factors has improved significantly at the level of Saudi universities. Also, the state's direction and emphasis in the current period are different from the previous one. The government is now promoting the transition to an economy that is not only dependent on oil but diversified, including the transition to a knowledge-based economy (King Abdulaziz City for Science and Technology 2014). This transformation translates into generous support in developing university infrastructure, developing research centres, attracting qualified researchers and scientists, and investing in training junior researchers. Another study of research productivity among Saudi faculty members was provided by Alzahrani (2011). The study aim was to determine the barriers and problems inhibiting academic staff from publishing in Saudi Arabia. Surveys were gathered from 265 faculty members in the Applied-Sciences, Arts and

Humanities areas. One of the research findings showed that there was a relationship between academic rank and academics' research productivity, in that associate professors were more research productive than other academic ranks. Another interesting finding was that, unlike many other countries, there was an absence of the culture of volunteering for work that does not offer direct monetary benefit. This finding also supports previous research findings, such as those by Al-Zahrani (1997). Besides, the main barriers found to impact the academics' research productivity negatively were the following; (1) the lack of faculty encouragement to conduct and publish research, (2) lack of financial support for research publications, and (3) lack of a research publishing infrastructure.

Some researchers have investigated the problem from a wider perspective. For example, Azad and Seyyed (2007) examined faculty research productivity in the context of the Gulf countries. The data gathered from 233 academic staff at the three business schools: the College of Business and Economics at the United Arab Emirates University (United Arab Emirates), the College of Industrial Management at King Fahd University of Petroleum & Minerals (Saudi Arabia), and the College of Business Administration at the University of Kuwait (Kuwait). They categorised factors that may influence faculty research productivity into four main categories, including demographics, self-knowledge and individual competencies, work environment, and social contingency factors.

Overall, the results showed that these four factors were significantly associated with faculty research productivity. Some factors were negatively associated with research productivity, such as financial needs and family responsibilities. However, other factors were positively associated with faculty research productivity, including favourable research culture, research incentives such as reduced teaching load, teaching-related commitments, availability of a research support office, availability of secretarial support, and the availability of student research assistants. Also, factors such as the ability to conduct research, the ability to generate research ideas and motivation for research in order to develop one's field were found to be positively related to research productivity. In their comprehensive investigation into research performance, Azad and Seyyed (2007) summarised many aspects influencing research performance in the Gulf society in detail.

However, the sample of the study is limited to the generalisation of the results of the research as the number may not represent a large part of the study

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population in these countries. The findings would have been much more convincing if they had considered including more than one university in each country and increasing the number of participants in the study.

A more recent study to investigate Saudi academics' research productivity was developed by Alzuman (2015). This study examined the relationship between research promoting practices, as well as faculty personal characteristics, and faculty research productivity. This research was quantitative and used a survey questionnaire to collect the data. Four major Saudi public universities were included in this research, namely, King Saud University, King Abdulaziz University, King Khalid University, and King Faisal University. The study population was all academic staff who held a PhD and who were working at these universities (7072 academics). From the total of 7072 faculty members, only 389 questionnaires were answered and used for the data analysis.

Regarding institutional factors, the results suggest that factors such as a supportive, collegial environment, academic editing and translating services, a positive research funding process, involvement in collaboration programs, conference attendance and financial research incentives were observed to have a positive impact on academics' research productivity. However, at the level of personal academic characteristics, male faculty members were found to be more productive than females regarding research publications in refereed journals. Also, the results showed that there was a relationship between factors such as academic rank, tenure status, and age, as well as the origin of the PhD degree, and academic staff research productivity. For example, full professors were more productive researchers than other academic ranks. This finding is in contrast with previous results, which showed that lower faculty member ranking was associated with higher research productivity (Alghanim and Alhamali, 2011; Alzahrani, 2011).

Additionally, regarding the origin of the PhD degree, the results showed that a faculty member who had obtained his or her PhD from a Saudi university had a lower level of research productivity than someone who had obtained his or her PhD from a Western university. The study argued that this was because western universities have stronger PhD programs than Saudi universities. Besides, western PhD programs always are studied in English, which contributed to raising the research efficiency of the faculty member through being able to review a broader range of scientific studies and research, as studies written in Arabic in some areas are limited.

2.2.5 Knowledge Gap regarding Research Performance

All in all, from the previous review it can be recognised that the concept of faculty performance regarding research is very complex and interdependent on many different factors. Much effort has been given to understanding how, as well as when, scholars might be highly productive regarding research production and knowledge creation. Although some studies have empirically examined the concept internationally, little is known of this subject in the context of higher education in the Middle East. Also, some important individual, as well as institutional, factors that may impact on faculty research performance have also been under-investigated. To the best of the researcher's knowledge, no empirical effort have tried to examine factors that may have impact on faculty member research performance through the lens of HPHRPS, although those HRM practices have been widely linked with positive individual outcomes (see, Subramony, 2009; Jiang *et al.*, 2012) including job performance (Kuvaas, 2008; Butts *et al.*, 2009; Liao *et al.*, 2009; Boxall, Ang and Bartram, 2011; Chang and Chen, 2011; Aryee *et al.*, 2012; Ehrnrooth and Björkman, 2012).

Thus, this paper is aimed at filling the gap in the previous literature on faculty research performance by examining the impact of missing factors including some managerial practices such as high-performance HR practices (HPHRPS) on academic staff research performance and career success. Career success will include both subjective and objective dimensions, as both are important indicators of an academic's career success and this will be discussed in more detail later. Career satisfaction among faculty members was recognised to be critical as a predictor of the intention to continue to work in, or to leave, the higher education sector (Seifert and Umbach, 2008). Before moving on to a review of literature on these subjects, is worth discussing previous studies that dealt with measuring research performance. The subsequent section will shed light on some of the studies that have dealt with this aspect.

2.3 Measurement of Research Productivity

Measuring research performance is very complicated as demonstrated by the debate among the scholars. Scholars have differing views about the optimal method to measure research performance. The debate about quantity or quality as the most proper way to measure research performance has been one of the major concerns (McGuire *et al.*, 1988). One of the main measures that have been

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widely used in literature to determine research performance is the count of publications over a specific period of time. Counting the number of publications over a specific period has been usually used when observing or testing academics' research performance (Creamer, 1998). According to Olson (1994), the most widely used indicator to measure research performance is the analysis of the publication of books and journal articles. Publications that can be taken into consideration when assessing research performance can be summarized in the following: (1) number of editorial duties, (2) conference deliveries, (3) licenses, (4) patents, (5) monographs, (6) books, (7) experimental designs, (8) works of an artistic or creative nature, and (9) public debates and commentaries (Creswell, 1986). However, the commonly used formats in the literature journal articles and books or book chapters.

Many previous studies have used publication records as a measure to investigate the relationship between institutional, as well as individual factors, and academics' research performance (Dundar and Lewis, 1998; Bland *et al.*, 2005; Ito and Brotheridge, 2007; Hesli and Lee, 2011; Jung, 2012; White *et al.*, 2012; Alzuman, 2015). However, other scholars have argued the need to consider the quality aspect in addition to quantity, to improve the validity of measuring research performance (Rebne, 1988; Townsend and Rosser, 2007). The idea behind measuring quality is to take into consideration the impact and the contribution of the publications when counting academic research performance. Several measures have been suggested by scholars to measure the quality of research performance in term of publications, including peer acknowledgement, the number of times cited, the publisher of the journal, funding awards, and research awards received (Rebne, 1988; Adkins and Budd, 2006; Townsend and Rosser, 2007).

One easy way suggested in the literature to measure the quality of scholarly publications is by using the proxy of citations. Citation measurements have been adopted for this purpose (Rebne, 1988; Braskamp and Ory, 1994; Creamer, 1998; Adkins and Budd, 2006; Townsend and Rosser, 2007). Citation counts act as an indicator of a publication's quality, as high-quality work that has contributed to knowledge is always cited by many researchers (but such measure needs adjustment for the period allowed for the citations). Centra (1981) argued that the impact of an academic's publications is best counted by the number of citation. A citation can be analysed by searching different databases of scholars' publications and counting the number of articles that have cited the work. Some

researchers have indicated that citation counting is a very appropriate way to evaluate publication performance (Bornmann *et al.*, 2008).

Other scholars have distinguished between several aspects of publication quality. For example, Martin and Irvine (1983) argued that the quality aspect of research productivity is different from the impact aspect. They differentiated between three concepts when analysing their research outcomes. The first concept was the “quality”, referring to how good the research was regarding it being free from error and having original findings. The second concept was the “importance”, which, according to them, refers to the expected influence on research activities, including the impact on the development of scientific knowledge. The third concept was the “Impact” of publications, which refers to the actual influence on research activities at a specific time. Moed *et al.* (1985) argued that citation counts could be used to measure the impact rather than quality. Cameron (2005) emphasised that citation evaluation of research articles outcomes usually ignore what those publications add to advance general knowledge. He argued that “Publication, in other words, in a high-impact factor journal does not mean that an article will be highly cited, influential, or high quality” (Cameron, 2005, p.113). According to this perspective, the number of citation should not be the sole determinant of the quality of work and its contribution to knowledge. Published in the prestigious peer-reviewed journal may not necessarily reflect the impact or the quality of the work. There is much high-quality research that did not have a chance to be published in prestigious journals, but they still contribute to the knowledge.

Hence, Ramsden (1994) concluded that the publication count is the most important indicator to measure research outcomes, for many reasons. Firstly, scholars’ publications are the main component of scholarly work and recognition. Secondly, the publication has been recognised as a source of honour. Thirdly, it is a required and critical factor for scholars’ promotion. Fourthly, it is an indication of institutional reputation and institutional excellence. Finally, the publication is an influential and serious factor for gaining highly in-demand research funds. Further, the number of publications provides an overview of an academic’s contribution to knowledge, as well as to his or her university, (Tien and Blackburn, 1996; Strathman, 2000) as publications are taken into consideration regarding universities’ rankings.

For the current study, research performance was determined as the mediator variable between HPHRPS and academic staff career success. The number of

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publications was utilised in this study rather than using the measures of the quality for several reasons. Firstly, the context in which this study was conducted (Saudi Arabia) is more concerned with quantity, because of the lack of scientific publications produced by academics and scholars in Saudi Arabia compared to the volume produced by scholars in developed countries (Al-Zahrani, 1997; Alzahrani, 2011). The number of research outcomes does not match the government goal to shift from an oil-based economy to a knowledge-based economy. Also, most of the research produced by Saudi faculty members and scholars are published in unknown or low ranking journals and do not have a significant impact on knowledge at the global level. Also, publications from Saudi universities have not received widespread interest or consideration. Finally, many of the previous and current studies in the literature of faculty research productivity have used only the number of publications as an indicator to measure research performance (Dundar and Lewis, 1998; Bland *et al.*, 2005; Ito and Brotheridge, 2007; Alghanim and Alhamali, 2011; Hesli and Lee, 2011; Jung, 2012; White *et al.*, 2012; Alzuman, 2015), and this shows the validity and reliability of the publication counts as a measure of research performance.

2.4 Literature Review Part one Conclusion

In summary, several studies, whether in the context of Saudi Arabia or in other countries, have investigated faculty research performance. While some previous studies of research productivity have focused on individual factors that may have influenced faculty members in terms of research outcomes, such as self-efficacy (Schoen and Winocur, 1988; Vasil, 1992;1996; Bailey, 1999; Pasupathy and Siwatu, 2014), others have focused on institutional factors (Butler and Cantrell, 1989; Fox, 1992; Tien and Blackburn, 1996; Chen, Gupta and Hoshower, 2006; Ayd, 2012; Chen and Zhao, 2013; Horodnic and Zaiț, 2015). However, other researchers studied the relationship more comprehensively, including multiple factors such as institutional and individual social and environmental dimensions (Baldwin, 1990; Blackburn *et al.*, 1991; Ramsden, 1994; Babu and Singh, 1998; Bland *et al.*, 2005; Azad and Seyyed, 2007; Alghanim and Alhamali, 2011; Hesli and Lee, 2011; Jung, 2012; Alzuman, 2015). Despite this, there are still missing factors have not been addressed in previous literature, especially when the subject is related to practices related to the management of people. For example, practices related to the development of academic researchers' skills and their performance and HRM practices that contribute to raising the level of motivation

they have. Hardré and Cox (2009) argued that still more studies were needed to integrate individual and institutional factors in order to study faculty members' research performance.

Most of the previous studies have discussed institutional factors that have a direct association with the work of research production, such as the availability of resources, provision of financial support, reduced teaching load, and so on. However, to the best of the researcher's knowledge, there are several important institutional factors which are missing and which have not yet been investigated. Although motivation has been examined in the previous literature, other important HRM practices are still under-researched in the context of academia and research performance at the institutional level. HR factors, such as skill-enhancing practices, motivation-enhancing practices and empowerment-enhancing practices have been found to be associated positively with individual and organisational outcomes (Combs *et al.*, 2006; Jiang *et al.*, 2012).

Thus, this research aims to build on what has been presented in previous studies and to continue to develop the knowledge and understanding of the factors that contribute to faculty research productivity. This research will contribute to filling the gap in the research performance literature by examining the impact of HPHRPS on faculty members' research performance as a mediator for their career success. This investigation is critically important to develop further our understanding of the factors that promote high levels of faculty member research performance, which will be widely valuable to administrators who frame policies in order to enhance faculty members' research productivity. The following parts of this chapter will highlight these factors and discuss their potential relationship to academic research productivity.

2.5 Part Two: Human Resource Management Practices

This section will discuss the concept of Human Resource Management (HRM) practices and their relationship with an individual's performance. The concept of HRM practices has gained considerable attention in the past years. According to Jiang *et al.* (2012) in the past two decades, many scholars have dedicated their efforts to investigate the impact of HRM practices on achieving organisational goals. According to Boxall and Purcell (2016), although the meaning of HRM has always subject to debate among scholars since the term came popular in the 1980s, it has become the most widely acknowledged term in the English-speaking world when referring to activities that related to the management of work and people. In the following sections, we will discuss the term Human Resource Management (HRM) and then review the literature on High-Performance HR Practices (HPHRPS).

2.5.1 Human Resource Management

HRM is a very important part of any Management Structure. HRM is the management of individuals at work. Human capital is one of the most important sources of strength for any organisation. Therefore, this area has attracted the attention of many researchers. Despite this, like other most concepts, there is no single agreed definition of the HRM concept. Several definitions of HRM exist. For example, Beer *et al.* (1984) indicated that HRM represents all the work and decisions that form the relationship between employees and employers. One of the most widely recognised definitions of HRM was introduced by Storey (1995, p. 5), who defines HRM as 'a distinctive approach to employment management which seeks to achieve competitive advantage through the strategic deployment of a highly committed and capable workforce, using an integrated array of cultural, structural and personnel techniques'. Therefore, from this definition, it can be highlighted that HRM is strategic practices, processes and policies intended to make effective use of human resources within organisations in order to achieve the company's goals and maximise its profits. In the same line Armstrong (2014, p. 3) sees the concept of HRM as 'a strategic and coherent approach to the management of an organisation's most valued assets: the people working there who individually and collectively contribute to the achievement of its objectives'.

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Besides, Heery and Noon (2008, p. 215) explain that HRM is 'a coordinated approach to managing people that seeks to integrate the various personnel activities so that they are compatible with each other'.

Another broad definition of HRM was offered Boxall and Purcell (2016, p.1), where they define HRM as 'all those activities associated with the management of work and people in organisations'. Furthermore, Stone (2009) argues that HRM is the efficient exploitation of individuals within the organisation to achieve its strategic goals. Bratton and Gold (2012) provided a comprehensive definition of HRM, where they define it as a strategic approach to managing employment relationships which highlights that leveraging individuals' competences is essential to reaching organisational competitive advantage or superior performance. They explained that this could be achieved by establishing a set of integrated appointment practices, policies and programmes that organise the relationship between employers and employees.

Even though there is no one agreed definitions among researcher, most of HRM definitions emphasise the fundamental purpose of it, which is to ensure that the organisations can be achieved their competitive advantage and, ultimately their success, through the success of their people (Armstrong, 2010). Hence, HRM it can be defined as all aspects that have an association with managing individuals within an organisation in order to achieve both individual and organisational goals. Since this definition highlights that HRM is all about managing people in the organisation, the question that arises here, what are the functions of this management. The following section will review this question.

2.5.2 Human Resource Management Functions and Approaches

HRM functions are complex since it concerns managing and regulating the relationship between organisations and employees. Lawrence (1992) explained that the basic responsibilities of HRM comprise three components, which are hiring, training and development. Subsequently, the concept of HRM has been expanded to include more elements and wide dimensions related to the human resource within organisations.

Schuler (2000) argued the practices of HRM have rapidly developed. He explained that this development has expanded the role of basic HRM functions such as recruitment of new workers, enhancement of employees' performance, motivation and training the organisational staff, to include more practices such as

employees' well-being, satisfaction and safety as part of the strategic planning to achieve the organisational competitive advantage, profitability and success (Schuler, 2000). Hence, Camps and Luna-Arocas (2009) indicated that this expansion in HRM function had shifted the research to focus on the strategic perspective on the HRM role. They explained that HRM practices in the organisation should be consistent with the organisation's strategies, and this likely will lead to superior performance (Camps and Luna-Arocas, 2009). In other words, the development of policies relating to the management of individuals within the Organisation should be in line with the Organisation's strategies and reflects its identity.

Therefore, HRM became a wide and complex subject that includes many aspects that are interdependent and critical as they are related to the most important resource for organisations. Scholars have suggested two different approaches of HRM perceptions when it takes place within an organisation.

2.5.2.1 Hard Versus Soft HRM Approaches

Storey (1995) explained the difference between the two concepts of HRM 'hard' and 'soft'. The hard perception of HRM, also known as the control approach (Whitener, 2001; Gould-Williams and Davies, 2005), holds the perception of dealing and managing the employees should not be based on emotions and human sides; instead it employs formal and rational way when managing employees in the workplace (Storey, 1995). Therefore, the hard HRM approach is mostly concerned with the effective exploitation of workers through HRM practices that arrange in line with a firm strategy (Guest, 1999; Guest, 2002). This approach depends on regulation, punishments, rewards, and control to direct people behaviour within the organisation (Whitener, 2001). The idea of the hard HRM approach can be described the assumptions of theory X by McGregor (1960). Theory X holds the assumptions that employees must be managed under strict control and in an authoritarian way in order for them to perform their roles (McGregor, 1960).

In contrast, the soft perception of HRM, known as the commitment approach (Whitener, 2001), taking into account the human and emotional dimension of employees concerning decisions related to them in the work environment. This approach emphasises the fact it is essential to treat employees as respected and valued individuals and highlights the importance of their well-being (Storey, 1995; Gould-Williams and Davies, 2005). The soft HRM approach could be

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explained as achieving organisational objectives and success through achieving employees' commitment. Thus, employees are seen as means instead of objects (Guest, 1999). In other words, this type of HRM, or what researchers refer to it as high-performance work system can be seen as "win-win HRM approach" (Sparham and Sung, 2007; Kalmi and Kauhanen, 2008). It is a mutual benefit between organisations and their employees which leads to achieving the objectives of two parties.

The soft HRM approach, therefore, can also be described by the assumptions of theory Y. According to theory Y (McGregor, 1960), the employee has more commitment towards their organisations and will work their best to build mutual trust between them and their organisations when they feel that they are valued by their employer. The soft HRM orientation holds the assumptions that individuals within the organisation will not only comply with the organisational objectives but also positively commit themselves to their organisational values. This HRM perspective indicates that such this employee commitment can be gain through a trust that is built based on practices, such as employee training, career advancement and autonomy (Guest, 1997). In addition, the soft perspective of HRM has association with the high performance work practices (Guest, 1999; Butler and Glover, 2010), where more emphasis is given to enhancing employees' ability, opportunity and motivation in order to achieve higher performance (Huselid, 1995; Guthrie, 2001; Boxall and Purcell, 2016).

The following section will highlight the focus on the concept of high-performance HR practices as this study aims to investigate the impact of such those practices on academics performance and their association with faculty member career success and progress. Although these practices have been over-researched in the business industry, there is a lack of studies addressing HRM practices in the public sector (Bach and Kessler, 2007; Harley, Allen and Sargent, 2007; Boselie, 2010), including specifically the academic sector, which is a very influential sector (Baruch and Hall, 2004; Baruch, 2013). This research will focus on how HRM practices might influence faculty members performance and career success, taking into consideration the unique nature of academic work (Baruch and Hall, 2004; Baruch, 2013).

Moreover, Jiang *et al.* (2012), argued that many of the previous studies in HRM literature had been focused on studying the impact of HRM practices on the performance of organisations rather than employees. They call for more empirical studies to investigate the effect of HRM practices on employees performance

(Jiang *et al.*, 2012). Although some studies have investigated the impact of HRM practices on employees' outcomes in the private sector, it is not known whether those practices will have the same results in academia. This relationship has not received much attention in HRM literature. Indeed, less attention has been given to the impact of HRM practices in non-profit and public sector organisations (Guest, 1999; Boselie, 2010; Brunt and Akingbola, 2015). Especially in a non-western context, since the majority of previous literature was based on western contexts (Gould-Williams, 2003; Godard, 2004; Boxall and Macky, 2009; Zhang and Li, 2009).

2.5.3 The Relationship between HRM Practices and Performance

One of the most important issues that researchers in Human Resource Management (HRM) have been examining is how HRM impacts performance (Jiang, Takeuchi and Lepak, 2013), which has led to two key theoretical questions: (1) What HRM practices (and in what combination) promote performance? and (2) How do HRM practices influence performance? Next discussion will briefly review these questions.

In terms of the first question, Lepak *et al.* (2006) argued that the HRM practices identified in previous empirical research could be categorized into (1) knowledge, skills and abilities (recruitment, selection, and training practices), (2) motivation and effort (performance management, job security, compensation, and incentive practices), and (3) opportunities to contribute (job design, employee involvement, and team working practices). In examining the way in which these practices are combined, several types of HRM models have arisen from the previous literature (Arthur, 1994a; Pfeffer, 1994; Huselid, 1995; MacDuffie, 1995; Youndt *et al.*, 1996; Zacharatos, Barling and Iverson, 2005; Sun, Aryee and Law, 2007; Vlachos, 2008; Camps and Luna-Arocas, 2009; McClean and Collins, 2011). One model is the universalistic or 'best practice' model, in which researchers argue that employing certain individual HRM practices can have strategic value in the organisation (Lepak and Shaw, 2008). Specifically, this perspective influenced by the work of Pfeffer (1998), who argues that successful companies were characterised by some common HRM practices, notwithstanding the industry or organisational strategy. This is often called 'high performance,' 'high commitment,' or 'best practice' HR (Wood and De Menezes, 1998; Jiang *et al.*, 2012).

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Whereas the second question how do HRM practices influence performance, researchers have explored a range of employee outcomes that are thought to mediate the relationship between HRM practices and performance of both individuals and organisations (see, Jiang, Takeuchi and Lepak, 2013). The theoretical literature in this stream suggests that the behaviour of individuals within corporations has implications for the performance of the organisation (Huselid, 1995; Macky and Boxall, 2007; Subramony, 2009; Jiang, Takeuchi and Lepak, 2013). That being said, HRM practices can influence employees' performance through their effect on 'employees' skills and motivation and through organisational structures that allow employees to improve how their jobs are performed' (Huselid, 1995,p.638).

The link between employees performance and HRM practices can be clearly explained through AMO theory (Appelbaum, Bailey and Berg, 2000). This theory explains that HRM practices should lead to enhance employees' performance through affecting their abilities and motivation, and through providing them opportunities to make use of their skills in their jobs (Gould-Williams and Gatenby, 2010; Jiang, Takeuchi and Lepak, 2013). At this juncture, a synthesis of the concept of high-performance HR practices can be helpful in understanding more the mechanisms of the HRM practices and performance connection. The following sections provide a brief overview of high-performance HR practices definition.

2.5.4 High-Performance HR Practices Definition

High-performance HR practices (HPHRPS) is a very critical aspect that has an impact on both individual and organisational outcomes (Jiang *et al.*, 2012). The notion of high-performance HR practices also referred to as high performance (Huselid, 1995), high involvement (Lawler III, 1992), flexible, and alternative work practices (Godard, 2001), has sparked widespread interest over the last years (Lepak *et al.*, 2006; Boxall and Macky, 2009; Boxall, Hutchison and Wassenaar, 2015). Despite the increasing attention that the concept of HPHRPS has been gained over the last few years, there is still no commonly agreed definition of the concept of HPHRPS (Butler and Glover, 2010). Comprehensive definitions of the notion of HPHRPS was provided by Huselid (1995). He explained the concept of HPHRPS as the following:

... High Performance Work Practices, including comprehensive employee recruitment and selection procedures, incentive compensation and

performance management systems, and extensive employee involvement and training, can improve the knowledge, skills, and abilities of a firm's current and potential employees, increase their motivation, reduce shirking, and enhance retention of quality employees while encouraging nonperformers to leave the firm (Huselid, 1995, p.635).

Several definitions and perspectives of HPHRPS were discussed in the literature, which is in line with Huselid (1995)' previous definition. For example, Takeuchi *et al.* (2007, p.1069), have defined HPHRPS as 'a group of separate but interconnected human resource (HR) practices designed to enhance employees' skills and effort'. Similarly, Messersmith *et al.* (2011) believed also that HPHRPS is a set of HR practices that are connected in order to improve employees performance. Another perceptive of the concept was provided by Beardwell and Claydon (2007). They emphasise that HPHRPS is a combination of HR practices that aims to improve employees' performance and commitment through enhancing their knowledge, skills and motivation (Beardwell and Claydon, 2007).

Similarly, Guthrie (2001, p.180), stated that HPHRPS 'a system of HR practices thought to enhance employees' levels of skill, motivation, information and empowerment'. Additionally, Heery and Noon (2008,p.205) defined the concept as an 'approach to the management of people that emphasises the need to develop organisational commitment amongst employees, on the assumption that this will lead to positive outcomes such as lower labour turnover, better motivation and improved performance'. These definitions agree that a set of HR practices have a positive role in organisations.

Hence, HPHRPS also seen as HR systems that are developed to help organisations improve their effectiveness by creating a work environment that helps the employees to be more engaged and committed toward their work and increase their performance to achieve organisational goals (Whitener, 2001). Whereas, Iverson and Zatzick (2007) described HPHRPS as a system composed of HR practices expected to inspire employees to work harder in order to achieve their goals in line with their organisation goals.

The expected result of HPHRPS should be beneficial for both organisations and employees (Armstrong, 2014). The mechanisms of such practices highlight the important potential competitive advantages that might be gained by employees through treating labours with respect, spending in their development, and promoting their trust in management and commitment toward accomplishing

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organisational objectives (Lepak *et al.*, 2006). These practices may include practices related to selective recruitment, individual and group motivations, rewards, intensive training and development, performance assessment and management, employee engrossment, work-life balance programs, and information sharing (Zacharatos, Barling and Iverson, 2005).

Posthuma *et al.* (2013) argued that the concept HPHRPS refer to any HR system that consists of practices enhancing employee competencies, commitment, and productivity. From this perspective, HR practices can be divided based on several aspects. Hence, Jiang and Liu (2015), described HPHRPS as a system that includes a bundle of HR practices that facilitates high performance. The following section provides a review with some studies on this aspect.

2.5.5 High-Performance HR Practices Components

The previous literature in HR illustrates a wide range use of HR practices toward developing a system of HPHRPS (Snape and Redman, 2010). There is no agreement among scholars about HR practices that enhance individual and organisational performance (Lepak *et al.*, 2006; Subramony, 2009; Jiang *et al.*, 2012; Posthuma *et al.*, 2013). Since the work of Arthur (1992), many researchers have pointed out several sets of HR practices that are contributing to improving both employees and organisations performance. For example, Arthur (1994a) categorised high-performance HR system into six practices including skill enhancement, participation decision making, training, empowerment, performance-related rewards, and high pays.

Similarly, Pfeffer (1994), identified the same practices' of Arthur (1994a) and added to them selective recruiting. However, Huselid (1995) argued that activities such as employee selection, performance appraisal, incentive compensation, selective staffing, and employee participation are core elements of HR system that help to improve productivity and organisational performance.

Correspondingly MacDuffie (1995), highlighted several HR practices that are considered as best practices including for example teams work, employee suggestions, training and recruitment and hiring.

Some researchers distinguish between human capital practices and human capital management practices. For example, Youndt *et al.* (1996) examined the influence of HR practices on organisational performance and came up with two main lists of HPHRPS. The first category is the human capital enhancing practices, which

include 'selective staffing, selection for technical and problem-solving skills, comprehensive training, training for technical and problem-solving skills, developmental and behaviour-based performance appraisal, group incentives, and salaried compensate' (Youndt *et al.*, 1996,p.850). The second category is the administrative HR system which involves practices such as ' selection for manual and physical skills, policies and procedures training, results-based performance appraisal, individual equity, individual incentives, and hourly pay' (Youndt *et al.*, 1996,p.850). These practices identified in the second category influenced by nature and context of the manufactory, in which this study based on. Therefore, some of these practices may not necessarily be compatible with other sectors.

In the same context, Zacharatos, Barling and Iverson (2005), conducted two studies to investigate the relationship between high-performance work systems and occupational safety. They identified ten HPHRPS in their studies that are associated with employee and firm performance. Those HPHRPS comprise of practices, such as employment security, selective hiring, training, teams work, reduced status distinctions, information sharing, contingent compensation, transformational leadership, high-quality work, and measurement of management practices. However, Sun, Aryee and Law (2007) categorised HPHRPS into three main subsystems. The first subsystem is people flow which includes practices that related to recruitment, intern employee mobility, and employee training and job security. The second subsystem is appraisal and rewards which includes practices that are related to performance appraisal, compensation, and benefits. The last subsystem is the employment relations which including practices that related to job design and employee participation. They developed a 27-item scale to measure this HPHRPS. These items have been widely used to study the concept of HPHRPS (i.e. Kehoe and Wright, 2013). In the same line, Vlachos (2008) considered five HR practices to be associated with high performance. Those HR practices are selective hiring, self-managed teams and decentralisation of decision-making, compensation policy, extensive training and information sharing. Hence, it can be seen from previous studies that there is a lack of agreement among scholars about specific practices that should be included in the high-performance HR system.

Some researchers divided the HR best practices to more than three levels. For example, Camps and Luna-Arocas (2009), classified HPHRPS into four main categories including staffing, compensation, flexible job assignments and training. McClean and Collins (2011) listed the HR best practices into the

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following; staffing and selection, training, compensation, employee development, and performance management practices.

Indeed, all these practices have obtained superior attention in the HPHRPS literature. These practices were found to be good sources to improve employee performance through developing their skills, knowledge, and abilities, enhance their motivation and empower them to use their skills, knowledge, and abilities to perform their job (Jiang, Takeuchi and Lepak, 2013). As discussed earlier, the link between HPHRPS and employee behaviour can be explained by the assumptions of the AMO theory. The AMO theory assumes that a set of HPHRPS will improve employee performance when it is composed of practices that enhance individuals' abilities and motivation, and provide them with opportunities to make use of their skills, knowledge, and attributes to do their job (Appelbaum, Bailey and Berg, 2000; Jiang, Takeuchi and Lepak, 2013; Boxall and Purcell, 2016).

However, which practices should be included in the HR system remains a subject of debate among scholars. Although a considerable number of studies have adopted high-performance HR practices, still, there is a lack of agreement among researchers on a particular set of HR practices that can be considered as the most appropriate (Gould-Williams *et al.*, 2014). At this juncture, recognising the common HPHRPS utilised in the previous literature would be helpful in identifying the important practices compatible with the purpose of this current study. The following section is a brief review of the most important raised HPHRPS in previous literature.

2.5.6 What HPHRPS Should be Used?

As mentioned above, several research and meta-analysis studies have been conducted around the concept of HPHRPS. A review of these research alludes to a lack of agreement and shows variations in the literature regarding the selection of HPHRPS when it is investigated. For example, Boselie, Dietz and Boon (2005) reviewed 104 major empirical research articles that were published in pre-eminent international refereed journals between 1994 and 2003. All of the studies were concerned with the concept of the linkages between HR practices and performance. This study shows variations among the researchers regarding which HR practices should be adopted in the HRM system. In their paper, Boselie, Dietz and Boon (2005) recognised 26 different HR practices that commonly used and related to improving performance. Table 2.1 illustrates these practices. Also, Combs *et al.* (2006), reviewed 92 studies that examined HR practices on

organisational performance among a total of 19,319 organisations. They found that there is no consensus among researchers regarding which practices should be considered as part of high-performance HR systems. However, they identified 13 HR practices based on their appearance in five or more reviewed studies. Any practice that appeared in less than five studies was eliminated. These HR practices identified in their study are shown in table 2.2.

Table 2-2 HRM practices by Boselie et al. 2005

1. Training & development	15. HR planning
2. Contingent pay & rewards	16. Financial participation
3. Performance management	17. Symbolic egalitarianism
4. Recruitment & selection	18. Attitude survey
5. Team working & collaboration	19. Indirect participation
6. Direct participation	20. Diversity & equal opportunities
7. „Good“ wages	21. Job analysis
8. Communication & information sharing	22. Socialisation, induction & social activities
9. Internal promotion opportunities	23. Family-friendly policies & work life balance
10. Job design	24. Employee exit management
11. Autonomy & decentralised decision-making	25. Professionalization & effectiveness of the HR function/ department
12. Employment security	26. Social responsibility practices
13. Benefits packages	
14. Formal procedures	

Source: Boselie et al. (2005).

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Table 2-3 HRM practices by Combs et al. 2006

1.incentive compensation	7. HR planning
2.training	8. Flexible work
3. Compensation level	9. Performance appraisal
4. Participation	10. Grievance procedures
5. selectivity	11.teams
6. Internal promotion	12.information sharing
	13. Employment security

Source: Combs et al. (2006)

Although the previous two efforts included a comprehensive review of studies and the period is not much far between them, there are differences in some of the HPHRPS that are indicated by each study as HPHRPS.

Alternatively, Subramony (2009) classified the HPHRPS into three main bundles based on reviewing previous attempts that aimed to categorize HPHRPS (e.g. Batt, 2002; Guest, Conway and Dewe, 2004; Boselie, Dietz and Boon, 2005; Kalleberg *et al.*, 2006; Lepak *et al.*, 2006; Sun, Aryee and Law, 2007). He argued that most of the previous classifications suggest that HPHRPS can help to enhance performance if they are combined into skill-enhancing practices that develop the knowledge and skill levels of the employee, empowerment-enhancing practices that increase staff autonomy and responsibility levels, and motivation-enhancing practices that offer workers with sufficient levels of guidance and incentives. He developed a list of 15 HPHRPS that are frequently mentioned in the literature which concluded from a total of 65 studies. After that he asked five academic staff, with research and teaching interests in the area of HRM, and five final-year graduate students to group each of the 15 HRM practices into one of the three HRM bundles (empowerment-, motivation-, and skill-enhancing bundles). All ten judges were provided with a brief description of the three main HRM categories (Subramony, 2009). The final classification of content HRM bundles can be seen in Table 2.3.

Table 2-4 The Content of HRM Bundles.

<p>Empowerment-Enhancing Bundles</p> <p>Employee involvement in influencing work process/outcomes</p> <p>Formal grievance procedure and complaint resolution systems</p> <p>Job enrichment (skill flexibility, job variety, responsibility)</p> <p>Self-managed or autonomous work groups</p> <p>Employee participation in decision making</p> <p>Systems to encourage feedback from employees</p>
<p>Motivation-Enhancing Bundles</p> <p>Formal performance appraisal process</p> <p>Incentive plans (bonuses, profit-sharing, gain-sharing plans)</p> <p>Linking pay to performance</p> <p>Opportunities for internal career mobility and promotions</p> <p>Health care and other employee benefits</p>
<p>Skill-Enhancing Bundles</p> <p>Job descriptions/requirements generated through job analysis</p> <p>Job-based skill training</p> <p>Recruiting to ensure availability of large applicant pools</p> <p>Structured and validated tools/procedures for personnel selection</p>

Source: Subramony (2009)

Another effort in the same matter was provided by Jiang *et al.* (2012). Their meta-analysis aimed to examine the effects of three main dimensions of HR system namely skills-enhancing, motivation-enhancing, and opportunity-enhancing practices on organisational performance. Based on the review of 116 articles, 14

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HPHRPS that were most frequently examined by the researchers in HRM literature were determined. By using the AMO framework, they categorised those HPHRPS into three dimensions. The components of the three HR dimensions (skills-enhancing, motivation-enhancing, and opportunity-enhancing practices) are shown in Table 2.4. They found that such as those practices have a positive impact on organisational performance through influencing employee motivation and performance (Jiang *et al.*, 2012).

Table 2-5 HR practices by Jiang et al

Skill-enhancing HR practices
Recruitment
Selection
Training
Motivation-enhancing HR practices
Performance appraisal
Compensation
Incentive
Benefit
Promotion
Career development
Job security
Opportunity-enhancing HR practices
Job design
Work teams
Employee involvement
Formal grievance and complaint processes
Information sharing

Source: Jiang et al. (2012)

Moreover, a recent work to summarise the HPHRPS was developed by Posthuma *et al.* (2013). They argued that HR systems that enhance employee abilities, skills, commitment and productivity are frequently called high-performance work systems. However, in their work of integrating previous studies investigating the relationship between different HPHRPS and performance, they used the term “taxonomy” to refer to the different HR practices instead of the term of high-performance work systems. They explained that the reasons behind using this term are that the term of taxonomy refers to a list that is (1) comprehensive, (2) each item is theoretically independent, and (3) each item has its own investigation

history, and this applied to their HR practices list. Using 181 between conceptual and empirical studies that were published during the past 20 years, from 1992 to 2011, they identified 61 HPHRPS. The total 61 HPHRPS were fixed into nine main categories. These categories are (1) compensation and benefits, (2) job and work design, (3) training and development, (4) recruiting and selection, (5) employee relations, (6) communication, (7) performance management and appraisal, (8) promotions, and (9) turnover, retention, and exit management.

That being said, all these practices are widely accepted in HRM literature, but the question that arises here is what are the criteria determining which practices reviewed above should be included when examined HPHRPS and performance-link? Before addressing this question a brief review of HPHRPS and performance-link would be helpful. The next section highlights some of the previous research that linked these HPHRPS and individual and organisational outcomes.

2.5.6.1 The Impact of High-Performance HR Practices on Employee and Organisation Outcomes

Several meta-analyses on the relationship between HPHRPS, and individual, and organisational performance reported a positive effect of HPHRPS. For example, Tzabbar, Tzafrir and Baruch (2017) based on 89 primary studies conclude that HPHRPS has a positive and significant relationship with organisational performance across contexts. On a large scale, studies show positive effects of HPHRPS on organisational and individual outcomes. Empirical research supports the use of HPHRPS in improving employee productivity (Arthur, 1994a; Huselid, 1995; MacDuffie, 1995). The results from these seminal studies have been supported by more recent research (Zhang and Jia, 2010; Chang and Chen, 2011; Lertxundi and Landeta, 2011; Zhang and Morris, 2014; Ogbonnaya and Valizade, 2018; Safavi and Karatepe, 2018; van Esch, Wei and Chiang, 2018). Also, although the number of research that studied HPHRPS at the individual level is still scarce (Jiang *et al.*, 2012), it has reported some positive outcomes of HPHRPS on individual behaviour. For instance, some studies have reported positive effects of HPHRPS on employee job performance (Kuvaas, 2008; Boxall, Ang and Bartram, 2011; Chang and Chen, 2011; Aryee *et al.*, 2012; Ehrnrooth and Björkman, 2012; Latorre *et al.*, 2016). Furthermore, other studies have provided empirical evidence that HPHRPS positively associated with employee job satisfaction (Gardner *et al.*, 2001; Butts *et al.*, 2009; Takeuchi, Chen and Lepak, 2009; Wu and Chaturvedi, 2009; Boon *et al.*, 2011; Ma *et al.*, 2016; Ogbonnaya and Valizade, 2016). The use of HPHRPS was also found to be linked to employee commitment (Macky and

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Boxall, 2007; Butts *et al.*, 2009; Boon *et al.*, 2011; Van De Voorde and Beijer, 2015) and organisational citizenship behaviour (Gong, Chang and Cheung, 2010; Snape and Redman, 2010; Boon *et al.*, 2011; Kehoe and Wright, 2013).

Nevertheless, it is worth mentioning here that is not all the empirical research on the impact of HPHRPS on employee, and organisational outcomes has been supported the positive influence of HPHRPS on performance (Wood and De Menezes, 1998; Cappelli and Neumark, 2001; Chow, 2005) and thus it is premature to argue conclusively about the HPHRPS-performance link (Guest, 2011). The extent to which HPHRPS contribute to faculty member research performance and their career success has not yet been empirically examined. To address this gap in the literature, current study designed and tested a model that posited faculty member research performance in the central position in the relationship between HPHRPS and career success in academia. Further, the general efficacy of HPHRPS has not conclusively been established in non-Western contexts (Zhang and Morris, 2014). This research will thus contribute to the literature in this stream by examining the impact of selected HPHRPS on faculty member research performance and their career success in Saudi universities.

2.6 Literature Review Part Two Conclusion

Considering the previous review, these studies suggest that there are differences among researchers about which practices should be included in HRM systems. Besides, what types of objectives these HRM systems are designed to achieve also was subject of disagreement among researchers. However, in general, high-performance HR practices can be employed to reach a range of HRM aims, for example evolving employees' knowledge and skills, boosting cooperation and teamwork within the organisations, and motivating employees.

Additionally, it is obvious from this review that although the researchers have adopted different components of HPHRPS, in general, all those practices can be categorised into three main group namely skills, motivation, and empowerment enhancing HPHRPS (Subramony, 2009; Jiang *et al.*, 2012), which can be often called a high-performance HR systems. For this current study, we adopt this classification of HPHRPS in order to investigate the influence of HPHRPS on faculty member research performance. Although several studies have shown evidence of a positive impact of HPHRPS on employees' performance and productivity, which in turn, should positively influence organisational performance, little is known

about the effect and validity of such as these practices in academia. Most research was conducted in production-oriented organisations (Kalleberg *et al.*, 2006), and private sector firms (Gould-Williams, 2004; Keegan and Boselie, 2006; Paauwe, 2009; Gould-Williams *et al.*, 2014), in which are all profit oriented. Kalleberg *et al.* (2006) indicated that most previous studies in HPHRPS had focused primarily on profit organisations, particularly in manufacturing industries. They explained that the success of applying HPHRPS practices in profit-oriented organisations led many non-profit and public sector organisations to start implementing them as well (Kalleberg *et al.*, 2006). However, they argued that the theoretical and empirical research on HPHRPS in the non-profit and public sectors is limited (Kalleberg *et al.*, 2006).

Reviewing previous literature shows there is less attention was given to the investigation of HPHRPS in non-profit organisations. The need to enhance employee performance in public and non-profit organisations may be less apt to implement HPHRPS because they are under fewer pressures to increase performance, however now several public and non-profit organisations have adopted those systems (Kalleberg *et al.*, 2006; Kim, 2010).

Also, previous studies on HPHRPS tend to neglect employee outcomes (Boselie, Dietz and Boon, 2005; Paauwe, 2009; Farndale, Hope-Hailey and Kelliher, 2011; Jiang *et al.*, 2012). Most previous research has focused on the impact of HPHRPS on organisational outcomes, giving less attention to the individual outcomes (Gould-Williams, 2004; Sparham and Sung, 2007; Kalmi and Kauhanen, 2008; Kroon, van de Voorde and van Veldhoven, 2009; Boselie, 2010; Kehoe and Wright, 2013; Zhang *et al.*, 2013). For this reason, some researchers have called for more studies that focus on the effects of HPHRPS on employees' outcomes level (Boselie, Dietz and Boon, 2005; Delbridge and Keenoy, 2010). Furthermore, Jiang *et al.* (2012), reviewed 116 studies on the impact of HPHRPS, and they concluded that there is a lack of empirical studies on the effects of HPHRPS on individual outcomes. They call for more empirical research to be conducting in this important area.

In addition, one of the criticisms that were directed to the previous research is that they tend in general to measure HPHRPS from the perspective of employees' senior managers (see, Gould-Williams, 2004; Kehoe and Wright, 2013). Kehoe and Wright (2013) argued that studying the relationship between HPHRPS and employees' outcomes should not ignore the perspective and perceptions of employees regarding these practices. That side, Paauwe (2009) called for a more

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balanced approach when examined the impact of HPHRPS on individual and organisational outcomes.

Thus, this study aims to close these gaps by examining the impact of selected HPHRPS on faculty member research performance in Saudi public universities. This will contribute to further developing our understanding of the validity of such HPHRPS in non-profit organisations. Based on the review of the previous literature in the HPHRPS, three frequently categories of HPHRPS namely empowerment, motivation, and skill-enhancing performance practices will be adopted in this research. Motivation-enhancing HR practices included internal mobility (promotion) and recognition. Whereas, Empowerment-enhancing HR practices included faculty participation in decision making and faculty involvement in influencing work process/outcomes. Lastly, Skill-enhancing HR practices included training.

These HR practices were chosen for this study due to several reasons. First of all, as discussed in the previous section, HPHRPSs are many, and there is no consensus and agreement among researchers on a specific set of them. These selected HPHRPS have been widely used by the researcher in HRM literature when studying HPHRPS-performance link (see for example Subramony, 2009; Jiang *et al.*, 2012; Posthuma *et al.*, 2013). Many studies have reported positive effects of these HPHRPS on employees outcomes (see, Jiang, Takeuchi and Lepak, 2013),

Second, not all of the HPHRPS that were discussed in the literature can be applied across all sectors because most of those practices in the previous studies investigated in manufacturing and business industries (e.g. see, Kalleberg *et al.*, 2006) Which is somewhat different from the public sector. Kurland and Egan (1999) argued that there might be a difference between private and public sector employees in term of their perceptions of several aspect related to their work formalisation. For example, profit sharing and bonuses HR practice was found to be less relevant to public and non-profit sectors, whereas participation in decision making was recognised to be related to public and non-profit sectors (Kalleberg *et al.*, 2006). Additionally, factors such as financial rewards found to be valued by the private sector employ more than public sector employees (Kim, 2010). This study focuses on academics, who hold a unique job, and the HRM in academia in some aspects may be slightly different from other sectors (e.g. see, Baruch and Hall, 2004; Baruch, 2013). Therefore, it is worth to examine the impact of HPHRPS in this context in order to validate its effectiveness in this unique environment.

Third, there are some HPHRPS that can work for the public and non-profit organisation, but they have been excluded because they are not consistent with the main purpose and aim of this current research. For example, factors such as job security and flexibility are among HPHRPS that are highly mentioned in the HRM literature. However, these factors are excluded in this research because they are already part of the nature of the faculty member work. According to Baruch (2013), tenured faculty member enjoys a very high level of job security, and also, a faculty member, in general, enjoys a wide range of flexibility and freedom within his or her job. Finally, HPHRPS may include many practices which some of them are relevant, and others may be irrelevant within a certain context. However, a high consideration was given to select the most HPHRPS that are repeated frequently and highly supported in the previous HRM literature as discussed earlier. Also, high attention was paid to their relevant with research aim and context. Hence, it can be argued that different careers have different attributes. Moreover, individual career attitudes and organisational career system can play a role in the equation of employees' performance and career success. The subsequent section will review the previous literature on career studies.

2.7 Part Three: Career Theory

2.7.1 Career Definition and Introduction

The word 'career' comes from the Latin word '*Carrus*' which means horse-driven chariot or vehicle which were used in races in early Rome (Liebig and Sansonetti, 2004). However, later on, the word career has had different meanings. Therefore, careers in terms of psychological and sociological have been defined in many different ways in the literature as the differences between scholars in their perspectives. There is disagreement among scholars in terms of identifying one common definition of the concept of career (Sullivan and Baruch, 2009). For example, Super (1980) defined a career as the combination and series of responsibilities and work performed by an individual during the path of his or her lifetime. This definition emphasises that the career is a sum of job experience that someone has had throughout his or her life. However, this definition does not explain whether one's career is managed by the employer or the individual. Others scholars see a career as 'a process of development of the employee along with a path of experience and jobs in one or more organisations' (Baruch and Rosenstein, 1992,p.478).

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Similarly, Khapova, Arthur and Wilderom (2007) defined a career as a series of individual's work experiences over time. In term of roles in managing individual career, Hall and Mirvis (1995) and Baruch (2004a) explained that in traditional career theory, careers are oriented or managed externally to the person, which means that an organisation manages and takes responsibility for individual career, including vertical progression during positions holding, increasing responsibility, and rewards and status. However, with the rapid change in the business and work world, the word career comes to refer to individual "experience" rather than a progression of jobs.

Other researchers argued that the word career had become more individual-oriented rather than employer-oriented. They explained that individuals could set their careers goals and work to achieve these goals, taking into consideration the aspects of flexibility and mobility (Sullivan, 1999; Baruch, 2004a; McDonald, Brown and Bradley, 2005). Individuals have become more concerned with building their own career success. For example, Sargent and Domberger (2007) emphasized that internal career success is more important than the external career success to individuals in terms of the meaning of career achievement, and this what many scholars refer to it as contemporary careers orientation (Hall, 1976;1996a; Baruch, 2004a; Sullivan and Baruch, 2009). Ongoing changes in environment, politics and economics have changed and affected the traditional concept of the career, which was mainly about the employer-employee relationship (Sullivan and Baruch, 2009).

These changes influenced the relationship between organisations and their employees regarding job security and career development. Since the economic crisis, many organisations layoff their employees (Sullivan and Baruch, 2009). As the response to the change in the employer-employee relationship, individuals have developed new patterns in their careers (Baruch, 2004a). They are taking more responsibility for developing their careers and making themselves marketable (Baruch, 2004a;2006). Sullivan and Baruch (2009) defined a career as 'an individual's work-related and other relevant experiences, both inside and outside of organisations, that form a unique pattern over the individual's life span' (p.1543). This definition of career is a great way to understand the new and old perspective of the notion of a career as it is comprehensive and covers the most important aspects related to the concept. This definition gives a comprehensive view of the notion of career, as was described by Sullivan and Baruch (2009):

This definition recognises both physical movements, such as between levels, jobs, employers, occupations, and industries, as well as the interpretation of the individual, including his or her perceptions of career events (e.g., viewing job loss as failure vs. as an opportunity for a new beginning), career alternatives (e.g., viewing limited vs. unlimited options), and outcomes (e.g., how one defines career success). Moreover, careers do not occur in a vacuum. An individual's career is influenced by many contextual factors, such as national culture, the economy, and the political environment, as well as by personal factors, such as relationships with others (e.g., dual-career marriages)(Sullivan and Baruch, 2009,p.1543).

This definition was applied in this research when referring to the concept of career since it covers most aspects that are associated with the notion of career. In addition, such a comprehensive description of career concept is not only associated with traditional career concept, but is also associated with contemporary career theories such as protean career (Hall, 1996a; Briscoe and Hall, 2006a), boundaryless career (Arthur and Rousseau, 1996; Sullivan and Arthur, 2006), post-corporate career (Peiperl and Baruch, 1997), portfolio career (Briscoe and Hall, 2006a), and Kaleidoscope career (Mainiero and Sullivan, 2005). According to these theories, the individual rather than the organisation is responsible for own his or her career development and progression.

The following section will discuss the traditional career concept as well as non-traditional career theories and research that has been conducted in these areas.

2.7.2 Traditional Career

The concept of traditional career refers to the management of employees' profession within their organisation. Traditional career theories focus on managing the relationship between employer and employees inside an organisational structure. Thus, the traditional career path is linear, of climbing up the ladder in the hierarchy (Rosenbaum, 1979) in a clear and stable organisational structure. The idea of traditional career theory was developed initially from scholars' thoughts and work, including Super (1957), who defined traditional career as the career advancement and upward promotion between one or two organisations where the attention is given towards the organisation in managing career and the interest is focused on extrinsic rewards (Sullivan and Baruch,

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2009). In the same line, Ackah and Heaton (2004) defined to the traditional career as a steady succession of upward progress inside a single firm.

Moreover, Edwards *et al.* (1999), referred to career advancement in traditional theory as a progression that depends on the continuous long term of employee commitment with persistent upward moves involving physical mobility. Also, in the traditional career era, some factors influence individual career advancement. These factors, for example, include employee's ability, hard effort, and loyalty, and individuals exhibit such factors are likely to be rewarded by their organisation, which might include training, growth, promotion and long-life job (Baruch and Hind, 1999; Baruch, 2003; Reitman and Schneer, 2003). In addition to this, high consideration for seniority takes into account in term of decisions regarding employee rewards (Sullivan and Baruch, 2009).

As a result of the organisational domination in managing careers, individuals role in managing their careers were limited, and they were less active in regards to taking responsibility for their career advancement. De Vos and Soens (2008) argued that individuals who have more traditional career attitude tend to exhibit a more non-active role regarding managing their carer and are most likely to pursue career progression from the organisation. Wilensky (1960) defined the concept of career as 'a succession of related jobs, arranged in a hierarchy of prestige, through which persons move in an ordered, predictable sequence (p.554). Also, Hind (2005) emphasised that traditional career was known as holdings a job with organisational boundaries. Accordingly, McDonald, Brown and Bradley (2005), in their research article described the notion of traditional career progression by terms as "working your way through the ranks", "moving up the hierarchy", or "climbing the ladder", whereas the success of career was measured and proven by any increasing related to financial rewards, responsibility, and rank or status.

Regarding the psychological contract in the traditional career perspective, the relationship between the employer and employees was controlled, based on several mutual benefits (Rousseau, 1989; Baruch, 2004a; Sullivan and Baruch, 2009). For example, in order for the employees to be rewarded which may include promotion, training, long-life job security by their organisation, they have to demonstrate their loyalty, commitment, and trust to their organisation (Rousseau, 1989; Baruch, 2004a; Clarke, 2009; Sullivan and Baruch, 2009; Baruch and Rousseau, 2019). Furthermore, employees need to show their ability to demonstrate hard work.

Built on the previous definitions, career progression in traditional career theory is associated with more bureaucratic perspectives considering the fact that employees need a long time to get promoted and climb the organisational hierarchy. This perspective was acceptable at that time since the organisational structures tended to be vertical and hierarchical.

Moreover, some scholars have linked career advancement to employees' career ages. For example, the lifespan development theory which is developed by Super (1980), illustrates the relationship between the individuals' ages and their career development and advancement. Different career progression stages include holding more responsibility and authority, prestige and status, and climbing organisational hierarchies were closely linked to the age of the employees.

It is obvious from the previous definitions and thoughts about a career in traditional theory that the main focus was placed on managing the relationship between employer and employee in the context of development and progression inside the organisation. The traditional career perceptions do not give much attention to the individuals regarding their personal goals and aspirations. Besides, it concerned about personal career success at one organisation structure. Mobility inside and outside more than one organisation would allow individuals to learn from different experiences different skills and develop their ability and employability. The fundamental principles of traditional career would make employees dependent on their employers for career development and advancement. This can be risky, especially when their organisation going through a financial crisis because usually the preferred option would be to layoff its employees and cuts some jobs (Baruch, 2004a). Also, the organisational structures have been influenced by different environmental changes including the increase and growth of the competition in global market and globalisation, rapid technological advancement, and organisations relying more on outsourcing, and temporary employees have impacted on the traditional relationship between organisation and employees (Sullivan and Baruch, 2009). These changes affect individuals' career orientations and contribute to the emergence of contemporary career patterns and attitudes. The following section will highlight these contemporary career patterns.

2.7.3 New Career Era

Change has always been rapidly happened almost everywhere in the world, including countries development, economic growth, technologies advancement,

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organisations structures and management, individuals' lives habits. Those rapid environmental changes that we are witnessing have modified the perceptions about the relationship between employer and employee in term of careers management and development (Sullivan, 1999; Sullivan and Baruch, 2009). On the one side, the same organisations no longer provide its employees with life-long time job and other traditional career factors expectations. On the other side, as a result of this organisational change, individuals have developed new career attitudes and take a more active role regarding the initiatives in managing and advancing their careers(El Baroudi *et al.*, 2017).

Furthermore, financial crises in recent years have made several organisations lay off their employees which has made employees rethink their career paths (Baruch, 2004a; Shultz and Wang, 2011). Those crises have influenced organisational finances and strategies; for example, older employees have been moved from place to place or have been redundant within their companies in response to organisational changes (Sullivan and Baruch, 2009). This forced many employees to look for different career paths, for example the concept of “forced entrepreneurship” was raised (Richtel and Wortham, 2009), and individuals now become more independent of their organisations in terms employment (De Vos, De Hauw and Van der Heijden, 2011), and have started creating their careers by establishing their businesses (Sullivan and Baruch, 2009).

Those changes that have influenced the concept of the career, which made traditional careers perceptions, including (upward careers progression and long-term job security) much difficult than before (Valcour and Tolbert, 2003). These changes that impact the employer – employees relationship have also transferred the career system from a linear career orientation to be more multidirectional career orientation (Baruch, 2004b). As a result of this type of transition, Smith-Ruig (2008) argued that such as traditional careers progression perceptions had been no longer existing, in other words, they had been changed. Although this perspective might be a reality, is not necessary to be as same in non-western cultures; for example, the Gulf context countries traditional careers perceptions still exist (Forstenlechner and Baruch, 2013).

Not only the environmental changes have influenced the careers systems, but also other personal factors have too. Those factors include for example increasing lifetime spans; the change of family structures, the growing number of dual-career couples, single employed parents, and workers with eldercare

accountabilities; and the increasing number of individuals pursuing to fulfil needs for their education, development and progression (Hall, 2004).

Those environmental and individuals dynamic changes have encouraged scholars and researchers to investigate new careers attitudes and systems. As result of the scholars work and effort, several contemporary careers theories have emerged including protean career (Hall, 1996a; Briscoe and Hall, 2006a), boundaryless career (Arthur and Rousseau, 1996; Sullivan and Arthur, 2006), postcorporate career (Peiperl and Baruch, 1997), portfolio career (Briscoe and Hall, 2006a), and Kaleidoscope career (Mainiero and Sullivan, 2005). In the next section, each of these theories will be discussed.

2.7.3.1.1 The Protean Career

The term of “protean career” was first introduced by Hall (1976), which was not widely recognised until 1996 when he published his book, *The Career Is Dead—Long Live the Career*, (Sullivan and Baruch, 2009). The concept “protean career” originally comes from the metaphor of the Greek *God Proteus*, who was capable of changing his shape at will (Briscoe and Hall, 2006b). The concept of protean career refers and explains the individuals’ abilities in adjusting and improving their skills, knowledge and abilities to survive in a highly dynamic work environment in order to still being employable (Hall, 1976). Unlike the traditional career perceptions, protean career perceptions focus on the individuals’ initiatives rather than the organisations in term of careers management and advancement (Baruch, 2004a; McDonald, Brown and Bradley, 2005; Sullivan and Baruch, 2009). The term of protean career was well defined by Hall (1976), he explained this notion as the following:

The protean career is a process which the person, not the organisation, is managing. It consists of all of the person’s varied experiences in education, training, work in several organisations, changes in the occupational field, etc. The protean career is not what happens to the person in any one organisation. The protean person’s own career choices and search for self-fulfilment are the unifying or integrative elements in his or her life. The criterion of success is internal (psychological success), not external. In short, the protean career is shaped more by the individual than by the organisation and maybe redirected from time to time to meet the needs of the person (Hall, 1976,p.201).

According to Hall’s definition, individuals have become less dependent on their organisations for their career progression path. Additionally, people with protean

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career attitudes are seeking personal career success rather than external careers success, which, according to the traditional careers theory, is climbing the organisational hierarchy. This definition of protean career perceptions shifts the responsibility of career managing from organisation to individuals, as a result of the increasingly uncertain circumstances that may affect organisational strategies regarding the relationship between organisations and their employees (Hall and Mirvis, 1996; Mirvis and Hall, 1996; Hall, 2002).

Individuals with protean career orientation are more likely to value freedom, have faith in ongoing learning, more flexible, and pursue subjective and intrinsic rewards from career (Hall, 1996a; 1996b). The protean career is therefore based on individuals' perspective in determining their goals, involving the entire life space, as well as being motivated by inner success rather than objective success including salary, rank, or authority (Briscoe and Hall, 2006a).

Protean careers attitudes have influenced the assumptions of the psychological contract. For example, Arthur (1994b) stated that new career theories including protean careers resulting what he called "new deal", which refers to the new psychological contract, where the relationship between the employer and employee no longer involves a promise of long-term life job security and stable career development. Hall (2002) argued that if the old contract was between employees and employer, in the protean career, the contract is between employees and themselves.

Additionally, Individual autonomy, continuous learning, personal responsibility and self-awareness have been noted by Hall (2002) as a requirement for successful protean careerists. As mentioned above, according to the old careers perspective the responsibility of careers management including (upward progression, goal setting and planning, and job security,) was part of an organisational role towards their employees. However, this responsibility has shifted in the protean career perspective, protean careerists are self-driven and play proactive roles in managing their career development and advancement (Baruch, 2004a; Briscoe and Hall, 2006a; Cabrera, 2009). This means that individuals should be more proactive to achieve their career success.

This perspective has been early supported by Seibert, Kraimer and Crant (2001a). In their study 'what do proactive people do?' They found an indirect relationship between individuals with proactive personality and career advancement and satisfaction (internal and external career success). Thus, individuals with protean

career orientation they have different convictions about their careers goals and plans than individuals with traditional career perspective. As changes in the work environment, protean careerists have a less important emphasis on traditional career factors such as loyalty and commitment to one organisation (Maguire, 2002).

Briscoe and Hall (2006a) elucidated the protean career more by defined two components which based on individuals are behaving regarding their career, as a reaction to the environmental and personal changes. Those two protean career factors are '(1) values-driven in the sense that the person's internal values provide the guidance and measure of success for the individual's career; and (2) self-directed¹ in personal career management—having the ability to be adaptive in terms of performance and learning demands (Briscoe and Hall, 2006a,p.8). They argued that based upon these two protean career factors, individuals could be different in term of the level of high, strong, or low in exhibiting values-driven and self-directed attitudes toward career management (Briscoe and Hall, 2006a).

Based on individual differentiations on the degree in these two dimensions, Briscoe and Hall (2006a) proposed four primary categories of a career as seen from the protean career perceptions. Those categories are dependent, reactive, rigid, and protean. First is the “dependent” category, which refers to the individual who does not exhibit values-driven nor does he or she self-directed when coming to career management as he or she does not have the ability to determine priorities and manage his or her career. Whereas, “reactive” category refers to the individual who is not values-driven but who is self-directed when coming to career management. This type of individual would not eventually have the perception to direct his or her career. The third category is the “rigid”, which refer to individuals who value-driven but not self-directed. This type of people do not have the ability to adjust to the performance and learning required to their career, so they cannot completely form their own career. The last category is “protean” career orientation. Protean career category refers to an individual who is both value driven in defining his or her career priorities and identity, as well as self-directed in adjusting to the required performance and learning of his or her career. This kind of individuals can manage their career as well as managing others and also have the capacity for ongoing learning.

Different scholars made efforts to develop and validate measures in order to empirically examine the protean career orientation (Briscoe, Hall and DeMuth, 2006; Baruch, 2008; Baruch, 2014). For example, Briscoe, Hall and DeMuth

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(2006) have developed and validated a 14-item scale to measure the two dimensions of the protean career orientation. However, those measures have been mostly tested among students sample. Another recent effort to develop and validate measures to empirically examine the protean career orientation was provided by Baruch (2014). He conducted research where he developed and validated 7-item scale considering different cultures samples. In a later section in this research, the literature of protean career orientation will be reviewed in details as well as its relationship with objective and subjective career success will be discussed.

Overall, the protean career notion has encouraged organisations to play a new significant role in term of their relationship with their employees. This new role of organisations is to act as a developer of its human capital and to provide needed support to its employees in order to empower them to facilitate their career progression and be self-directed regarding their career (Baruch, 2006). This perspective could be linked with what has been previously discussed on HPHRPS that applied by organisations to enhance employees behaviour and attitudes. The next section will provide a brief review of another widespread new career theory. This theory is known as a boundaryless career.

2.7.3.1.2 The Boundaryless Career

Another interesting contemporary career theory is a boundaryless career (Arthur and Rousseau, 1996; Sullivan and Arthur, 2006). This term of new career emerged as the response to the concept of “boundaryless organisation” which was the theme of the 1993 Academy of Management conference (Sullivan and Baruch, 2009). The concept of a boundaryless career was well known after the publication of Arthur and Rousseau (1996) highly influential book about the term boundaryless career. They clarified that ‘...the term boundaryless distinguishes our concept from the previous one – the ‘bounded,’ or organisational career. That view saw people in orderly employment arrangements achieved through vertical coordination in mainly large, stable firms’ (Arthur and Rousseau, 1996,p. 3). They also see a boundaryless career as the opposite of organisational careers; they believed that boundaryless career is independent rather than dependent on old organisational career and involves experiences and opportunities that go outside any one single organisation and employment (Arthur and Rousseau, 1996; DeFillippi and Arthur, 1996).

Additionally, Arthur and Rousseau (1996) and Arthur (1994b) presented six different meanings that illustrate boundaryless careers. The first meaning is what they called the typical Silicon Valley career, which refers to individuals moving across the boundaries of separate employers. The second meaning is those who draw validation and marketability from outside the present employer, such as academics or carpenters. The third meaning is real-estate agents, which refers to individuals who are sustained by external networks or information. The next meaning refers to individuals who break traditional organisational assumptions about hierarchy and career advancement. The fifth meaning refers to those individuals who are rejecting existing career opportunities for personal or family reasons. The last meaning refers to individuals who perceive a boundaryless future regardless of structural constraints and their perception entirely built on the career actor's interpretation.

Although the definition of the boundaryless career was developed as the opposite of the traditional career perceptions, some boundaryless career values are still present in some of the traditional career principles like the fact that overall sense of boundaryless career perceptions includes psychological and/or physical progress and mobility inside or outside the organisational boundary. However, it is worth mentioning here that the individual is the one who is responsible for taking initiatives regarding his or her career progression.

There are three career competencies based on the boundaryless career perspective were discussed by scholars. Those competencies namely knowing-why, knowing-how, and knowing-whom (DeFillippi and Arthur, 1994;1996; Arthur, Inkson and Pringle, 1999; Arthur, DeFILLIPPI and Lindsay, 2008). According to Arthur, Inkson and Pringle (1999), knowing-why which is the first career competency referring to an individual's identity and meaning regarding his or her career motivation and career sense, thus knowing-why competency acts as the motivational driver of the individual in which he or she provides in his or her company. The second competency knowing-how is concerned with the individual's career-related skills and work-specific knowledge. Knowing-how skills often develop over the practical and managerial experiences of employing firms. The last competency is knowing-whom which refers to an individual's ability to interact with others and develop contacts. Also, it involves individual's ability to build up and maintain his or her networks in order to have wide connections with different experts from several companies in which might help in one individual career progression and development. Those three competencies are

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interdependent of each other and the weakness or the absence in one of these competencies might have negatively influenced an individual's ability to work towards his or her career development (DeFillippi and Arthur, 1996).

There are similarities and connections between the perceptions of boundaryless career and protean career perspectives, however boundaryless career orientation is more influenced by external organisational factors such as outside organisation networks, individual-family boundaries that control the career decisions, and nonobjective individual interpretation of the career (Arthur and Rousseau, 2001).

Additionally, Boundaryless career orientation includes two components; physical as well as psychological career mobility and moves (Sullivan and Arthur, 2006). Sullivan and Arthur (2006, p. 21) in their study, defined the first component of boundaryless career orientation which is the physical mobility as 'actual movement between jobs, firms, occupations, countries'. The psychological mobility on the other side, defined as 'the capacity to move as seen through the mind of the career actor' (Sullivan and Arthur, 2006, p. 21). According to boundaryless career perceptions, the physical mobility refers to the individual as move across organisational boundaries, which may include moving to different departments within an organisation, moving to different organisations, moving to different industries and sectors and exiting or quitting from career (Crowley-Henry, 2007). Psychological mobility on the other side can occur across the organisational boundaries but is not essentially associated with physical movements. Psychological mobility can take different perceptions such as personals' social prospects about vertical career progression or work/life balance, creating marketability external current organisation and working in connections across one organisation (Arthur and Rousseau, 2001; Segers *et al.*, 2008).

Sullivan and Arthur (2006) developed a model of boundaryless careers where they categorised boundaryless careers into four main types based on their suggested definition of a boundaryless career which involves both dimensions, physical and/or psychological career mobility. This model was developed depend on these two dimensions (see Fig 2.4).

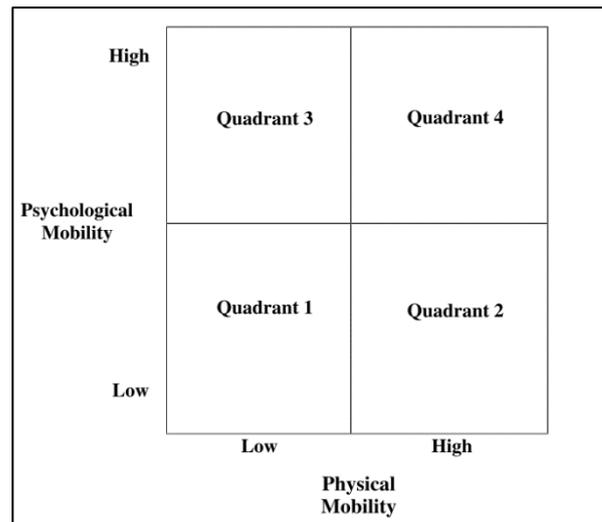


Figure 2-3: Boundaryless Careers Model

The first category is quadrant one which refers to individuals exhibiting low levels of both boundaryless careers dimensions physical and psychological mobility. According to this category, individuals tend to remain in the same company with limited mobility which is assumed to appeal to both employee and employer. This type of boundaryless careers may include individuals who have an advanced level of education and highly specialised knowledge which may make them have a low level of transferability as their limited of employers requiring this type and level of knowledge for example astronauts. As result of this situation, the physical and psychological mobility could below as the employees have less desire to move from organisation to other as the challenges associated with accessing to opportunities and the limitations of job options available. Also, other careers in this category may include individuals who have experienced a long period unemployed as their low level of basic skills and training. Therefore they have less physical and psychological desire to move.

The second category is quadrant 2. Individuals in this category have expected to exhibit high levels of physical moves but low levels of psychological moves. This type of boundaryless careers may include young individuals who want to see the world may work as a waiter or bartender in a series of temporary jobs to have the opportunity to travel around the world. Furthermore, individuals may change their jobs or organisations to move to different geographical locations to stay with their family or follow their spouse's work move. In both situations, individuals might not essentially have any psychological advantage from this mobility across

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organisational. Thus, psychological boundaries remain as they were before moving.

The third category is quadrant three which describes individuals who have high levels of psychological mobility but low levels of physical mobility. According to the model, individuals who are categorised in this quadrant recognise and act towards psychological career mobility orientation. Those individuals are carrying high expectations of their employability. Thus, they seek personal growth outside their workplace, for instance, volunteer work or adult education classes, or inside their workplace, such as introducing novel ideas into their organisation. Those individuals seek to build a respectable reputation for themselves and achieve self-actualisation within their career with less desire to change their organisational employers, such as respected academics, experienced nursing, or qualified management experts. Individuals can also face problems in their careers in terms of psychological mobility if individuals have less confidence in their ability and are unable to improve their relational skills because this might make them unmarketable to other employers.

The fourth and last category is quadrant four which refers to individuals who have both high levels of boundaryless careers dimensions physical and psychological mobility. Individuals who are exhibiting this boundaryless careers category most likely may make many physical moves in their careers as well as psychological changes to do this. Examples in this category might include employees who work for many restaurants, where each work experience contributes to developing their skills, knowledge, and self-confidence, which may lead them to open their restaurant. Moreover, individuals may adopt this boundaryless careers category to make a balance with their spouses' career commitments or have the responsibility of childcare.

In sum, boundaryless careers orientation has two main components which are the physical and psychological mobility. Many studies have been conducted to understand those two dimensions of boundaryless careers using the measures that were developed by Briscoe and Hall (2006a). These measures consist of a 13-item scale. Those 13 items divided into two subscales, which one subscale includes 8-items to measure the boundaryless mindset which refers to individuals attitude to work across organisational boundaries (physical mobility), whereas, the second subscale includes 5-items to measure individual's organisational mobility preferences (psychological mobility)(Sullivan and Baruch, 2009).

Although the concepts of boundaryless and protean careers have been most frequently subjects used by researchers in the career studies over the past ten years, there are also other efforts by other scholars in developing the next generation of career theories (Sullivan and Baruch, 2009). The following next section will discuss those newer efforts of career concepts.

2.7.4 The Next Efforts of Career Concepts

Several scholars have dedicated their efforts to further developing career concepts as responses to the dynamic work environment. Sullivan and Baruch (2009), conducted a very influential critical review research in contemporary career theory where they critically analyse and discuss several boundaryless and protean careers concepts as well as other newer careers models what they called 'Next Generation of Career Concepts'. Some of these newer efforts were based on the integrating between protean and boundaryless careers concepts, whereas other career theories were developed based on the interpretations of research findings.

According to Sullivan and Baruch (2009), review, there are three main integrative efforts to clarify the relationship between the protean and boundaryless career concepts. The subsequent discussion is a brief review of these efforts.

2.7.4.1 Postcorporate Career

The first effort was offered by Peiperl and Baruch (1997). They integrated perceptions from the protean and boundaryless theories into one model what they called postcorporate career concept. They described individuals who are categorised as a postcorporate career as self-directed in term of the progression of their careers. Also, postcorporate careerists most likely take responsibility and create opportunities regarding their career management and development. They also recognise different career choices and are more willing to go behind boundaries in order to meet their individuals' needs, such as career satisfaction as well as monetary rewards. Those individuals who are exhibiting postcorporate career attitudes are often willing to leave big organisations in favour to engage in multiple alternative employment experiences. For example, they may leave their highly recognised organisations in order to engage in temporary work or do independent consulting. They may also create their own business or work for a small company that focussed on providing specialised services to large companies. This type of career perspective composed of both elements and

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dimensions that have been emphasised in the protean or boundaryless career concepts. For instance, postcorporate careerists on one side are taking the responsibility regarding directing their career (protean career perceptions), and on the other side, they are more willing to make both physical and psychological career moves in term of their career (boundaryless career perceptions).

2.7.4.2 Boundaryless Perspective

Another integrative model was proposed by Greenhaus, Callanan and DiRenzo (2008). This model encompasses three major components. The first component is the mobility patterns which is carrying the opposite perspective from the traditional organisational career arrangements. This component of this model refers to the capability to move in any direction and across any boundary, in which what Baruch (2004b) called multidirectional career path. This dimension may include practices such as moving between organisations, moving between organisational departments, changing employment forms (e.g. from full-time to part-time or from organisational- employment to self-employment), career quit and job crafting (individuals changing and redefining their jobs).

The second component of a boundaryless perspective is the career competencies (knowing- why, knowing- how, knowing-whom). These include the three career competencies that were initially proposed by DeFillippi and Arthur (1994); Arthur and Rousseau (1996). The third component is the protean career attitudes (Briscoe, Hall and DeMuth, 2006; Briscoe and Hall, 2006a). This model also takes into consideration the antecedent factors such as economic factors, organisational conditions, personal and family characteristics in addition to the outcomes of the boundaryless perspective at both individual and organisational level (see Fig2.4).

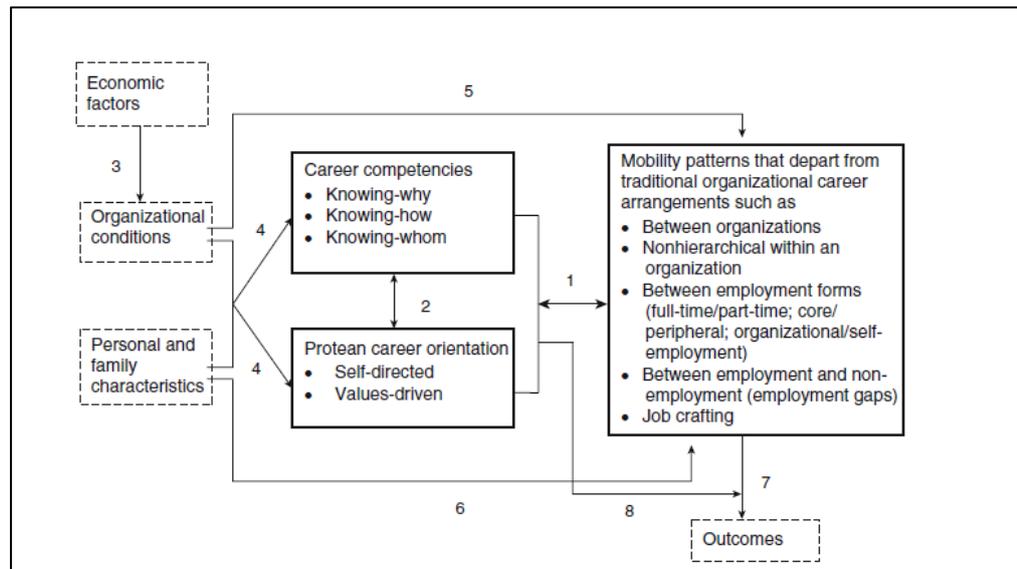


Figure 2-4: Boundaryless Perspective Model

2.7.4.3 Career Profiles

The third integrative model was proposed by Briscoe and Hall (2006a). They combined protean and boundaryless career orientation into one model which results in 16 different career profiles (see Fig2.5). Each profile represents a career type that is based on the higher or lower level of protean career orientation in term of its two dimensions (self-directed attitudes and values-driven attitudes) and boundaryless career orientation in term of its two dimensions (psychological and physical mobility). For example, Briscoe and Hall (2006a) classified individuals exhibiting low self-directed and values-driven attitudes as well as low physical mobility and psychological mobility regarding their career management as trapped or lost profile. Those individuals according to this profile, having a passive and reactive role regarding their career management as well as having the ability to across the multidirectional boundaries.

In contrast, they classified individuals exhibiting high self-directed and values-driven attitudes as well as high physical mobility and psychological mobility in term of their career management as Protean Career Architect profile. Those individuals, according to this profile, are more willing to psychological and physical multidirectional boundaries movement. Also, they are also managing their career by themselves based on their values in order to achieve career success.

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Protean: Self-directed career management	Protean: Values driven	Boundaryless: Psychological mobility	Boundaryless: Physical mobility	Hybrid category/archetypes	Career actor's personal challenge in maintaining status Quo	Career actor's and supporting groups' career development challenge
Low	Low	Low	Low	"Lost" or "Trapped"	React quickly to opportunities, survive.	Clarify priorities, gain career management skills, expand perspective.
Low	High	Low	Low	"Fortressed"	Find stable, opportunities in predictable organizations that match values.	Broaden in terms of open-mindedness and self-direction. Otherwise, person and employers will suffer unless this person is a perfect fit for an extremely stable situation/organization.
Low	Low	Low	High	"Wanderer"	Continuously find new rides to "hitch."	Help develop self-direction, establish whether fit good after this is achieved.
Low	High	High	Low	"Idealist"	Finding organizations that match values, curiosity, but don't require mobility.	Find challenges to push out of comfort zone and help build adaptability skills—in terms of mindset and working across boundaries.
High	Low	High	Low	"Organization man/woman"	Find stable organizations in which basic performance competence can be demonstrated.	Don't be seduced by performance ability. Increase self-awareness to make leader of high performer.
High	High	High	Low	"Solid Citizen"	Person-organization fit a must. Mobility a threat.	Maintain diversity of talent but leverage solid citizen's contributions.
High	Low	High	High	"Hired Gun/hired hand"	Identify and respond to best opportunities for providing services across boundaries	Convert talented, reactive person into effective, self-aware leader with a sense of priorities.
High	High	High	High	"Protean Career Architect"	Leverage capability into meaningful impact	Provide stages on which to shine, learn, engage. Temper if needed.

Figure 2-5: Career Profiles Model

2.7.4.4 Hybrid Careers

The concept of hybrid careers has arisen as several researchers have found that individuals prefer and exhibit both traditional and non-traditional elements of careers theories (Sullivan and Baruch, 2009). This career orientation explains how individuals may focus on traditional career elements such as upward career progression and job security while at the same time they focus some elements of the contemporary career theories such as the perceptions of both protean and boundaryless theories. For example, O'Neil, Bilimoria and Saatcioglu (2004), examined career orientations of women and their association with career satisfaction career success. One of this study findings shows that 34% of the study sample had non-traditional organisational careers in term of focusing on upward promotion, but also at the same time had protean career orientation regarding managing their career and being self-directed toward their career progression.

Similarly, Skromme Granrose and Baccili (2006) found that most employees in their study considered the traditional career outcomes such as job security and upward mobility essential, but also they desired other elements of contemporary career such across boundary training where they can have training outside their organisation or within their organisation but across different departments. Furthermore, Skilton and Bravo (2008) found that some employees were exhibiting traditional career element in term seeking climbing up the organisational hierarchy while they were at the same time may experience multidirectional movement between different projects where they had different

roles in each project. According to Hybrid careers, individuals may enact in term of career decisions and progressions based on their preference of mixed combination of different careers orientation factors.

2.7.4.5 The Kaleidoscope Career Model

Unlike previous careers models, kaleidoscope Career model (KCM) hold new, different careers perceptive which were developed independently from the boundaryless or protean careers theories (Sullivan and Baruch, 2009). Mainiero and Sullivan (2006) developed KCM based on data collected from more than 3,000 U.S. professional employees, using five different research which including three using surveys method, one using focus groups and one interview. The idea of KCM is taken from the kaleidoscope that makes changing patterns when the tube is rotated, and its coloured glass pieces turn into new arrangements. However, the meaning of the KCM in career studies referring to the individual in term of how they change and shift the pattern of their careers based on different aspects of their lives in order organise their roles and relationships in new ways. Those changes can be accrued as a result of individuals' internal shift in their thinking and inspiration due to advances in age and maturity in one side, or external environmental changes that cannot be controlled by individuals such as being laid off (Sullivan and Baruch, 2009). This model proposes three parameters that individuals focus on when they make their decisions in term of their careers over time (Cabrera, 2009; Sullivan and Baruch, 2009). Those parameters or motivators are authenticity, balance, and challenge.

The first parameter is authenticity that refers to making the career decision based on the perspective of being true to oneself and enable individuals to have the appropriate work that matches his or her values. The second parameter is the balance which refers to the aspiration and desire to positively equiponderate between an individual's work and non-work lives demands. The last parameter is the challenge which refers to the individuals' desire for inspiring work that includes autonomy and responsibility in one side, whereas on the other side includes the aspects of learning, career growing and advancement. The KCM suggests that individuals may focus on one of these parameters over the other depending on each stage of their work life span. For example, individuals at certain periods might give more priority to the challenge parameter, while giving less attention to the other two parameters; however, these two parameters are still present and active in individuals' backgrounds in term of career decision but are not in the foreground priorities. A good example of this can be shown in Fig

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2.6. It illustrates how women shift the pattern of their careers by rotating several parts in their lives to organise their careers and relationships in new ways.

In this section, it has been explained that there are several theories tried to understand the career orientation of individuals. These theories dealt in detail with how individuals lead their careers. We note from previous reviews that many factors have an impact on the attitudes of individuals and their decisions regarding their career. The subject of career management has become more complex than in the past. The section that follows moves on to consider the link between neuter of faculty member job and contemporary career attitudes in order to better understand the career management in the academic sector.

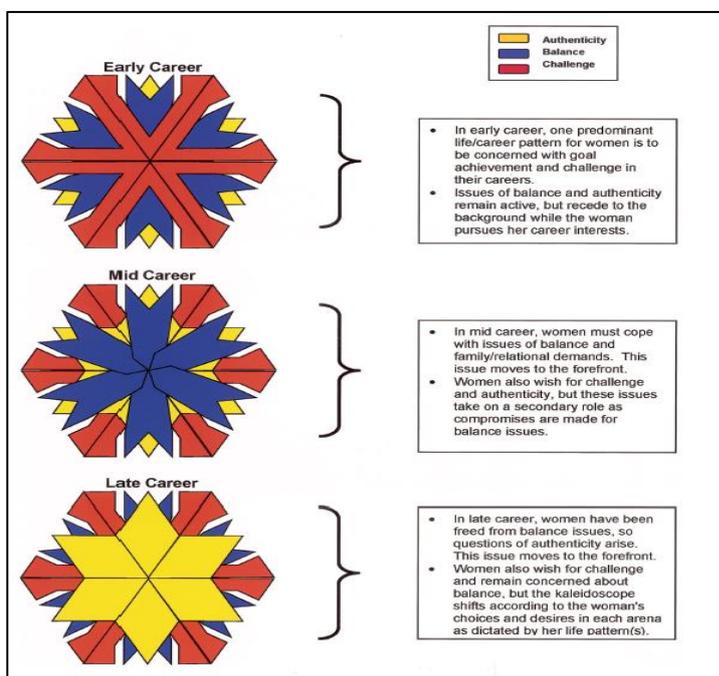


Figure 2-6: The ABC Model of Kaleidoscope Careers for Women

Source: Mainiero and Sullivan (2005)

2.7.5 Careers Across Cultures

Another perspective related to career is cross-cultural career studies. Cross-cultural career studies examine culture as an explanatory variable of careers (Briscoe, Hall and Mayrhofer, 2011; Smale *et al.*, 2019). The purpose of

Cross-cultural career research is to broaden the understanding of careers outside established Western career concepts in order to identify universal concepts of careers (Kaše *et al.*, 2018)

Inkson *et al.* (2007) studied changing career concepts in Russia in contrast to what they as traditional Western career concepts. They concluded that Cross-cultural career research need to make sure that they consider both the culture and the person as dynamic, to gather useful data in a changing world. Several studies in cross-cultural careers research offers descriptions of cultural differences and interpretations of career concepts in different countries and regions including Australasia (Noordin, Williams and Zimmer, 2002), the Middle East (Ozbilgin and Healy, 2003), India (Nath, 2000), Europe (Valentova, 2005), and across nations from around the world (Burke, 2001; Chudzikowski *et al.*, 2006; Rani Thanacoody *et al.*, 2006). These studies have highlighted important issues such as career commitment (Noordin, Williams and Zimmer, 2002), the embeddedness of careers in historical, political, labour market, and organizational contexts (Ozbilgin and Healy, 2003; Valentova, 2005), career success (Chudzikowski *et al.*, 2006; Rani Thanacoody *et al.*, 2006), and women's career experiences (Nath, 2000; Burke, 2001; Valentova, 2005; Rani Thanacoody *et al.*, 2006). Therefore, Cross-cultural career research should give attention to cultural differences when examining established Western career concepts.

2.7.6 Faculty and Contemporary Career in Academia

There is a consensus between the assumptions and principles of the contemporary career orientations and the nature of the faculty work in academia. Baruch and Hall (2004) argued that the academic career model can serve as a “role-model” to the new contemporary career orientations that have been developed past years including the protean (Hall, 1996a; Briscoe and Hall, 2006a), boundaryless (Arthur and Rousseau, 1996; Sullivan and Arthur, 2006) and post-corporate (Peiperl and Baruch, 1997). They argued that before these concepts emerged in the business environment, they were experienced in academia. According to them, academics were always “protean,” regarding taking the responsibilities in managing their career (Baruch and Hall, 2004).

In academia, academics are in charge of developing their careers and get promotions through their publications. Researchers argued that academia was the first in term of using the concept of linking promotions to performance. For example, Baruch and Hall (2004) explained that career advancement in the academic environment was based on academics’ performance, such as the number of publications, rather than tenure and seniority, and based on self-initiated before these contemporary career experienced on the business world.

Academics professions are characterised by high-career mobility where the academics commit to their professions rather the institutions, and it was more accepted in academe (Baruch and Hall, 2004). This means that academics may move across the institution’s boundaries and work for different universities in order to advance his or her career. Besides, academics were enjoyed more freedom and flexibility in term of moving their career and research agenda easily across universities (Baruch, 2013).

Moreover, scholars need a high level of self-efficacy, as they have to deal with several duties that require multi-skills. Additionally, academic jobs are dependent mostly on human capital as they take place in a knowledge-intense environment, where the concept of careers management required from the academics to be mostly self-initiated and self-managed in term of their career advancement and development (Baruch, 2013). It has also been recognised that academic careers were linked to the new concept of kaleidoscope career. Academic career model deal with all three “mirrors” of the kaleidoscope career as the academics are

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always conducting their research by following their passion, they have the flexibility as well as freedom to obtain the balance between life and work if they want to, last, the mirror of challenges is very high and expected in academic. Thus, as we can see, the nature of the academic work of faculty members was closely linked to the contemporary career theories that recently emerged in the business environment (Baruch and Hall, 2004). The question that may come to mind after reviewing contemporary careers literature is what effects might these new career attitudes have on individual career success. To answer this question, the following section provides a brief review of previous literature addressing the association between new careers attitudes and individual career success.

2.7.7 Contemporary Careers and Career Success

Several studies have been conducted to validate and investigate those new careers theories (this will be discussed later on in this section). Protean careers and boundaryless careers orientation have been widely referred to in careers literature, and continue influencing careers studies. According to Sullivan and Baruch (2009), protean and boundaryless careers models are the two major non-traditional careers theories that have dominated the careers studies and have had an essential and lasting impact on the careers literature. In addition, it has been argued that protean careers theory is one of the most innovative and advanced practises to capture the new orientations of non-traditional career systems (Hall, 1996b;2004; Baruch, 2006).

Moreover, it has also been found close and positive link between protean and boundaryless careers orientations and careers success by several studies (Sturges, 1999; Hall and Chandler, 2005; Sargent and Domberger, 2007; Volmer and Spurk, 2011; Biemann and Braakmann, 2013; Gerli, Bonesso and Pizzi, 2015; Guan *et al.*, 2018). Thus protean and boundaryless careers attitudes are not only an individual's patterns regarding managing their careers, but they are also great sources for individuals' careers success. The subsequent section will highlight and review the previous research findings that illustrate the relationship between protean and boundaryless careers and careers success. First, we will review the career success concept, and second, we will discuss previous contemporary careers studies and careers success.

2.7.7.1 Career Success

Career success has received much attention from a researcher for many years. Much research in several fields has been conducted to explore individual and organisational factors that facilitate individuals' career success (e.g., Judge and Bretz, 1994; Wayne *et al.*, 1999; Boudreau, Boswell and Judge, 2001; Seibert and Kraimer, 2001; Ng *et al.*, 2005; Spurk, Hirschi and Dries, 2019). Career success is one of the individuals and organisations concerns as individuals' careers success can eventually positively influence organisational success (Judge *et al.*, 1999). It is important before reviewing previous studies, to define the concept of career success.

Career success was defined as the outcomes of individuals' job experiences that were influenced by his or her accumulated successful work and psychological results (Seibert, Kraimer and Crant, 2001a). Whereas, Boudreau, Boswell and Judge (2001) defined career success as the cumulative interaction and interconnection between the multiple societal, organisational and individual behaviours, customs, and work practices. Other scholars described the concept of career success as the individual assessment of accomplishments and achievement throughout his or her work-life experiences (Gattiker and Larwood, 1990; Judge and Bretz, 1994; Hennequin, 2007).

The scholars distinguished between two types of career success. The first type of career success is associated with the perspective of traditional career theories. This dimension of career success is often called objective success and defined as the increase of employee salary and promotion as he or she climbed the organisational hierarchy and advanced his or her career (Hennequin, 2007; Kotter, 2008).

On the other hand, the second type of career success is associated with contemporary career perspective such as protean and boundaryless careers. This type is often called subjective success, which is described as internal satisfaction that judged by the individual themselves (Hennequin, 2007; Kotter, 2008). Subjective success is also defined as self-fulfilment, accomplishment and satisfaction that individual can feel and have with his or her work or career (Judge *et al.*, 1995).

For this study, faculty member careers success assessed regarding objective and subjective career outcomes. Objective career success includes pay and promotions, whereas subjective career success refers to career satisfaction (Judge

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et al., 1999). We considered both dimensions of careers success (objective and subjective) in this study as they are both important indicators for individuals' careers success and the absence of one of these dimensions might negatively impact the degree of sense of individuals' perception about their careers success.

2.7.7.2 Measuring Career Success

The careers literature indicates a strong focus on the measurement of the objective as well as subjective criteria for career success (Guan *et al.*, 2018). For example, objective career success in the careers literature always has been referred to the level of salary, job position and number of promotions received. Several previous studies have used these criteria to measure employees' objective career success (see e.g. Feldman and Ng, 2007; Verbruggen, 2012; Bagdadli and Gianecchini, 2019). Whereas, subjective career success in the careers literature always has been referred to the level of the individuals' satisfaction regarding their careers (see e.g. De Vos, De Hauw and Van der Heijden, 2011; Herrmann, Hirschi and Baruch, 2015). Furthermore, in previous studies, both objective and subjective career success components have been frequently measured by using questionnaires, which include items that employees are required to rate based on their perspectives about different criteria related to career success (e.g. Judge *et al.*, 1995; Kirchmeyer, 1998; Ng *et al.*, 2005; Enache *et al.*, 2011; Grimland, Vigoda-Gadot and Baruch, 2012; Herrmann, Hirschi and Baruch, 2015).

2.7.7.3 Protean and Boundaryless Careers Attitudes and Career Success

Since the emergence of protean and boundaryless careers concepts, different research has examined the relationship between individuals having more protean and boundaryless careers attitudes and their careers success. In the following section, some of those studies will be reviewed.

2.7.7.3.1 Protean Careers Attitudes and Career Success

Several researchers referred to potential positive relationships between protean career orientations and career success (Sturges, 1999; Hall and Chandler, 2005; Sargent and Domberger, 2007; Volmer and Spurk, 2011). For example, De Vos and Soens (2008), conducted a quantitative study to investigate the relationship between protean career orientation and career success in Belgium. The career success was the independent variable, which consists of career satisfaction and perceived employability. They used the survey as a data collection instrument to gather the data from 297 Belgian employees. The results support the idea that a

protean career attitude is closely associated with employees' career success. They reported a positive and significant relationship between protean career attitude and employees' career satisfaction and perceived employability. Alternatively, Volmer and Spurk (2011) have conducted their study to empirically investigate the effects of protean and boundaryless career attitudes on employees' career satisfaction and promotions and salary progression. They found that protean career attitudes are positively associated with subjective career success including career satisfaction. This finding is also supported by Enache *et al.* (2011)'s study. Their work was conducted to investigate the relationship between contemporary career theories and career success. The data were obtained from 150 Spanish professionals from the Catalonia region. The findings show that the self-directed attitude regarding managing one's career was positively associated with subjective career success.

Furthermore, protean career attitudes are not only empirically linked to subjective career success, but also with objective success. For example, Grimland, Vigoda-Gadot and Baruch (2012), examined the relationship between several career attitudes and career success. This study employed a quantitative method using a survey to gather data from a sample of 545 task or project managers in public and the private sectors. The results of this study show that protean careers attitudes are associated positively with both objective and subjective career success. The results show that managers having protean careers attitudes had a higher position in the organisational hierarchy and reported a higher level of career satisfaction.

Similarly, a more recent study was developed by Herrmann, Hirschi and Baruch (2015). They developed two studies to investigate the protean orientation and career outcomes. The data were collected from university students and working professionals in Germany. The protean career orientation in this study was measured using the measure that was developed by Baruch (2014). The results of the first study show that protean career orientation has a significant and positive relationship with career satisfaction, job satisfaction, work engagement, and career planning. Also, the study found there is a relationship between protean career orientation and proactive career behaviours.

Some scholars have presupposed that self-managed individuals are more active in term of struggling to gain their desired career aims which in turn should reflect positively on their career success and they will be more successful in their career (Arthur, Khapova and Wilderom, 2005; Ng *et al.*, 2005). In line with these

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assumptions, Vos, Clippeler and Dewilde (2009) empirically examined the perceptions of proactive career behaviours including career self-management behaviours and career success among graduates making the transition from school to work. The results support that there is a positive relationship between career self-management behaviours and salary level during early career. The study findings also show that career self-management attitudes have a positive impact on individuals' career satisfaction in the early stages of their careers. Moreover, Abele and Spurk (2009) found that there are positive associations between employees self-efficacy and their salary level. Whereas, Seibert, Crant and Kraimer (1999) and Seibert, Kraimer and Crant (2001a) found that proactive personality is also associated positively with objective career success. These individual's characteristics (career self-management behaviours, self-efficacy and proactive personality) are all positively linked to protean career attitudes (see, Briscoe, Hall and DeMuth, 2006; Sullivan and Baruch, 2009).

2.7.7.3.2 Boundaryless Careers Attitudes and Career Success

Similar to protean careers, researchers have provided empirical evidence to support the link between boundaryless careers attitudes and career success. For example, Biemann and Braakmann (2013), conducted a longitudinal study where they compared 159 expatriates, 395 repatriates and 2697 domestic German employees in term of their objective and subjective career success during the first stages of their careers. The study results show that employees who were either expatriates or repatriates have a higher objective career success regarding their monthly salary level. The boundaryless careers perceptions emphasise on the principle of crossings boundaries in seeking career progression and development. That being said, Biemann and Braakmann (2013) study shows that crossings the organisational and national boundary for career new experience is positively associated with career success such as higher employees income.

Similarly, Chen, Veiga and Powell (2011) used data from the career histories to analyse the relationship between crossing several boundaries and careers success in term of career advancement 760 managers. They concluded that crossing functional, organisational and geographical boundaries were positively related to the career advancement of managers which had a positive long-term impact on income growth. Volmer and Spurk (2011) have also reported that both boundaryless career attitudes are related to objective career success such as promotions and salary growth.

Alternatively, Eby, Butts and Lockwood (2003), examined the three career competencies of boundaryless careers ('knowing why,' 'knowing whom,' and 'knowing how') and their relationship with career success. They used three dimensions in their study to measure career success. The first career success criteria are career satisfaction, whereas the other two career success criteria are internal and external career marketability. The research findings illustrate that three career competencies of boundaryless careers 'knowing why,' 'knowing whom,' and 'knowing how' are all important predictors of career success, as well as perceived both internal and external marketability. In the same line, Colakoglu (2011) developed his study to examine the model in which career boundaryless may influence subjective career success mediated by the impact of the three boundaryless career competencies—knowing-why, knowing-how, and knowing-whom—and career autonomy and career insecurity. The findings of this study support previous empirical evidence for the positive association between careers boundaryless and the two career competencies—the knowing-why and knowing-how. Whereas, on the other side, the results show that there is a positive relationship between the three career competencies—knowing-why, knowing-whom, and external knowing-whom and career autonomy. Indeed, career autonomy was found to be an influential factor in achieving subjective career success (career satisfaction) (Colakoglu, 2011). He was explained that individuals with a high level of career autonomy most likely would have the ability to direct their careers in ways that will most fit to their personal preferences which are perhaps will turn on positively to contribute to their career satisfaction (Colakoglu, 2011).

Furthermore, Briscoe *et al.* (2012) have found that boundaryless mindset career attitudes are positively associated with job performance, career success and psychological well-being. Also, Chudzikowski (2012), found a positive relationship between the new career transitions and career success specifically regarding increased wage. For example, with all respect to horizontal career moves, he found that individuals who had made more functional domain transitions had achieved higher wage increases than individuals who had remained within the same functional domain. This finding is in line with earlier efforts on this topic, such as Peiperl and Baruch (1997).

Additionally, Feldman and Ng (2007) reviewed the literature on career success to identify the relationship of mobility types in one side, and objective career success such as promotions and subjective career success such as career satisfaction in the other side. According to their review, there is a potential

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positive relationship between career mobility and objective career success in the long run. Also, they argued that the relationship between career mobility and subjective career success might be higher than objective career success for a variety of reasons. First, individuals usually only make these dramatic career transitions when they both are significantly associated with a positive impact than the current occupations. Second, individuals frequently start new careers with high positive prospects of career satisfaction, and those prospects can become self-fulfilling predictions. Thirdly, based on the routes of cognitive dissonance, individuals may increase their assessments of their new career move to excuse the sacrifices incurring in leaving their previous career.

Another study revealed that boundaryless careers attitudes are positively associated with career success was conducted by Kuijpers, Schyns and Scheerens (2006). They found that factors such as career control and networking are significantly related to career success. That being said, networking is one of the important elements of boundaryless mindset, in which the individuals develop their relationship outside their organisation boundaries (Arthur, 1994b; Arthur, Inkson and Pringle, 1999; Guan *et al.*, 2019).

In line with previous research, Verbruggen (2012), examined the relationship between two types of boundaryless psychological mobility careers attitudes (boundaryless mindset and organisational mobility preference) and career success. The results illustrate that boundaryless mindset is positively associated with objective career success (higher wages and more promotions). Recently, Gerli, Bonesso and Pizzi (2015) examined the relationship between emotional and social competencies in one side and boundaryless career and objective career success on the other side. The results show that there is a positive and significant relationship between boundaryless career attitudes and career success. Indeed, Mirvis and Hall (1994) argued that one of the important ways to experience psychological career success throughout the ups-and-downs of career series is to develop adaptability which refers to empowering individuals to have new tasks and relationships and to combine new responsibilities and roles in line with their identities.

2.8 Literature Review Part Three Conclusion

The review of literature in previous sections illustrates the extent to which career orientations have changed over the past years. This change is attributed to many factors, including developments in technology, globalisation and financial crises, which triggered individuals to adopt new attitudes to advance and manage their careers (Sullivan and Baruch, 2009). As discussed previously, this shift in career orientations have been associated with positive outcomes, such as career satisfaction and income progression (Arthur, Khapova and Wilderom, 2005; Ng *et al.*, 2005; De Vos and Soens, 2008; Abele and Spurk, 2009; Vos, Clippeleer and Dewilde, 2009; Chen, Veiga and Powell, 2011; Volmer and Spurk, 2011; Biemann and Braakmann, 2013).

Nevertheless, the impact of this shift on the relationship between individuals' performance and their career success has yet to be studied. Although previous theoretical literature indicates that the effect of the new career orientation on this relationship can be predicted, no empirical research that we are aware of has investigated this impact. Also, most of the previous studies were based on western contexts, which are not necessarily valid in another context (Forstenlechner and Baruch, 2013). That said, Sullivan and Baruch (2009) call for more studies to validate these new career attitudes in non-western contexts. Indeed, studying career orientations in non-western contexts is crucial, as it is an influential aspect when it comes to individuals' career success. For these reasons, this study expects faculty members' career orientations to moderate the relationship between their performance and career success.

2.9 Development of the Research Hypotheses

2.9.1 High-Performance HR Practices and Research Performance

HPHRPS have been investigated at a broad multilevel over the past years. Much evidence in the literature supports the strong relationship between HPHRPS and both organisational and individual outcomes (See, Subramony, 2009; Snape and Redman, 2010; Jiang *et al.*, 2012). However, most of that research was based in industrial settings. Less attention has been given to examining the impact of those practices in a different work environment, for example, the public sector context (Gould-Williams, 2004). No empirical work that the researcher is aware of has investigated the impact of HPHRPS on the research performance and career

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success of academics, although there are strong theoretical explanations to predict such a relationship.

An inspiring reason behind much of the research on HRM has been an attempt to determine HR practices that contribute to the overall performance and effectiveness of the organisation. The association between desirable organisational outcomes and HPHRPS can be explained through the important role that these practices have played in influencing individual behaviour, attitudes and outcomes, which, in turn, will lead to the organisation's desired outcomes. Zhang *et al.* (2013,p.3198) argued that adopting high-performance HR practices should enhance organisational performance 'through eliciting positive employee outcomes such as high commitment, job satisfaction, and extra-role behaviours'. Empirical research has shown evidence of such a relationship. Many studies have reported a positive and strong relationship between HPHRPS and many employees' outcomes, including organisational commitment (Macky and Boxall, 2007; Butts *et al.*, 2009; Boon *et al.*, 2011), organisational citizenship behaviour (Gong, Chang and Cheung, 2010; Snape and Redman, 2010; Boon *et al.*, 2011), and job satisfaction (Butts *et al.*, 2009; Takeuchi, Chen and Lepak, 2009; Wu and Chaturvedi, 2009; Boon *et al.*, 2011).

HPHRPS have also been found to have a positive influence on job performance. Several studies have investigated this association, and empirical evidence supports this relationship (Kuvaas, 2008; Butts *et al.*, 2009; Liao *et al.*, 2009; Boxall, Ang and Bartram, 2011; Chang and Chen, 2011; Aryee *et al.*, 2012; Ehrnrooth and Björkman, 2012). Indeed, HPHRPS goes beyond the impact on job performance. HPHRPS can also encourage individuals at work to make extra efforts beyond their job duties. Gould-Williams (2003) provided evidence that HPHRPS were empirically linked to employees' extra-role behaviour.

The logic between HPHRPS and individual performance linkage can also be explained through the mechanism of the AMO theory, which was discussed in detail in chapter two. AMO theory suggests that HPHRPS should lead to improving individuals' behaviour and attitudes, to provide the best performance. This can occur when these practices are: (1) seeking to improve individuals, knowledge skills and abilities, (2) increasing their motivation levels to exert discretionary effort, and, (3) providing them with opportunities to make use of their skills and knowledge in order to deliver high levels of performance (Boxall and Purcell, 2016).

Based on the above theoretical discussion, we should expect HPHRPS to have a positive effect on faculty members' research performance. That being said, the following hypotheses have been developed for this present research.

Hypothesis 1a: In academia, there is a positive relationship between HPHRPS and faculty members' research performance.

Hypothesis 1b: In academia, there is a positive relationship between skill-enhancing practices training and faculty members' research performance.

Hypothesis 1c: In academia, there is a positive relationship between motivation-enhancing practices internal mobility and faculty members' research performance.

Hypothesis 1d: In academia, there is a positive relationship between motivation-enhancing practices recognition and faculty members' research performance.

Hypothesis 1e: In academia, there is a positive relationship between empowerment-enhancing practices including participation in decision-making and involvement in influencing work process/outcomes and faculty members' research performance.

2.9.2 High-Performance HR Practices and Career Success

The fundamental purpose of HRM is to ensure that the organisations can be achieved their a competitive advantage and, ultimately their success, through the success of their people (Armstrong, 2010). As discussed above, individual outcomes play an important role in achieving desired organisational outcomes, which will contribute to overall organisational success. There is evidence from previous empirical research that individual outcomes mediate the relationship between HPHRPS and organisational outcomes. For example, Guest (2001), in his study, found that employee satisfaction mediated the relationship between HR systems and several organisational outcomes, including productivity, quality, invocation and financial performance. The mediation role of job satisfaction was also supported by Harmon *et al.* (2003). Additionally, Messersmith *et al.* (2011) found that job satisfaction, employee commitment and organisational citizenship behaviour act as mediators in the relationship between HPHRPS and firm performance. A growing number of studies have provided evidence regarding the connection between HPHRPS and organisational performance (e.g., see Subramony, 2009; or Posthuma *et al.*, 2013).

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Having said that, individual performance is thought to mediate the relationship between HPHRPS and organisational outcomes. Individuals with higher levels of commitment and performance are assumed to have a greater role in achieving their organisation's goals, for which, in turn, they expect to be rewarded by their organisation. Therefore, there is a promising link between individuals' high performance and their objective and subjective career success. Van Scotter, Motowidlo and Cross (2000) concluded that high performing employees were most likely to have a better chance of getting promoted, and to have greater opportunities for career progression, than low performing employees.

Moreover, researchers have noticed that task accomplishment and meeting job performance goals could be linked to individual career satisfaction (Ng and Feldman, 2014). In other words, high performing individuals most likely will have higher levels of satisfaction regarding their careers. According to Sonnentag (2003), career satisfaction can be reached through high performance and task accomplishment, while dissatisfaction and personal failure might be caused by low performance and failing to achieve career goals and responsibility. Therefore, we should expect HPHRPS to be related not only to objective career success but also to subjective career success. Although significant evidence exists regarding the positive effects of HRM practice (motivation-, skill-, and empowerment-enhancing practices See Subramony, 2009; Jiang *et al.*, 2012; Posthuma *et al.*, 2013) on individual and organisational outcomes, no empirical work we are aware of has examined the promising linkage of HPHRPS and career success. It is important to be concerned about individuals' career success because it should, in turn, be of benefit not only to the individuals but also their organisation. Thus, in light of the above observation, the following hypotheses were developed:

Hypothesis 2a: In academia, there is a positive relationship between HPHRPS and faculty members' salary.

Hypothesis 2b: In academia, there is a positive relationship between skill-enhancing practices training and faculty members' salary.

Hypothesis 2c: In academia, there is a positive relationship between motivation-enhancing practices internal mobility and faculty members' salary.

Hypothesis 2d: In academia, there is a positive relationship between motivation-enhancing practices recognition and faculty members' salary.

Hypothesis 2e: In academia, there is a positive relationship between empowerment-enhancing practices including participation in decision-making and involvement in influencing work process/ and faculty members' salary.

Hypothesis 3a: In academia, there is a positive relationship between HPHRPS and faculty members' promotion.

Hypothesis 3b: In academia, there is a positive relationship between skill-enhancing practices training and faculty members' promotion.

Hypothesis 3c: In academia, there is a positive relationship between motivation-enhancing practices internal mobility and faculty members' promotion.

Hypothesis 3d: In academia, there is a positive relationship between motivation-enhancing practices recognition and faculty members' promotion.

Hypothesis 3e: In academia, there is a positive relationship between empowerment-enhancing practices including participation in decision-making and involvement in influencing work process/ and faculty members' promotion.

Hypothesis 4a: In academia, there is a positive relationship between HPHRPS and faculty members' subjective career success.

Hypothesis 4b: In academia, there is a positive relationship between skill-enhancing practices training and faculty members' subjective career success.

Hypothesis 4c: In academia, there is a positive relationship between motivation-enhancing practices internal mobility and faculty members' subjective career success.

Hypothesis 4d: In academia, there is a positive relationship between motivation-enhancing practices recognition and faculty members' subjective career success.

Hypothesis 4e: In academia, there is a positive relationship between empowerment-enhancing practices including participation in decision-making and involvement in influencing work process/ and faculty members' subjective career success.

2.9.3 The Mediating Effect of Research Performance

Since individual performance acts as a mediator in the relationship between HPHRPS and organisation success (See, Jiang, Takeuchi and Lepak, 2013), we should expect it to have a mediating effect as well on the relationship between

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HPHRPS and career success. HPHRPS, as mentioned earlier, is supposed to influence employees' behaviour, including increasing their performance, which contributes to the overall success of an organisation. When Individuals provide a quality performance that contributes to meeting their organisation's goals, most likely, in return, they will have better opportunities for salary progression and promotion. This is because most organisations are likely to reward high performing employees as an appreciation of their contribution to their organisational success. As a result of this, it can be expected that HRM practices would lead to individual career success, through affecting employees' behaviour, including their performance. Specifically, in academia, scientific outcomes are a key aspect in determining salary progression and promotion. Academics with high research performance are always of interest to universities, and they try to attract and retain them. Therefore, faculty members who are more active in producing scientific work are expected to have better opportunities for promotion and a higher salary. Therefore, we expect research performance to mediate the relationship between HRM practices and objective career success. In this context, we hypothesise the following:

Hypothesis 5a: In academia, there is a positive relationship between faculty members' research performance and salary.

Hypothesis 5b: In academia, there is a positive relationship between faculty members' research performance and promotion.

Hypothesis 5c: In academia, there is a positive relationship between faculty members' research performance and subjective career success.

Hypothesis 6a: The relationship between HPHRPS and salary, is mediated by academic research performance.

Hypothesis 6b: The relationship between skill-enhancing practices training and salary, is mediated by academic research performance.

Hypothesis 6c: The relationship between motivation-enhancing practices internal mobility and salary, is mediated by academic research performance.

Hypothesis 6d: The relationship between motivation-enhancing practices recognition and salary, is mediated by academic research performance.

Hypothesis 6e: The relationship between empowerment-enhancing practices including participation in decision making and involvement in influencing work process/outcomes and salary, is mediated by academic research performance.

Hypothesis 7a: The relationship between HPHRPS and faculty members promotion, is mediated by academic research performance.

Hypothesis 7b: The relationship between skill-enhancing practices training and faculty members promotion, is mediated by academic research performance.

Hypothesis 7c: The relationship between motivation-enhancing practices internal mobility and faculty members promotion, is mediated by academic research performance.

Hypothesis 7d: The relationship between motivation-enhancing practices recognition and faculty members promotion, is mediated by academic research performance.

Hypothesis 7e: The relationship between empowerment-enhancing practices including participation in decision making and involvement in influencing work process/outcomes and faculty members promotion, is mediated by academic research performance.

We also expect that research performance will be positively related to subjective career success. Being a contributor to knowledge and science has a great influence on academics' advancement and reputation within academia (Creamer, 1998). When faculty members are more productive regarding scientific work, and their work has made significant contributions to science and knowledge, they are more likely to be satisfied with their career accomplishments. Also, academics' research productivity has been recognised as a key indicator of faculty members' strength, disciplinary knowledge and expertise (Middaugh, 2001). Indeed, this makes us also expect that faculty members with a higher research output will have high-level satisfaction regarding their careers. Thus, we hypothesise the following:

Hypothesis 8a: The relationship between HPHRPS and subjective career success, is mediated by academic research performance.

Hypothesis 8b: The relationship between skill-enhancing practices training and subjective career success, is mediated by academic research performance.

Hypothesis 8c: The relationship between motivation-enhancing practices internal mobility and subjective career success, is mediated by academic research performance.

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Hypothesis 8d: The relationship between motivation-enhancing practices recognition and subjective career success, is mediated by academic research performance.

Hypothesis 8e: The relationship between empowerment-enhancing practices including participation in decision making and involvement in influencing work process/outcomes and subjective career success, is mediated by academic research performance.

2.9.4 The Moderating Effect of Career Orientations

Finally, we expect individual contemporary career orientation to have a moderating role in the relationship between research performance and both subjective, and objective, career success. Moderation, in this case, means that contemporary career orientations could have an impact on the strength of the relationship between research performance and academic career success. Contemporary careers, including Boundaryless and Protean career orientation (discussed in detail in chapter two), reflect some attitudes, in which particularly ambitious individuals take the initiative to get ahead in their careers (Baruch, 2004a; Sullivan and Baruch, 2009).

There is evidence from previous literature that each of these orientations can lead to a greater objective and subjective career success. For example, Grimland, Vigoda-Gadot and Baruch (2012)s' research examined the relationship between several career attitudes and career success. The data was gathered from 545 managers in the public and the private sectors. They found that protean careers' attitudes are associated positively with both objective and subjective career success (Grimland, Vigoda-Gadot and Baruch, 2012). Managers with protean careers' attitudes had higher positions in the organisational hierarchy and reported higher levels of career satisfaction (Grimland, Vigoda-Gadot and Baruch, 2012). Protean career orientation was also found to be significantly related to career satisfaction and job satisfaction (Herrmann, Hirschi and Baruch, 2015). Volmer and Spurk (2011) found that boundaryless career attitudes are related to both promotion and salary growth; their finding was also supported by Gerli, Bonesso and Pizzi (2015).

There is a close connection between the assumptions and principles of contemporary career orientations and the nature of the faculty work in academia (Baruch and Hall, 2004). Baruch and Hall (2004) explained that career advancement in the academic environment is based on self-initiated academic

performance, such as the number of publications, rather than tenure and seniority. Besides, they explained that academic professions are characterised by high-career mobility, where the academics give a commitment to their profession, rather the institution, and that this was acceptable in academia (Baruch and Hall, 2004). This means that academics may move across the institution's boundaries and work for different universities in order to advance their career which, in turn, should lead to their career success. Therefore, we expect contemporary career orientation to moderate the relationship between research performance and the career success of faculty members since it has an impact on employees' attitudes and behaviour towards their work to develop their career. Therefore, individuals with a contemporary career orientation are expected to have proactive attitudes toward career progression, which in return may influence their career success positively.

Hypothesis 9a: In academia, there is a positive relationship between protean career orientation and salary.

Hypothesis 9b: In academia, there is a positive relationship between protean career orientation and promotion.

Hypothesis 9c: In academia, there is a positive relationship between protean career orientation and subjective career success.

Hypothesis 10a: In academia, there is a positive relationship between faculty members' research performance and salary, which is moderated by protean career orientation, in a way that this relationship will be stronger for faculty members with protean career orientation than for faculty members without it.

Hypothesis 10b: In academia, there is a positive relationship between faculty members' research performance and promotion, which is moderated by protean career orientation, in a way that this relationship will be stronger for faculty members with protean career orientation than for faculty members without it.

Hypothesis 10c: In academia, there is a positive relationship between faculty members' research performance and subjective career success, which is moderated by protean career orientation, in a way that this relationship will be stronger for faculty members with protean career orientation than for faculty members without it.

Hypothesis 11a: In academia, there is a positive relationship between Boundaryless career orientation and salary.

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Hypothesis 11b: In academia, there is a positive relationship between Boundaryless career orientation and promotion.

Hypothesis 11c: In academia, there is a positive relationship between Boundaryless career orientation and subjective career success.

Hypothesis 12a: In academia, there is a positive relationship between faculty members' research performance and salary, which is moderated by Boundaryless career orientation, in a way that this relationship will be stronger for faculties with Boundaryless career orientation than for faculties without it.

Hypothesis 12b: In academia, there is a positive relationship between faculty members' research performance and promotion, which is moderated by Boundaryless career attitudes, in a way that this relationship will be stronger for faculty members with Boundaryless career orientation than for faculty members without it.

Hypothesis 12c: In academia, there is a positive relationship between faculty members' research performance and subjective career success, which is moderated by Boundaryless career attitudes, in a way that this relationship will be stronger for faculty members with Boundaryless career orientation than for faculty members without it.

Table 2-6: Summary of Hypotheses

Hypothesis 1a
In academia, there is a positive relationship between HPHRPS and faculty members' research performance.
Hypothesis 1b
In academia, there is a positive relationship between skill-enhancing practices training and faculty members' research performance.
Hypothesis 1c
In academia, there is a positive relationship between motivation-enhancing practices internal mobility and faculty members' research performance.
Hypothesis 1d
In academia, there is a positive relationship between motivation-enhancing practices recognition and faculty members' research performance.

Hypothesis 1e
In academia, there is a positive relationship between empowerment-enhancing practices including participation in decision-making and involvement in influencing work process/outcomes and faculty members' research performance.
Hypothesis 2a
In academia, there is a positive relationship between HPHRPS and faculty members' salary.
Hypothesis 2b
In academia, there is a positive relationship between skill-enhancing practices training and faculty members' salary.
Hypothesis 2c
In academia, there is a positive relationship between motivation-enhancing practices internal mobility and faculty members' salary.
Hypothesis 2d
In academia, there is a positive relationship between motivation-enhancing practices recognition and faculty members' salary.
Hypothesis 2e
In academia, there is a positive relationship between empowerment-enhancing practices including participation in decision-making and involvement in influencing work process/ and faculty members' salary.
Hypothesis 3a
In academia, there is a positive relationship between HPHRPS and faculty members' promotion.
Hypothesis 3b
In academia, there is a positive relationship between skill-enhancing practices training and faculty members' promotion.
Hypothesis 3c
In academia, there is a positive relationship between motivation-enhancing practices internal mobility and faculty members' promotion.

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Hypothesis 3d
Hypothesis 3d: In academia, there is a positive relationship between motivation-enhancing practices recognition and faculty members' promotion.
Hypothesis 3e
In academia, there is a positive relationship between empowerment-enhancing practices including participation in decision-making and involvement in influencing work process/ and faculty members' promotion.
Hypothesis 4a
In academia, there is a positive relationship between HPHR and faculty members' subjective career success.
Hypothesis 4b
In academia, there is a positive relationship between skill-enhancing practices training and faculty members' subjective career success.
Hypothesis 4c
In academia, there is a positive relationship between motivation-enhancing practices internal mobility and faculty members' subjective career success.
Hypothesis 4d
In academia, there is a positive relationship between motivation-enhancing practices recognition and faculty members' subjective career success.
Hypothesis 4e
In academia, there is a positive relationship between empowerment-enhancing practices including participation in decision-making and involvement in influencing work process/ and faculty members' subjective career success.
Hypothesis 5a
In academia, there is a positive relationship between faculty members' research performance and salary.
Hypothesis 5b
In academia, there is a positive relationship between faculty members' research performance and promotion.
Hypothesis 5c

In academia, there is a positive relationship between faculty members' research performance and subjective career success.
Hypothesis 6a
The relationship between HPHRPS and salary is mediated by academic research performance.
Hypothesis 6b
The relationship between skill-enhancing practices training and salary is mediated by academic research performance.
Hypothesis 6c
The relationship between motivation-enhancing practices internal mobility and salary is mediated by academic research performance.
Hypothesis 6d
The relationship between motivation-enhancing practices recognition and salary is mediated by academic research performance.
Hypothesis 6e
The relationship between empowerment-enhancing practices including participation in decision making and involvement in influencing work process/outcomes and salary is mediated by academic research performance.
Hypothesis 7a
The relationship between HPHRPS and faculty members promotion is mediated by academic research performance.
Hypothesis 7b
The relationship between skill-enhancing practices training and faculty members promotion is mediated by academic research performance.
Hypothesis 7c
The relationship between motivation-enhancing practices internal mobility and faculty members promotion is mediated by academic research performance.
Hypothesis 7d

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The relationship between motivation-enhancing practices recognition and faculty members promotion is mediated by academic research performance.

Hypothesis 7e

The relationship between empowerment-enhancing practices including participation in decision making and involvement in influencing work process/outcomes and faculty members promotion is mediated by academic research performance.

Hypothesis 8a

The relationship between HPHRPS and subjective career success is mediated by academic research performance.

Hypothesis 8b

The relationship between skill-enhancing practices training and subjective career success is mediated by academic research performance.

Hypothesis 8c

The relationship between motivation-enhancing practices internal mobility and subjective career success is mediated by academic research performance.

Hypothesis 8d

The relationship between motivation-enhancing practices recognition and subjective career success is mediated by academic research performance.

Hypothesis 8e

The relationship between empowerment-enhancing practices including participation in decision making and involvement in influencing work process/outcomes and subjective career success is mediated by academic research performance.

Hypothesis 9a

In academia, there is a positive relationship between protean career orientation and salary.

Hypothesis 9b

In academia, there is a positive relationship between protean career orientation and promotion.

Hypothesis 9c
In academia, there is a positive relationship between protean career orientation and subjective career success.
Hypothesis 10a
In academia, there is a positive relationship between faculty members' research performance and salary, which is moderated by protean career orientation, in a way that this relationship will be stronger for faculty members with protean career orientation than for faculty members without it.
Hypothesis 10b
In academia, there is a positive relationship between faculty members' research performance and promotion, which is moderated by protean career orientation, in a way that this relationship will be stronger for faculty members with protean career orientation than for faculty members without it.
Hypothesis 10c
In academia, there is a positive relationship between faculty members' research performance and subjective career success, which is moderated by protean career orientation, in a way that this relationship will be stronger for faculty members with protean career orientation than for faculty members without it.
Hypothesis 11a
In academia, there is a positive relationship between Boundaryless career orientation and salary.
Hypothesis 11b
In academia, there is a positive relationship between Boundaryless career orientation and promotion.
Hypothesis 11c
In academia, there is a positive relationship between Boundaryless career orientation and subjective career success.
Hypothesis 12a
In academia, there is a positive relationship between faculty members' research performance and salary, which is moderated by Boundaryless career

orientation, in a way that this relationship will be stronger for faculties with Boundaryless career orientation than for faculties without it.

Hypothesis 12b

In academia, there is a positive relationship between faculty members' research performance and promotion, which is moderated by Boundaryless career attitudes, in a way that this relationship will be stronger for faculty members with Boundaryless career orientation than for faculty members without it.

Hypothesis 12c

In academia, there is a positive relationship between faculty members' research performance and subjective career success, which is moderated by Boundaryless career attitudes, in a way that this relationship will be stronger for faculty members with Boundaryless career orientation than for faculty members without it.

2.10 Conceptual Model

The conceptual model of this research, which illustrates the relationship between the research variables, is presented below in Figure 2.7. The number of measures for each variable is indicated next to each construct. Further, Figure 2.8 demonstrates a graphical representation of the research hypotheses.

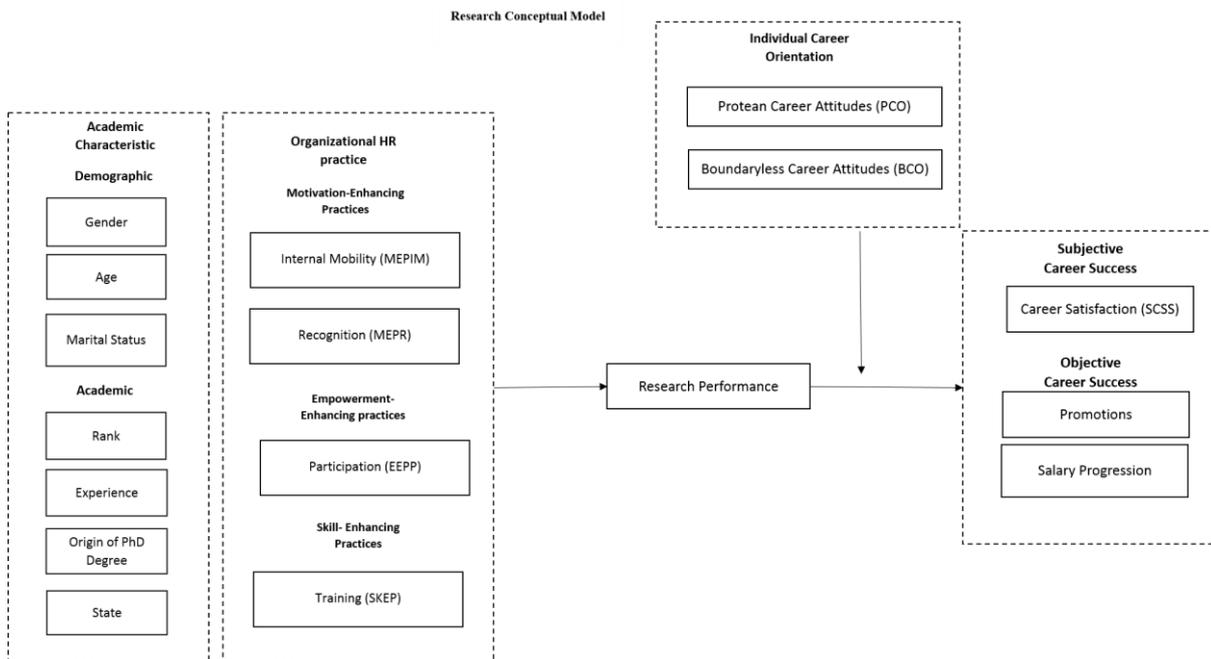


Figure 2-7: Conceptual Model

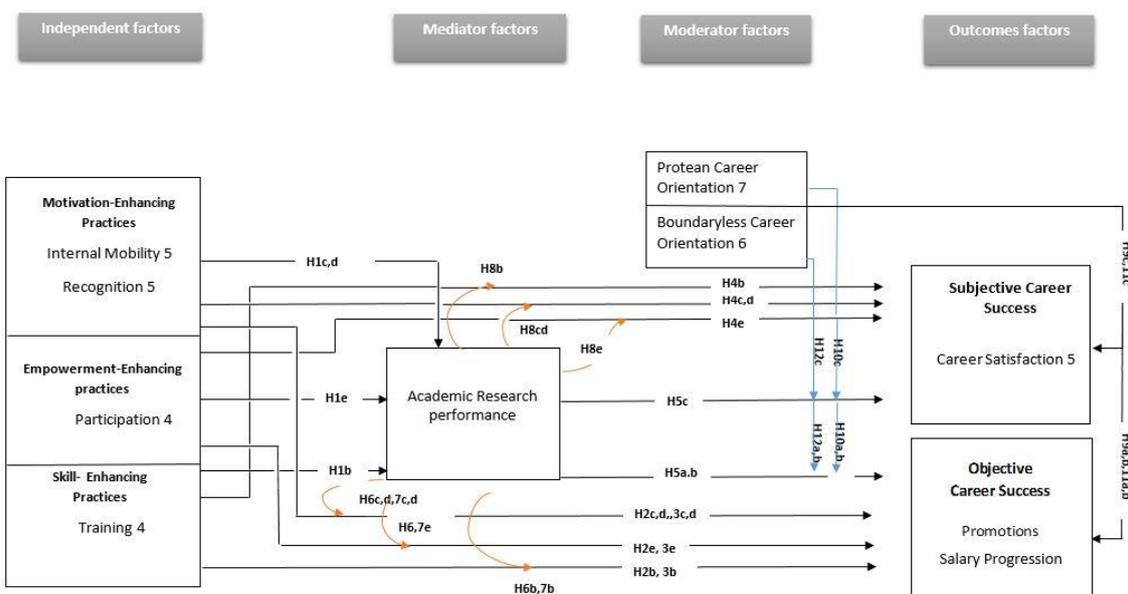


Figure 2-8 A Graphical Representation of the Research Hypotheses (excluding hypotheses As)

2.11 Literature Gap and Potential Contribution

Several studies, in the context of western and non-western context, have investigated faculty research performance. While some previous research on academic performance has focused on individual factors that influenced faculty members' research outcomes (Schoen and Winocur, 1988; Vasil, 1992;1996; Bailey, 1999; Pasupathy and Siwatu, 2014), others have concentrated on institutional factors (Butler and Cantrell, 1989; Fox, 1992; Tien and Blackburn, 1996; Chen, Gupta and Hoshower, 2006; Ayd, 2012; Chen and Zhao, 2013; Horodnic and Zaiț, 2015). In addition, a growing number of studies have integrated multilevel factors such as sociodemographic factors (e.g. gender, ethnicity and age), individual career factors, (e.g. academic discipline, previous publication experience, career stage, academic rank, and academic managerial position) institutional factors (e.g. university itself, the institutional financial base rewards system, performance evaluation), and social contingency factors (e.g. birth of a child, illness of a spouse, or death of a family member) to investigate academic research performance (Baldwin, 1990; Blackburn *et al.*, 1991; Ramsden, 1994; Babu and Singh, 1998; Bland *et al.*, 2005; Azad and Seyyed, 2007; Alghanim and Alhamali, 2011; Hesli and Lee, 2011; Jung, 2012; Alzuman, 2015). However, these previous studies have mainly focused on factors that have associated with the work itself, institutional environment, or researchers' characteristics rather than faculty member ability and motivation to conduct research. Despite that, Hardré and Cox (2009) argued that still more studies are needed to integrate different factors to investigating what factors promote faculty member research productivity.

That being said, reviewing previous literature indicates the lack of studies examined some of the factors that have been widely linked to enhancing productivity in manufacturing and businesses industry. For instance, factors such as HPHRPS were missing in the academics performance literature, even though they have been widely examined and many researchers have reported empirical evidence of the positive link between HPHRPS and individual and organisational outcomes in HRM literature (see for example Combs *et al.*, 2006; Jiang *et al.*, 2012; Jiang, Takeuchi and Lepak, 2013). Although the HPHRPS such as motivation has been observed in previous research performance literature (i.g.see, Fox, 1992; Chen, Gupta and Hoshower, 2006; Chen and Zhao, 2013; Horodnic and Zaiț, 2015), other important HPHRPS have yet to be investigated in the context of academia. HRM factors, such as skill-, motivation- and empowerment- enhancing

practices have been found to be associated positively with individual and organisational outcomes. For example, at the industrial context, factors such as employee training, recognition, and internal mobility, participation in decision making and involvement in influencing work process (Huselid, 1995; Delery and Doty, 1996; Ahmad and Schroeder, 2003; Lepak *et al.*, 2006; Paré and Tremblay, 2007; Sun, Aryee and Law, 2007; Boxall and Purcell, 2016) have been linked to desired individual and organisational outcomes (Boselie, Dietz and Boon, 2005; Combs *et al.*, 2006; Subramony, 2009; Jiang *et al.*, 2012; Posthuma *et al.*, 2013). However, most these research were based on private sector organisations (Gould-Williams, 2003; Keegan and Boselie, 2006; Paauwe, 2009; Gould-Williams *et al.*, 2014), which are in all profit oriented.

That being said, a little is known about the effectiveness of HPHRPS in public sector (Bach and Kessler, 2007; Harley, Allen and Sargent, 2007; Boselie, 2010). Less attention was given to the impact of these practices in non-profit and public sector organisations (Guest, 1999), especially in a non-western context. Gould-Williams (2003); Gould-Williams *et al.* (2014) argue that most previous literature examining the relationship between HPHRPS and performance was in the UK and US. Thus, more studies to validate the impact of HPHRPS theory and performance in other sectors is needed (Keegan and Boselie, 2006; Jackson, Schuler and Jiang, 2014). Therefore, this current research aims to investigate the impact of these factors in an academic context in order to expand our understanding and fill the gap in the literature in regard the extent in which HPHRPS may have an impact on faculty research performance and career success in non-western cultures. Although academic staff hold a very critical position and academia is very influential sector (Baruch and Hall, 2004; Baruch, 2013; Machado-Taylor *et al.*, 2016), studies in HRM literature tends to ignore this sector. Studies in this stream are essential to validate the potential impact of HPHRPS and faculty member outcomes. Faculty members outcomes are critical as it can influence not only their institution's' reputation and high ranking but also the development of their countries (e.g. Baruch and Hall, 2004; Baruch, 2013; Machado-Taylor *et al.*, 2016).

Furthermore, this study will also aim to fill the gap in HRM literature by investigating the impact of HPHRPS on individual outcomes. According to Macky and Boxall (2007), this area of research is recognised to need more studies. Also, Gould-Williams (2004), argues that it is unclear whether the HPHRPS drives the desired individual outcomes or not, as the earliest efforts are based on organisational –level performance analysis (see, Jiang *et al.*, 2012). This study is a

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response for several calls by scholars to investigate the impact of HPHRPS on individual outcomes (Guest, 1999; Boselie, Dietz and Boon, 2005; Delbridge and Keenoy, 2010; Jiang *et al.*, 2012).

Besides, at individual factors, the present study aims to investigate the impact of an individual's career orientation on the relationship between faculty research performance and career success. Although several studies have proven the positive impact of contemporary career orientations on individual career success (Arthur, Khapova and Wilderom, 2005; Ng *et al.*, 2005; De Vos and Soens, 2008; Abele and Spurk, 2009; Vos, Clippeleer and Dewilde, 2009; Chen, Veiga and Powell, 2011; Volmer and Spurk, 2011; Biemann and Braakmann, 2013), the finding of this research will contribute to the literature in several ways: (1) Most of previous studies used career orientations as independent variable, while this study will employ it as moderator variable. Reviewing career literature indicates that there are strong theoretical explanations to expect such this role of career orientations. (2) The focus of the previous research was placed on the link between the different career orientations and individual success, whereas this research aims to investigate the impact of individual career orientation and performance, which is very important due to the role individual performance plays on both institutional and personal success. Moreover, (3) prior efforts were mostly focused on employees working in private sector organisations. However, this current research targets public sector organisations, particularly faculty working in public higher education institutions, which differs from private organisations. (4) Previous efforts in career orientations were mainly conducted in western culture and scholars have pointed out the need for future research to investigate and validate the impact of contemporary career orientations in non-western culture (see for example Sullivan and Baruch, 2009); however, this research will be held eastern culture, namely Saudi Arabia.

This research aims to build on what has been presented in previous studies and to continue to develop our understanding of the impact of individual career orientation on faculty research performance and career success. Results that will be generated from such this investigation will be significant for decision-makers in higher education organisations to develop practices and policies enhancing the specific HPHRPS and career orientations that will be found to have a positive impact on faculty performance and led to career success.

To sum up, addressing the current research questions will assist in filling several gaps in the literature and will have multilevel contributions, including theoretical,

practical, and contextual contributions. At the theoretical level, this research will contribute to developing our understanding of different concepts and theories. First, this research will help us to understand the impact of factors that have not yet been investigated in the literature of academic research performance. Therefore, findings generating from this investigation will contribute to previous theories and literature (discussing the several factors having an impact on faculty research performance) by enriching our knowledge about factors contributing to improved faculty member performance.

Secondly, this research will also contribute to high-performance HR practices theory by examining the impact of those practices on faculty member outcomes and career success. Thus, this research will add significant value to the field of HRM for the following reasons: (1) Carrying out this study will help to broaden our knowledge about the validity of this theory in different context and in individual outcomes, given the fact that most of the previous literature was conducted in the private sector and measuring the organisational outcomes. Although some studies are addressing the impact on the HPHRPS in the public sector, these studies were mainly focused on the outcomes at the organisational level. (2) Additionally, studies that had investigated the individual outcomes were mainly focused on outcomes such as intention to leave, organisational commitment, and citizenship behaviour, whereas this study aims to investigate the link between HPHRPS, and individual performance and individual career success. (3) This study aims to examine the impact of HPHRPS on faculty members who hold complex jobs that require various skills. (4) Furthermore, the majority of the previous literature were conducted in developed countries and western cultures, whereas this study will be in eastern culture and a developing country.

The third theoretical contribution is the value this study will add to career theories. This study will contribute to career literature by investigating the moderate role of individual career orientation on the relationship between faculty member research performance and career success. There is a lack of studies that have discussed the impact of career orientation as a moderator for performance. Several studies in career literature have reported a positive link between non-traditional career orientations and individual career success as mentioned above. However, most of this research were conducted in profit-oriented private organisations. The results of those studies might not be applicable in public and non-profit organisations due to the difference and contrast of the way in which public and private sector organisations run. Also, research in contemporary

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career orientation is mainly conducted in western cultural context. Sullivan and Baruch (2009) called for future studies to validate non-traditional career theories in a non-western cultural setting. For these reasons, this study aims to close this gap in career literature and develop our range of knowledge by examining the impact individuals' career orientations on the relationship between their performance and career success in non-western culture.

At the practical level, the results of this research will address the problem of poor research performance in higher education institutions in Saudi Arabia. This can be reached through the results of this research, which expect to provide the institutional leaders and decision-makers with solid information about several factors that may play a critical role in increasing faculty member research performance and success. Hence, this will enable the decision-makers to reform the policies and practices affecting faculty members' performance scientifically.

On the other hand, at the contextual level, there are insufficient studies that focus on developing countries and eastern cultures. Most of the attention of researchers was centred in the developed countries and western context. This study will add value to the literature about developing countries and eastern context. It will help to develop our understanding of the similarities and differences between developed and developing countries as well as western and eastern contexts. This is critical as the results will enable us to validate the impact of theories (used in developed countries and western cultures) in developing countries and the eastern context in order to see their applicability. If existed theories are proven to be valid when applied to a context different than the one they were established in, the results of this research will open the door to the use of these theories in various developing counties. Otherwise, the research would encourage scholars and researchers to investigate and develop theories specifically for eastern developing context.

This research is one of the first efforts to study academics staffs' research performance and career success in Saudi Arabian public universities through the lens of high-performance HR practices and career theories. This study is critically important to develop further our understanding of the factors that promote high levels of faculty research performance, which will be highly valuable to administrators who frame policies in order enhance faculty member research productivity and career advancement.

Chapter 3: Research Methodology

3.1 Introduction

This chapter reviews the research methodology and describes the choice of the most appropriate methodology to be used in order to carry out this study. This chapter structured using Saunders et al., (2016)'s Research Onion to explain the process of choosing an appropriate methodology in carrying the research. Figure 3-1 shows different stages and choices that explaining the process of choosing a research methodology based on Saunders et al., (2016)'s Research Onion. The subject of research methodology is critical to any study, as it supports the types of investigation that the study aims to undertake and the nature of the knowledge that is created. In management research, there are several approaches used to carry out research. These are related to different philosophical approaches to the creation of knowledge, such as positivism, realism, constructivism, interpretivism. As shown in Figure 3-1, these philosophical approaches can be used to inform different research approaches for collecting data methods, which generally fall into either quantitative or qualitative techniques.

Moreover, research methods tend to be either deductive or inductive which, in large part, is related to the philosophical and research approach that is adopted. Thus, an overview of the different research philosophies, methods and techniques will be presented in this section. Moreover, this chapter discusses how the research design for this study was developed and implemented. This will also include a clear and comprehensive justification of why this research was undertaken with a quantitative, rather than a qualitative, method. In order to set this study in the appropriate context of research approaches and methodologies, this section starts by reviewing the literature regarding the research paradigms, types, designs and methods. Briefly, however, this research following the positivist paradigm adopting quantitative methodology using survey strategy to collect the data.

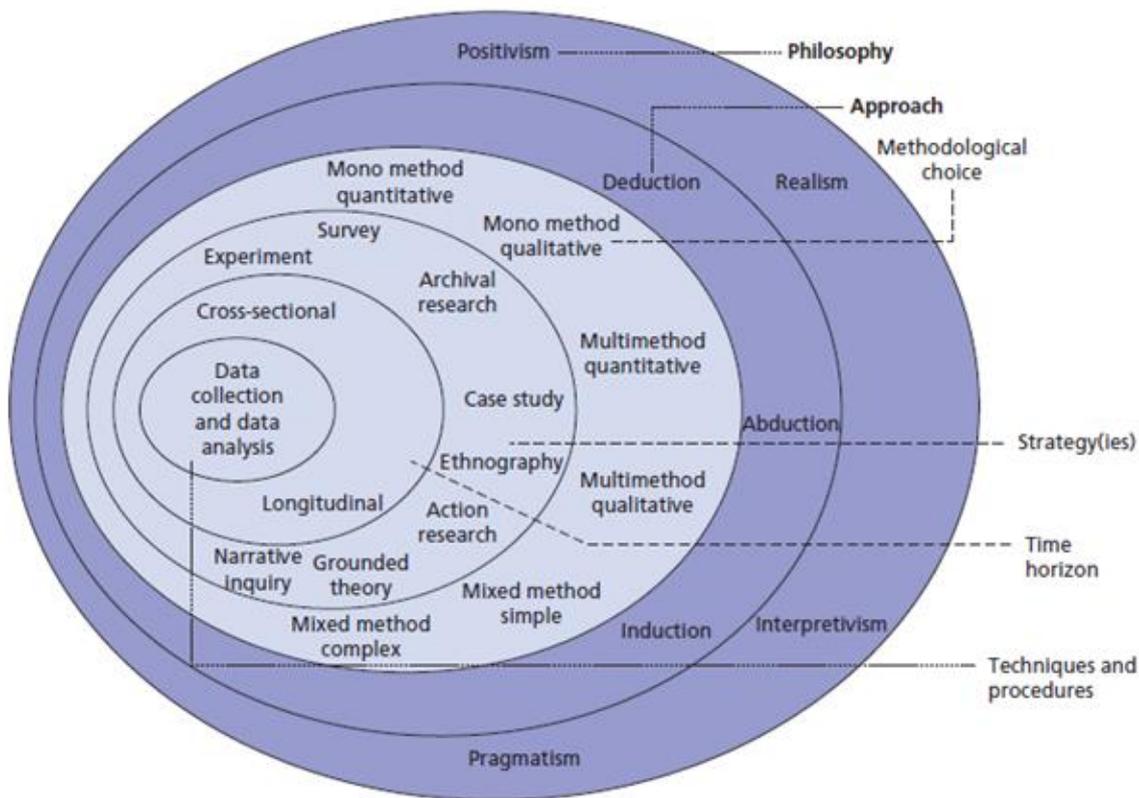


Figure 3-1 Saunders et al., (2016)’s Research Onion

3.2 Philosophical Overview of the Research

Before introducing the appropriate methodology for this research, it is important to discuss the concept of research paradigms, in order to decide which philosophical approach would be compatible with the research questions (Neuman, 2013; Saunders, Philip and Thornhill, 2016). In other words, the research philosophy is mainly about the way of thinking about what is knowledge and the way that knowledge is developed (Saunders, Philip and Thornhill, 2016). Easterby-Smith, Thorpe and Lowe (2012) cite three main reasons why an understanding of philosophy is crucial. Firstly, it helps in determining the appropriate research strategy and method for the research. Secondly, it helps the researcher regarding evaluating the different existing methods in order to use the appropriate one(s) for the study. Thirdly, the philosophical position of the research helps the researcher to make decisions throughout the research, especially in terms of identifying the relevant philosophical perspectives that affect research at different phases, including data collection and analysis.

To understand the context for choosing the appropriate research methodology, Guba and Lincoln (1994) classified the complexity of research into three philosophical paradigms: ontology, epistemology and methodology. The following discussion will provide an overview of each of these perceptions and review the different concepts that fall beneath each term.

3.2.1 **Ontology**

The word ontology consists of two Greek words, *onto*, which translates to being, and the word *logos*, which translates to theory or knowledge (Johnson and Duberley, 2000). Regarding research philosophy, ontology is associated with the nature of being, existence, or reality (Bryman, 2015; Bryman and Bell, 2015; Saunders, Philip and Thornhill, 2016). It is concerned with questions of, for example, what is existence? This raises questions about researchers' assumptions regarding their beliefs about what is existence and what is a reality. It raises concerns about what the truth is. In other words, what is the nature of the reality that researchers investigate? Scholars differentiate between two aspects of ontology, which both have widespread acceptance among business and management researchers, and which mostly are recognised as creating valid knowledge by many academics (Saunders, Philip and Thornhill, 2016). These two aspects are objectivism and subjectivism. It is very important to understand each of these aspects of ontology because what the researcher believes about reality will influence every single decision that will be made when carrying out the study.

3.2.1.1 **Objectivism**

According to Saunders, Philip and Thornhill (2016, p.132), 'objectivism represents the position that social entities exist in reality external to, and independent of, social actors'. In this aspect, knowledge exists in reality, and the researcher plays an external role in the investigation. The objective perspective believes that one truth exists and that truth may not change. Objectivism also believes that reality can be discovered using objective measurements and once it is discovered, it can be generalised to other situations.

3.2.1.2 **Subjectivism**

On the other hand, 'subjectivism asserts that social phenomena are created from the perceptions and consequent actions of social actors' (Saunders, Philip and Thornhill, 2016, p.132). Thus, the subjective perspective holds the idea of it is necessary to investigate the details of a state in order to comprehend what is

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taking place, or even the reality that occurs beyond what is taking place (Saunders, Philip and Thornhill, 2016). While the objective perspective holds the belief that there is one truth, subjectivism believes that multiple realities exist. According to this belief, the reality is formed by the context, and it can develop and change from one situation to another. Thus, truth from the subjective perspective cannot be generalised, but it can be transferred to another, similar, context.

To sum up, in objective research, the researcher is externally involved in the process of the knowledge generation. Additionally, there is one truth that exists in reality, and it does not change from one situation to another. On the other hand, from the subjective perception, the researcher is internally involved in the process of knowledge creation. Furthermore, the truth may differ from one situation to another, and this requires the researcher to go more in-depth in order to acquire the knowledge and understand what is happening. There is no right or wrong regarding the choice of ontological philosophical perspective that is adopted by a researcher. It all depends on the researcher's beliefs about what is a reality, in addition to its compatibility with the methodology used by the researcher in order to answer the questions of the study.

Thus, the researcher needs to adopt the philosophical perspective that is the most appropriate to answer the research question(s) according to his or her beliefs about what is the truth. The ontological position of the present study is mainly drawn from objectivism, whereby the researcher is an independent external observer. This is because the main aim of this research is to test research hypotheses developed from well-established existing theory in the area of human resource management and development, relating to academics' perceptions and attitudes in universities. This research tries to answer the question about the extent to which HPHRPS impact on academic research performance and career success. Thus, the research should be carried using the objective approach in order to confirm hypotheses based on the truth that exists in reality and to ensure the minimum impact of the researcher on the results. Concluding this discussion leads to another important aspect in research, which is epistemology, or in other words, how the researcher obtains knowledge. The following discussion will highlight this concept in order to identify and understand the epistemological position of the present study.

3.2.2 Epistemology

While ontology is concerned with the question of what is a reality, epistemology is related to the question of how we come to know the truth. It helps to determine and constitute what is acceptable knowledge (Saunders, Philip and Thornhill, 2016). Epistemology, in other words, means what relationship the researcher has with the research regarding discovering the truth and generating knowledge. Scholars differentiate between two main research paradigms in use under philosophical epistemology. These two paradigms are concerned with the beliefs about how researchers should generate and gather new knowledge.

The first research paradigm, called positivism, is the belief that research should be conducted objectively to discover the truth. This means that the researcher does not have any impact on the data that is collected. On the other hand, the second research paradigm, interpretivism, is the belief that research should be conducted with a subjective approach to find the truth. This means that the researcher has more of a role regarding interacting with people to generate the data in order to find new knowledge. Several researchers have declared that both paradigms have their related advantages and disadvantages across the fields of research. However, they are both widely used by different researchers (Saunders, Philip and Thornhill, 2016). It is worth noting that other researchers have identified other research paradigms, for instance, realism (Saunders, Philip and Thornhill, 2016). According to Healy and Perry (2000.p.8) 'realism believes that there is a "real" world to discover even though it is only imperfectly apprehensible'. The basic beliefs in the realism paradigm that the researcher is part of what is observed and knowledge are driven by human interests. In this paradigm, the researcher focus on meaning in order to understand what is happening.

The author, however, believes that discussing the two above mentioned epistemological paradigms is sufficient to clarify the method for this research since these two paradigms are very different to each other, but both are very common in management research (Saunders, Philip and Thornhill, 2016). The next section will expand on these two research paradigms to understand which paradigm this research falls into, and why. Determining the philosophical framework of any research is very important, as the philosophy that will be applied by the researcher will hold essential assumptions about the way in which the researcher views reality (Saunders, Philip and Thornhill, 2016). These assumptions will then support the research strategy and the methods that the

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researcher chooses to carry out the research (Saunders, Philip and Thornhill, 2016).

3.2.2.1 Positivism

Positivism is one of the widely used philosophies in the field of social sciences. This paradigm holds the assumption that truth exists independently from the researcher. Thus, the role of the researcher is to test theories to discover reality (Bryman and Bell, 2015). The positivist perspective is often used in the field of social sciences as the philosophy for research that adopts scientific methods of investigation (Neuman, 2013). The emphasis of this paradigm is on utilising empirical approaches. Specifically, the positivist paradigm is objective, scientific, investigating causal laws and, mostly, quantitative.

Regarding examining a relationship between variables, the positivist paradigm is often used, and it is closely associated with quantitative data collection (Collis and Hussey, 2013), utilising theories, variables, hypotheses and numbers to statistically analyse data in order to generate new knowledge. The researcher, according to this paradigm, often uses quantitative data to explain what is happening in social reality. Researchers have largely recognised that the positivist paradigm is most appropriate for conducting research using a quantitative method (Collis and Hussey, 2013). Positivism depends on the objective nature of the data and, thus, the belief is that reality, or the truth, exists independently from human perception, which is acceptable for quantitative measurement (Saunders, Philip and Thornhill, 2016). Researchers mostly aim to use a scientific approach to their investigation and to discover reliable and valid methods of data collection in order to view social phenomenon (Bryman and Bell, 2015). This paradigm holds the assumption that the observation of social phenomenon should be free from the researcher's own beliefs about reality (Gill and Johnson, 2010; Saunders, Philip and Thornhill, 2016).

To sum up, the dominant belief in the positivist paradigm is that the researcher should not influence the data that is collected, because this paradigm believes that the research should be conducted with an objective approach. In other words, the research is carried out in a value-free manner (Saunders, Philip and Thornhill, 2016). Thus, the perceptions of this philosophical paradigm are that the researcher should stay as far away from the research as possible in order to find the truth by objective measurement. When it backs onto the ontological aspect, we can see that the positivist paradigm is compatible with the

assumptions of the objectivist ontological aspect, where the belief is that the truth exists externally and independently from the researcher and can be measured objectively without disturbing the reality that is under investigation.

Based on the assumptions of the positivist paradigm, the researcher can only produce credible data from the phenomena that he or she can observe (Saunders, Philip and Thornhill, 2016). According to Saunders, Philip and Thornhill (2016), in order for researchers to develop a research strategy to gather this type of data, it is most likely that they will need to adopt an existing theory to build their research assumptions and hypotheses. Then, these assumptions and hypotheses will be examined in order to verify their validity and continue to build on the theory for further development of it. Thus, it is most likely that positivism is linked to a deductive approach, where a theory is adopted to develop hypotheses and then measure the phenomenon, by implementing quantitative data and statistical examination to prove or refute the hypotheses about the investigated phenomenon (Guba, 1990; Bryman, 2015; Bryman and Bell, 2015). Easterby-Smith, Thorpe and Lowe (2012) emphasise the close connection between the positivist paradigm and the deductive approach, which they refer to it as “theory testing”.

3.2.2.2 Interpretivism

Interpretivism, on the other hand, is the opposite paradigm to positivism. It is another widely used philosophical paradigm in the field of social sciences. This paradigm holds the assumption that the truth can be discovered subjectively. Thus, the role of the researcher will be internal, wherein the researcher is involved more regarding the data collection processes. In the interpretivism paradigm, the researcher needs to go inside the social phenomena in order to interact with people and to understand their point of view regarding the investigated issue, as each individual has his or her own experiences. This paradigm is often called qualitative research by researchers, because of the exploratory nature of the data gathering and observation needed to study social phenomena (Neuman, 2013). We can see that the exploratory aspect in this paradigm can make research quite time-consuming, as well as having high-cost implications because researchers need to contact respondents directly and personally (for example, face to face interview). According to this paradigm’s assumptions, the context and conditions in which a social phenomenon is studied play an important role in terms of discovering the social truth by the researcher. In other words, reality differs from one situation to another. This means that

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there are various truths, which are dependent on each individual's perspective and the perception that is shaped based on his or her own experience and situation. Thus, researchers adopting the interpretivism paradigm mostly use an inductive approach and acquire qualitative data in order to understand the manner in which people are thinking and make meaning of a particular phenomenon (Teddlie and Tashakkori, 2009; Creswell, 2013).

To sum up, the main belief in this paradigm is that the truth can be discovered subjectively. This means that the researcher needs to be more involved in the research and to interact with people in order to acquire an insider view about what the truth means to them. Thus, in this paradigm, the interaction is realised as an essential object to understanding what is happening in-depth. The question that may be raised here is, what ontological aspect leads one to carry out research based on this paradigm? It is most likely that the interpretivist paradigm fits with the assumptions of the subjective ontological aspect, where the belief is that the truth is shaped by senses and experiences. Thus, in order to obtain the truth, the researcher needs to interact with people and talk to them in order to understand an individual's experiences and the situations that shaped them. The epistemological interpretivism paradigm holds the belief that it is important for the researcher to recognise variances between people in their role as social actors (Saunders, Philip and Thornhill, 2016).

In contrast with positivism, interpretivism does not rely on a logical perspective in terms of the observation of the truth. However, interpretivism believes that the truth is considered to be socially made by the unique experiences of individuals and their situations. Thus, Easterby-Smith, Thorpe and Lowe (2012) emphasise the close association between the interpretivism paradigm and the inductive approach, which they refer to as "theory building". This means that the researcher needs to go into the field first to interact with people personally in order to understand the truth. After that, he or she can come up with a theory. Table 3-1 presents the keys features and differences between positivist and interpretivist paradigms.

Table 3-1: Key Features and Differences between Positivist and Interpretivist Paradigms

Theme	Positivist paradigm	Interpretivist paradigm
Basic beliefs	<p>The world is external and objective</p> <p>Observer is independent</p> <p>science is value-free</p>	<p>The world is socially constructed and subjective</p> <p>The observer is part of what is observed</p> <p>Science is driven by human interests</p>
Researcher should	<p>Focus on facts</p> <p>Look for causality and fundamental laws</p> <p>Reduce phenomena to the simplest elements</p> <p>Formulate hypotheses and test them</p>	<p>Focus on meanings</p> <p>Try to understand what is happening</p> <p>Look at the totality of each situation</p> <p>Develop ideas through induction from data</p>

Source: Amaratunga *et al.* (2002)

To conclude the previous discussion, the positivist and Interpretivist paradigms are not in competition with each other. Each of these two paradigms has its own belief about how to generate knowledge, and the choice of research paradigm should relate to the research question. There is no right or wrong answer about which paradigm should be adopted for the research. That is because each epistemological paradigm has its philosophical assumptions. The philosophical ontology aspect that the researcher believes in is about what is truth, and the type of research question(s) that the research aims to answer, and these are the main determinants of the choice of any epistemological paradigm that a researcher should adopt (Guba, 1990; Bryman and Bell, 2015). However, it is worth mentioning here that each paradigm has its strengths and weaknesses. Table 3-2, below, illustrates the main strengths and weaknesses for both positivist and Interpretivist paradigms. To address the research questions and carry out this current study, the positivist paradigm was adopted. The research question of this study did not aim to explore the subjective meaning of the relationships between variables. Rather, this study employed a deductive approach to testing the hypotheses that were developed based on previous literature to examine the relationships underlying the linkages between the

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research variables. Based on the previous discussion, the positivist paradigm appeared to be an appropriate approach to carry out the research and to answer the research question, which is: To what extent do High-Performance HR Practices (HPHRPS) have an impact on academic research performance and career success? To answer this question, research hypotheses developed from an existing theory should be tested objectively to confirm the hypothesised relationships. That being said, the positivist paradigm is more appropriate to achieve the goal of the study and answer this type of questions that try to test the relationships between variables rather than understanding the meaning of a particular phenomenon.

Table 3-2: Comparison of Strengths and Weaknesses between Positivist and Interpretivist Paradigms

Paradigm	Strengths	Weaknesses
Positivism	<p>This can provide wide coverage of the situation.</p> <p>Can be fast and economical.</p> <p>Where statistics are aggregated from large samples which may be of considerable relevance to policy decisions.</p>	<p>Methods used tend to be rather inflexible and artificial.</p> <p>Not very effective in understanding the processes or the significance that people normally attach to actions.</p> <p>Not helpful in generating theories as they focus on what is, or what has been recent, they make it hard for policymakers to infer what changes and actions should take place in the future.</p>
Interpretivism	<p>Data-gathering methods seen more natural than artificial.</p> <p>Ability to look at the change in processes over time.</p> <p>Ability to understand people's meaning.</p> <p>Ability to adjust to new issues and ideas as they emerge</p> <p>Contribute to theory generation.</p>	<p>Data collection can tedious and require more resources.</p> <p>Analysis and interpretation of data may be more difficult.</p> <p>Harder to control the pace, progress and endpoint of the research process.</p> <p>Policymakers may give low credibility to results from a qualitative approach.</p>

Source: Amaratunga *et al.* (2002)

3.3 Methodology

The methodology represents the study of the various techniques followed in the process of collecting empirical evidence to investigate the researcher's questions. It is concerned with how knowledge is discovered and analysed in a systematic approach. Researchers differentiate here between the term 'methodology' and the term 'method'. The term 'methodology' is associated with the philosophies that monitor the research regarding how knowledge should be gathered. On the other hand, the term 'method' in research is related to the different techniques for data gathering, such as surveys, direct observations, or interviews.

3.3.1 Deductive Versus Inductive

Before discussing the research methodology, it is worth pointing out that researchers often distinguish between two approaches. These two types of research approach are, namely, deductive and inductive. It is very critical to link the research approaches to research philosophies. For example, a deductive approach normally associates more with positivism, whereas an inductive approach mostly associates with interpretivism.

The deductive approach is mostly recognised by researchers as a theory-testing approach, whereby the researcher usually tests existing theories in order to investigate and justify the relationship between the variables. Thus, the deductive approach includes the development of theory by examining it (Bryman and Bell, 2015; Saunders, Philip and Thornhill, 2016).

Consequently, in the deductive approach, researchers often do much reviewing of the literature to explain the causal relationships between the different variables (Collis and Hussey, 2013). In these type of studies, researchers develop a set of hypotheses and test them in order to examine the relationship between several variables, which they have established when reviewing the literature (Bryman and Bell, 2015).

To test hypotheses which describe the relationships between study variables, the deductive approach generally adopts the approach of collecting quantitative data. The key distinction of this type of data is its generalisability, wherein researchers can generalise the study results from the specific to general situations (Zikmund *et al.*, 2013). In order to generalise findings in social behaviour, it is essential to have a sufficient sample size of the study population. Specifically, the deductive

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approach is frequently used by researchers to test theories, develop hypotheses and gather data for analysis within the positivist paradigm.

On the other hand, the inductive approach has mostly recognised by researchers as a theory-building approach. In an inductive approach researchers usually go into the field and interact with people in order to understand their beliefs in, and experience of, the issue under investigation (Zikmund *et al.*, 2013; Yin, 2015). After that, researchers try to come up with concepts and develop a model that helps to answer the research question. To put it simply, this approach is more about developing and building a theory about the investigated phenomena in order to structure research hypotheses (Sekaran and Bougie, 2011; Saunders, Philip and Thornhill, 2016).

According to Bryman and Bell (2015), the deductive approach (theory testing) is mostly allied with quantitative research, whereas, the inductive approach (theory building) is mostly used within qualitative research. An inductive approach is usually adopted in research that aims to investigate new phenomena or if there is insufficient literature about the research topic. In contrast to the positivist paradigm, the literature shows that the interpretivist paradigm usually adopts the inductive approach for studying a case, observing the relationships, circumstances and, finally building a theory to cover the situation in detail (Easterby-Smith, Thorpe and Lowe, 2012; Saunders, Philip and Thornhill, 2016). Based on the above discussion, this current research adopted a deductive rather than an inductive approach, as it was more suited to the aim and the philosophical standing of this research.

The subsequent section will discuss and compare research methodologies. It is very important to consider the differences between these methodologies, as each one of them has its distinct way of generating new knowledge. Indeed, those methodologies 'carry with them different ways of asking questions and often different commitments to educational and social ideologies'(Hathaway, 1995 ,p.557).

3.4 Choice of Method

3.4.1 Quantitative Versus Qualitative Research

Regarding the research methodology, researchers differentiate between quantitative and qualitative research.

Qualitative research emphasises meanings that have been less researched or have not yet been examined or measured experimentally in the previous literature regarding, quantity, frequency, amount or intensity (Guba and Lincoln, 1994). In other words, it is usually associated with the processes and implications of the investigation of new or less researched phenomena, which requires gathering qualitative data by, for example, interacting with people to offer a deep understanding of the phenomenon within its context. Therefore, it employs a non-statistical approach to analyse the qualitative data, usually generated from interviews, observations, conversation, articles, books, and recordings.

A quantitative approach, on the other hand, emphasises numerical ways to find measurements or quantities to generate knowledge. It is usually associated with processes and the implications of the investigation of the relationship between different variables and tends to collect large amounts of quantitative data to test the relations. Therefore, it employs a statistical approach to analyse the quantitative data, generated, for instance, from surveys.

There are many differences between these two methodological approaches. For example, in terms of the common purpose of the methodology, the quantitative approach mostly aims to test hypotheses or specific relationships between several variables. On the other hand, the qualitative approach usually purposes to discover ideas and explore the investigated phenomena with general research objectives. With regards to their approach, quantitative research uses measures and tests, while qualitative research utilises observation and interpretation. For data collection, quantitative research usually applies structured responses, with categories provided, while qualitative research applies unstructured responses and free form. In quantitative research, the researcher is an uninvolved observer, and the results are objective.

In contrast, in qualitative research, the researcher is an intimately involved observer, and the results are subjective. In terms of the samples, quantitative research generally uses large samples to produce generalizable results and runs statistical analysis. On the other hand, qualitative research mostly uses small samples, often in natural settings and the results are less likely to be generalizable. Finally, quantitative research regularly utilises descriptive and causal research designs, whereas qualitative research mostly makes use of exploratory research designs. Table 3-3, below, illustrates the differences in terms of the philosophical viewpoints followed in each approach.

Table 3-3: Quantitative and Qualitative Research Differences

Philosophical viewpoint	Qualitative Research	Quantitative Research
Principal orientation to the role of theory to research	Inductive: generation theory	Deductive: testing of theory
Epistemological orientation	Interpretivism	Positivism
Ontological orientation	Constructivism	Objectivism

Source: Bryman and Bell (2015)

3.4.1.1 Qualitative Research: Strengths & Weaknesses

Several strengths and weaknesses are associated with the qualitative research approach. One of the advantages is that the qualitative approach allows a researcher to investigate the phenomenon within its social background (Gephart, 2004), which is important as it will provide a comprehensive overview of the context of where the investigation is taking place. In addition, not everything can be studied quantitatively, and some aspects require qualitative data to understand the phenomenon in-depth. Qualitative research also depends on directly interacting with the participant(s) of the study, which will enable the participant(s) to express their experiences of, and feelings about, the phenomenon in own their words with more freedom. As a result, the data gathering in qualitative methodology can result in rich and detailed information about the investigated phenomenon.

Nevertheless, the qualitative approach also has its drawbacks. One of the qualitative approach disadvantages is the issue that it is time-consuming regarding data collection or data analysis. The nature of the open-ended questions used to generate the data in this approach can result in creating lots of information, which may take more time to analyse. Although it provides rich, contextual information regarding the phenomenon under investigation, it can consume a great deal of the investigator's effort and time.

Another issue associated with this approach is the difficulty of generalisation. As qualitative research requires interaction with participants, it regularly uses small-sized samples, which often makes it difficult to generalise findings. This is because a small sample is usually not sufficient to represent the whole population

of an inquiry or issue. Additionally, the nature of the linguistic data that will be generated in a qualitative approach can determine validity and reliability harder.

Furthermore, the results and findings in qualitative research may differ and vary from researcher to researcher. This can be explained by the influence of each researcher's background and beliefs, especially during two important stages in the research procedure. Firstly, at the data gathering stage, conversations with participants can be influenced by the researcher's background. Indeed, the researcher is required to interact with participants (often face to face) to gather the information. This may also inhibit the participant from expressing his or her feelings comfortably. Secondly, at the data analysis stage, the nature of the qualitative data depends essentially on interpretative analysis, which most likely will also be affected by the researcher's background and beliefs.

Thus, bias and subjectivity in one way or another will influence the research conclusions: it is difficult to avoid them since the qualitative researcher has a very interactive role regarding data collection, analysis and interpretation.

3.4.1.2 Quantitative Research: Strengths & Weaknesses

Similar to the qualitative approach, a quantitative methodology has both strengths and weaknesses. One advantage of the quantitative approach is its clear research structure. The goals and steps of the research are clearly defined in this approach. For example, the researcher knows what he or she is looking for. This is because the researcher knows what he or she wants to measure and knows what he or she wants to test, and how.

The amount of time that is associated with data analysis is another benefit of using this approach. The quantitative approach is less time-consuming. For example, the nature of generating numerical data, allows the researchers to implement different software programs, which are more time-saving in the analysis stage. Indeed, the numerical data enables the researcher to use statistical software programs to analyse the data, which will give more accurate results.

The validity, reliability, and margin of error can be calculated easily in this approach, as this approach depends on numerical data, which allows the use of statistical analysis (several software programs can be used to do this).

Also, large sample size can be obtained in quantitative research. The nature of the numerical data that is linked to this approach will encourage researchers to

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use, for example, the survey technique for data gathering. The use of survey can help to increase the sample sizes of research; hence, questionnaire as data instrument, for example, can be easily sent and collected from a wide range of the study population.

Another advantage is generalisability of the results. In this approach, generalisation is possible because quantitative research is often based on a large research sample and can use random sampling to approximate the total population, which both help to generalise the findings for the entire population.

Quantitative research is less likely to be biased and influenced by the researcher. Hence, a researcher may use a questionnaire for data collection, but the probability of impact by the researcher on the process of gathering data is low. This is because the researcher does not need to interact with the participants and dialogue with them physically in order to generate the data. Furthermore, the role played by the researcher in the analysis of the data is not based on interpretation, as is the case with a qualitative approach. Instead, this approach relies on statistical analysis in which it is difficult for the researcher to bias or influence the results.

As with any method, quantitative research has its downsides. One of the disadvantages linked to this approach is the difficulty of obtaining detailed information from the participants when using a questionnaire. It can be possible to acquire participants' perceptions about a particular subject through the questionnaire, but it may not be possible to acquire in-depth details through this approach, because in order to draw deep details about phenomena from the participants it is important to interact with them and to have an open dialogue. Another limitation with this method is that it does only get a response to the question that you asked, which limits the research inquiry and understanding of the wider variables.

Another issue associated with this approach is the statistical skills required by the researcher to deal with data analysis. As was explained earlier, this approach relies on numerical information and that requires knowledge of statistics and the ability to use various statistical programs. The learning of these statistical skills may be associated with a lot of time and effort. Also, the use of some analytical programs is complex for the non-specialist. There may be a need to attend more than one training course to master the analysis through the program.

Low response rates are another concern in quantitative research. Failure to gain a high rate of responses from the study sample may be a hindrance for a quantitative researcher. This method often depends on a questionnaire distributed to large numbers of the study population and, for one reason or another, the targeted sample may not respond to the questionnaire.

Finally, the following table summarises the advantages and disadvantages of each methodology discussed above. It is worth mentioning that each of the two approaches has been widely accepted among researchers and the choice between them depends on the philosophical paradigm which informs the research, the type of research aims, and the nature of the questions that the study is trying to answer (Ghuri and Grønhaug, 2005). Also, it is possible to use both methodologies in the same research if this is required to answer the research question(s), and this is what researchers refer to as the mixed method approach (Creswell, 2013). Mixed method approach provides a more comprehensive and complete understanding of the study problem than either using only quantitative or qualitative approaches (Saunders, Philip and Thornhill, 2016). This is because it provides strengths of both quantitative and qualitative research, which gives the research more enrichment of the phenomenon.

Table 3-4: Advantages and Disadvantages of Research Method

	QUALITATIVE	QUANTITATIVE
Advantages	<ul style="list-style-type: none"> • Study the phenomenon within its social background • A participant can express their perception by their own words with more freedom • Generate rich and detailed information 	<ul style="list-style-type: none"> • Clear research structure • Less time-consuming • Validity, reliability, and margin of error can be calculated easily • Large sample size can be obtained • The possibility of generalisation the results

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		<ul style="list-style-type: none"> • Less chance of bias and influence from the researcher
Disadvantages	<ul style="list-style-type: none"> • Time-consuming • Limitation of generalisation the results • Data might be Influenced by researcher • Greater chance of bias 	<ul style="list-style-type: none"> • Limitation of generation in-depth data • Statistical skills required • The issue of low responses rates

Source: Author

In this current study, the focus is placed on quantitative methodology in order to answer the research questions. Quantitative methodology places emphasis on quantification with regards to both data collection and analysis (Bryman, 2015). Several empirical studies have been conducted within the managerial and behavioural sciences by using quantitative methodology (Baruch and Holtom, 2008). The quantitative methodology enables researchers to test and validate already existing theories to understand how certain phenomena occur and how several variables related to it are connected. To answer the research questions and test the developed hypotheses, this current study applied quantitative methodology. This methodology is most suitable for this research for several reasons. The first, and important, justification of why the research used quantitative methodology is the research question. The nature of the research question is one of the key determining aspects when making decisions about the appropriate research methodology (Ghuri and Grønhaug, 2005). This current research aims to answer the question: To which extent do high-performance HPHRPS influence faculty research performance and career success? In order to answer this question, a large amount of quantitative data was needed, and statistical analysis was important to test the hypotheses that were developed. The main objective of this research to understand the impact of one variable on

another variable. The quantitative approach supports achieving this objective as it allows to actually measure the causal relationship effectively. Secondly, the quantitative approach is more consistent with the philosophical, ontological position and standing of this study, which mainly holds the objectivist perspective, where the researcher is an independent external observer. Thirdly, the quantitative approach is also often used with the positivist paradigm, which is the implemented paradigm in this research as explained in section 3.2.2. This research used the objective approach to ensure the minimum impact of the researcher on the results.

3.5 Research Design

Another important aspect associated with methodology is the nature or design of the research. Research design can be defined as a plan of the research that is undertaken by the researcher to investigate the research phenomenon and to answer the research question (Cooper, Schindler and Sun, 2003). Yin (2015) pointed out that the research design plays a critical role in the reliability and validity of the investigation. There are three research designs (often called types) provided in the literature, namely, exploratory, descriptive and explanatory research (Hair *et al.*, 2016b; Saunders, Philip and Thornhill, 2016). Typically, exploratory research is conducted when there is a need to study the phenomenon within its social background. Descriptive research is that this type of research following descriptive means regarding the investigation. This type of research describes the characteristics of the phenomenon, occasion, individual or group. Explanatory research is another type of research that emphasizes are investigating the relationships between the study variables (Hair *et al.*, 2016b). It is concerned with answering questions, such as why some factors influence other factors. According to Saunders, Philip and Thornhill (2016), explanatory research aims to explain the relationship between the variables that are associated with the investigated phenomenon or problem.

3.5.1 Suitable Research Design for the Current Study

The key important aspect when choosing a research type or design is the research question to be answered in the investigation. According to Hair *et al.* (2016b), researchers should choose the design that provides them with the right information to answer their research question. This current study aims to answer the questions about the relationships among several factors associated with the research problem. Explanatory research aims to investigate the relationship(s)

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among the variables under investigation (Hair *et al.*, 2016b; Saunders, Philip and Thornhill, 2016). Therefore, the current study purpose is to test the relationships between several HPHRPS and faculties' performances, which falls under the explanatory research approach. There is no doubt that the research questions and objectives are a key determinant for setting the nature of any study. In line with this, explanatory research was a most appropriate approach to carry out this current research.

This research identified several factors (based in the previous literature and theories) that may have an influence on the research problem, from which the research hypotheses were then developed. The nature of this research was to investigate the causes and effects among the identified factors, in order to understand the relationships between these factors and their impact on the phenomenon under investigation.

The research model of this study comprised three constructs as independent variables, namely, motivation-enhancing HRM practices (internal mobility and recognition), empowerment- enhancing HRM practices (participation in decision making and involvement in influencing work process/outcomes), and skills-enhancing HRM practices (training). Moreover, the research model involved academic performance as a mediator in the relationship between HPHRPSs and career success. Also, the model utilised individuals' career orientations (protean career attitudes and boundaryless career attitudes) as a moderator variable in the relationship between academic performance and career success. That being said, the dependent variable in this research model is academic career success, including subjective and objective career success (see Figure 2.7). The main aim of this study was to examine the impact of the independent variables on the faculty members' performance and success. Therefore, this research falls under an explanatory research design, which allows the researcher to examine and comprehend the cause and effect relationships among the factors. Additionally, explanatory research design is also suited to a quantitative methodology (Hair *et al.*, 2016b; Saunders, Philip and Thornhill, 2016), which was the approach adopted in this study.

3.6 Research Strategies

The research strategy is an essential aspect of conducting research. Research strategy can be defined as a plan followed by the researcher in order to guide the investigation to answer his or her research question (Saunders, Philip and

Thornhill, 2016). Research strategy has also been recognised as the operational link between the philosophical standing of the research and the methodological approach that is adopted to collect and analyse data (Denzin and Lincoln, 2011). On the other words, it can be seen as the means that a researcher implements in order to carry out his or her research. Several factors are influencing the choice of an appropriate research strategy. Despite the important role of the nature of the question (that is intended to be answered in a study) in identifying a suitable strategy, the philosophy adopted and methodology employed by a researcher are the keys that determine the research strategy. According to Neuman (2013), the choice of research strategy depends mainly on the methodology adopted to answer the research question(s).

Researchers classify research strategy into many types, including experimental research, survey, case study, action research, ethnography research, archival research and grounded theory (Saunders, Philip and Thornhill, 2016). The subsequent section justifies the selection of the survey as the appropriate strategy for this present investigation.

3.6.1 Why Survey Strategy?

Survey strategy is one of the most widely used strategies in the field of social sciences, and it enables the researcher, in a short period, to obtain valid, accurate and reliable data (Neuman, 2013). Saunders, Philip and Thornhill (2016) indicated that this strategy is the most common and popular approach that is employed in business and management studies. They explained that this strategy is most frequently used for answering questions such as “what”, “who”, “where”, “how much”, and “how many”. The survey has been used mostly as a strategy for quantitative methodology. This strategy is also usually related to a deductive research approach (Saunders, Philip and Thornhill, 2016). As a result of the association between a survey strategy and a deductive approach, the survey is frequently applied to descriptive and explanatory research designs (Denzin and Lincoln, 2011). This type of strategy is often useful to collect quantitative data, which can be done through questionnaires or structured interviews (Saunders, Philip and Thornhill, 2016). Data collected from questionnaires or structured interviews can help to explain the relationship between the research variables. It is a very economical method, which also enables the researcher to make easy comparisons (Saunders, Philip and Thornhill, 2016). According to Saunders and his colleagues, it is possible in a survey strategy to generalise the findings, because this strategy enables the researchers to collect the data from a large

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sample, which often represents the entire study population as it depends on random sampling. Also, this strategy often employs statistical analysis to reach the research results (Saunders, Philip and Thornhill, 2016).

The current study applied a survey strategy to examine the relationship between selected motivation, empowerment, and skills-enhancing HR practices and faculty members' performance and career success. Generally, the survey strategy, as discussed above, is mostly employed to answer questions such as "what", "who", "where", "how much", and "how many" (Saunders, Philip and Thornhill, 2016). Hence, it is recognised by researchers to be an appropriate strategy that enables the researcher to collect quantitative data (Saunders, Philip and Thornhill, 2016). The question of this current research was mainly concerned with examining the impact of HPHRPS on academic performance and career success. This type of investigation usually requires quantitative data in order to examine the causal relationships between study variables and test the hypotheses statistically. Therefore, a survey strategy was adopted for this study.

3.7 Data Collection

This section will briefly discuss the types of data source that were used in this research. It is important for the researcher to understand each type of data in order to make the right decisions about the sources of information required to answer the question of the study. Scholars distinguished here between two types of data sources, namely, primary data and secondary data (Bryman and Bell, 2015; Saunders, Philip and Thornhill, 2016).

Primary data is information that a researcher generates and gathers specifically for his or her research. This type of information could be generated and collected either quantitatively or qualitatively. For example, quantitatively collected data can be completed through questionnaires and structured interviews (Creswell, 2013; Saunders, Philip and Thornhill, 2016). On the other hand, qualitative data collection can be done through semi-structured interviews or unstructured interviews, focus groups, observations and case studies (Creswell, 2013; Saunders, Philip and Thornhill, 2016).

Secondary data is data that has already been gathered by someone other than the researcher. This data would have been originally collected for another purpose. This type of data may include, for example, government documents or

organisational records (Zikmund *et al.*, 2013; Saunders, Philip and Thornhill, 2016), and a researcher makes use of it for his or her research purposes.

The main sources for this current research were from primary data. The data that helped to answer the research question could be found through primary data. Therefore, the researcher collected the data himself in order to answer the research question. This research applied a survey strategy and implemented a quantitative methodology. The researcher needed to decide whether to use questionnaires or structured interviews to obtain the desired quantitative data. One important consideration was that interviews have to be conducted on a one-to-one basis with each respondent, either face-to-face, by telephone or computer. Whereas, questionnaires can be organised through self-administered paper surveys or by the electronic survey (Creswell, 2013). It is therefore much easier to obtain a large sample of respondents by using a survey strategy. The choice of data collection instrument also needs to take into account other important elements, including the targeted sample size, as well as the nature of the research questions. The following section will discuss each type of data collection instrument and offer a justification of why the questionnaire was more appropriate to be used in this study.

3.7.1 Questionnaires

Questionnaires, as a data collection instrument, have mostly been used for quantitative research. Saunders, Philip and Thornhill (2016) explained that the questionnaire is often employed in a descriptive and explanatory research design. However, they are less appropriate for an exploratory research design. The questionnaire technique is usually suitable when the questions that need to be asked are close-ended questions (Creswell, 2013).

There are two types of questionnaire, namely, self-completed and interviewer-completed (Saunders, Philip and Thornhill, 2016). A self-completed questionnaire is a questionnaire which needs to be completed by the respondent. This form of the questionnaire can be delivered to respondents through three possible forms. The first one is the electronic questionnaire, which is usually based on internet-mediated or web-based questionnaires. The second one is a mail or postal questionnaire, which requires the respondent to send it back when it is completed. The last and third form is delivered by hand to all participants and collected from them later.

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An interviewer-completed questionnaire, on the other hand, is based on each respondent's answers, which are usually recorded by the interviewer. This type of questionnaire can take two forms. The first form is by telephone, where the questions are given to the participant through a phone call by the interviewer. The second form of the interviewer-completed questionnaires is the structured interview. This method is based on physical interaction with the participant by asking him or her the questions face to face. Figure 3.1, below, summarises the types of questionnaire that have been discussed.

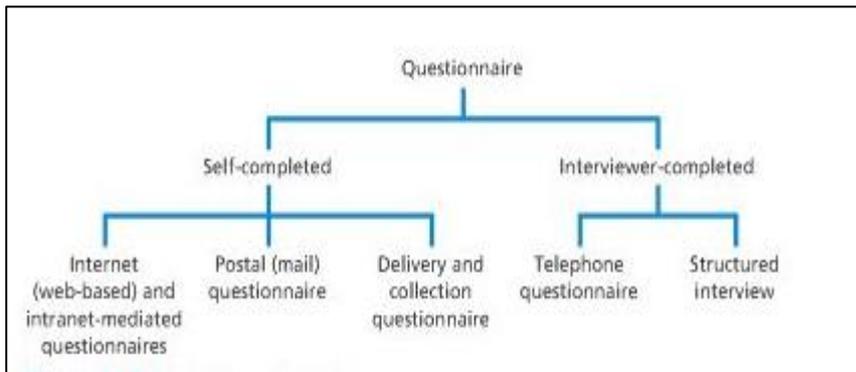


Figure 3-2: Types of the Questionnaire

Source: Saunders et al. (2016, p.420)

3.7.2 Interviews

Interviews are another instrument for data collection. An interview is a purposeful and focused conversation between two, or more than two, people in order to obtain information about a particular issue or to explore a specific phenomenon (Bryman and Bell, 2015; Yin, 2015). Saunders, Philip and Thornhill (2016) explained that the interview is the interviewer simply asking a person(s) purposeful questions and listening carefully to their responses. This tool for data collection has been widely used in qualitative research, as it is an excellent way to generate qualitative and context-rich data (Creswell, 2013). Interviews can help researchers to gather valid and reliable data that is relevant to their research objectives in order to answer the question(s) of the research (Saunders, Philip and Thornhill, 2016).

There are different types of interviews which the researcher can use in order to collect data for their research, including structured, semi-structured, and in-depth interviews. The following discussion is a brief explanation for each type. However, structured interviews (which are called interviewer-completed questionnaires) have been discussed in the previous section. There are many factors that the

researchers should consider when making their selection, including research question(s) and the objectives, the purpose of the research, and the adopted research strategy, all of which should be consistent with the choice of interview type (Saunders, Philip and Thornhill, 2016).

Semi-structured interviews depend on open-ended questions that are intended to generate more qualitative information from the respondents. They are not highly structured or planned interviews, but will have a list of themes and topics which the researcher needs to cover (Saunders, Philip and Thornhill, 2016). In semi-structured interviews, the researcher may begin with key questions and then leave the conversation open, with some follow-up questions to cover his or her themes. In this type of interview, the researcher does not need to ask questions in the same order to each respondent or ask the same questions in each interview.

The other type of interview is an in-depth interview, or what is often called the unstructured interview. According to Saunders, Philip and Thornhill (2016), this type of interview is informal. In this interview, the researchers do not need to prepare questions; they only need to determine the aspect or aspects they want to explore. This interview is built on an open conversation without being directed by the researcher. Therefore, unlike semi-structured interviews, the in-depth interview is guided by the interviewee's perceptions, rather than the interviewer questions (Saunders, Philip and Thornhill, 2016).

Additionally, interviews may take different forms. The choice between them depends on the researcher and which sources he or she has. Figure 3.3, below, illustrates and summarises these formats.

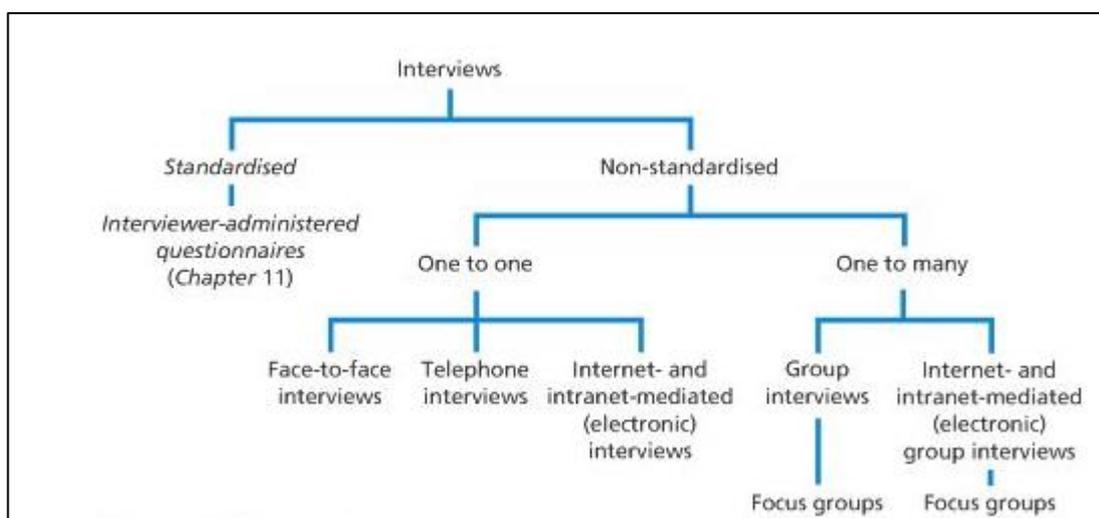


Figure 3-3: Forms of Interview

Source: Saunders et al. (2016, p.375).

3.7.3 Justification of the Questionnaire as a Data Collection Instrument

In this research, a self-completed survey questionnaire technique was adopted for primary data collection. The main justification behind the choice of this data collection instrument was its suitability and ability for collecting large quantitative data for testing the study model. This data can help to explain the relationship between the research variables since it can be quantified (Saunders, Philip and Thornhill, 2016). Baruch and Holtom (2008) explained that the questionnaire technique is the most commonly utilised tool within the organisational and behavioural sciences.

Questionnaires have several advantages, one of which is that they are usually inexpensive and less time consuming (Creswell, 2013; Neuman, 2013; Zikmund *et al.*, 2013). Also, questionnaires can help to obtain higher levels of reliability, since they can eliminate the influence of subjectivity by the researcher by providing standardised questions to all respondents. Additionally, self-completed survey questionnaires allow the investigators to reach a large population for the study, enabling to generalise findings. Also, this data collection technique has been recognised by researchers as being the most suitable for collecting data about participants' perceptions (Zikmund *et al.*, 2013).

Questionnaires also can help to offer insight into managerial practices and policies, as well as the attitudes and opinions of individuals (Baruch and Holtom, 2008). They are also frequently adopted to study relationships among variables, clarify these relationships and develop models of these relationships (Saunders, Philip and Thornhill, 2016).

In general, this data collection instrument may also be more acceptable to respondents, as it usually does not take too much of their time, in contrast to the interview technique, which may not be popular with respondents, as it takes too long a time from their busy schedules.

Thus, given the above discussion, a self-completed questionnaire was determined as being the most suitable instrument, as it is a practical tool for gathering data from a large number of people in a small period (Saunders, Philip and Thornhill, 2016). Through this tool, the investigator could measure the faculty members' perceptions regarding the determined research variables. Also, this study asking

a research question that is explanatory and based on evaluating how much impact one variable has on another, questionnaire-based survey was thus suitable due to its ability for collecting large quantitative data for testing research mode since data from this tool can be quantified.

The adopted self-completed questionnaire in this study comprised 57 questions (see Appendix C), which aimed to generate data about the respondents' perceptions regarding the studied variables, as well as the required demographic information.

3.8 Time Horizon: Cross-Sectional

Another important decision that a researcher needs to take is the time horizon of his or her study. According to (Saunders, Philip and Thornhill, 2016), determining the time horizon of a research design is an essential requirement, which does not depend on the methodology used in the research. However, the main determinants influencing this decision might be the aim of the study, as well as the researcher's time and resources available.

Researchers here distinguish between two main types of time horizon, namely, cross-sectional and longitudinal. Cross-sectional is a study that is conducted for a specific period. In other words, cross-sectional studies are usually limited to one particular time. Therefore, a cross-sectional time horizon can be called a 'snapshot' (Hair *et al.*, 2016b; Saunders, Philip and Thornhill, 2016), whereas a longitudinal time horizon is a study that is repeated through an expanded period. This type of time horizon simply focuses on investigating specific phenomenon over several periods, to determine the differences or to make a comparison of the results. Given the aim, as well as the time constraints of the current study, a cross-sectional type of time horizon was chosen over a longitudinal one. This study aims to test the causal relationship between these variables rather than measuring the effect of these variables among participants between two periods. The longitudinal study also requires more time to collect information in two periods, and this is beyond the time framework available to the researcher. However, research outputs, are gathered from many years and are conducted separately, so this is a point to mention – not simple cross-sectional only in this sense.

3.9 Research Population and Sampling

Another essential aspect in research design is the population of the study, which can be defined as the targeted individuals who are required to participate in the study in order to answer the research question(s) (Bryman, 2015). Therefore, determining the study population is one of the most important elements that must be selected in accordance with the objectives of the study to ensure obtaining the right data for answering the research question(s). In most cases the research population is very large, making it impossible to fully target the entire population. Consequently, researchers often used what is called a study sample.

Generally, the study sample in research is explained as a carefully selected part of the study population, which must be chosen through an appropriate technique that enables the researcher to generalize his or her research conclusions to the whole targeted population (Sekaran and Bougie, 2011; Neuman, 2013; Bryman and Bell, 2015; Saunders, Philip and Thornhill, 2016). Sampling is a process of selecting individuals from a larger group of people to represent the latter. In other words, instead of studying an entire population to understand specific phenomena, the study can be focused only on investigating part of the population, though the results can be representative of the whole population. Researchers usually start by determining and defining the characteristics of the ideal population which they aim to study and then go on to determine the sample of the target population (Creswell, 2013; Saunders, Philip and Thornhill, 2016). The target population for this study consisted of faculty members from any disciplines that hold a PhD degree and work in public universities in Saudi Arabia.

Table 3-5 Participation Criteria

Eligibility Criteria	Exclusion Criteria
<ul style="list-style-type: none"> • All participants were holding a PhD degree. • All participants were working in Saudi public universities. 	<ul style="list-style-type: none"> • The participants are not holding a PhD degree. • The participants are not working for Saudi public universities.

3.9.1 Sampling Frame

A sampling frame is a full list of all elements of the target population from which the study sample will be drawn (Saunders, Philip and Thornhill, 2016). In other words, the sampling frame in a study will be all individuals or organisations who meet the specifications of the population of the study. Determining an appropriate sampling frame essentially helps to draw an unbiased sample for any study. It is important to mention here that, in probability sampling, the results can be generalised only on a sampling frame applied to the population (Saunders, Philip and Thornhill, 2016). For this study, the researcher collected data from faculty members holding a PhD degree and working in Saudi public universities. According to the Saudi Ministry of Education, there were 24 public universities in Saudi Arabia at the time of the research. All these universities are spread over various regions of the Kingdom. Some of these universities are comprehensive (including most of the disciplines and having several colleges), and others are limited to specific disciplines. Besides, some of them are male-only and other female-only, but the majority are for both males and females.

Faculty members in Saudi universities can be categorised into two groups (as previously stated in chapter one), based on their contact with their university. The first group has permanent contracts with their university, and they are Saudi citizens. While the second group has fixed time contracts with their universities and the majority of them are foreign citizens (internationals). The research included both groups in order to obtain a comprehensive view of how HR practices may affect the research performance and career success for all academics holding a PhD degree and working in Saudi universities. However, the present study only focused on faculty members working in five selected public Saudi universities. There are several reasons why this study did not include the entire 24 universities. First was the difficulty of obtaining access to some universities because of their geographic location.

Moreover, the researcher was not able to find the contact person in all of the universities to help get access to respondents. Secondly, the limited time for the research was another obstacle preventing consideration of all the universities. The participation of all universities in the research would have needed great effort and time, and this would have hindered the researcher from properly completing the data collection stage in the available time.

Last but not least, all universities in Saudi Arabia follow one system in the management of faculty members set by the Ministry of Education, so we would

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not expect large differences between the universities regarding practices related to the management of faculty members. The following section will discuss the selected five universities and explain the rationale behind selecting them to participate in this research. Table 3-6 provides the total of the study population in these five universities.

Table 3-6: Total Study Population

University	Number of faculty members with a PhD degree
King Saud University	3,850
King Abdulaziz University	3,495
Umm Al-Qura University	2,498
King Faisal University	981
King Fahd University of Petroleum and Minerals	635
Total	11,459

3.9.2 Targeted Universities

The section will give a brief review of the five selected universities that participated in this study. These were King Saud University (KSU), King Abdulaziz University (KAU), Umm Al-Qura University (UQU), King Faisal University (KFU), and King Fahd University of Petroleum and Minerals (KFUPM).

The rationale behind selecting these five universities was:

- (1) These are the most prestigious universities in Saudi Arabia and the oldest.
- (2) The universities are geographically well dispersed, covering the three main areas in the Kingdom, including the western, central and eastern regions.
- (3) These are large universities and teach most main disciplines for male and female students, apart from KFUPM. However, it was necessary to include it, as it

is one of the major universities in the KSA because of its specialisation in the discipline of petroleum and minerals, the basic resources in the Kingdom.

(4) All these universities are amongst the top ten ranking universities in Saudi Arabia.

(5) Older Saudi public universities frequently have higher standing and resources, a better skilled and more stable workforce, and often are the ideal and preferred universities to work for by academics (Onsman, 2011).

The sampling frame of the study was all faculty members holding a PhD degree who worked at any of these five selected universities. As mentioned previously, faculty members with no PhD degree were excluded from this study. These included, for example, teaching assistants and instructors, because non-PhD holders in Saudi universities differ significantly regarding training work requirements. Also, these faculty members normally are not expected to perform research work, which is one of the main variables that was measured in this study. As such, their participation could have biased the results. Therefore they were excluded from the study.

The following is a brief introduction to each of the selected universities.

King Saud University (KSU)

King Saud University (KSU) is a public university and the second-largest university in Saudi Arabia. KSU was founded in 1957 and located in the capital city, Riyadh. It also has the second-largest campus in the world. It has 24 colleges, including, for example, the Faculty of Arts, the Faculty of Business Administration, the Faculty of Engineering and the Faculty of Medicine. KSU attracts both male and female students and faculty members. The number of students was 67,165 in the year 2014, whereas the number of faculty members was 7,548.

King Abdulaziz University (KAU)

King Abdul-Aziz University ((KAU) is another university that is run by the government and located in the western region of Saudi Arabia, specifically in Jeddah city. KAU was established in 1967 and consists of 24 colleges. These include teaching in several fields, for instance, Arts, Humanities, Economics, Management, Medicine and Engineering. KAU is open to both male and female students and faculty members. It provides some of its programs for both part-time and full-time students. The number of students was 198,967 in the year 2014, while the number of faculty members was 8,072.

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Umm Al-Qura University (UQU)

Umm Al-Qura University (UQU) is the largest university in Saudi Arabia. It was initiated in 1981 and is located in the western region of Saudi Arabia, specifically in the holy city of Mecca. It is a public university, and it comprises 24 faculties, examples of which are the Faculty of Arabic Language, the Faculty of Business, the Faculty of Education, the Faculty of Engineering and Islamic Architecture, and the Faculty of Medicine. UQU welcomes both male and female students and faculty members. It provides some of its programs for both part-time and full-time students. The number of students was 95,857 in the year 2014, while the number of faculty members was 5,151.

King Faisal University (KFU)

King Faisal University (KFU) is another large public university in Saudi Arabia, established in 1975. It is placed in the eastern region of Saudi Arabia, specifically in Al-Ahsa city. The university has 16 colleges and offers education in most scientific fields. For example, these include Medicine, Engineering, Science, Business and Management, Computer Science, and Information Technology. KFU is open for both male and female students and faculty members. It provides some of its programs for both part-time and full-time students. The number of students was 208,376 in the year 2014, while the number of faculty members was 1,885.

King Fahd University of Petroleum and Minerals (KFUPM)

King Fahd University of Petroleum and Minerals (KFUPM) is a leading public university in Science and Technology in Saudi Arabia. It was established in 1965 and is sited in the eastern region of Saudi Arabia, specifically in Dhahran city. The University has eight colleges, including the Faculty of Engineering Sciences, the Faculty of Computer Science & Engineering, and the Faculty of Industrial Management. KFUPM opens for male students only. It provides all the programmes in English. The number of students was 13,102 in the year 2014, while the number of faculty members was 1,059.

3.9.3 Sampling Size

Determination of the sample size is important and critical for any study. If the sample size is lower than the estimated size, it may lead to inaccurate results (Hair *et al.*, 2016b), which can be caused by an insufficient number of responses to run the statistical analysis. However, if the sample is too large, it can be a waste of time and effort, and make the process of data collection even longer

(Zikmund *et al.*, 2013; Hair *et al.*, 2016b). Therefore, determining the appropriate sample size that will help to generate reliable results and generalizable conclusions for the whole population is very important. Several factors can play an essential role in determining a reliable sample. These include the statistical analysis method to be performed to analyse the data and the size of the target population. The data analysis method used was the main determination for the sample size in this current research. Structural equation modelling (SEM) was the main method that was implemented for data analysis in this study. Based on what had been observed in the literature, a sample of 200 is the critical sample size for SEM. Also, the minimum number for the sample size depends on the numbers of the variables that are to be measured. Some researchers recommend five responses per parameter as a minimum for the sample size, while others believe that it is more appropriate to have ten responses for each assessed parameter (Hair *et al.*, 2010). That being said, 375 responses thought to be a good sample size to test the study model.

3.9.4 Sampling Technique

The sampling technique is another important aspect that should be considered carefully by the investigator. Researchers distinguish here between two main types of sampling method, namely, probability sampling and non-probability sampling (Yin, 2015; Saunders, Philip and Thornhill, 2016). Probability sampling is based on giving all the individuals in the target population an equal opportunity of being selected in the samples of the study from which the data will be collected (Saunders, Philip and Thornhill, 2016). In contrast, non-probability sampling is based on the researcher's judgement; the sample will be selected subjectively by the researcher rather than through random selection. This difference between the two methods allows the researcher using probability sampling to generalise the findings of the target population, based on the rationale of probability theory (Easterby-Smith, Thorpe and Lowe, 2012).

Research based on a survey approach mostly uses probability sampling (Saunders, Philip and Thornhill, 2016). For the current research, a probability sampling method was used. There are several techniques, namely, cluster sampling, stratified sampling, systematic sampling, simple random sampling, and multistage sampling (Saunders, Philip and Thornhill, 2016), and the researcher can use one or more of them to draw the sample.

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For this present research, simple random sampling was the technique applied to select the sample from the sampling frame. This technique allowed the researcher to select faculty members randomly from the target universities. Simple random sampling is a basic technique that allows a researcher to select a sample from a larger group (target population) in order to gather the data from them for the study. This technique ensures that each individual is selected completely randomly, and each individual of the target population has an equal opportunity of being involved in the study (Creswell, 2013). According to Saunders, Philip and Thornhill (2016), the technique of simple random sampling is best used when there is easy access to an accurate sampling frame. The sampling frame, as has mentioned before, is the complete list of the target population. For this current research, the access to an accurate sampling frame was not challenging, which made the use of simple random sampling a suitable technique to select the sample. Also, this technique allowed the researcher to generalise the findings to the entire target population, as the sample was selected randomly (Creswell, 2013). The participants were randomly selected from the list of faculty members for each university. Each university was contacted to obtain a list of faculty members who met the criteria, and 200 participants were randomly selected from each list. Specifically, the list was divided into four parts, and the first 50 names were selected in each part.

3.10 Access to Respondents

Having access to a research sample might be an obstacle for any researcher and, therefore, the researcher should give prior consideration to this. For this current research, the unit of analysis was only at the individual level. This consisted of faculty members holding a PhD degree and working in one of the five selected universities. This was because the main aim of this research was to investigate the relationship between high-performance HR practices and faculty members' research performance and career success. Thus, this research was carried out at an individual unit of analysis, where only faculty members working in the target universities and meeting the eligibility criteria mentioned in 3.8 were selected as respondents.

The access to respondents for this research was not challenging, for several reasons: (1) The researcher belonged to the higher education sector, which facilitated access to the information needed, such as academic staff emails lists or numbers. (2) The researcher had at least one contact person in the target

universities, which helped in obtaining the required information or help needed. (3) Access to the information about faculty members, such as their contact information and position, was easily obtained from the university websites. (4) Finally, the researcher had a contact person in the Ministry of Higher Education, who could assist in cases where more support and information regarding access to the respondents was needed.

3.11 Measures of the Study

Research measures are a critical aspect of a research methodology, specifically in a survey design study. One of the most important steps in the research process is to develop and select an accurate instrument that is relevant and precise, in order to achieve the research aim and objectives, and answer the research question (Zikmund *et al.*, 2013). According to Zikmund and his colleagues, it is important, while developing the research data collection instrument, to ensure that what is going to be measured and how it is going to be measured will enable the researcher to answer the research question.

The present study used seven-point Likert scales for measuring most of the constructs of the research model. There were several reasons for using this type of scale to measure the research constructs: (1) For a survey approach, Likert scales have been recognised as the most common and suitable technique for collecting data from respondents (Sekaran and Bougie, 2011). (2) For measuring individuals' attitudes and behaviour, scholars in positivism generally recommend the Likert scale to be used for survey questionnaires (Saunders, Philip and Thornhill, 2016). (3) The majority of the previous works in HRM have used Likert scales to measure HRM practices and their outcomes.

In order to ensure reliability among the measured items, most of the measures included in this research were adopted from various studies. All the measurement items and scales used were previously developed by different researchers and are used widely in the literature. All items involved in this current research instrument were measured by using a seven-point Likert-scale (1=strongly disagree, and 7=strongly agree) apart from the variables of research performance of the faculty members, objective career success, and demographic and academic factors (gender, age, marital status, citizenship, academic rank, origin of earning the PhD degree, experience, contract nature with current university). The method of measuring the variables of the research performance of the faculty members and their objective career success will be discussed later in this section. Notably,

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the demographic variables were included in the study as control variables. It is worth mentioning here as well that the main reason for using a seven-point Likert-scale for all the items (apart from the excluded variables, explained previously) is that the target population of this research was well-educated people (having the ability to distinguish the full differences across levels). That said, with this target population, a seven, rather than a five, point Likert scale is preferable (Baruch, 2014).

The research model comprised several variables. These included the independent, dependent, moderator, mediator, and control variables (see Figure 2.7). The independent variables for this study were High-Performance HR practices (HPHRPS), including selected motivation- skills-, and empowerment-enhancing practices. The dependent variables were subjective, and objective, career success. The mediator variable was the research performance of faculty members, while the moderator variables were the career orientations of the faculty members. Finally, the control variables were several demographic and academic factors. The following section reviews the measures adopted for each variable.

3.11.1 Measures of the Independent Variables Motivation- Skills-, and Empowerment-Enhancing HR Practices.

A total of five specific high-performance HR practices, characterised as motivation- skills- and empowerment- enhancing practices, were selected. Three motivation-enhancing practices, namely, internal mobility and recognition, which helped individuals to work in the university with motivation, were selected. One skills-enhancing practice, namely, training, was selected, as it generally benefits individuals to develop their skills in the workplace on a regular basis. Finally, one empowerment-enhancing practice, namely, participation, was selected, as it usually assists individuals to make use of their skills and keep them involved in the work, leading to higher performance. This HPHRPS mentioned above are widespread in the existing HRM literature and have been widely linked to a positive individual, as well as organisational, outcomes (Subramony, 2009; Jiang *et al.*, 2012). The justification behind the selection of these specific HRM practices has previously been discussed in the second chapter, the literature review, in section 2.6.

To measure the internal mobility variable, five items were adopted from Sun, Aryee and Law (2007). This variable attained a Cronbach's alpha of .377. About

measuring the recognition variable, five items were adopted from Paré and Tremblay (2007). This variable achieved a Cronbach's alpha of .885.

To measure the training variable, four items were adopted from Delery and Doty (1996). The reliability of items measuring this variable attained a Cronbach's alpha of .790. The last variable to be measured of the HRM practices in this study was participation. To measure the participation variable, four items were adopted from Delery and Doty (1996). This variable achieved a Cronbach's alpha of .865.

Respondents were asked to indicate the extent of their agreement with each item using a seven-point Likert scale (1=strongly disagree; 7=strongly agree). A higher score on the scale indicated a higher level agreement with the specific HRM practices. All these items and sources for these five constructs are presented in Table 3-7, below.

Table 3-7: Measures of Skills-, Motivation-, and Empowerment-Enhancing HR Practices

Construct	Items	References
Skills - Enhancing Practices Training (SEPT)	SEPT1- Extensive training programmes are provided to me in my job.	Delery and Doty,(1996)
	SEPT2- In my job, I normally go through training after every few years.	
	SEPT3- There are formal training programmes to train new faculty members to enhance their skills to perform their jobs well.	
	SEPT4- Formal training is provided to me to increase my promotability.	
Motivation - Enhancing Practices Internal Mobility (MEPIM)	MEPIM 1- I have few opportunities for promotion. (R)	Sun, Aryee, and Law (2007)
	MEPIM 2- I do not have any future in my university. (R)	
	MEPIM 3- Promotion in my university is based on seniority. (R)	

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	MEPIM 4- I have clear career paths in my university.	
	MEPIM 5- Faculties who desire promotion have more than one potential position they could be promoted to.	
Motivation - Enhancing Practices Recognition (MEPR)	MEPR1- My suggestions regarding work are seriously taken into account.	Pare, and Tremblay,(2007)
	MEPR2- In this university, people regularly show their appreciation of suggestions that I make.	
	MEPR3- In this university, the dean or head of department uses different ways to recognise my efforts (oral praise, tickets for cultural events, free dinners etc.).	
	MEPR4- In this university, I receive recognition in writing from my dean, head of department or deanship of faculty members (e.g. appreciation letters).	
	MEPR5- The Dean or head of department regularly congratulate sub-ordinates in recognition of their good efforts.	
Empowerment -Enhancing Practices Participation (EPPP)	EEPP1- In my job, I am allowed to make many decisions.	Delery and Doty,(1996)
	EEPP2- In my job, I am often asked by my dean or head of department to participate in decisions.	
	EEPP3- I am provided with the opportunity to suggest improvements in the way things are done.	
	EEPP4- The Dean or head of department keep open communications with me in this job.	

3.11.2 Measures of Faculty Member Research Performance.

The performance of the faculty members was measured by quantity, as discussed previously in section 2.3. More justification and explanation of measuring research performance can be found in that section. To measure research productivity, seven types of publication were selected, based on the previous literature. These were: (1) publication in peer-reviewed journals, (2) publication in professional journals, (3) published book chapters, (4) published books, (5) edited and translated books, (6) papers presented at conferences, and, (7) obtained patents. The respondents were asked to report the number of their works for each element of these seven research productivity types.

3.11.3 Measures of Career Orientation

Two different career orientations were measured in this study. These were associated with measuring contemporary career orientations (namely protean and boundaryless career orientations). This has been discussed in detail in section 2.7.3.

The boundaryless career was measured by six items. These six-items were a shortened version of Briscoe, Hall and DeMuth (2006) boundaryless career scale. This variable attained a Cronbach's alpha of .897. To measure a protean career. Seven items were adopted from Baruch (2014). The protean career variable achieved a Cronbach's alpha of .787.

Respondents were asked to indicate the extent of their agreement with each item using a seven-point Likert scale (1=strongly disagree; 7=strongly agree). A higher score on the scale indicates a higher level of specific career orientation. All the items and sources for these three constructs are presented in Table 3-8, below.

Table 3-8: Measures of Different Career Orientations

Construct	Items	References
Boundaryless Career Orientation (BCO)	BCO1- I enjoy working with people outside of my university.	Briscoe, Hall, and Demuth,(2006)
	BCO2- I enjoy jobs that require me to interact with people in many different organisations.	

	BCO3- I enjoy job assignments that require me to work outside of the organisation.	
	BCO4- I like tasks at work that require me to work beyond my own department.	
	BCO5- I would enjoy working on projects with people across many organisations.	
	BCO6- I have sought opportunities in the past that allow me to work outside the organisation.	
Protean Career Orientation (PCO)	PCO1- For me, career success is how I am doing against my goals and values.	Baruch (2014)
	PCO2- I navigate my own career, mostly according to my plans.	
	PCO3- If I have to find a new job, it would be easy.	
	PCO4- I am in charge of my own career.	
	PCO5- I take responsibility for my own development.	
	PCO6- Freedom and autonomy are driving forces in my career.	
	PCO7- For me, career success means having flexibility in my job.	

3.11.4 Measures of Career Success

Two different types of career success were measured in this study. One of them was objective career success, and the other was a subjective career success. These two types of career success measures have been discussed and explained previously in section 2.7.6.3.

Objective career success was measured by two elements, which were salary and promotion. Two self-report questions were used to measure each of these elements. Respondents were asked to indicate their monthly salaries (including bonuses and other direct income) in two periods, since they had obtained their PhD degree and the current time. The promotion was measured by asking respondents to report the number of promotions they had received since they had obtained their PhD degree. Promotion referred to “any increases in level and any significant increases in job responsibilities or job scope”(Seibert, Kraimer and Crant, 2001a P.858).

Subjective career success was assessed by measuring faculty members’ career satisfaction. To measure the career satisfaction, Greenhaus, Parasuraman and Wormley (1990)s’ five-item career satisfaction scale was adopted. This scale is a widely accepted measure of career satisfaction(Spurk, Abele and Volmer, 2011; Spurk, Hirschi and Dries, 2019). Although, this scale is old, but many new studies still use it and have acceptance among researcher in the field. Also, many other scales measure job satisfaction rather than career satisfaction. In fact, they differ in terms of the comprehensiveness of the concept and the relationship of satisfaction with the organization or profession. This study focuses on the professional satisfaction of a faculty member rather than his job satisfaction with his university. Therefore, this scale was a suitable option for this study, especially since it is still used by key researcher in this area. This measure is also suitable for the culture in which the study will be conducted as it has been validated by many previous studies (Burke and El-Kot, 2010; Karatepe and Vatankhah, 2015). Respondents were asked to indicate the extent of their agreement with each item using a seven-point Likert scale (1=strongly disagree; 7=strongly agree). A higher score on the scale indicates a higher level of career satisfaction. All the items for career satisfaction scale are presented in Table 3-9, below. The five items of this variable achieved a Cronbach’s alpha of .868.

Table 3-9: Measures of Different Career Orientations

Construct	Items	References
Subjective Career Success Satisfaction (SCSS)	SCS1- I am satisfied with the success I have achieved in my career.	Greenhaus, Parasuraman, and Wormley (1990)
	SCS1- I am satisfied with the progress I have made toward meeting my overall career goals.	

	SCS1- I am satisfied with the progress I have made toward meeting my goals for income.	
	SCS1- I am satisfied with the progress I have made toward meeting my goals for advancement.	
	SCS1- I am satisfied with the progress I have made toward meeting my goals for the development of new skills.	

3.11.5 Control variables

The control variables for this study consisted of two main sets of factors, demographic and academic. The demographic set consisted of several self-report questions, asking the respondents about their gender, age, marital status, and region of citizenship. The academic set consisted of several self-report questions asking the respondents about their academic rank, work experiences, the origin of earning their PhD degree, and the nature of their contract with their current university.

3.12 Questionnaire Design and Development Process

As mentioned earlier, the data collection instrument that was adopted for this research was a questionnaire. Scholars have emphasised that questionnaire as a data collection tool is a very effective technique to measure the variables under investigation in order to answer the research question(s) and to carry out the research (Sekaran and Bougie, 2011; Neuman, 2013; Zikmund *et al.*, 2013). However, one of the main disadvantages of using questionnaires for data collection might be that some respondents may misunderstand the meaning of the questions. This difficulty might not only bias the results, but it also might affect the response rate of the questionnaire. To overcome this challenge, developing well-designed questionnaires, including simple and easy questions for better understanding, is critical.

Several factors should be considered when designing a research questionnaire. The process of questionnaire development should be guided by the objectives of

the study (Oppenheim, 1992; Veal, 2005). In other words, develop the questionnaire in a way that generates accurate and proper data to help answer the research questions. In order to do this, the researcher should identify a clear purpose and the aims of the questionnaire and use more than one item to assess each construct. Besides, pre-testing the questionnaire (a pilot study) before the main study takes place is an important step (Saunders et al., 2016). All these important aspects were considered by the researcher for this current research. Moreover, three main important aspects were considered in the processes of preparing the research questionnaire for this study. These three aspects, recommended by (Lorelle Frazer and Lawley, 2000), include the development of the question content, wording, and the format and layout of the questionnaire.

In terms the question content and wording, researchers suggest that using short questions and avoiding complex statement or more than one statement in one question might prevent incorrect answers by the respondents (Lorelle Frazer and Lawley, 2000; Zikmund *et al.*, 2013). Therefore, through the development process of the research questionnaire, more emphasis was placed on keeping the questions of the questionnaire as short and simple as possible. Ambiguity and indirect questions were avoided as much as possible by the researcher in the wording of questions. Standard wording rules were carefully followed. The languages and the vocabulary used for original questions were carefully transited to be understandable in the context of the respondents' speaking language, in order to ensure that they would understand the correct meaning of the question.

Furthermore, to avoid response bias and promote participation, the researcher tried to include diverse question formats, based on the nature of each question. All the questions formats that were adopted in this questionnaire were designed in a way to decrease the amount of time, thinking, and effort taken by the respondents in answering the questions (Hair, and Ortinau, 2002). Most of the questions were based on scale response formats to assess respondents' level of agreement with each construct. This was handled using a seven-point Likert scale with all questions, apart from the academic, demographic research performance and promotion variables. These variables were measured based on self-report questions. All the questions were grouped by subject and placed in a rational order.

Another important feature of a good questionnaire is its layout. In this regard, the researcher attempted to make the layout and structure of the questionnaire concise, well-ordered, attractive and easy to follow. The questionnaire layout and

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structure were not only designed in a way that helped to obtain accurate data but also to reduce respondents' efforts, to raise the response rates and to hold participants' attention throughout the process of completing the survey (Oppenheim, 1992; Veal, 2005). Before the pilot study took place, the researcher reviewed the questionnaire content, wording layout and structure with a supervisory team and PhD colleagues to make sure that the questionnaire met the criteria mentioned above. Also, a brief introduction consisting of a description of the aim and significance of the study was presented at the beginning of the questionnaire. This introduction also included the approximate time expected to complete the survey and was followed by a message thanking respondents for their participation in this study. Contact information was also provided in this part of the questionnaire, including the names and emails of the researcher and the supervisory team (see Appendix C).

The time and length of a questionnaire is also another critical factor, as they might have an impact on the response rate. Therefore, the researcher was careful to ensure that the questionnaire took no longer than 10 minutes to complete. The questionnaire had a total of 47 items. This equalled to only six pages of A4 paper, which is considered to be an acceptable length that will not lose respondents' motivation to complete the questionnaire (Neuman, 2013). Based on the observations in the pilot study responses, the questionnaire required 8 to 10 minutes to be completed.

The questionnaire consisted of three main sections, excluding the consent form and the introduction (see Appendix B and C). The first part was the institutional factors, comprising questions measuring the different selected HRM practices. These included training, internal mobility, recognition and participation. The questions were a set of statements that represented faculty members' feelings about these institutional factors related to their career at the University, and they needed to indicate their level of agreement with each statement. The second part was the personal factors, involving questions assessing different career orientations (Protean, and Boundaryless) and faculty members' career satisfaction. The questions were a set of statements representing faculty members' feelings about the various career factors that were related to their personal preferences and attitudes. The third, and final, part was personal information. This part comprised several self-report questions about the personal information of faculty members.

3.13 Questionnaire Translation

Questionnaire translation is an important stage for developing a valid research data collection instrument. According to Cha, Kim and Erlen (2007), questionnaire translation is an essential part of the research, especially when measures of the instrument have been adopted from previous research that had been conducted in different cultures and languages. The use of established valid and reliable measures might help save both time and effort (Cha, Kim and Erlen, 2007). However, the measures adopted for this study were originally used in English, whereas the target population of this study was mostly Arabic. Therefore, these measures had to be appropriately translated and be acceptable for the new cultural context, in order to be valid.

Literature in cross-cultural research shows several techniques that can be used for translation. These include direct translation, parallel translation, and back-translation. In this current research, Brislin (1970) back-translation was adopted in order to translate the research questionnaire. According to Douglas and Craig (2007), back translation is the most extensively utilised technique to ensure translation accuracy in survey research.

In the back translation technique, a person fluent in both languages, the original source language and the target language, translate the questionnaire from the source to the target language. After that, a second person fluent in both languages translates the questionnaire back from the target language to the source language. Then, both versions of the questionnaire, the source and back-translation, are compared to each other in order to see if they are the same. If there is no difference between those two versions, the target language translated questionnaire can be considered to be accurate (Brislin, 1970).

At the first stage of the back translation process in this research, the researcher asked two of his colleagues, who were fluent in both English and Arabic to translate the source version of the questionnaire into Arabic. To ensure the accuracy of this translation, the people selected to do this translation were both lecturers in the Faculty of Business and Management and specialises in human resources management and development. The goal was not only to translate the words into the Arabic language but also to conserve the meaning of the original version, which is why it was important to have translators from an HRM background. After this, another two colleagues who were also fluent in both English and Arabic were asked to translate the Arabic version back into English (they did this without seeing the original version of the questionnaire). After they

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had both done their translations independently, they went over each other's translation in order to come up with a version which they agreed was a back-translated questionnaire.

Once the back translation process had been completed, the researcher and one of his colleagues, a specialist in linguistics, speaking both English and Arabic, reviewed and compared the original version of the questionnaire with the back-translated version. This was done in order to identify any errors that may have changed the original meaning of each item in the back-translated version. In fact, some items of the source version had to be reworded in order to fit this research context and for easier translation. After this stage, the Arabic version of the questionnaire was ready for distribution (see Appendix D).

3.14 Managing Common Method Bias

Common method bias, also known as common method variance (Spector, 2006), is the most common obstacle to be faced by researchers. This bias can happen when using one method for measuring all constructs, which may cause statistical variance (Podsakoff *et al.*, 2003). Common method bias can be a serious issue, as it can negatively impact the validity of findings in term of the relationships between the variables as it is one of the main sources of measurement inaccuracy (Podsakoff *et al.*, 2003). In general, many researchers have agreed that common method bias is a critical concern in organisational and behavioural research (Podsakoff, MacKenzie and Podsakoff, 2012); thus, researchers should pay more attention to controlling this source of bias.

Researchers can do this by measuring the study constructs from more than one source (Podsakoff, MacKenzie and Podsakoff, 2012). However, for this current study, it was not possible to measure the constructs from different sources, due to several factors, including lack of resources and the difficulty of access. Moreover, some of the study variables were not able to be measured from more than one source. Therefore, some practical procedures were considered in the research questionnaire design in order to reduce common method bias (Podsakoff *et al.*, 2003; Podsakoff, MacKenzie and Podsakoff, 2012).

The first procedure was that each study construct was measured with psychological segregation. The questions measuring all constructs of the study, including high-performance HR practices, faculty research performance, career orientations, and career success, were placed in different sections of the

questionnaire. In addition, each section of the questionnaire was introduced with different sets of instructions and guidelines, explaining what this section aimed to measure. All of this was prepared to make it clear that the measures of the constructs were not associated with, or correlated to, each other. Secondly, efforts were made to assure participant confidentiality and reduce participant concern about being part of the study. Participants were guaranteed that their responses would be confidential.

Moreover, participants were informed that the questions were about what they believed and that there were no right or wrong answers. Thirdly, as discussed in the questionnaire design section 3.12, careful attention was paid to the structure and wording of the scale measures items. Unclear terms, unfamiliar concepts and questions with more than one meaning were avoided.

Furthermore, a pilot study was conducted in order to assure the reliability and accuracy of the items. Finally, some constructs, such as career success, were measured objectively and subjectively. It is worth mentioning here that questionnaires were collected from different geographical locations and participants with different customs and traditions.

In order to assure that common method bias was controlled, statistical techniques were used in this research. Several statistical techniques have been adopted by researchers to identify and control common method bias. However, the literature showed that Harman's one-factor test and the unmeasured latent method factor are the most widely used techniques (Podsakoff *et al.*, 2003; Podsakoff, MacKenzie and Podsakoff, 2012). Therefore, in this study, both techniques were used (see chapter five).

3.15 Data Analysis Method

The empirical analysis for the present study aimed to examine the relationships between multiple HPHRPS (independent variables) and faculty member objective, as well as subjective, career success (dependent variables), and the mediating effects of faculty member research performance on these relationships. Also, the moderating effects of Protean and Boundaryless career orientations on the relationship between faculty member research performance and career success were examined.

For this type of analysis, SEM has been suggested as the most suitable analytical strategy (Hair *et al.*, 2010; Byrne, 2013). MacCallum and Austin (2000 P.202)

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explained that 'SEM is a technique used for specifying and estimating models of linear relationships among variables'. Similarly, Hair *et al.* (2010) described SEM as a family of statistical models that try to clarify the relationships between multiple variables. For this study and to answer the questions of this investigation, SEM was chosen as the main method of analysis, in preference to the other analysis methods. It was the most appropriate analytical technique, as it allowed simultaneous analysis of structural equations in order to test interrelationships among multiple variables in the research model and to test the hypotheses. It is worth mentioning here that, for data entry and the descriptive statistics, SPSS-24 software was employed for the earliest stage of data analysis.

3.16 The Pilot Study

A pilot study is an essential step to test the data collection instrument before conducting the core study. A pilot study is usually conducted in order to test the reliability and validity on one hand and to eliminate the potential weaknesses and errors of the instrument on the other hand (Zikmund *et al.*, 2013). For this present research, the pilot study was conducted with three main objectives in mind. These were: (1) examining the reliability of the adopted items for measuring the study variables, (2) improving the sentence structure and wording of the items if required, and, (3) obtaining the participants' feedback regarding questionnaire readability and length. The pilot study details and results will be presented in the following section.

3.16.1 Description of the Pilot Study

The pilot study was conducted on November 2016. The results of the pilot stage were deemed satisfactory by the supervisory team and allowed the researcher to continue with the main study. The final version of the questionnaire that was used in this pilot survey is shown in Appendix C. The pilot study was in two stages.

In the first stage, the questionnaire was tested in order to confirm its readability and layout. The participants in this stage were the supervisory team, and two friends, faculty members in the Business School and they gave feedback regarding the questionnaire effectiveness. Constructive suggestions to improve

the level of the questionnaire were addressed. For example, the word 'undecided' in the middle of the response scale was changed to the words 'neither agree nor disagree'. Besides, in question 24, the word 'this job' was changed to 'my job', in order to make the question personally directed to the respondent. Regarding the layout, there was a comment regarding the spacing of the statements. Space was too narrow, which made some statements take many lines. This was discouraging to read, so it was changed.

After that, the second stage was ready to take place. In this stage, the pilot study was directed to a target population similar to that to be used for the main study, in order to avoid possible bias at the main data collection stage. Participants in this pilot study were faculty members from three Saudi public universities, which were not part of the actual target universities for the main data collection. The three different universities included in this pilot study were located in three different regions (eastern, western and central regions of KSA). The participants in the pilot survey were selected randomly from each university's website, using a simple random sampling technique (Saunders, Philip and Thornhill, 2016).

A total of 120 faculty members (n=120) were e-mailed a link to the online questionnaire, with 40 faculty members from each of the three universities. Of the 120 faculty members, 53 (n=53) completed the questionnaire, presenting a response rate of 44%. The average time taken by the respondents to complete and submit the questionnaire was 10 minutes, with the minimum time taken being 7 minutes and maximum, 18 minutes. The data was collected from 9th to 21st November 2016. The participants' consent was obtained, and they were informed about the research before they took the survey. Also, reverse coded items were included in some parts of the questionnaire to help minimise the response bias.

3.16.2 Analysis and Discussion of the Pilot Study

The participants of the pilot study were both male and female faculty members. The male faculty members were 39.6% (n=21), whereas the female faculty members were 60.4 % (n=32). The minimum age of the participants was 26 years old, and the maximum was 61 years old. The average age was 44.53, and 60.4% (n=32) of the participants were between 40 and 49. All the participants (100%, n=53) were working in Saudi public universities and holding a PhD degree. A majority (62.2%, n=33) of the participants had obtained their PhD degree from KSA or the UK, and most of them (71.6%, n=38) had six or more years of work

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experience in academia. Almost half of the participants (49.1%, n=26) were assistant professors, while 32.1% (n=17) were associate professors. The remainder 18.9% (n=10) were professors.

3.16.3 Analysing Internal Consistency Reliabilities

The internal consistency of the measure items in this study was calculated by the Cronbach's alpha reliability statistic. The overall questionnaire reliability was .90, which indicated high internal consistency between the study measures. The Cronbach's alpha of the current research's variables was between the ranges of .38 to .90. The majority of the measures adopted for each variable achieved a Cronbach's alpha of 0.70 or over, apart from the variable for internal mobility, which secured a Cronbach's alpha of 0.38. The highest Cronbach's alpha score was .90, with the variable for boundaryless career orientation, whereas the lowest Cronbach's alpha score was 0.38 with the variable for internal mobility. However, Cronbach's alpha score of internal mobility increased to .61 when the item (MEPIM 1) was deleted. According to Hair *et al.* (2010), in organisational research, a score of 0.70 and no lower than 0.60 is considered to be acceptable. Besides, the low Cronbach's alpha score for the internal mobility variable might be influenced by the small sample size in this pilot study. However, it was thought that it might increase in the main study, as the sample would be larger. Table 3-10, below, summarises the internal consistency reliabilities and the number of measured items for all the study's constructs.

Table 3-10: Cronbach's Alpha of the Pilot Study Variables

Variables	Number of items	Cronbach's alpha
Reliability of the instrument	36	.90
Skills -Enhancing Practices Training (SEPT)	4	.79
Motivation -Enhancing Practices Internal Mobility (MEPIM)	5	.37*

Motivation -Enhancing Practices Recognition (MEPR)	5	.88
Empowerment -Enhancing Practices participation (EEPP)	4	.86
Boundaryless Career Orientation (BCO)	6	.897
Protean Career Orientation (PCO)	7	.787
Career Satisfaction (CS)	5	.868
* - The Cronbach's alpha of this construct increases to .611 when the item (MEPIM 1) was deleted.		

3.16.4 Variables Descriptive Statistics and Inter-variables Correlations

As we can see from Table 3-11 below, the pilot study results show that the mean of HPHRPS in the mid-range score with a score of 4.28 on Motivation-Enhancing Practices, 4.60 on Skills-Enhancing Practices, and 4.72 on Empowerment-Enhancing Practices. Protean and Boundaryless, mean results were more highly with scores of 5.28 and 5.31 respectively. Subjective Career Success was 5.23. All previous variables were measured on a 7-point agreement scale. Objective Career Success is measured by the number of promotion and change in salary since obtaining a PhD until present. The mean of this variable was scored.03.

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Table 3-11: Pilot Study Descriptive Statistics

Constructs	N	Minimum	Maximum	Mean	Std. Deviation
Skills -Enhancing Practices Training*	53	1.50	7.00	4.60	1.39
Motivation -Enhancing Practices Internal Mobility *	53	2.50	6.50	4.96	1.11
Motivation -Enhancing Practices Recognition*	53	1.00	6.80	4.40	1.53
Motivation -Enhancing Practices (Internal Mobility, Recognition)	53	2.13	6.14	4.28	1.03
Empowerment -Enhancing Practices Participation*	53	1.00	7.00	4.72	1.53
Protean Career Orientation*	53	2.71	7.00	5.28	1.10
Boundaryless Career Orientation*	53	1.83	7.00	5.31	1.30
Research Performance Outcomes**	53	0	280.00	24.74	45.32
Subjective Career Success*	53	2.00	7.00	5.23	1.22
Objective Career Success***	53	-.87	2.19	-.03	.82

* - The construct was measured on a 7-point Likert agreement scale.

** - The construct was measured by the number of 7 types of research outcomes.

*** - The construct was measured by two self-reported questions (number of promotion since obtaining PhD and indicating the salary range since obtaining PhD and current) then both questions computing by the mean into one variable using their Z score

Table 3.12 below, presents the correlations results between variables of the pilot study. As we can see from the table below, there is variation in results. For example, among HPHRPS, there is only a significant positive correlation between MEP and research performance ($r=.282$, $p<0.05$). However, all HPHRPS including SEP, MEP, and EEP are significantly correlated with subjective career success ($r=.373$, $p<0.01$), ($r=.497$, $p<0.01$), and ($r=.487$, $p<0.01$) respectively. However, only MEP is significantly correlated with objective career success ($r=.353$, $p<0.01$). Additionally, research performance is significantly correlated with subjective career success ($r=.298$, $p<0.05$) and with objective career success ($r=.386$, $p<0.01$).

Table 3-12: Pilot Study Inter-Construct Correlations

Pearson's Correlation (r) (N = 53)	SEP	MEP	EEP	Research performance	Subjective success	Objective success	PCO	BCO
SEP	1	-	-	-	-	-	-	-
MEP	.370**	1	-	-	-	-	-	-
EEP	.372**	.646**	1	-	-	-	-	-
Research Performance	.265	.282*	.148	1	-	-	-	-
Subjective success	.373**	.497**	.487**	.298*	1	-	-	-
Objective success	.210	.353**	.214	.386**	.451**	1	-	-

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PCO	.353**	.193	.418**	.076	.187	.023	1	-
BCO	.048	.078	.075	-.015	.075	-.171	.535**	1

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

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

3.16.5 Linear Regressions

Even though the leading goal of the pilot study was to test the reliability and validity of instrument of data collection, some basic regressions analysis was performed at the pilot study stage. Consequently, the relationship between each independent variable (skill, motivation, and empowerment – enhancing practices) and dependent variables of research performance, subjective career success and objective career success were examined in nine simple linear regressions analyses.

Table 3-13: Pilot Study Linear Regressions

Model – research performance (DV)					
Model - IVs	R	R ²	Adjusted R ²	Std. Error of the Estimate	Sig
SEP	.265	.070	.052	44.12	.027
MEP	.282	.080	.062	43.90	.020
EEP	.148	.022	.003	45.25	.145
Model – subjective career success (DV)					
Model - IVs	R	R ²	Adjusted R ²	Std. Error of the	Sig

				Estimate	
SEP	.373	.139	.122	1.14	.003
MEP	.497	.247	.232	1.07	.000
EEP	.487	.237	.222	1.08	.000
Model - objective career success (DV)					
Model - IVs	R	R ²	Adjusted R ²	Std. Error of the Estimate	Sig
SEP	.210	.044	.025	.81	.065
MEP	.353	.125	.108	.77	.005
EEP	.214	.046	.027	.81	.062

Table 3-13 presents the results of simple linear regressions analyses. Among the independent variables, only MEP was found to be a statistically significant predictor for all dependent variables. MEP was able to explain 6.2% of the variance in research performance ($R = 0.062$, $p < 0.05$), and 23.2% of the variance in subjective career success ($R = 0.232$, $p < 0.001$) and 10.8% of the variance in objective career success ($R = 0.108$, $p < 0.01$). Whereas, SEP and EEP were only able to explain 12.2% and 22.2% of the variance in subjective career success ($R = 0.122$, $p < 0.01$) and ($R = 0.222$, $p < 0.001$), respectively. These results may not indicate the strong ability of HPHRPS to explain variance in research performance, subjective career success and objective career success. However, this might be changed in the main study. Additionally, the data will be larger in the main study, which enables us to carry out further analysis to test the whole model and provide an accurate result.

3.16.6 Question-Wording

One of the main goals of conducting the pilot study was to confirm that the questions could be easily read and understood. Thus, feedback from the

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participants was collected and analysed in the pilot study. A few questions needed to be clarified in terms of wording in order to avoid potential confusion. For example, the wording of question 45, which was about the nature of the contract between the faculty member and the university, was a source of confusion for the participants. Thus, this question was reworded and made clearer.

Furthermore, question 47, which measured the range of the incomes of faculty members since they had obtained their PhD degree until now, was misunderstood by some participants. This caused some inaccurate responses. Therefore, the question was rewritten and made clearer.

3.16.7 Missing Information and Response Rate

One of the issues that appeared in the second pilot stage was missing information. The issue of missing information can be serious, as it might bias the results of the study (Little and Rubin, 1989). This problem emerged clearly with question 47, which consisted of two parts, wherein the participants were asked to select the range of their income in two periods (since they had obtained their PhD and the present time). Most of the respondents failed to answer the second part of the question. The feedback on the pilot study showed that the second part of the question did not clearly appear when taking the questionnaire by smartphone, which may have caused this issue. Given this, the issue was addressed after communicating with the Qualtrics supporting team (the research software company used for developing and distributing the questionnaire), who offered a solution to this issue.

Another issue discovered from the feedback from the pilot study, which impacted the response rate, was a technical problem that prevented the participants from submitting their questionnaire after they had completed it. This issue was reported to the Qualtrics supporting team, who helped to address this issue.

Neither of the issues occurred again in the main data collection for the study.

3.17 Ethics and Confidentiality

Ethical approval before the data collection stage was requested from the University of Southampton Ethics Approval Committee. The application and all the required forms were filed and submitted online through the Ethics and Research Governance Online on October 20th 2016. The application was approved on

October 25th 2016. The integrity of research is an important aspect; therefore, all ethical procedures were carefully considered during the questionnaire design and the data collection stage. Every effort was made to keep this stage of the research free of any discomfort, embarrassment, or harm to the participants.

All participants in this research were provided with a consent form (see Appendix B), demonstrating the confidentiality and ethical protocols of their involvement in this study (Cooper, Schindler and Sun, 2003). The participants were assured of the privacy and anonymity of their participation. They were also informed that all information provided in this survey would only be used for the research purposes and would not be revealed to anyone other than the researcher (Saunders, Philip and Thornhill, 2016). Also, the participants were informed that their participation in this research was voluntary and they had every right to either not participate or withdraw from the study at any point.

Furthermore, the purpose of the study was explained to all participants on the first page of the questionnaire, in order to provide them with the appropriate context for answering the survey. The participants were also provided with the contact details of the supervisory team, as well as the researcher, for any questions and inquiries they may have regarding the study. Additionally, the participants were informed that they could have a copy of the results report of the study if they so wished.

Chapter 4: Data Analysis: Descriptive Analysis

4.1 Introduction

This chapter discusses the descriptive analysis of the data collected for the main study. For this descriptive analysis including basic statistics of participants' demographic and academic profile and the constructs of the research model, Statistical Package for Social Sciences (SPSS) version 24 was used in this stage.

The chapter is divided into three main subsections. The first section discusses the response rate and non-response bias. The second section reviews the demographic and academic profile of the study participants. The last section of the chapter presents an overview of the descriptive statistics of the constructs examined in the current study.

4.2 Response Rate and Non-Response Bias

The main data collection for this study was conducted throughout 14 weeks starting in Jun 2017 and ending on September 2017. As mentioned previously in chapter three, the target participants for this study are faculty members holding a PhD degree and working in one of the five selected universities from any disciplines. A total of 1000 questionnaires were distributed to a faculty member in the five sample universities, 200 questionnaires for each. The 594 questionnaires collected present a response rate of 59.4 % of the total original distributed questionnaires. Of these returned questionnaires, eight questionnaires were excluded because they were not answered completely (left blank for entire section). Therefore, a total of 586 usable questionnaires remained, which gives an effective response rate of 58.6 %. According to Baruch and Holtom (2008), the average response rate for questionnaires is 52.7% for individuals in management and behavioural science. Accordingly, a response rate of 58.3 % for this current study was considered satisfactory. The sample represents 5% of study population . This percentage represents a good number of the sample, especially if we look at the distribution of the sample geographically among the five largest and oldest universities in Saudi Arabia, where it covers most of the regions

Non-response bias takes place when participants of a questionnaire differ significantly on the response on the variables measured in a study from non-participants (Lambert and Harrington, 1990; Couper, 2000; Dooley and Lindner, 2003). The emergence of such bias in a study may limit the generalisation of results (Barclay *et al.*, 2002; Dooley and Lindner, 2003). There is more than one method suggested to examine non-response bias (Lambert and Harrington, 1990). One of the frequently used method by the researcher is examining two separated groups of the participants to identify whether there are any significant differences between the two groups of participants (Armstrong and Overton, 1977). To examine non-response bias, the useable questionnaires were ranked based on the date of receiving them. The questionnaires were split into four groups each group approximately 145 cases. After that, the non-response bias was examined by comparing the mean of the variables between the early and late participants. The first group was considered as early participants and the fourth group considered as late participants. A series of independent sample t-tests were performed for all variables measured on Likert- scale alongside and main variables such as objective career success and research performance. The results indicated there were no significant difference ($p>0.05$) among the early and late group of participants. Consequently, it was assumed that participants in this study did not differ from non- participants and that non-response bias was considered not to be a problem in the current study.

4.3 Overall Demographic and Academic Profile of the Study Participants

This section presents the descriptive statistics for the demographic and academic profile of the participants in the study. The first part review the demographic profile and the second part presents the academic profile.

4.3.1 Demographic Profile of the Survey Participants

The demographic profile of the study participants is presented in Table 4-1. The participants have included both male and female faculty members. The majority of the participants in the study were male faculty members ($n=405$), representing 69.5% of the study sample. Whereas the female faculty members were only 30.9 % ($n=181$). As for the participant's age, nearly to half of the participants, 43.3% ($n=254$) were between the age of 41 and 50 years old. The minimum age of the

participants was 29 years old, and the maximum was 75 years old. The average age was 47.38.

In term of the marital status, most of the participants 89.9% (n=527) were married, while the single was only 6.3% of the participants (n=37). The other participants were between widowed and divorced 0.9% (n=5) and 2.9% (n=17), respectively. As for citizenship, more than half of the participants, 63.5% (n=372) were Saudi. The rest were none- Saudi faculty members with the largest group 30.9% (n=181) were Arab.

Table 4-1: Demographic Profile of the Participants

Demographic Variable	Category	Research Sample (n = 586)	
		Frequency	Percentage (%)
Gender	Male	405	69.1%
	Female	181	30.9%
Total		586	100%
Age	29 to 40	143	24.4%
	41 to 50	254	43.3%
	51 to 60	145	24.7%
	More than 60	44	7.5%
Total		586	100%
Marital status	Single	37	6.3%
	Married	527	89.9%
	Widowed	5	0.9%
	Divorced	17	2.9%
Total		586	100%
Citizenship	Saudi	372	63.5%
	Arab	181	30.9%
	Asian	15	2.6%
	Westerner	18	3.1%
Total		586	100%

4.3.2 Academic Profile of the Survey Participants

The academic profile of the study participants is presented in Table 4-2. All the participants (100%, n=586) were working in five Saudi public universities. The participants from KSU, UQU, and KFU were 120, 122, and 117 faculty members representing 20.5%, 20.8%, and 20 % form the total sample for the study respectively. Whereas the participants from KAU were 115, representing 19.6% of the study sample and the participants from KFUPM were 112, representing 19.1% of the total sample of the study.

All the participants (100%, n=586) were holding a PhD degree. Half of the participants 51.2% (n=300) were assistant professors, while 24.2% (n=142) were associate professors. The rest 24.6% (n=144) were professors. The work experience of the participants varied widely. The largest group of the participants 27.5% (n=161) were between 11-20 years of work experience in academia. The participants with 6-10 years of work experience were 23.4%, (n=137), followed by participants with 1-5 years of work experience (23.2 %, n=136), then participants over 20 years of work experience representing 22.2% (n=130) from the total study sample. Finally, the smallest group was participants with less than a year (3.8%, n=22).

As to the origin of where the PhD degree was obtained, the majority of the participants (68.4%, n=401) had obtained their PhD degree from KSA, UK or USA. The remainder (31.6%, n-185) were obtained their PhD degree from different regions, for example, Egypt, Sudan, Algeria, Europe etc. Regarding the type of contract in their current institution, more than half of the participants (62.6%, n=367) had a permanent contract with their institution. The rest (37.4%, n=219) had a fixed-term contract with their current institution.

Table 4-2: Academic Profile of the Participants

Demographic Variable	Category	Research Sample (n = 583)	
		Frequency	Percentage (%)

Place of work	KSU	120	20.5%
	KAU	115	19.6%
	UQU	122	20.8 %
	KFU	117	20%
	KFUPM	112	19.1%
Total		586	100%
Academic rank	Assistant Professor	300	51.2%
	Associate Professor	142	24.2%
	Professor	144	24.6%
	Professor		
	Professor		
Total		586	100%
Working experience	Less than a year	22	3.8%
	1-5 years	136	23.2%
	6-10 years	137	23.4%
	11-20 years	161	27.5%
	Over 20 years	130	22.2%
Total		586	100%
Origin of PhD degree	Saudi	151	25.8%
	USA	108	18.4%
	United Kingdom	142	24.2%
	Other	185	31.6%
Total		586	100%
Contract type	Permanent contract	367	62.6%
	Fixed-term contract	219	37.4%
Total		586	100%

4.4 Descriptive Analysis of the Constructs Measurement

This section is divided into three sub-sections. Each section presents the descriptive statistics of participants' answers to the items associated with the different constructs of the study model. It summarises the mean and standard deviation (SD) for the questionnaire items related to all constructs.

4.4.1 Measures of the HR Practices, Career Orientations and Subjective Career Success.

Table 4-3 and Table 4-4 summarise the mean and standard deviation (SD) for the questionnaire items related to all constructs measured by seven-point Likert scale, in which one = "Strongly disagree", and seven = "Strongly agree".

Faculty members' perceptions of HR practices differ across practices. Some of the HR practices the mean for the items was mainly above the midpoint. However, the other HR practices scored less than the midpoint with most of the items. For example, Table 4-3 shows that the means of 3 out of the four items of skills - enhancing practices training were above the midpoint while the item SEPT2 was almost at the midpoint. On average, this indicates that the participants had experienced different training opportunities offered by their universities. As for the motivation-enhancing practices internal mobility, the mean was similar among the five items of these HR practices. The means of the items (including three reversed) were scored above the midpoint. This shows that the participants, on average, had similar views regarding the items measuring the internal mobility HR practices. However, with some aspects of internal mobility practices, the participants had higher positive perceptions while they had lower perceptions with other aspects at the same time.

As regards to motivation-enhancing practices recognition (MEPR1, MEPR2, MEPR3, MEPR4, and MEPR5) and empowerment -enhancing practices participation (EPPP1, EPPP2, EPPP3, and EPPP4) the average scores measuring these items were higher than the midpoint for each item, indicating positive perceptions toward these practices from the study participants.

The standard deviations of all items measuring the HR practices show that the participants had differences in the answers to the items. All the HR practices items have a standard deviation score of more than 1.50.

Table 4-3: Descriptive Statistics of HR Practices Measures

Construct	Items	Mean	SD
Skills - Enhancing Practices Training (SEPT)	SEPT1- Extensive training programmes are provided to me in my job.	4.55	1.72
	SEPT2- In my job, I normally go through training after every few years.	3.90	1.85
	SEPT3- There are formal training programmes to train new faculty members to enhance their skills to perform their jobs well.	5.02	1.91
	SEPT4- Formal training is provided to me to increase my promotability.	4.10	1.87
Motivation - Enhancing Practices Internal mobility (MEPIM)	MEPIM 1- I have few opportunities for promotion. (R)	4.64	1.79
	MEPIM 2- I do not have any future in my university. (R)	5.27	1.84
	MEPIM 3- Promotion in my university is based on seniority. (R)	5.19	1.92
	MEPIM 4- I have clear career paths in my university.	4.80	1.72
	MEPIM 5- Faculties who desire promotion have more than one potential position they could be promoted to.	4.08	1.73
Motivation - Enhancing Practices Recognition (MEPR)	MEPR1- My suggestions regarding work are seriously taken into account.	4.57	1.60
	MEPR2- In this university, people regularly show their appreciation of suggestions that I make.	4.70	1.52
	MEPR3- In this university, the dean or head of department uses different ways to recognise my efforts (oral praise, tickets for cultural events, free dinners etc.).	4.39	1.82
	MEPR4- In this university, I receive recognition in writing from my dean, head of department or deanship of faculty members (e.g. appreciation letters).	4.32	1.85
	MEPR5- The Dean or head of department regularly congratulate sub-ordinates in recognition of their good efforts.	4.92	1.71
Empowerment -Enhancing Practices participation	EEPP1- In my job, I am allowed to make many decisions.	4.28	1.69
	EEPP2- In my job, I am often asked by my dean or head of department to participate in decisions.	4.68	1.64

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(EPPP)	EPPP3- I am provided with the opportunity to suggest improvements in the way things are done.	4.87	1.58
	EPPP4- The Dean or head of department keep open communications with me in this job.	5.11	1.60

Note: N = 586, (R) = reverse-scored, SD = Standard Deviation

Table 4-4: Descriptive Statistics of Career Orientations and Subjective Career Success Measures

Construct	Items	Mean	SD
Boundaryless Career Orientation(BCO)	BCO1- I enjoy working with people outside of my university.	5.59	1.16
	BCO2- I enjoy jobs that require me to interact with people in many different organisations.	5.76	1.17
	BCO3- I enjoy job assignments that require me to work outside of the organisation.	5.42	1.37
	BCO4- I like tasks at work that requires me to work beyond my own department.	5.37	1.39
	BCO5- I would enjoy working on projects with people across many organisations.	5.72	1.13
	BCO6- I have sought opportunities in the past that allow me to work outside the organisation.	4.85	1.71
Protean Career Orientation(PCO)	PCO1- For me, career success is how I am doing against my goals and values.	5.71	1.23
	PCO2- I navigate my own career, mostly according to my plans.	5.44	1.24
	PCO3- If I have to find a new job, it would be easy.	4.55	1.54
	PCO4- I am in charge of my own career.	5.29	1.50
	PCO5- I take responsibility for my own development.	5.94	1.19
	PCO6- Freedom and autonomy are driving forces in my career.	5.63	1.41
	PCO7- For me, career success means having flexibility in my job.	5.81	1.16

Subjective Career Success Satisfaction(SCSS)	SCS1- I am satisfied with the success I have achieved in my career.	5.41	1.41	Faculty members' perceptions of career orientations
	SCS1- I am satisfied with the progress I have made toward meeting my overall career goals.	5.34	1.36	
	SCS1- I am satisfied with the progress I have made toward meeting my goals for income.	4.85	1.55	
	SCS1- I am satisfied with the progress I have made toward meeting my goals for advancement.	5.18	1.40	
	SCS1- I am satisfied with the progress I have made toward meeting my goals for the development of new skills.	5.23	1.35	

are similar across different career orientations. For example, Table 4-4 shows that the means of all items measuring TCO, BCO and PCO were above the midpoint. On average, this indicates that the participants had positive perceptions toward each type of these career orientations. This was explained in the career literature where the individual might have more than one of career orientation but one higher than the other (Baruch, 2006;2014).

As regards to subjective career success satisfaction, the means of all items were above the midpoint of the measuring scale, showing that the participants were satisfied in term of their subjective career success. The standard deviations of all items measuring the different career orientations and subjective career success satisfaction show that the participants had differences in the answers to the items. All these items have a standard deviation score of more than 1.13.

4.4.2 Measures of the Faculty Member Research Performance and Objective Career Success.

Table 4-5 and Table 4-6 present the descriptive statistics (frequency and percentage) for the questionnaire questions related to the constructs of research performance, promotion and salary.

The descriptive statistics of the research performance and promotion is presented in Table 4-5. The participants were diverse in term of the number of research performance. Some faculty members had zero of research outcomes, while others had a very high number of research outcomes. For example, 8.2% (n=48) of the participants had zero of research work, whereas 9.9% (n=52) of the participants

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had over than 100 research outcomes. Additionally, half of the participants in the study (51 %, n=299) had between 1 to 20 research outcomes, followed by faculty members with research outcomes between 21 to 40 (n=92), representing 15.7% of the study sample. The remain their research performance were as the following 7.8 %(n=46) between 41 to 60, then 4.1% (n=24) between 61 to 80, and, last 4.3% (n=25) between 81 to 100. Notably, this variation in research outputs among faculty members is considered normal. Previous studies (discussed in Chapter 2) indicate that some faculty members are more active than others regarding research outcomes. Also, more than half of the participants in the study (65.5%, n=384) of the participants had between 1 to 5 promotions.

As for the salary, the participants were asked to report the range of their salary in two different times of their career, when they obtained their PhD and the current salary. Table 4.6 presents the frequency and percentage of the participants' answer to the salary question. As expected, Table 4.6 shows that the participants' salary mostly increases when comparing the participants' salary once PhD degree obtained and current salary. For example, 51.4% (n=301) of the participants' salary was up to 11999 SAR when obtained their PhD, where only 8.9% (n=52) of the participants' current salary was up 11999 SAR. In contrast, the table shows that only 10.1% (n=59) of the participants' salary was over 19999 SAR when obtained their PhD, where 52.2% (n=306) of the participants' current salary was over 19999 SAR.

Table 4-5: Descriptive Statistics of Research Performance and Promotion

Variable	Category	Research Sample (n = 586)	
		Frequency	Percentage (%)
Research performance	0	48	8.2%
	1-20	299	51 %
	21-40	92	15.7%
	41-60	46	7.8%
	61-80	24	4.1%
	81- 100	25	4.3%
	Over 100	52	8.9%
Total		586	100%
promotion	0	144	24.6%

	1 -5	384	65.5%
	6-10	57	9.7%
	Over 10	1	0.2%
Total		586	100%

Table 4-6: Descriptive Statistics of Faculty Member Income

Variable	Category	Frequency		Percentage (%)	
		Since PhD obtained	Today	Since PhD obtained	Today
Salary	up to 7,999				
	8,000- 9,999				
	10,000- 11,999				
	12,000- 13,999	102	0	17.4%	0.0%
	14,000- 15,999	83	13	14.2%	2.2%
	16,000- 17,999	116	39	19.8%	6.7%
	18,000- 19,999	83	47	14.2%	8.0%
	20,000- 21,999	53	47	9.0%	8.0%
	22,000- 23,999	50	68	8.5%	11.6%
	24,000- 25,999	40	66	6.8%	11.3%
	26,000- 27,999	31	68	5.3%	11.6%
	28,000- 29,999	14	67	2.4%	11.4%
	30,000- 31,999	14	48	2.4%	8.2%
	32,000- 33,999	0	123	0.0%	21.0%
	34,000- 35,999				
	36,000- 37,999				
38,000- 39,999					
40,000- 41,999					
42,000- 43,999					
44,000- 45,999					
46,000- 47,999					
48,000- 49,999					
50,000- 51,999					
52,000- 53,999					
54,000- 55,999					
56,000- 57,999					
58,000- 59,999					
60,000- 61,999					
62,000- 63,999					
64,000- 65,999					
66,000- 67,999					
68,000- 69,999					
70,000- 71,999					
72,000- 73,999					
74,000- 75,999					
76,000- 77,999					
78,000- 79,999					
80,000- 81,999					
82,000- 83,999					
84,000- 85,999					
86,000- 87,999					
88,000- 89,999					
90,000- 91,999					
92,000- 93,999					
94,000- 95,999					
96,000- 97,999					
98,000- 99,999					
100,000 and over					
Total		586		100%	

4.5 Summary

This chapter presents three important aspects relating to data analysis before testing the research model takes place. In the first section of the chapter, a review of the response rate and non-response bias was presented. The questionnaire reached a positive response rate of 58.6% and the results from the test of the non-response bias indicated that non-response bias is not likely to consider a problem in the current study.

The second section reviewed the profiles of the participants in the study. The total of study participants was 586 after desalted the uncompleted questionnaires. More than half of them (69.5%) were male faculty members where the female faculty members were only 30.9%. The participants were 120 from KSU, 122 from UQU, 117 from KFU, 115 from KAU, and 112 from KFUPM.

In the last section of the chapter, the descriptive statistics of the main constructs measures were presented. The participants' perceptions of different HR practices differed across practices. The average scores of MEPI items were less than the midpoint, whereas, for example, the EEPP items on average were higher than the midpoint of the measuring scale. The means also shown that participants were satisfied with their career success. Furthermore, 51% of the participants, had between 1 to 20 research outcomes, and 65.5% of the participants had between 1 to 5 promotions.

The next chapter presents data preparation and screening, along with the procedures and results of SEM for multivariate analysis to test the measurement and structural model.

Chapter 5: Data Analysis: Structural Equation Modelling

5.1 Introduction

The previous chapter reviewed the descriptive results of the demographic and academic profiles, along with the key constructs measures for the study model. This chapter aims to present the results of testing the measurement model and study hypotheses using SEM procedures. This chapter divided into three primary subsections. The first section presents data preparation and screening processes to ensure that the SEM requirements are met in the study data. This includes the test of missing data, outliers, and normality (Hair *et al.*, 2010) and internal consistency of the measures' items using Cronbach's alpha and the item-total correlation (Field, 2009; Pallant, 2013). The second section presenting the results of the Confirmatory Factor Analysis (CFA) which performed to validate the measurement model. The last section presents the results of the structural model test, including the test of the research hypotheses that were developed in Chapter two.

Mplus version 8 was used for SEM procedures and testing the present research hypotheses (Muthén and Muthén, 2017). This approach considered to be appropriate due the following, the complexity of research model, the size of the study sample (n=586), and the need to examine the structural relationships simultaneously. It is worth to mention that all SEM results presented in this chapter will be discussed further in detail in the subsequent chapter.

5.2 Data Preparation and Screening

Data preparation and screening is an important stage before SEM can take place (Kline, 2005). This stage includes assessing the effect of missing data, detecting outliers, and testing for the normality. Although this stage of data analysis may be time-consuming, good preparing and screening of the data can help minimise bias and non-significant results (Kline, 2005; Hair *et al.*, 2010). Additionally, Kline (2005) explained that this part of the analysis is essential for the following reasons; (1) most of the SEM estimations methods required to meet specific assumptions about the data distribution, and (2) any problem in

the data could affect the assessment of the model. Consequently, before to apply SEM analysis, the following subsections will discuss the issues of missing data, outliers and normality.

5.2.1 Missing Data

Missing data is one of issue that mostly appears in quantitative studies (Peugh and Enders, 2004) specifically when questionnaires used as a way to gather information (De Leeuw, Hox and Huisman, 2003). Missing data occurs when a participant leaves one or more questions unanswered, whether intentionally or unintentionally (Veal, 2005). According to Hair *et al.* (2010), there are two main effects of missing data: 1- missing data could cause the loss of statistical power in the analysis, 2- it could bias the findings as it can affect the accuracy of statistical estimation in the analysis. Researchers explained that two concerns must be taken into account when coming to missing data (Tabachnick and Fidell, 2001; Byrne, 2010). The first concern is the quantity of missing data. There is no specific rule of what is considered large or considered acceptable for missing data. However, scholars suggest that 5% up to 10% of missing data in one variable is not considered large (Kline, 2005; Cohen *et al.*, 2013) but caution should be taken when the amount of missing data is more than 10% because it could affect the results of the model fit (Hair *et al.*, 2010). The second concern is the pattern of missing data. The missing data are considered to be less serious if only little data from the large dataset were missing at random (MAR) or missing completely at random (MCAR) (De Leeuw, Hox and Huisman, 2003; Kline, 2005). However, the missing data can be serious and need to be addressed before the analysis of the data is not missing at random (missing in the systematic pattern).

The problem of missing data might be hard to be prevented, but it can be minimised. One of the main reason for causing the problem of missing data is the design and structure of the research questionnaire. Kline (2011) argued that missing data happens when the questionnaire is too long in which scaring the respondents. Therefore, De Leeuw, Hox and Huisman (2003) emphasised that researchers need to develop well-designed questionnaires that comprehensively pretested in order to minimise the missing data. In this current study, these suggestions and other important aspects were taken into account when developing the research questionnaire (see Chapter 3, section 3.11). This may explain the few amounts of missing data in this research (only eight questionnaires out of 594 had missing data). Additionally, the questionnaire

received much positive feedback from the study participants regarding its design, structure and length, where the average time taken by the study participants to complete the questionnaire was 9 minutes. Perhaps, the length of the questionnaire contributed to minimising the issue of missing data.

For handling the missing data issue, Hair *et al.* (2010) differentiated between different methods of missing data remedies and suggested which method can be used based on the amount and the pattern of the missing data. For this current research the method of Listwise deletion (also known as case deletion) found to be appropriate to address the missing data for several reasons. This approach is simple and is usually suitable for the situation that had a small number of the deleted incomplete questionnaire. This approach also is the most used method for treating the missing data in the behavioural and social sciences discipline (Peugh and Enders, 2004), aseptically, if the data were MCAR (Hair *et al.*, 2010). Additionally, this approach limits bias in the results for estimation if the data were MCAR (Peugh and Enders, 2004). Moreover, Hair *et al.* (2010) emphasised that for data analysis using SEM, case deletion is considered the most proper remedy for addressing the issue of missing data.

Table 5-1 below illustrates the percentage and frequency of missing data on all key constructs of the study model. As shown in Table5-1, the missing data ranging from 0,1% to 0.7% for all constructs which are considered relatively small and far away from the advised amount (5% to 10 %) of an acceptable percentage of missing data (Kline, 2005; Cohen *et al.*, 2013; Byrne, 2010). As mentioned above, only eight questionnaires that had missing data in this research, and all of them were excluded from the dataset before analysis as to the fact that these questionnaires had missing data above 15% and especially, some of them had missing data even above of 50%. According to Hair *et al.* (2016a) when a questionnaire had the amount of the missing data exceeds 15%, typically, it should be omitted from the dataset file. Furthermore, they claim that a questionnaire can be excluded from the final dataset even if the amount of missing data is less than 15% (Hair *et al.*, 2016a). Although the deletion of the 8 cases reduced the total sample size of the study, the remaining cases found to be sufficient to conduct the SEM analysis. Indeed, the percentage of deleted cases does not exceed 1.3%, of the total cases which assumed to have no effects on the results of the analysis (Tabachnick and Fidell, 2001).

Table 5-1: Summary Statistics of Missing Data

Items		Missing		Items		Missing	
		Cases	%			Cases	%
Skills -Enhancing Practices Training (SEPT)	SEPT1	0	.0%	Boundaryless Career Orientation (BCO)	BCO1	1	0.2%
	SEPT2	1	0.2%		BCO2	1	0.2%
	SEPT3	1	0.2%		BCO3	2	0.3%
	SEPT4	0	.0%		BCO4	1	0.2%
Motivation -Enhancing Practices Internal mobility (MEPIM)	MEPIM 1R	0	.0%		BCO5	1	0.2%
	MEPIM 2R	1	0.2%		BCO6	1	0.2%
	MEPIM 3R	0	.0%	Protean Career Orientation (PCO)	PCO1	1	0.2%
	MEPIM 4	1	0.2%		PCO2	1	0.2%
	MEPIM 5	0	.0%		PCO3	1	0.2%
Motivation -Enhancing Practices Recognition (MEPR)	MEPR1	0	.0%		PCO4	2	0.3%
	MEPR2	1	0.2%		PCO5	1	0.2%
	MEPR3	1	0.2%		PCO6	2	0.3%
	MEPR4	1	0.2%		PCO7	1	0.2%
	MEPR5	0	.0%	Subjective Career Success Satisfaction (SCSS)	SCSS1	1	0.2%
Empowerment - Enhancing Practices participation (EPPP)	EEPP1	1	0.2%		SCSS2	2	0.3%
	EEPP2	1	0.2%		SCSS3	3	0.5%
	EEPP3	1	0.2%		SCSS4	2	0.3%
	EEPP4	3	0.5%		SCSS5	1	0.2%
Age		2	0.3%	Research Performance	1	3	0.5%
Gender		2	0.3%		2	2	0.3%
Marital		2	0.3%		3	2	0.3%

Citizen	2	0.3%		4	2	0.3%
Employer	1	0.2%		5	2	0.3%
Academic rank	4	0.7%		6	2	0.3%
Work experience	2	0.3%		7	2	0.3%
Origin of PhD degree	2	0.3%	Income	Previous	3	0.5%
Contract type	2	0.3%		Current	3	0.5%
Promotion	4	0.7%				

5.2.2 Checking for Outliers

An outlier is a value within the case that deviates extremely from the other cases values (Tabachnick and Fidell, 2001). Those outlier's values may appear on one or more variables within a case. The existence of the outliers in the dataset could negatively affect the results of the analysis and limit its generalizability. Outliers may appear as a result of data error such as incorrect recoding variables, errors in sampling, or error in data entry etc. (Hair *et al.*, 2016a). Although there is no agreed definition of extreme value among scholars, Hair *et al.* (2010) explained that cases with standardised items values above ± 2.5 from the mean in small samples (80 or fewer cases) and the score of ± 3.0 in bigger sample sizes are considered an outlier.

Outliers can be detected using different methods including a univariate, bivariate, and multivariate (Tabachnick and Fidell, 2001; Hair *et al.*, 2010). According to Hair *et al.* (2010) univariate and multivariate methods are recommended to be used when detecting the outliers, thus, for this present study, both methods were used to identify the outliers. The bivariate outlier was not considered as it involves a large number of graphs and examining two variables at the same time (Kline, 2005; Hair *et al.*, 2010). The univariate method deals with extreme values within a single variable, while multivariate method deals with extreme values within a case using multiple variables (Kline, 2005).

According to Hair *et al.* (2010) univariate outliers can be found using the standardised scores for every single variable, in which standardised scores

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exceed ± 2.5 in a small sample and ± 4 in a large sample is an univariate outlier. However, multivariate outliers can be detected using the Mahalanobis D2 measure. The Mahalanobis D2 estimates the distance of each case from the mean centre of all cases on two or more variables (Tabachnick and Fidell, 2001). According to Hair *et al.* (2010), a case considered multivariate outlier when the value of $D2/df$ (degree of freedom) exceeds 2.5 in a small sample and 3 or 4 in large samples and the probabilities related with the D2 are 0.001 or less.

Following the above approaches, only 13 cases were identified as univariate outliers as they had standardised value above 4 with one variable namely research performance. However, no cases were found to be multivariate outliers ($D2/df < 4$ for all cases) (see Appendix E).

As the results of the outliers showed, only a few cases (13 cases out of 586) were identified as outliers, however, deleting them was not considered for the following reasons. First of all, there was not sufficient evidence that these outliers are not part of the study target population. It is normal to have a difference in research performance among faculty members, and it is natural that some faculty members have a higher research output than others. Second, Hair *et al.* (2010), emphasised the deletion of outliers could enhance the multivariate analysis but limiting its generalizability. They indicated if there is insufficient proof showing that outliers are not part of the study population, then, the outliers should not be deleted to ensure generalizability to the whole study population (Hair *et al.*, 2010). Finally, Kline (2005) argued that having a few outliers within a large dataset should not be a big concern. Alternatively, the researcher decided using the transformation of the research performance variable to not only reducing potential outliers' impact but also improving the normality of distributions. According to Tabachnick and Fidell (2001) transformations are used as a remedy for both reducing univariate outliers impact and improving the normality of distributions. Accordingly, all cases become free of outliers after transforming the research performance variable.

5.2.3 Evaluating Normality

The normality of the data is an important assumption underlying multivariate analysis (Tabachnick and Fidell, 2001). Normality refers to which extent the distribution of the data correspond with a normal distribution (Hair *et al.*, 2010). According to Kline (2005), most of the estimation techniques used for SEM assume that the data are normally distributed. Therefore, a researcher should pay

careful attention to assessing normality before SEM can be employed. The evaluation of normality can be done through univariate and multivariate assessment. However, scholars argue that the results of univariate normality help to see if the multivariate normality might be a problem. According to Hair *et al.* (2010) and Tabachnick and Fidell (2001), the multivariate normality can be assumed not to be problematic when the data were univariate normal. Univariate normality can be evaluated using two measures: skewness and kurtosis (Tabachnick and Fidell, 2001). Skewness refers to the degree of balance of the distribution around the mean. A skewed variable means that the mean of this variable is not in the centre, whereas a positive skewness means the distribution moved to the left and a negative skewness means the distribution moved to the right. On the other side, kurtosis refers to the sharpness of the distribution curve in term of the degree of peakedness or flatness.

Skewness and kurtosis were both used to check the normality of data for each variable in this present study. There is no rule of thumb in the litterateur about the acceptable value of skewness and kurtosis. According to Hair *et al.* (2016a) the values of skewness and kurtosis should not be outside the range of -1 to 1. However, Curran, West and Finch (1996) specify that skewness values falling under the range of 2 and kurtosis under the range 7 suggesting no serious issues of the normality assumption. Additionally, Kline (2005) suggests that skewness values 3 or less, and kurtosis values no greater than 10 indicates an acceptable level of skewness and kurtosis.

Consequently, Table 5-2 illustrates the skewness and kurtosis for the study variables. The results demonstrate that all the items within the acceptable range of skewness or kurtosis values, where all the items have a value of skewness less than 1.64, and value kurtosis less than 3.01. Based on the results, all items in the current study seemed to be normally distributed. Thus, no additional remedies for the data were considered.

Table 5-2: Evaluating Normality

Items		Statistic		Items		Statistic	
		Skewness	Kurtosis			Skewness	Kurtosis
Skills -Enhancing Practices Training	SEPT1	-0.67	-0.55	Motivation -Enhancing Practices Recognition (MEPR)	MEPR1	-0.68	-0.37
	SEPT2	-0.10	-1.27		MEPR2	-0.79	-0.17
	SEPT3	-0.90	-0.39		MEPR3	-0.53	-0.89
	SEPT4	-0.20	-1.13		MEPR4	-0.48	-0.96
					MEPR5	-0.82	-0.19
Motivation -Enhancing Practices Internal mobility (MEPIM)	MEPIM 1R	-0.54	-0.80	Empowerment -Enhancing Practices participation	EEPP1	-0.44	-0.87
	MEPIM 2R	-1.00	-0.85		EEPP2	-0.84	-0.21
	MEPIM 3R	-0.96	-0.25		EEPP3	-0.96	0.27
	MEPIM 4	-0.65	-0.47		EEPP4	-1.09	0.62
	MEPIM 5	-0.23	-0.94	Protean Career Orientation (PCO)	PCO1	-1.45	3.00
Subjective Career Success Satisfaction (SCSS)	SCSS1	-1.21	1.27		PCO2	-1.04	0.90
	SCSS2	-1.11	1.10		PCO3	-0.47	-0.29
	SCSS3	-0.81	-0.04		PCO4	-1.04	0.62
	SCSS4	-0.95	0.48		PCO5	-1.49	2.28
	SCSS5	-0.98	0.86		PCO6	-1.34	1.67
Boundary less Career Orientati on	BCO1	-0.87	0.65				
	BCO2	-1.09	1.09				

	BCO3	-1.04	0.816		PCO7	-1.22	1.68
	BCO4	-0.98	0.74	Income change		0.66	-0.67
	BCO5	-0.99	0.91	Research performance		0.02	-0.57
	BCO6	-0.62	-0.57	Promotion		1.63	2.22

5.2.4 Internal Consistency of the Measures Items

This section highlights the results of reliability for all constructs measured by Likert scales. According to Nunnally (1994), the reliability of a multi-item scale is recommended to perform prior to the Confirmatory factor analysis (CFA). One of the most common approaches to testing reliability is internal consistency. This method is assessing how well the items in term of measuring the same underlying construct. In order to calculate the internal consistency of the measuring items of each construct, Cronbach's alpha and the item-total correlation was used (Pallant, 2013).

5.2.4.1 Cronbach's Alpha

Cronbach's alpha coefficient is one of the most widely accepted approaches when examining the internal consistency reliability of a multi-item measure (Hair *et al.*, 2010; Pallant, 2013). There is no firm rule of how high Cronbach's alpha value considered as an indicator of acceptable reliability. However, Hair *et al.* (2010) suggested that in general the Cronbach's alpha of 0.70 or above is acceptable. Nevertheless, Murphy and Davidshofer (1988) illustrated that Cronbach's alpha of 0.60 is the lowest acceptable value. Similarly, Loewenthal (2001) demonstrated that scale with a small number of items (less than 10) is less likely to obtain a high-reliability coefficient, thus, considering using slight lower standards (about 0.60) is acceptable especially when the scale well established. A low Cronbach's alpha value specifies that some items are not consistent with others in term of what they meant to be measured, therefore, these items can be recognised and consequently discarded before to CFA.

The results of the internal consistency analysis are shown in Table 5-3 for the scales used in the present study. Notably, the Cronbach's alpha scores are above

0.70 for all constructs. Notably, Cronbach's alpha scores of some constructs can be improved when some items are removed. The possibility of item deletion will be discussed further in the subsequent section. The upcoming section reviews the results of the item-total correlation for all items. Kline (2005) indicates that using Cronbach's alpha value should be with carefulness as it is sensitive to the scales number of items. In other words, there is a positive relationship between the numbers of items and the scale Cronbach's alpha value (Field, 2009). Consequently, Pallant (2013) suggests that researchers should calculate and report item-total correlation for the items since the Cronbach's alpha score can be influenced by the number of items. Accordingly, the item-total correlation was also presented in Table 5-3.

5.2.4.2 Item-Total Correlation

Item-total correlation demonstrates the degree for correlation of each item with the total score (Hair *et al.*, 2010). An item with low total correlation score (less than 0.30) indicates that the item is not consistent with the whole scale in term of measuring the same construct (Field, 2009; Pallant, 2013).

The results of the item-total correlations analysis are also summarised in Table 5-3. As can be seen in the Table, most items have value exceed 0.30, which indicate an acceptable level of correlation between items measuring their allocated construct. In reviewing the results, all items had values of item-total correlation above 0.30.

Overall, the results of Cronbach's alpha values and item-total correlations are encouraging. These results indicate that the scales used in this study can be considered reasonably reliable. Nonetheless, it should be noted that even all items were above 0.30, item deletion could be implemented in order to increase the alpha value. For example, based on the results on Table 5-3, Cronbach's alpha for SEPT scale is above the suggested cut-off value 0.70 ($\alpha=0.79$). However, if item SEPT2 is deleted, then the Cronbach's alpha value would increase from 0.79 to 0.81 in this current study. Also, the deletion of item BCO6 will increase Cronbach's alpha for this construct from 0.85 to 0.88 in this present study. The next stage will be CFA. Further investigation of items deletion might be discussed in the CFA in order to ensure that the measurement model meets the overall model fitness criteria.

Table 5-3: Reliability Test of the Constructs

Items		Statistic			Items		Statistic		
		Item-total correlation	α if item deleted	α			Item-total correlation	α if item deleted	α
Skills -Enhancing Practices Training (SEPT)	SEPT1	0.69	0.69	0.79	Motivation -Enhancing Practices Recognition (MEPR)	MEPR 1	0.70	0.84	0.87
	SEPT2	0.44	0.81			MEPR 2	0.72	0.84	
	SEPT3	0.62	0.72			MEPR 3	0.69	0.85	
	SEPT4	0.66	0.70			MEPR 4	0.66	0.85	
Motivation -Enhancing Practices Internal mobility (MEPIM)	MEPIM 1R	0.72	0.80	0.85		MEPR 5	0.73	0.83	
	MEPIM 2R	0.77	0.79						
	MEPIM 3R	0.67	0.82		Empowerment -Enhancing Practices participation (EEPP)	EEPP 1	0.66	0.89	
	MEPIM 4	0.65	0.82			EEPP 2	0.77	0.85	
	MEPIM 5	0.49	0.86			EEPP 3	0.83	0.82	
Subjective Career Success Satisfaction	SCSS1	0.75	0.87	0.90	EEPP 4	0.75	0.85	0.80	
	SCSS2	0.82	0.86		Protean Career Orientation (PCO)	PCO1	0.59		0.77
	SCSS3	0.63	0.90			PCO2	0.53		0.78

	SCSS4	0.83	0.86			PCO3	0.47	0.79		
	SCSS5	0.73	0.88			PCO4	0.61	0.76		
Boundaryless Career Orientation (BCO)	BCO1	0.58	0.84	0.85		PCO5	0.54	0.78		
	BCO2	0.70	0.82			PCO6	0.60	0.77		
	BCO3	0.78	0.80			PCO7	0.47	0.79		
	BCO4	0.70	0.82							
	BCO5	0.73	0.81							
	BCO6	0.45	0.88							

5.3 Validation of Measurement Model

This section discusses the assessment of the overall measurement model. In this stage, factor analysis was performed in order to evaluate constructs measures. All results from this analysis were reported and discussed below.

5.3.1 CFA versus Exploratory Factor Analysis (EFA)

CFA and EFA are the main types of factor analysis. CFA usually performed when the researcher has prior knowledge of the underlying measure items of the construct. In other words, CFA is appropriate when the measures used in the study are driven from existing theory and well defined in the literature (Kline, 2005; Hair *et al.*, 2010). By contrast, EFA often utilised to evaluate new establish measures (Hair *et al.*, 2010). Many researchers performed EFA when they do not have previous knowledge of the underlying measures. The EFA is in the sense that the researcher is not sure that the items do, certainly, measure the intended construct. Therefore, EFA is suitable for the situation where the researcher uses new establish measure.

Based on the above discussions, CFA appears to be more appropriate for the current study. In this present study, all the measures were adopted from previous studies and widely used in the literature. Hence, the CFA method was adopted to evaluate the fitness of the measurement.

5.3.2 The Criteria of the Model Fit

The primary objective of conducting CFA is to assess the model fit. Goodness-of-fit evaluates the degree of consistency between the proposed measurement model and the actual covariance matrix. In other words, Goodness-of-fit measure how well the data fit the proposed model (Kline, 2005). There three different groups of Goodness-of-fit measurers classified by researchers. These are absolute measures, incremental measures and parsimony measures (Hair *et al.*, 2010). Absolute fit indices are measuring how well the proposed model by researcher reproduces the observed data. According to Hair *et al.* (2010), the absolute fit indices offer the most basic assessment of how well a researcher's proposed model fits the sample data. The incremental fit indices group evaluate the proposed model in term of how well it fits comparative to some substitute baseline model which is often indicated to as null model(Hair *et al.*, 2010). The last group is parsimony fit indices. This group of indices specifically developed to offer information about which model amongst a set of competing models is better, given its fit comparative to its complexity (Byrne, 2010). Table 5-4 summarises the absolute, incremental and parsimony fit indices that suggested by scholars (Hu and Bentler, 1999; Kline, 2005; Hair *et al.*, 2010). Before moving to the test of the structural model the measurement model should be reached a good overall fit. If the overall fit Indices of the measurement model fail to meet adequate values, the model modification is then essential in order to improve the overall fit.

There is much debate on what indices research should report assessing the goodness-of-fit of the measurement model. One of the most well-known indices that usually reported to evaluate the model fit is Chi-square (χ^2) value. However, the χ^2 value is sensitive to model complexity and sample size, therefore, the researchers do not recommend using it as the sole model fit indices.

Alternatively, it been suggested that using three to four fit indices offers adequate evidence of the overall model fit (Hair *et al.*, 2010). According to Hair and his colleagues, a researcher should report at least besides the χ^2 value one absolute fit index and one incremental index. Accordingly, the SRMR and RMSEA were reported in the present study as absolute fit indices, and the CFI and TLI were reported as incremental fit indices.

The next section reviews the results of the CFA for the complete measurement model rather than individual constructs based on the suggestion provided by Hair *et al.* (2010).

Table 5-4: Summary of Goodness-of-fit Indices

Index	Full name	Acceptable fit
Absolute fit measures		
χ^2	Chi-square	small χ^2 value and $p > 0.05$
χ^2/df	Normed Fit Chi-square	Value < 2 or up to 5
GFI	Goodness-of-Fit Index	Value >0.90
RMSEA	Root Mean Square Error of Approximation	A value between 0.05 and 0.08
SRMR	Standardised Root Mean Residual	Value ≤ 0.08
Incremental fit measures		
NFI	Normed Fit Index	Value ≥ 0.90
TLI	Tucker-Lewis Index	Value ≥ 0.90
CFI	Comparative Fit Index	Value ≥ 0.90
Parsimony fit measures		
AGFI	Adjusted Goodness-of-Fit Index	Value ≥ 0.80
PNFI	Parsimony Normed Fit Index	Greater values indicate well fit

Source: Adopted from Hu and Bentler (1999); Kline (2005); Hair *et al.* (2010)

5.3.3 CFA Results for the Measurement Model

At this stage, CFA was performed for the overall measurement model. All items allocated to each scale were integrated into the examined measurement model since all scales have obtained acceptable reliability score as discussed in Section 5.2.4.

5.3.3.1 Goodness-of-fit Indices

The results of the overall measurement model indices are: $\chi^2 = 1177.559$, $p < 0.001$, $df = 706$, $\chi^2 / df = 1.66$, $CFI = 0.96$, $TLI = 0.96$, $SRMR = 0.03$, $RMSEA = 0.03$. This result of the measurement model is after the deleting of items (PCO3 and PCO7) which will be discussed later in this section. It is worth mentioning, that even before deleting these items, the measurement model indices were met the criteria of the good fit ($\chi^2 = 1370.850$, $p < 0.001$, $df = 826$, $\chi^2 / df = 1.65$, $CFI = 0.96$, $TLI = 0.95$, $SRMR = 0.03$, $RMSEA = 0.04$). Overall, the results of the CFA indicates that the measurement model has a good fit for the sample data. Regardless χ^2 is statistically significant; all other indices are satisfactory. For example, CFI and TLI values are above the recommended cut-off value of 0.90. Also, SRMR and RMSEA are far below the acceptable cut-off value 0.08 and 0.05.

Similarly, the score of χ^2 / df is also below the suggested value two up to five. In term of the significant of χ^2 , it is common as discussed in section 5.3.2 above; this value is largely sensitive to the size of the sample in which the χ^2 value is usually expected to be significant with large sample size (Hair *et al.*, 2010). Therefore, Hair *et al.* (2010) recommended that using three to four different fit indices should be sufficient proof of the overall model fit. Based on the CFA results the overall measurement model fitness is viewed as reasonable. Table 5-5 summarised the results of CFA.

Table 5-5: the Results of Goodness-of-fit Indices

Goodness-of-fit Indices	Statistics final model	Statistics initial model
χ^2	1177.559 ($p < 0.001$)	1370.850 ($p < 0.001$)
df	706	826
χ^2 / df	1.66	1.65
CFI	0.96	0.96
TLI	0.96	0.95
SRMR	0.03	0.03
RMSEA	0.03	0.04

5.3.3.2 Convergent Validity, Unidimensionality and Reliability

Table 5-6 presents the estimates of standardised loading for items onto their respective constructs ranging between 0.48 and 0.91, with all scores significant at $p < 0.001$. As shown in Table, standardised loading for all items exceed the suggested value of 0.50 (Hair *et al.*, 2010), except for the items SEPT2 (0.49) and BCO6 (0.48). However, removing them was not considered as they do not have a major impact on the overall model fit, nor do they affect the average variance extracted (AVE), and composite reliability (CR) of their constructs. According to Hair *et al.* (2016a) items with loading between 0.40 and 0.70 should not be deleted if they do not result in decrease of their constructs CR or AVE below the set threshold. Further, based on the cut-offs values suggested by Tabachnick and Fidell (2001) standardised loading of 0.45 considered fair. Notably, these two items are closely to 0.50.

In term of AVE, CR and Cronbach's alpha of constructs, as can be seen in Table 5-6, all values have exceeded the suggested thresholds of 0.50, 0.70 and 0.70, respectively except for the AVE of the constructs of PCO (0.37). Closer inspection of the factor loadings for items belong to this construct revealed that possible deletion of some items could be made in order to improve the AVE of this

construct. For example, removing items PCO3 and PCO7 increase the AVE value of the construct to 0.42. Although the new AVE value of the PCO construct did not exceed the suggested thresholds of 0.50, the researcher decided to keep it because it did not influence the overall fit of the measurement model. Moreover, Fornell and Larcker (1981) explained that an AVE value of 0.40 is acceptable if the CR is higher than 0.60 and that the convergent validity of the construct remains satisfactory. Notably, the CR of the PCO construct is 0.78. That being said, the CFA results demonstrate that the subjects of convergent validity, unidimensionality, and reliability are not a major concern and the items satisfactorily represent the theoretical underpinning of the constructs (Hair *et al.*, 2010).

5.3.3.3 Discriminant validity

After confirming the convergent validity, reliability and unidimensionality, this section aims to test the discriminant validity of the constructs. Discriminant validity was assessed by two methods in the current study: 1) the correlation matrix among constructs is less than 0.85 (Kline, 2005); 2) the square root of AVE for each construct is greater than its inter-correlation with any other construct (Fornell and Larcker, 1981; Hair *et al.*, 2010). The results of the discriminant validity assessment are presented in Table 5-7 below. As shown in Table 5-7, all the correlations among constructs were below the recommended value of 0.85. Moreover, the square root of the AVE for each construct (bold formatted numbers) is higher than inter-correlation among the constructs, except for the inter-correlation between MEPR and EEPP. In order to investigate this deeper, the researcher used other methods to ensure that each of these two constructs discriminates from each other.

For example, Hair *et al.* (2010) explained that discriminant validity could be evaluated between two constructs by comparing the fit of the one-factor model (all items assigned to one construct) and the two factors model (each item assigned to its original construct). If the fits of these two model were significantly changed, this would suggest that these items represent two single constructs. Following this method showed that the fits of the two model are significantly different which suggest that these items are measuring two different constructs (CFI 0.87, TLI 0.83, SRMR 0.55 of the one-factor model, and CFI 0.93, TLI 0.91, SRMR 0.40 of two factors).

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Additionally, discriminant validity is also established if the loading of each item is more closely linked to its allocated construct in the model than to other constructs. Examining the cross-loading between these two constructs demonstrates that items load more highly on their assigned construct than on other constructs. Furthermore, discriminant validity can be established by the AVE of the construct is higher than 0.50 (Hair *et al.*, 2010). Giving that, the AVE of these two constructs was greater than 0.50 as shown in Table 5-6.

Overall, the results of the analysis suggest that the constructs possess the discriminant validity in this current study.

Table 5-6: Convergent Validity and Reliability

Construct		Standardised Loading	Error variance	AVE	CR	Cronbach's Alpha
Skills -Enhancing Practices Training (SEPT)	SEPT1	0.79	0.36	0.51	0.79	0.79
	SEPT2	0.49	0.75			
	SEPT3	0.75	0.43			
	SEPT4	0.77	0.40			
Motivation -Enhancing Practices Internal mobility (MEPIM)	MEPIM 1R	0.73	0.45	0.58	0.86	0.85
	MEPIM 2R	0.85	0.26			
	MEPIM 3R	0.67	0.54			
	MEPIM 4	0.78	0.38			
	MEPIM 5	0.74	0.44			
Motivation -Enhancing Practices Recognition (MEPR)	MEPR1	0.78	0.39	0.57	0.86	0.87
	MEPR2	0.76	0.41			
	MEPR3	0.75	0.43			
	MEPR4	0.71	0.49			
	MEPR5	0.77	0.39			
Empowerment - Enhancing Practices participatio	EEPP1	0.71	0.48	0.678	0.891	0.88
	EEPP2	0.82	0.32			
	EEPP3	0.91	0.16			

	EEPP4	0.83	0.30			
Protean Career Orientation (PCO)	PCO1	0.61	0.62			
	PCO2	0.64	0.58			
	PCO4	0.69	0.52	0.42	0.78	0.78
	PCO5	0.62	0.60			
	PCO6	0.66	0.55			
	Boundaryless Career Orientation (BCO)	BCO1	0.59	0.64		
BCO2		0.75	0.42			
BCO3		0.90	0.17			
BCO4		0.78	0.37	0.55	0.87	0.85
BCO5		0.86	0.25			
BCO6		0.48	0.76			
Subjective Career Success Satisfaction (SCSS)	SCSS1	0.72	0.47			
	SCSS2	0.75	0.42			
	SCSS3	0.75	0.42	0.563	0.861	0.90
	SCSS4	0.78	0.38			
	SCSS5	0.72	0.47			

Table 5-7 Inter-Correlations and Square Root of the AVE

(N = 586)	SEPT	MEPIM	MEPR	EEPP	PCO	BCO	SCSS
Training, SEPT	0.714	-	-	-	-	-	-
Internal mobility, MEPIM	0.432***	0.761	-	-	-	-	-
Recognition, MEPR	0.560***	0.495***	0.754	-	-	-	-
Participation, EEPP	0.470***	0.400***	0.845***	0.818	-	-	-
Protean Career Orientation, PCO	0.190***	0.311***	0.281***	0.247***	0.648	-	-
Boundaryless Career Orientation, BCO	0.032	-0.080	-0.068	-0.045	0.241***	0.741	-
Career satisfaction, SCSS	0.339***	0.371***	0.427***	0.335***	0.513***	0.096	0.748

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

5.3.3.4 Assessment of Common Method Bias

As with the method of self-report data, there is the possibility for the existence of common method bias. Following the suggestion of Podsakoff *et al.* (2003), two statistical tests were employed to identify the extent of common method bias in the current study. First, Harman's single-factor test was performed (Podsakoff and Organ, 1986). The constructs load into factor analysis and the number of factors constraint to one. The results from this test revealed the presence of effects of common method bias is not likely a major concern for the present study. The total variance that explained by a single factor was counted only of 22% which less than the cut-off point 50%.

To confirm the result of Harman single-factor test, an additional statistical test was conducted to assess the common method bias. Following the procedure suggested by Widaman (1985) and employed by Williams, Cote and Buckley (1989) unmeasured latent method factor was performed (Podsakoff *et al.*, 2003; Podsakoff, MacKenzie and Podsakoff, 2012). This test includes adding common methods factor to measurement model in which items allow to be loaded it as well as on their theoretical constructs. Accordingly, the measurement model was tested twice one with new common methods factor and one without. The results

demonstrated that the common method factor did slightly improve the model fit ($\chi^2/df = 1.52$, RMSEA = 0.030, GFI = 0.974, TLI = 0.969, and RMSEA = 0.032), and the fit of the model without method factor is ($\chi^2/df = 1.66$, RMSEA = 0.034, GFI = 0.966, TLI = 0.960, and RMSEA = 0.038). Additionally, the common method factor was accounted for only a small percentage of variance. More specifically, the variance accounted by the common method factor was only 0.26%, which is less than the cut-off value 0.50% that has been recommended as indicating the existence of common method bias (Fornell and Larcker, 1981; Hair *et al.*, 2010). These findings suggest that common method bias is not likely to be a critical problem in this current study, which confirm the results of Harman's single-factor test.

5.4 Structural Equation Model Assessment

This section highlights the results of the structural model. Specifically, the assessment of the structure model follows four steps: first, the fit Indices of the structural model is inspected. Secondly, all direct relationships hypotheses between constructs are examined to confirm the theoretical expectations. Third, the indirect association hypotheses between constructs are tested. Last, the moderating effects of different career orientations on the proposed hypotheses are verified. The results of the structural model test are presented below and will be discussed further in the following chapter.

5.4.1 Fit Indices of the Structural Model

Before reviewing the results of the hypotheses, the overall fit of the structural model is assessed to confirm that the model satisfactorily represented the data for entire proposed Structural relationships. Similar to measurement model assessment, fit indices, including χ^2 , χ^2/df , SRMR, RMSEA, CFI, TLI were employed.

The overall results of the structural model indices are: $\chi^2 = 1934.767$, $p < 0.001$, $df = 1066$, $\chi^2/df = 1.81$, CFI = 0.942, TLI = 0.93, SRMR = 0.05, RMSEA = 0.03. Overall, the results of the structural model indicate a good fit for the sample data. This means data to fit the proposed model. Regardless χ^2 is statistically significant; all other indices are within the recommended cut-off value. Regarding the significant of χ^2 , it is common as discussed previously in section 5.3.2, this value is mostly sensitive to the size of the sample in which the χ^2 value is regularly expected to

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be significant with large sample size (Hair *et al.*, 2010). Moreover, it can also be seen that the results of the overall structural model fit indices did not change significantly from the measurement model results presented in Table 5-5. This, in fact, shows additional support for the validation of the measurement model.

The following sections present the results of hypotheses testing. Mplus 8 statistical package (Muthén and Muthén, 2017) was utilised to test the path analysis including direct and indirect structural relationships among constructs including five independent variables of HR practices, and research performance as a mediator, three types of career orientations as moderator, and subjective as well as objective career success as dependent variables. The structural direct and indirect hypotheses among constructs are examined using standardised path coefficients and their related t-values. Consequently, the standardised path coefficients show the strength of hypothesised relationships between the different constructs. Standardised coefficient values with a total t-value more than 1.96 show a significance level of 0.05 and a total t-value above 2.58 demonstrate a significance level of 0.01.

5.4.2 Hypotheses Testing: Direct Relationships

A total of 29 hypothesised direct relationships were examined in this stage. The results of the hypothesised direct relationships are presented in Table 5-8. The table also presents the standardised path coefficients, t-values, and associated levels of significance.

5.4.2.1 High-Performance HR Practices and Research Performance

Hypothesis H1a to H1e investigated the relationship between HPHRPS and faculty research performance. It was hypothesised that HPHRPS would have a positive relationship with faculty research performance. Researchers usually combine individual HPHRPS into one factor called high-performance HR system (Delery and Shaw, 2001). When looking to HPHRPS as one factor, the results showed a positive and significant impact of HPHRPS on research performance ($\beta = 0.089$, $p < 0.05$).

However, looking at the individual HPHRPS, the results demonstrated a positive and significant path only from training and recognition to research performance ($\beta = 0.106$, $p < 0.05$, $\beta = 0.302$, $p < 0.05$,) respectively. Unexpectedly, the results revealed that the relationship between participation and research performance is negative and significant ($\beta = -0.210$, $p < 0.05$), while the relationship between

internal mobility with research performance was not significant. Thus, hypotheses H1a, H1b, and H1d were supported, whereas hypothesis H1c and H1e were not supported.

Table 5-8 Direct Relationships Results

Hypothesis	Independent variables	Dependent variables	Standardised Coefficient	t-values	Results
H1a	HPHRPS	Research performance	0.089	2.058*	Supported
H1b	Training	Research performance	0.106	2.076*	Supported
H1c	Internal mobility	Research performance	-0.045	-1.027	rejected
H1d	Recognition	Research performance	0.302	2.138*	Supported
H1e	Participation	Research performance	-0.210	-2.051*	Rejected
H2a	HPHRPS	Salary	0.052	1.329	Rejected
H2b	Training	Salary	-0.047	-0.862	Rejected
H2c	Internal mobility	Salary	0.130	2.762**	Supported
H2d	Recognition	Salary	-0.094	-0.647	Rejected
H2e	Participation	Salary	0.155	0.142	Rejected
H3a	HPHRPS	Promotion	0.085	2.197*	Supported
H3b	Training	Promotion	-0.027	-0.520	Rejected
H3c	Internal mobility	Promotion	0.089	1.995*	Supported
H3d	Recognition	Promotion	0.296	2.114*	Supported
H3e	Participation	Promotion	-0.060	-0.593	Rejected

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H4a	HPHRPS	Subjective Success	0.425	9.895***	Supported
H4b	Training	Subjective Success	0.028	0.407	rejected
H4c	Internal mobility	Subjective Success	0.193	3.617***	Supported
H4d	Recognition	Subjective Success	0.549	2.592**	Supported
H4e	Participation	Subjective Success	-0.175	-1.158	rejected
H5a	Research performance	Salary	0.308	7.323***	Supported
H5b	Research performance	Promotion	0.369	8.623***	Supported
H5c	Research performance	Subjective Success	0.163	3.589***	Supported
H9a	Protean Career	Salary	0.073	1.493	rejected
H9b	Protean Career	Promotion	0.024	0.506	rejected
H9c	Protean Career	Subjective Success	0.394	7.646***	Supported
H11a	Boundaryless Career	Salary	0.041	0.993	rejected
H11b	Boundaryless Career	Promotion	0.082	2.040*	Supported
H11c	Boundaryless Career	Subjective Success	0.012	0.266	rejected

* p<0.05 ** p< 0.01 *** p<0.001

5.4.2.2 High-Performance HR Practices and Career Success

Hypothesis H2a to H 2e, H3a to H3e, and H4a to H4e investigated the relationship between HPHRPS and career success. It was hypothesised that HPHRPS would have a positive relationship with faculty career success including subjective and objective career success.

5.4.2.2.1 Objective Career Success

In term of the objective career success salary, the results did not support the hypothesised argument that the one-factor HPHRPS has a positive impact on salary progression.

Moreover, for the individual HPHRPS, the results showed that only internal mobility had a positive and significant path to salary progression ($\beta = 0.106$, $p < 0.05$), while the relationship between training, recognition, and participation was not significant. Consequently, hypotheses H2c was supported, whereas hypotheses H2a, H2b, H2d, and H2e were not supported.

For the relationship between HPHRPS and objective career success promotion, the results indicated that the one factor HPHRPS had a positive and significant impact on faculty member promotion ($\beta = 0.085$, $p < 0.05$).

In term of the individual HPHRPS, the results demonstrated positive and significant paths from internal mobility and recognition to objective career success promotion ($\beta = 0.089$, $p < 0.05$, $\beta = 0.296$, $p < 0.05$) respectively. Surprisingly, the relationship between training and participation in objective career success promotion were not significant. Accordingly, hypotheses H2c, H3a, H3c and H3d were supported, whereas hypothesis H2a, H2b, H2d, H2e, H3b, and H3e were not supported.

5.4.2.2.2 Subjective Career Success

In regards the subjective career success, the results did support the hypothesised argument that the one-factor HPHRPS has a positive impact on faculty member subjective career success ($\beta = 0.425$, $p < 0.001$).

As for individual HPHRPS, the results illustrated a positive and significant relationship between internal mobility and recognition with subjective career success ($\beta = 0.193$, $p < 0.001$, $\beta = 0.549$, $p < 0.01$,) respectively. However, the relationship between training and participation in subjective career success were

not significant. Therefore, hypotheses H4a, H4c and H4d were supported, while hypothesis H4b and H4e were not supported.

5.4.2.3 Research Performance and Career Success

Hypothesis H5a to H5c investigated the relationship between faculty research performance and faculty career success. It was hypothesised that research performance would have a positive relationship with career success. The results revealed positive and significant relationship between faculty research performance and subjective career success as well as objective career success salary and promotion, ($\beta = 0.163$, $p < 0.001$, $\beta = 0.308$, $p < 0.001$, $\beta = 0.369$, $p < 0.001$) respectively. Thus, hypotheses H5a, H5b and H5c were supported.

5.4.2.4 Career Orientations and Career Success

Hypothesis H9a –H9c, H11a-H11c, and H13a-H13c investigated the relationship between different career orientations and career success. It was hypothesised that protean and boundaryless career orientations would have a positive relationship with faculty subjective and objective career success. The results demonstrated that only protean career orientation had a positive and significant relationship with faculty member subjective career success ($\beta = 0.394$, $p < 0.001$).

Boundaryless career orientation on the other side was positively linked to the objective career success promotion ($\beta = 0.082$, $p < 0.05$). To conclude that, hypotheses H9c and H11b were supported, whereas hypothesis H9a, H9b, H11a, and H11c were not supported.

To summarise, 18 out of the 29 hypothesised direct relationships were statistically significant although two relationships revealed different direction to the theorised direction (H1e). As a result, a total of 17 hypothesised direct relationships were supported, as shown in Table 5-8.

5.4.3 Hypotheses Testing: Mediating Relationships

In the current study, Mplus version 8 is used to test H6a –H8e, the indirect effects of HPHRPS on career success. Three conditions must be met in order for mediation to be supported: (1) The path from the independent variable to the mediator variables must be significant; (2) The path from the mediator variable to the outcome variable must be significant; and (3) The path from the independent variable to the outcome variable must be weaker (partial mediation) or not significant (full mediation) in the existence of the mediating variable.

Following the guidelines, the first step for testing the mediation is to test the all necessary direct relationships (Hair *et al.*, 2010) which been done previously and the results shown in Table 5-8. The second step for testing the mediation involves assessment of each proposed mediating relationship and, comparing the significance level with the direct relationships presented in step one. Mplus uses the Sobel (1982) approach for testing the indirect effects. All the results of the indirect effects are presented in Table 5-9.

As for the one-factor HPHRPS, the results showed that research performance fully mediated the relationships between HPHRPS with objective career success salary progression ($\beta = 0.039$, $p < 0.05$), and partially mediated the relationships between HPHRPS with objective career success promotion ($\beta = 0.035$, $p < 0.05$). However, the mediating effect of research performance on the relationship between HPHRPS with subjective career success was not significant. This gives the support of H6a and H7a, while the rejection of H8a.

In term of the individual HPHRPS, the results indicated that research performance fully mediated the relationships between training and recognition with objective career success salary progression ($\beta = 0.044$, $p < 0.05$, $\beta = 0.124$, $p < 0.05$) respectively, thus giving support to H6b and H6d. Unexpectedly, the results demonstrated that research performance mediated negatively the relationship between participation and objective career success salary progression ($\beta = -0.086$, $p < 0.05$), while research performance was not found mediating the relationship between internal mobility with objective career success salary progression. Accordingly, H6c and H6e were rejected.

As for objective career success promotion, the results revealed research performance fully mediated the relationships between training with objective career success promotion ($\beta = 0.039$, $p < 0.05$) and partially mediated the relationships between recognition with objective career success promotion ($\beta = 0.111$, $p < 0.05$) respectively. Accordingly, H7b and H7d were supported, while H7c and H7e were rejected.

In term subjective career success, the results showed that research performance only partially mediated the relationships between recognition and subjective career success ($\beta = 0.049$, $p < 0.05$), consequently giving support to H8d, whereas H8b, H8c, and H8e were rejected.

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To summarise, 8 out of the 15 hypothesised indirect relationships were significant based on the results, although one relationship revealed different direction to the theorised direction (H6e). As a result, a total of 7 hypothesised indicated relationships were supported as shown in Table 5-9.

Table 5-9: Mediating Relationships Results

Hypothesis	Independent variables	Mediators	Dependent variables	Standardized Coefficient	t-values	Results
H6a	HPRPS	Research performance	Salary	0.039	2.032*	Supported Full mediation
H6b	Training	Research performance	Salary	0.044	2.031*	Supported Full mediation
H6c	Internal mobility	Research performance	Salary	-0.019	-1.017	Rejected
H6d	Recognition	Research performance	Salary	0.124	2.057*	Supported Full mediation
H6e	Participation	Research performance	Salary	-0.086	-1.976*	Rejected
H7a	HPRPS	Research performance	Promotion	0.035	2.012*	Supported partial mediation
H7b	Training	Research performance	Promotion	0.039	1.996*	Supported Full mediation
H7c	Internal mobility	Research performance	Promotion	-0.017	-1.020	Rejected

H7d	Recognition	Research performance	Promotion	0.111	2.136*	Supported partial mediation
H7e	Participation	Research performance	Promotion	-0.077	-2.039	Rejected
H8a	HPHRPS	Research performance	Subjective Success	0.018	1.925	Rejected
H8b	Training	Research performance	Subjective Success	0.017	1.760	Rejected
H8c	Internal mobility	Research performance	Subjective Success	-0.007	-0.995	Rejected
H8d	Recognition	Research performance	Subjective Success	0.049	2.016*	Supported partial mediation
H8e	Participation	Research performance	Subjective Success	-0.034	-1.928	Rejected

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

5.4.4 Hypotheses Testing: Moderated Relationships

A moderator is a variable that could change the direction or strength of the relationship between the predictor and outcome variables (Baron and Kenny, 1986). For this current research Mplus version eight is used to test H10a –H10c and H12a-H12c the moderation effects of different career orientations on the relationship between research performance and career success. This been conducted through the interaction between predictor and moderator to outcomes. All the results of the moderation effects are presented in Table 5-10.

It has been proposed in the second chapter that different career orientations may have a significant role in influencing the relationship between research performance and career success. The results indicated that none of the examined career orientations moderates the relationship between research performance career success, thus giving reject to H10a –H10c, and H12a-H12c.

Table 5-10: Moderating Relationships Results

Hypothesis	Independent variables	Moderators	Dependent variables	Standardized Coefficient	t-values	Results
H10a	Research performance	Protean Career	Salary	0.003	0.081	Rejected
H10b	Research performance	Protean Career	Promotion	-0.008	-0.187	Rejected
H10c	Research performance	Protean Career	Subjective Success	-0.052	-1.149	Rejected
H12a	Research performance	Boundaryless Career	Salary	-0.017	-0.465	Rejected
H12b	Research performance	Boundaryless Career	Promotion	0.012	0.321	Rejected
H12c	Research performance	Boundaryless Career	Subjective Success	-0.011	-0.262	Rejected

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

5.5 Chapter Summary

This chapter reviewed the results of the hypotheses developed in Chapter two using SEM approach (Hair *et al.*, 2010). This chapter starts with presenting the results of the data preparation and screening process including assessing the effect of missing data, detecting outliers, and testing for the normality. Then, CFA results were reviewed which revealed an overall good fit measurement model $\chi^2 = 1177.559$, $p < 0.001$, $df = 706$, $\chi^2 / df = 1.66$, CFI = 0.96, TLI = 0.96, SRMR = 0.03, RMSEA = 0.03. last the structural SEM path analysis was undertaken to test all direct mediation, and moderation relationships. The results showed support for

17 out of 29 direct hypothesised relationships, 7 out of 15 indirect relationships. Unexpectedly, none of the moderating hypothesised relationships was supported.

These findings are of particular interest as, to the best of the researcher knowledge, no study has empirically challenged the effect of HPHRPS in academia specifically in non-western developing countries. The subsequent chapter presents the discussion of the findings of this current research alongside answers to the research questions drawn in Chapter One.

Chapter 6: Discussion of Results

6.1 Introduction

This chapter discusses the findings of the present study. For consistency, the results of the hypotheses will be discussed following the same sequence as used in Chapter Five. The discussion of this chapter is divided into four main sections. The first section discusses the results of direct relationships. The second section discusses the mediation effect of research performance. The third section discusses the results of the moderation variables of the research model. The last section discusses the answers to the main research questions posed in this current study. Overall, the results partly support that HRM has an impact on performance in academe. Specifically, the results revealed that training and recognition were positively linked to faculty member research performance. Also, the results showed that internal mobility had a positive and significant path to salary progression/increases, whereas internal mobility and recognition positively link to faculty member promotion and career satisfaction. Furthermore, the study found that academics research performance do mediate the relationship between training and recognition with career success. However, the results did not support the moderation of career orientations.

6.2 Findings Discussion: Direct Relationships

The following sections discuss the results of the direct relationships in this research, which is an effort to link the current results with previous literature and understand the meaning of the present findings.

6.2.1 High-Performance HR Practices (HPHRPS) and Research Performance

H1a: there is a positive relationship between HPHRPS and research performance (supported);

H1b: there is a positive relationship between training and research performance (supported);

H1c: there is a positive relationship between internal mobility and research performance (rejected);

H1d: there is a positive relationship between recognition and research performance (supported);

H1e: there is a positive relationship between participation and research performance (rejected).

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Considering the fundamental question about the linkage between the HPHRPS and performance, the results revealed some interesting findings. Despite previous studies that supported the positive impact of HPHRPS on individual performance (e.g. see Kuvaas, 2008; Butts *et al.*, 2009; Liao *et al.*, 2009; Boxall, Ang and Bartram, 2011; Chang and Chen, 2011; Aryee *et al.*, 2012; Ehrnrooth and Björkman, 2012), the current results only provide evidence of these relationships in the case of training and recognition .

There is also a debate in the literature about the universal applicability of the HPHRPS (Marchington and Grugulis, 2000; Bryson, Forth and Kirby, 2005). Indeed, these results lead us to question whether HR practices are universally applicable (see Bryson, Forth and Kirby, 2005; Paauwe, 2009; Posthuma *et al.*, 2013; Tzabbar, Tzafrir and Baruch, 2017). These results are to some extent inconsistent with the results of previous studies in western contexts and with studies undertaken in private and public sector organisations (e.g. Macky and Boxall, 2007; Boselie, 2010; Boon *et al.*, 2011; Messersmith *et al.*, 2011; Den Hartog *et al.*, 2013; Kehoe and Wright, 2013). Thereby casting doubt on the argument that the effectiveness of HPHRPS extend beyond Anglo-Saxon nations, or private sector organisations, but are apparent across different cultures and industries (Gould-Williams and Mohamed, 2010).

Looking at HPHRPS as one factor, this study confirms that HPHRPS is associated positively with faculty member research performance. There is a positive relationship between faculty members experiencing HPHRPSs (including skill-enhancing practices, motivation-enhancing practices, and empowerment-enhancing practices) and their research performance. These findings fit with the rationale of the AMO theory and the social exchange theory. In other words, the relationship between the employer and the employee based on the mutual benefit on the principle of giving and taking (i.e. training and reward vs commitment and extra effort).

However, Jiang *et al.* (2012) have questioned whether the three dimensions of HPHRPS (i.e. skill-, motivation-, and empowerment-enhancing practices) have differential impacts on employee outcomes. This may help explain the discrepancy in the results when looking at the impact of HPHRPSs individually on research performance. Hence some of the practices were supported while the others were not supported or have even a negative effect on research performance.

Observing each specific HPHRPS, the research results demonstrate that training has a positive and significant effect on academic research performance. So, universities which provide intensive training to their faculty members are more likely to develop their ability to have higher-level research outcomes. In other words, the more that faculty members are provided with ongoing training, the higher their research performance. The ability of training to increase research performance is a critically important finding that will help universities to improve their research outcomes. The results, therefore, confirm the critical role of training as a (positive) antecedent to overall research outcomes with academics in universities. As such, the result seems to be consistent with other previous studies in research productivity (e.g. see, Vasil, 1996; Babu and Singh, 1998; Hesli and Lee, 2011; McGill and Settle, 2012; Pasupathy and Siwatu, 2014) which found that developing the faculty members research skills and self-efficacy (which can be developed through training) linked positively with their research performance. Moreover, the finding also supports previous research in field of HRM which suggests that skill-enhancing practices (Kuvaas, 2008; Butts *et al.*, 2009; Liao *et al.*, 2009; Boxall, Ang and Bartram, 2011; Chang and Chen, 2011; Aryee *et al.*, 2012; Ehrnrooth and Björkman, 2012) lead to the improvement of job performance among employees.

Another important finding was that recognition was positively associated with academic research performance. Thus, these findings suggest that recognition undoubtedly plays a unique role in the level of research performance. This may be explained by the theory of social exchange, which proposes that the relationship between employees and employers are rooted in an exchange process and trust. This can be explained by the fact that the university will provide recognition to academic achievement, which in turn will motivate faculty members to a higher level of job performance. In other words, the more faculty members research achievements are recognised the more research work they perform. The influence of recognition on research performance is another critically important finding that will add value to both literature and practitioners (see chapter seven). These results indicate that the existence of recognition practices used by the Dean, colleagues and faculty, in general, inspires higher research performance from faculty members. These results also corroborate the findings of a great deal of the previous work in HRM field which suggests that recognition leads to desired employees outcomes (see for example Subramony, 2009; Snape and Redman, 2010; Jiang *et al.*, 2012).

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Contrary to expectations, this study did not find a significant relationship between internal mobility and faculty member research performance. This means that HPHRPS of internal mobility did not have any impact on the level of faculty member research performance in public sector universities in Saudi Arabia. This finding is contrary to previous studies in academia, which have suggested that internal mobility was found to be positively associated with faculty member research performance (Hunter and Kuh, 1987; Butler and Cantrell, 1989; Fox, 1992; Chen, Gupta and Hoshower, 2006; Chen and Zhao, 2013). These findings also differ from the results of the studies observed by Jiang *et al.* (2012) that supported the fundamental role that internal mobility has on employee job performance.

A possible explanation for these results may relate to the understanding which academics in Saudi Arabia have about their contribution to science and knowledge from an Islamic perspective. For example, in Islamic law, knowledge creation and distribution is work that should be done for the sake of God (Siddiqui, 1976). Thereby, the scholars are not likely expected to seek reward for what they contribute to knowledge creation and distribution, especially in religious sciences.

Another possible explanation for these results is that the nature of scientific research. Indeed, most previous studies have investigated the relationship between motivation-enhancing practices and performance were based on employees working on manufacturing, professional service or lower-skilled service (see for example Paauwe, 2009; Subramony, 2009; Snape and Redman, 2010; Posthuma *et al.*, 2013). However, the production of scientific research is a complex process that goes through many stages and requires much time, effort and multiple skills. It can relate to the 'career as a calling' where people are in the profession for ideal such as the will to develop scientific knowledge (Hall and Chandler, 2005). So, the reward of being promoted may not be that attractive with this complex work. In other words, career mobility may be unattractive and not commensurate with the effort of doing research, or the procedures for obtaining these rewards might be so complicated. Thus, the faculty are just happy to receive the same salary and job level and carry on doing good research. This result contradicts Herzberg (1959)'s two-factor theory of motivation, which suggests that internal mobility should work as a motivating factor, which was not the case in this study.

This led us to an additional possible explanation for these results which is the level of need or in other words the economic dimension. This explanation can be explained by Maslow's needs-based theory of motivation (also known as Maslow's Hierarchy of Human Needs). The theory argues that factors will no longer have a role in motivation for higher performance when it is fulfilled. The income of the individual, (the richness) and the good economic situation in the Gulf countries and Saudi Arabia, in particular, might be contributed to reducing the attractiveness of career mobility for the faculty members compared with other motivational factors such as self-realisation. Indeed, this is what can be explained by the interesting results of the present study where they showed the positive association between recognition and performance while they failed to establish this association between internal mobility and performance.

Surprisingly, participation was found to have a negative effect on faculty members' research performance. This means that the more faculty members were allowed to participate in decision-making and involve in influencing the work process the lower their research performance was in public sector universities in Saudi Arabia. This finding is contrary to previous studies in HPHRPS which have suggested that participation in decision-making and involvement in influencing work process among the factors that were found positively associated with individual outcomes (Wright *et al.*, 1999; Guest, Conway and Dewe, 2004; Liao and Chuang, 2004; Tzafrir, 2005; Gong *et al.*, 2009; Gong, Chang and Cheung, 2010; Gardner, Wright and Moynihan, 2011).

This result may be explained by the critical role played by the cultural dimension in this aspect. In the Arab countries, including Saudi Arabia the cultures are used to having high power distance in interactions between those in authority (e.g., superiors) and subordinates (Hofstede, 2003). This cultural dimension is likely to have an impact on the individual in accepting the process of participation in decision-making and involvement in influencing the work process. Individuals may, therefore, react to this behaviour with an adverse reaction and thus adversely affect their performance. This can be explained by the probability that practice of participation, causes academics unnecessary stress due to the time and effort involved in attending extra meetings. So it could be the way that they are asked to be involved which is too formal and burdensome. In other words, they may consider taking part in decision making as an additional load or a responsibility that is not within their work obligations, but that of managers.

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Therefore, the result of this participation may negatively affect their performance. Additionally, back to Hofstede (2003) and the question of collectivism vs individualism. Even if the country is collectivist, the academic profession is quite an individualist. These interesting findings may partly answer the question raised by Posthuma *et al.* (2013) which investigates why cross-cultural research tend to exclude some practices when researching non-western cultures. The possible answer to this question may be that some HPHRPSs are not effective across nations due to cultural differences. This is in fact what can be supported by these controversial results. Additionally, these results further support the Three Needs Theory introduced by McClelland (1961), explaining that culture and life experiences influence the dominant motivating driver of individuals.

Another possible explanation for this result is the pressure due to multiple tasks in academia. As mentioned in the literature review, academic work is based on multiple tasks such as teaching, research and administrative work (Baruch and Hall, 2004; Baruch, 2013). Academic staff have to allocate their work time and performance between these three tasks, which are the major responsibilities of academic work (Marsh and Hattie, 2002). It is possible therefore the participation in decision-making and involvement in influencing work process can be an additional burden for academics, resulting in the negative impact of their research performance. This is more akin to the fact that this process of participation and involvement most likely requires many administrative meetings which may be tedious and time-consuming. Prior studies have noted the importance of allocating more time for academics to increase research performance. These results reflect those of Alghanim and Alhamali (2011) who also found that involvement in administrative activities was associated negatively with academic research productivity. Furthermore, several reports have shown that the allocation of more time to research work versus administrative or teaching work has a positive relation to research performance (e.g. see Butler and Cantrell, 1989; Ito and Brotheridge, 2007; McGill and Settle, 2012; White *et al.*, 2012).

In summary, these findings extend the understanding of the generalizability of HPHRPS to a unique sector, outside of manufacturing, professional service, lower-skilled service, or high-technology sectors, which is academia. Moreover, the study has also advanced our understanding of how HPHRPS applied in a non-western context, namely Saudi Arabia. Indeed, these results raise the controversial question about the debate on whether HPHRPSs are universally applicable (see Bryson, Forth and Kirby, 2005; Paauwe, 2009; Posthuma *et al.*,

2013). These results are to some extent inconsistent with the results of previous studies in western contexts and with studies undertaken in private and public sector organisations (e.g. Macky and Boxall, 2007; Boselie, 2010; Butler and Glover, 2010; Gould-Williams and Gatenby, 2010; Katou and Budhwar, 2010; Boon *et al.*, 2011; Boxall, Ang and Bartram, 2011; Innocenti, Pilati and Peluso, 2011; Messersmith *et al.*, 2011; Aryee *et al.*, 2012; Ehrnrooth and Björkman, 2012; Den Hartog *et al.*, 2013; Kehoe and Wright, 2013). Thus, the present research's findings shed doubt on the argument that the effectiveness of HPHRPS extend beyond Anglo-Saxon nations, or private sector corporations, but are apparent across different cultures and industries (Gould-Williams and Mohamed, 2010).

Additionally, when looking to individual HPHRPS, these findings have only partially confirmed the assumptions behind the AMO theory. The AMO theory suggests that a set of HPHRPS will improve employee performance when it is composed of practices that enhance individuals' abilities and motivation, and provide them with opportunities (Appelbaum, Bailey and Berg, 2000; Jiang, Takeuchi and Lepak, 2013; Boxall and Purcell, 2016). Specifically, practices that enhance employees' abilities mainly related to the development of the workforce by increasing the knowledge, ability, and skill levels of the employees (Subramony, 2009). That being said, training is one of the primarily HRM practices related to enhancing employees knowledge, ability, and skill (Jiang *et al.*, 2012). Motivation-enhancing practices on other hands help direct employees' efforts toward the achievement of work objectives and provide them with the encouragements necessary to involve in high levels of performance. Lastly, empowerment-enhancing practices provide employees with the opportunity to make use their skills and feel their value at work. Participating in decision-making enable them to use their skills involvement in influence work process/outcomes (Delery and Doty, 1996). However, only skill and motivation -enhancing practices were supported in all cases of this research. The connection to HRM will become more apparent in the following section.

6.2.2 High-Performance HR Practices and Career Success

This section discusses the results of the relationship between HPHRPSs and career success. It was hypothesised that HPHRPSs would have a positive relationship with faculty members' career success including objective and subjective career success. This discussion includes the following hypothesis H2a to H2e, H3a to H3e, and H4a to H4e.

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6.2.2.1 Objective Career Success

H2a: there is a positive relationship between HPHRPS and salary (rejected);

H2b: there is a positive relationship between training and salary (rejected);

H2c: there is a positive relationship between internal mobility and salary (supported);

H2d: there is a positive relationship between recognition and salary (rejected);

H2e: there is a positive relationship between participation and salary (rejected);

H3a: there is a positive relationship between HPHRPS and faculty members' promotion (supported);

H3b: there is a positive relationship between training and promotion (rejected);

H3c: there is a positive relationship between internal mobility and promotion (supported);

H3d: In academia, there is a positive relationship between recognition and promotion (supported);

H3e: there is a positive relationship between participation and promotion (rejected);

The results of this study indicate that the HPHRPS as one factor is not associated with faculty member salary progression as an objective career success component. In contrast, there is a positive association between HPHRPS and the objective career success promotion. The more faculty member experienced HPHRPSs (including skill, motivation, and empowerment-enhancing practices), the more promotion he or she will have. This finding is not surprising given that any effective HPHRPS system should aim to have a clear promotion program. However, what is surprising is that HPHRPS was not found to influence employees' salary progression positively. This runs counter to the fundamental purpose of HPHRPS which is based on the mutual benefit between the organisations and their employees toward achieving the organisational competitive advantage and, ultimately their success (Armstrong, 2010). This result might be explained that some promotion in the academic career in Saudi universities often consists of small salary increases and is usually temporary (a period of two to four years) rather than permanent (Ministry of Education, 2016). In other words, academics may get promoted to new jobs/posts with a higher level of responsibilities, but otherwise, the incremental salary increase is low such as the head of the department or the Vice Dean or Dean.

These results can be further explained by looking at the relationships of individual HPHRPS with faculty members' objective career success. For example, only internal mobility was found to have a positive effect on faculty member

salary progression. However, the three remaining HPHRPSs have no impact on the salary progression of faculty members.

Furthermore, the results illustrate that internal mobility and recognition were positively associated with faculty member promotion. It is somewhat surprising that no evidence was noted in the relationship between the other HPHRPSs and faculty member promotion.

Indeed, HPHRPSs is expected to lead to employees' objective success because those practices are expected to influence employees' outcomes (e.g. see Kuvaas, 2008; Butts *et al.*, 2009; Liao *et al.*, 2009; Boxall, Ang and Bartram, 2011; Chang and Chen, 2011; Aryee *et al.*, 2012; Ehrnrooth and Björkman, 2012). Thus, HPHRPS is supposed to have a role in employees' objective career success (see, Kats *et al.*, 2010). However, the findings of this study were contrary to the expectation and did not fully confirm the argument that describes HPHRPS as mutual benefit HRM approach (Sparham and Sung, 2007; Kalmi and Kauhanen, 2008), that believed to lead to the success for both organisations and their employees. Previous literature has shown such impact of HPHRPS on organisational success (Subramony, 2009; Jiang *et al.*, 2012; Posthuma *et al.*, 2013; Jiang and Liu, 2015), which ultimately expected to be reflected in employees' success. However, the effects of HPHRPS on employees' success is still not clear.

A possible explanation for these findings might be the HPHRPS designed in a way that does not serve employees success as much as it focuses on the success of the organisation. For example, the organisation may provide some of these practices to increase employees' productivity to achieve the organisational objectives, but ignores providing their employees with opportunities to achieve their personal goals. This, in fact, might be understandable if we consider the main reason for the application of HPHRPS, at the beginning of its appearance in manufacturing, was to increase worker productivity and reduce expenses (e.g. see Pfeffer, 1994; Huselid, 1995; MacDuffie, 1995; Youndt *et al.*, 1996),

This outcome may be explained by the nature of public sector workers compared to the private sector, and the different management culture in the Middle East (Iles, Almhedie and Baruch, 2013). Another possible explanation may also be the role of Wasta (Harbi, Thursfield and Bright, 2017) (Middle-Eastern type of networking and network connection) in the promotion, as identified by Weir and colleagues (2016).

6.2.2.2 Subjective Career Success

H4a: there is a positive relationship between HPHRPS and subjective career success (supported);

H4b: there is a positive relationship between training and subjective career success (rejected);

H4c: there is a positive relationship between internal mobility and subjective career success (supported);

H4d: there is a positive relationship between recognition and subjective career success (supported);

H4e: there is a positive relationship between participation and subjective career success (rejected);

Another important finding was that the HPHRPS as one factor is positively associated with faculty member subjective career success. This means the higher faculty member experienced HPHRPSs the higher he or she satisfied with his or her career accomplishments. A possible explanation for this might be that HPHRPS makes employees feel more positive about the organisation and their careers because these practices can be seen as a giving obligation and appreciation to them (i.e. training for development or reward for superior performance). These results reflect the fundamental purpose of HRM which emphasises that investment in HPHRPS can play a crucial role in the organisations' achievements through the success of their employees (Armstrong, 2010). These results support previous research into this area, which links HPHRPSs with career satisfaction and organisational success (Guest, 2001; Harmon *et al.*, 2003; Messersmith *et al.*, 2011).

However, the observation of the relationship between the individual HPHRs with faculty members' subjective career success demonstrates that not all of the investigated practices were positively related to faculty member subjective career success. For instance, only internal mobility and recognition were found positively linked to career satisfaction. This means the more faculty member provided with internal mobility opportunities, the more he or she is satisfied with his or her career accomplishment. Similar to this, the more the faculty member job performance achievements are recognised by the colleagues, head of the department, or the dean of the faculty, the more he or she is satisfied with his or her career. Van Scotter, Motowidlo and Cross (2000) concluded that high performance (which can be reached through HPHRPS) most likely lead to a better chance of career progression, which ultimately should enhance employees' career satisfaction. Also, researchers have noticed that task accomplishment and meeting job performance goals could be linked to individual career satisfaction

(Ng and Feldman, 2014). In other words, high performing individuals most likely will have higher levels of satisfaction regarding their careers. According to Sonnentag (2003), career satisfaction can be reached through high performance and task accomplishment, while dissatisfaction and personal failure might be caused by low performance and failing to achieve career goals and responsibility.

Contrary to expectations, this study did not find a significant positive relationship between the practices of training and participation with faculty member subjective career success. A possible explanation for this is that how faculty members perceive training and its contribution to their career satisfaction, knowing that the job of them is complicated by multiple tasks (research, teaching and serves) expecting to be performed at the same time. This may, therefore, contribute to the narrow impact of training on career satisfaction as this study limited only to one element of academics job. Also, the insufficient result of participation on career satisfaction may be attributed to cultural dimension in the Middle East (Iles, Almhedie and Baruch, 2013), which may impact how academics perceived the practice of participation. The cultural dimension in the Middle East was discussed in detail in section (6.2.1).

6.2.3 Research Performance and Career Success

H5a: there is a positive relationship between faculty members' research performance and salary (supported);

H5b: there is a positive relationship between faculty members' research performance and promotion (supported);

H5c: there is a positive relationship between faculty members' research performance and subjective career success (supported);

The findings demonstrate that academics research performance has a positive and significant effect on both objective and subjective career success. Consequently, the faculty member who has a higher level of research performance is more likely to experienced objective and subjective career success. In other words, the more a faculty member has research outcomes, the higher the level of career satisfaction, salary progression, and promotion obtained he or she has. The ability of research outcomes to contribute to faculty member career success is a critically important finding as the fact that some careers scholars argue that more studies need to occur on the construct of subjective career success (Arthur, Khapova and Wilderom, 2005; Dries, 2011), and objective career success especially in academia (Sutherland, 2017). The findings, therefore, confirm the critical role of research performance outcomes as

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a (positive) antecedent to overall objective and subjective career success with a faculty member in academia. As such, the result seems to be consistent with other previous studies in career success in academia. For example, Enders and Kaulisch (2006, p. 87) emphasise that “The prime criterion for success in academia was, and still is, performance in research”. This argument is reinforced by more researcher in the literature on academics success in academia (Laudel and Gläser, 2008; Parker, 2008; Hemmings and Kay, 2010b; Sutherland, Wilson and Williams, 2014; Sutherland, 2017). Indeed, in academia, scientific outcomes are a key aspect in determining salary progression and promotion and career satisfaction (Sutherland, 2017). Academics with high research performance are always of interest to universities, and they try to attract and retain them. Therefore, faculty members who are more active in producing scientific work are expected to have better opportunities for promotion and a higher salary (Baruch and Hall, 2004). Consequently, they expected to be more satisfied in term of subjective career success.

6.2.4 Career Orientations and Career Success

This section discusses the results of the investigated relationship between faculty member career orientations and career success. It was hypothesised that contemporary career orientations have a positive relationship with faculty career success including objective and subjective career success. This discussion includes the following hypothesis H9a to H9c and H11a to H11c.

H9a: there is a positive relationship between protean career orientation and salary (rejected);

H11a: there is a positive relationship between Boundaryless career orientation and salary (rejected);

H9b: there is a positive relationship between protean career orientation and promotion (rejected);

H11b: there is a positive relationship between Boundaryless career orientation and promotion (supported);

6.2.4.1 Objective Career Success

The research results indicate that academics career orientations could play a role in their objective career success. For example, the findings show that Boundaryless career orientation has a positive and significant effect on faculty member promotion.

This means that faculty member with higher/stronger boundaryless career attitudes is more likely to get promoted. These results correspond to the

principle of the Boundaryless career, which puts the emphasises on the two key components; physical as well as psychological career mobility and movies (Sullivan and Arthur, 2006). This, in other words, maybe explained that academics with Boundaryless career attitudes are more passionate to advance their career by developing a network of relationships and their career competency. Moreover, these results seem to be consistent also with other research which found a positive association between Boundaryless career attitudes and promotion (Feldman and Ng, 2007; Volmer and Spurk, 2011; Verbruggen, 2012; Gerli, Bonesso and Pizzi, 2015). Some of these previous research also reported a positive relationship between Boundaryless career attitudes and salary progression, which is considered imperative as a consequence of promotion (Baruch and Quick, 2007). However, this was not the case for this current investigation. There is no positive effect of Boundaryless career attitudes on salary progression in the study results. A possible explanation for this might be that the nature of promotions in academia, especially the scope of Saudi universities, depends much on the titles as a prestige rather than as an increase in salary. For example, a faculty member who promoted to the Head of Department will have five thousand Saudi Riyal as an increase in the total annual salary (2%) (Ministry of Education, 2016), which is considered a small amount given the economic situation in Saudi Arabia.

Contrary to expectations, this study did not find a significant effect of protean career attitudes and objective career success (promotion and salary progression). There is disagreement among previous research on this relationship. While some of the prior studies support the association between protean career attitudes and objective career success (e.g. see Seibert, Kraimer and Crant, 2001a; Abele and Spurk, 2009; Grimland, Vigoda-Gadot and Baruch, 2012), others did not (e.g. see Enache *et al.*, 2011; Verbruggen, 2012). This finding is consistent with the argument of Briscoe and Hall (2006a) who explained that protean career is based on individuals' perspective in determining their goals, involving the entire life space, as well as being motivated by inner success rather than objective success including salary, rank, or authority.

6.2.4.2 Subjective Career Success

H9c: there is a positive relationship between protean career orientation and subjective career success (supported);

H11c: there is a positive relationship between Boundaryless career orientation and subjective career success (rejected);

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As expected, the study results indicate a positive and significant relationship between protean career attitudes and subjective career success. The more faculty members have protean career attitudes the more their subjective career success is. In other words, faculty members with protean career attitudes tend to be more satisfied with their career. This also accords with our earlier observations, which showed that protean career attitudes have more to do with internal success (Briscoe and Hall, 2006a). These results also corroborate the findings of a great deal of the previous work in contemporary career orientation and career success. For example, several evidence from previous observations show that individuals who exhibit protean career attitudes are more likely to experience a higher level of career satisfaction (Briscoe and Hall, 2006a; Baruch and Quick, 2007; De Vos and Soens, 2008; Vos, Clippeleer and Dewilde, 2009; Enache *et al.*, 2011; Volmer and Spurk, 2011; Grimland, Vigoda-Gadot and Baruch, 2012; Herrmann, Hirschi and Baruch, 2015). However, contrary to expectations, there is no association found between boundaryless career orientation and subjective career success. This result may be explained by the fact that the academic context is one of high competition and in order to work outside the boundaries of the university and being marketable or even maintain current job faculty members require to have much research outputs in high prestige ranking journals. This challenge may put academics under constant pressure. Another possible explanation for this discrepancy in the results might be attributed to the nature of career management in bureaucratic organisations (Baruch, 2004a). Therefore, the impact of the boundaryless career attitudes on individuals' career success may depend largely on the type of organisation and its policy regarding the management of individual career. Also a possible explanation of the limited options to move to another research university (there is not that many in Saudi Arabia).

6.3 Findings Discussion: Mediating Relationships

H6a: The relationship between HPHRPS and salary, is mediated by academic research performance (supported);

H6b: The relationship between training and salary, is mediated by academic research performance. (Supported);

H6c: The relationship between internal mobility and salary, is mediated by academic research performance (rejected);

H6d: The relationship between recognition and salary, is mediated by academic research performance (supported);

H6e: The relationship between participation and salary, is mediated by academic research performance (rejected);

H7a: The relationship between HPHRPS and faculty members promotion, is mediated by academic research performance HPHRPS (supported);

H7b: The relationship between training and faculty members promotion, is mediated by academic research performance (supported);

H7c: The relationship between internal mobility and faculty members promotion, is mediated by academic research performance (rejected);

H7d: The relationship between recognition and faculty members promotion, is mediated by academic research performance (supported);

H7e: The relationship between participation and faculty members promotion, is mediated by academic research performance (rejected);

H8a: The relationship between HPHRPS and subjective career success, is mediated by academic research performance (rejected);

H8b: The relationship between training and subjective career success, is mediated by academic research performance (rejected);

H8c: The relationship between internal mobility and subjective career success, is mediated by academic research performance (rejected);

H8d: The relationship between recognition and subjective career success, is mediated by academic research performance (supported);

Hy8e: The relationship between participation and subjective career success, is mediated by academic research performance (rejected);

The results of this study revealed that academics research performance is mediated the relationship between HPHRPS as one factor and faculty member objective career success. In detail, academics research performance was found to fully mediate the relationships between HPHRPS and salary progression, whereas academics research performance was found to mediate the relationship between HPHRPS and academics promotion partially.

The indirect effect provides consistent evidence supporting the rational function of the HPHRPS system, that been believed to be critical factors in leading to the success of the organisation through the success of their employees (Sparham and Sung, 2007; Kalmi and Kauhanen, 2008). Unexpectedly, the academics research performance was not found to mediate the relationship between HPHRPS and faculty member career satisfaction. This finding was not expected, but may be explained by the nature of faculty member work. Although academics perform three main functions simultaneously, it is argued that the major sources for academics success are the output of research performance (Sutherland, Wilson and Williams, 2014). However, the failure to give research performance sufficient importance in Saudi universities may be a reason to explain this result. The fact of the low research performance in Saudi universities has been previously recognised by several researchers (Touq and Zaher, 1989; Al-Zahrani, 1997; AlSalem, 1997; Alzahrani, 2011).

In term of the individual HPHRPSs, the research revealed interesting findings. In detail, academics research performance was found to fully mediate the relationships between training and both salary progression and promotion. This

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result is interesting, as the direct relationship between training and salary progression was not supported, but training through research performance has a positive effect on salary progression. This study confirms that training is associated with job performance. This also accords with earlier observations, which showed that training is linked to the high level of job performance (Bartel, 1995; Dearden, Reed and Van Reenen, 2006; Amin *et al.*, 2013; bin Atan, Raghavan and Mahmood, 2015), which ultimately should have an influence on their career success.

Additionally, academics research performance was found to mediate the relationships between recognition and salary progression fully, whereas partially mediate the relationship between recognition and academics promotion. These findings support previous studies that showed job performance mediate the relationship between HPHRPS and organisation success (Kuvaas, 2008; Butts *et al.*, 2009; Liao *et al.*, 2009; Boxall, Ang and Bartram, 2011; Chang and Chen, 2011; Aryee *et al.*, 2012; Ehrnrooth and Björkman, 2012) by extending the previous work and widen our understanding about the role of job performance on the relationship between HPHRPS and employees success (Armstrong, 2014). The relationship between research performance, universities success, and academics success intersect where is thought that the high level of research performance contributes to the success of universities, which ultimately expected to be reflected on academics success. These findings suggest that some of these practices can serve the interests of both parties. In another world, the results confirm the validity of the argument that implementation of HPHRPS expected to lead simultaneously to desirable outcomes for the employers and employees (Sparham and Sung, 2007; Kalmi and Kauhanen, 2008).

On the question of other relationships, it is surprising that academics research performance was found negatively mediate the relationship between academics participation in decision-making and involvement in influencing work process and salary progression. This finding in this study was unexpected compared to the previous theoretical and empirical literature. The literature showed that employee desired outcomes expected to play a role in the relationship between HPHRPS and organisations success (e.g. see Katz, Kochan and Weber, 1985; Liao and Chuang, 2004; Tzafir, 2005), and ultimately it is anticipated that it should in return contribute to employees success. This finding, in fact, might be influenced by the inadequate direct effect of academics participation and research performance. This insufficient finding can be explained by several factors including cultural dimension (Hofstede, 2003) and the nature of academic career(see Section 6.2.1).

As far as research performance is concerned, contrary to expectations, the results did not support the hypothesised role of academics research performance on the relationship between the remaining HPHRPS and objective career success. A possible explanation for this result might be linked to the difficulty and time consuming associated with the task of conducting and publishing research comparing to the return benefits. In other words, it might back to the university strategy and system where if it places greater emphasis on the output of task research performance, in which will ultimately reward academics who have contributed more to the University's strategy.

In term of subjective career success, academics research performance was found only to mediate the relationships between recognition and career satisfaction partially. These result further support the idea that job performance and task achievement play a crucial and important role in reaching career satisfaction (Sonnentag, 2003). These results further suggest that job performance not only mediates the relationship between HPHRPS and institutional success but also extends to include career satisfaction for employees. These findings, however, show no effects of academics research performance in mediating the relationship between the remaining HPHRPS and academics subjective career success. This result may not be surprising if we take into account that the academic function consists of three main tasks, one of which only is the research performance. Thus, it is possible that the measurement of research performance alone is insufficient to determine whether work performance mediates the relationship between HPHRPS and career satisfaction of faculty members. It is also likely that the university orientation type plays a critical role here. The research performance by academics in Saudi Arabia may not be as important as the other faculty members' tasks which are suggested in previous work (Alghanim and Alhamali, 2011; Alzahrani, 2011; Alzuman, 2015). This may occur due to several factors, including the level of awareness among academics about the importance of this aspect in their work and the university type of orientations.

6.4 Findings Discussion: Moderating Relationships

H10a: there is a positive relationship between faculty members' research performance and salary, which is moderated by protean career orientation, in a way that this relationship will be stronger for faculty members with protean career orientation than for faculty members without it (rejected).

H10b: there is a positive relationship between faculty members' research performance and promotion, which is moderated by protean career orientation, in a way that this relationship will be stronger for faculty members with protean career orientation than for faculty members without it (rejected).

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H10c: there is a positive relationship between faculty members' research performance and subjective career success, which is moderated by protean career orientation, in a way that this relationship will be stronger for faculty members with protean career orientation than for faculty members without it (rejected).

Hy12a: there is a positive relationship between faculty members' research performance and salary, which is moderated by Boundaryless career orientation, in a way that this relationship will be stronger for faculties with Boundaryless career orientation than for faculties without it (rejected).

H12b: there is a positive relationship between faculty members' research performance and promotion, which is moderated by Boundaryless career attitudes, in a way that this relationship will be stronger for faculty members with Boundaryless career orientation than for faculty members without it (rejected).

H12c: there is a positive relationship between faculty members' research performance and subjective career success, which is moderated by Boundaryless career attitudes, in a way that this relationship will be stronger for faculty members with Boundaryless career orientation than for faculty members without it (rejected).

The literature review highlighted the importance of contemporary career orientations and the individual career success (for example, see Cooke, 2009; Boselie et al., 2005; Gerhart, 2007; Horn and Kinicki, 2001; Purcell and Kinnie, 2007; Saks, 2006; Wall and Wood, 2005; Wright and Gardner, 2003). However, when academics' career orientation has been employed as a possible moderator in the relationship between academics research performance and career success, the study results showed insufficient effects of career orientations on the relationship between research performance and career success. This result is somewhat surprising and has come as opposed to expectations. Contemporary careers, including Boundaryless and Protean career orientation, reflect some attitudes, in which particularly ambitious individuals take the initiative to get ahead in their careers (Baruch, 2004a; Sullivan and Baruch, 2009). These positive behaviours in taking the initiatives to career advancement expected to have a role in the relationship between academics performance and career success. There is evidence from previous literature that each of these career orientations can lead to a greater objective and subjective career success (For example, see Grimland, Vigoda-Gadot and Baruch, 2012; Gerli, Bonesso and Pizzi, 2015; Herrmann, Hirschi and Baruch, 2015).

Although the theoretical literature potentially suggests such as this effect, and the assumptions, as well as principles of contemporary career orientations and the nature of the faculty work in academia, is closely linked (Baruch and Hall, 2004), these empirical results did not support those hypothesised relationships. This result may be explained by the fact that the concept of career management and contemporary career orientations is an uncommon conception in the Middle East compared to western socialites (Forstenlechner and Baruch, 2013). There are, however, other possible explanation. This study was conducted in the public sector universities where the high job security another reason may be explained

for these results. Therefore, the system of mobility between public universities is complicated according to the system followed in Saudi Arabia, and this may have an impact on the results. Also, freedom of movement between public universities in Saudi Arabia is very complex and subject to many aspects including the role of “wasta”/”piston” (connections/pull) (Iles, Almhedie and Baruch, 2013, p.465) and it is not easy to do so.

6.5 Overall Findings

Building on the empirical results presented in Chapter five, this section provides a summary of the main findings in accordance with each research question.

6.5.1 Research Question 1- What HPHRPS is/are significantly associated with academic research productivity at Saudi Arabian public universities?

The results suggest that some of the studied HPHRPSs influence faculty members’ research performance. The results of the study showed only the practices of training and recognition could lead to higher research performance by faculty members. In other words, faculty members provided with ongoing training and receiving continuous recognition for research achievements and performance will be more productive in term of their research outcomes. However, practices of internal mobility do not have any impact on the faculty members’ research performance. Also, the practices of participation have a negative impact on faculty members’ research performance. The study, therefore, shows that the level of faculty members’ research productivity is largely driven by practices of training and recognition that are provided by the universities (i.e. dean of the College, heads of departments, or colleagues).

6.5.2 Research Question 2- What HPHRPS is/are significantly associated with academics career success at Saudi Arabian public universities?

The results indicate that HPHRPSs have different effects on the success of faculty members. The results of the study showed that only the practices of internal mobility and recognition associated with faculty members’ career success. In term of objective career success practices of internal mobility lead to a higher level of faculty member salary progression and promotion. Whereas, the practices of recognition lead only to the higher level of promotion obtained. Similarly, in term of subjective career success, the results of the study showed that only the

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practices of internal mobility and recognition associated with faculty members' subjective career success. In other words, faculty members provided with regularly internal mobility opportunities and receiving continuous recognition for research achievements and performance will have a higher level of career satisfaction. However, practices of training and participation do not have any impact on the faculty members' objective and subjective career success. The study, therefore, shows that the level of faculty members' careers success is largely driven by practices of internal mobility and recognition that provided from the universities, (i.e. dean of the College, heads of departments, or colleagues).

6.5.3 Research Question 3- Does academic research performance mediate the relationship between HRM practices and career success?

The study results showed that academics research performance mediate the relationship between some HPHRPSs and both objective and subjective career success of faculty members. Specifically, the results indicate that academics research performance do mediate the relationship between the practices of training and recognition and objective career success. In other words, faculty members' objective career success can be achieved through the impact of these practices on the research performance of academic staff, which in return will affect their salary progression and promotion. However, in term of subjective career success, the study results showed that academics research performance was only able to mediate the relationship between the practices of recognition and subjective career success. In other words, faculty members' subjective career success can be achieved through the impact of the practices of recognition on the research performance of academic staff, which in return will affect their career satisfaction. Also, academics research performance was found negatively mediate the relationship between the practices of participation and salary progression.

6.5.4 Research Question 4- What individual career orientation has/have a significant impact on academics career success and on the relationship between academics research performance and career success?

The results of this study suggest that there is a difference in the impact of career orientations (Boundaryless and Protean) on the faculty members' career success. Furthermore, the results indicate the limited impact of all the three career orientations in general on faculty members' career success. In term of objective career success, the results of the study revealed that only the attitudes of

Boundaryless Career could lead to higher objective career success. Specifically, faculty members with physical and psychological career mobility and moves mind-set (Sullivan and Arthur, 2006) will have higher opportunities for promotion. In term of subjective career success, the results of the study showed that only the attitudes of Protean Career could lead to higher subjective career success. In other words, faculty members with values-driven attitudes in the sense that the individual's internal values provide the direction and measure of success for the person's career and self-directed attitudes in personal career management—having the ability to be adaptive in terms of performance and learning demands (Briscoe and Hall, 2006a,p.8), will have higher level of career satisfaction. However, the two career orientations do not have any impact on the relationship between faculty members' research performance and career success. Thus, there is no moderation effect of career orientations on the relationship between research performance and career success.

6.6 Chapter Summary

This chapter presents the discussions of the results of this current study. This chapter starts with discussing the results of the direct relationships between the study constructs. As predicted, the results revealed that among the HPHRPSs, the practices of training and recognition have a positive effect on faculty member research performance. The chapter also provides explanations for the results which do not support the direct hypothesised relationships.

Additionally, the chapter discusses the role of research performance in mediating the relationship between HPHRPSs and career success. The results show that research performance is mediated the relationship between training and recognition with objective career success, and recognition with subjective career success. Additionally, research performance found negatively mediated the relationship between participation and objective career success. The role of faculty member career orientations on the relationship between research performance and career success was discussed as well. The chapter ended by summarising the key findings according to the main questions underlying the study. The next chapter presents the contribution, practical implications, and limitations of this study, along with the directions for future research.

Chapter 7: Conclusion and Implication

7.1 Introduction

This chapter begins by presenting the contributions of this thesis. Following on, the practical implications are outlined. Then, the limitations of the research are presented. Finally, some directions for future research are suggested.

7.2 Contributions

This study developed and tested a theoretical model which examines the effects of High-Performance HR Practices (HPHRPS) on academics career success. The model also tests for the indirect effects of research performance on the relationship between HPHRPS and academics career success, and the moderating effect of academics career orientations on the relationship between research performance and academics career success. This section highlights the theoretical, practical and contextual contributions of this study.

7.2.1 Theoretical Contributions

At the theoretical level, this study has provided controversial results that have broadened understanding of the implication of HPHRPS and career theories in eastern work environment and culture. This research contributes to knowledge in three streams of literature, including literature on academic research performance, human resource management, and career theories. These contributions are detailed next.

7.2.1.1 Contribution to Literature on Academic Research Performance

This research contributes to the understanding of the effects of HPHRPS on academics research performance, which has been neglected in prior literature (Smeenk *et al.*, 2006; Decramer, Smolders and Vanderstraeten, 2013; Van den Brink, Fruytier and Thunnissen, 2013; Amin *et al.*, 2014). Existing research on research performance mainly focus on examining aspects related to environmental and demographic factors, but they have failed to sufficiently examine some managerial practices, specifically from the lens of human resources management. For example, some previous studies addressed the role of individual-level factors, such as self-efficacy (e.g. Vasil, 1992;1996; Bailey,

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1999; Hemmings and Kay, 2010a; Pasupathy and Siwatu, 2014; Hemmings and Kay, 2016), gender, family size and age of children (Stack, 2004; Fox, 2005; Jappelli et al., 2017), and the choice of the research topic (Fisher, 2005). Other studies focused on the role of institutional factors, including availability of resources (Bland and Ruffin, 1992; McGill and Settle, 2012; Chen and Zhao, 2013; Nguyen and Klopper, 2014; Horodnic and Zaiț, 2015), size and type of the institution and its departmental climate (Smeby and Try, 2005; Dever and Morrison, 2009; Edgar and Geare, 2013), in addition to the level and type of communication and workload within the institute (Lee and Bozeman, 2005). Some studies have also explored multiple factors including individual, institutional, leadership and environmental characteristics (Blackburn et al., 1991; Bland et al., 2005; Lee and Bozeman, 2005; Hesli and Lee, 2011; Jung, 2012; White et al., 2012). Despite the valuable contribution of previous studies, the influence of HR managerial practices, i.e. High-Performance HR Practices (HPHRPS), on research performance remains under-explored. Thus, the present study contributes to the academic career literature by exploring the effects of such practices on academics research performance and career success. The study findings suggest that some HRM practices, including training and recognition, are important predictors of not only academics research performance, but also academics career success. Therefore, this study enriches our knowledge of the mechanism in which HRM can make a difference through HPHRPS in encouraging the higher performance of academics, leading to greater career success. This study also responds to the call for more understanding of the factors facilitating superior academics research performance (Hardré and Cox, 2009).

7.2.1.2 Contribution to Literature on Human Resource Management (HRM)

This research contributes to the literature on HRM by examining the effect of HPHRPS on academics research performance and career success. This research advances our understanding of HPHRPS and AMO theory in several ways.

First, the findings confirm the positive role of employees ability and motivation in for their performance. However, the research shows that opportunities may negatively affect performance in light of different cultural and occupational aspects. Specifically, the findings show that participation in decision-making and involvement in influencing the work process have a negative impact on academic research performance. As mentioned in the discussion chapter, this negative impact could be attributed to the cultural dimension or the nature of the academic context. Therefore, this result contributes to the understanding of AMO

theory by showing that its three components may not necessarily yield a similar outcome on performance. Also, the result shows that each of the theory components may be impacted by contextual dimensions, such as culture and occupation.

Second, this study contributes to our understanding of the validity of HPHRPS and AMO theory for individual outcomes (research performance) and in a unique context (academia). More specifically, most of the previous literature was conducted in the private sector, measuring performance outcomes at an organisational level (Jiang *et al.*, 2012; Tzabbar, Tzafrir and Baruch, 2017). Similarly, the limited studies addressed the impact of HPHRPS practices in the public sector were also focused on the organisational outcomes (Gould-Williams, 2003; Giauque, Anderfuhren-Biget and Varone, 2013; Vermeeren, Kuipers and Steijn, 2014). Studies investigating the individual outcomes were limited and mainly focused on outcomes impacting the organisation, such as the intention to leave, organisational commitment, and citizenship behaviour (See, for example, Jiang *et al.*, 2012). By investigating the link between HPHRPS, individual performance, and individual career success, this study shows that some HPHRPS affects individual-level outcomes. Specifically, this study shows that training and recognition have a positive impact on academics research performance.

Also, this study examined the impact of HPHRPS in academia, specifically, on academics who hold complex jobs that require various skills (Baruch and Hall, 2004; Machado-Taylor *et al.*, 2016; Sutherland, 2017). Thus, this research extends the understanding of the generalizability of HPHRPS and AMO theory to a unique sector, outside of manufacturing, professional service, lower-skilled service, or high-technology sectors (Teclmichael Tessema and Soeters, 2006; Gould-Williams, 2007; Boselie, 2010). In this study, the effect of some HPHRPS, including training and recognition, on work performance was consistent with previous studies addressing such practices in other sectors. However, the study also shows that some HPHRPS, such as participation in decision making and influencing work practices, have a negative impact on work performance in academia.

Third, this study contributed to developing an understanding of the relationship between HPHRPS and career success. Previous studies are mainly focused on the relationship between HPHRPS and organisation success (See for example, Subramony, 2009). This study enriches our knowledge regarding the linkage of HPHRPS and career success by showing that some HPHRPS affects career success.

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Specifically, this study shows that internal mobility and recognition have a positive effect on academics career success. This is an important finding as it provides empirical evidence of the effect of HPHRPS on individuals' career success.

Fourth, the majority of the previous literature were conducted in developed countries and western cultures (Gould-Williams and Mohamed, 2010; Zhang *et al.*, 2013), whereas this study is unique in focusing on Middle Eastern culture and a developing country, namely Saudi Arabia which is 'influenced by culture, Islam, and the role of "wasta"/"piston" (connections/pull), as well as by national and global politics' (Iles, Almhedie and Baruch, 2013, p.465). By validating HPHRPS in a non-western context, the findings contradict the argument that 'bundles' of HPHRPS (Delery and Doty, 1996; Guest, 1997) are fit for organisations with different identities, and the argument that 'bundles' of HPHRPS are effective for achieving superior performance in any organisation, regardless of the sector (Arthur, 1992; Delery and Doty, 1996). Specifically, the study shows that some HPHRPS, such as internal mobility, have no impact on academics research performance. The study also shows participation in decision-making and involvement in influencing the work process have a negative impact on academic research performance.

7.2.1.3 Contribution to Literature on Career Theories

First, this study contributes to career theories literature by investigating the moderating role of individual career orientations, specifically Protean and Boundaryless orientations, on the relationship between academics research performance and career success. The previous literature linking job performance with career success have not provided sufficient understanding if individual career orientation has a role in this relationship. Therefore, this research bridges the gap in previous studies by examining the effect of employees' career orientation on the relationship between job performance and career success. The results show that individual career orientation does not affect the relationship between academics research performance and their subjective and objective career success.

Second, this study validates the contemporary theories of career orientations in an Eastern context. Research on contemporary career orientation is mainly conducted in a western cultural context. This study responds to the call of Sullivan and Baruch (2009) for studies validating non-traditional career theories in

a non-western cultural setting, where cultural aspects can shape how individuals perceive their careers (Chudzikowski *et al.*, 2011; Khapova *et al.*, 2011). Thus, this study contributes to the career literature by closing this gap and furthering our understanding by examining the impact of career orientations on academics career success in eastern culture. The findings of this study confirmed the positive effect of contemporary career orientations on individuals career success.

Third, most of the previous research addressing the relationship between contemporary career orientation and career success was conducted in profit-oriented private organisations (see section 2.7.6). This study confirms that such relationship exists even in the public sector, where traditional career aspects such as career progression are associated with more bureaucratic perspectives in which employees need a long time to get promoted and climb the organisational hierarchy (Baruch, 2004a).

7.2.2 Managerial Contribution

This research is one of the first efforts to study academic research performance and career success in Saudi Arabian public universities through the lens of high-performance HR practices and career theories. This study is critical in developing our understanding of the factors that promote faculty research performance, which will be highly valuable to administrators who develop policies aimed at enhancing faculty member research productivity and career advancement.

The results of this research contribute to addressing the poor research performance in higher education institutions in Saudi Arabia (Ministry of Education, 2016). This can be evidenced through the results of this research, which provide institutional leaders and decision-makers with solid information about the impact of HPHRPS in increasing faculty member research performance and career success. Hence, this will enable the decision-makers to reform the policies and practices affecting faculty members' performance in an informed manner, based on evidence and while considering the characteristics of the profession. This will be discussed in detail on practical impact section.

7.2.3 Contextual Contribution

At the contextual level, there are insufficient studies that focus on developing countries and eastern cultures. Most of the attention of researchers was centred in the developed countries and western context. This study adds value to the

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literature by reducing this gap. It helps to develop our understanding of the similarities and differences between developed and developing countries as well as western and eastern contexts. This is critical as the results enable us to validate the impact of theories (used in developed countries and western cultures) in developing countries and eastern context. In this thesis, the results showed that some existing theories, such as AMO, are partially valid when applied to a context different than the one they were established in. This could be attributed to the nature of the sector or aspects of the culture (see section 6.2).

Additionally, the research encourages scholars and researchers to be selective when applying HPHRPS model in a way that best fits their sector and cultural context.

7.3 Practical Implications

The findings of the present thesis have several important implications for the management in public sector universities. If Saudi public-sector universities want to improve research outcomes and put a step in solving the low performance, then the focus on the implementation of some HRM practices to raise the productivity of academic research is important. Current situation universities focus much on the physical environment including luxurious infrastructure (Alzahrani, 2011), however the effective use of HPHRPSs still needs to be given more attention. In particular, the study sheds light on how certain managerial practices can contribute to an increase in faculty members' research performance and lead to academic career success. The results of this study could serve policymakers in Saudi universities to overcome some of the current problems related to low levels of research productivity. For example, universities should focus not only on buildings and infrastructure but simultaneously develop and encourage faculty members through the optimal use of human resources practices to create a productive and positive work environment.

In particular, universities can increase their research outcomes by focusing on some of HRM practices that positively associated with higher level of academics research performance in order to help to achieve the Saudi's government transition to be a knowledge-based economy (Allothman and Busch, 2009; Ministry of Economy and Planning, 2014). Specifically, universities should ensure that their faculty members are provided with systematic on-going training opportunities to reinforce their knowledge, skills, and abilities. Such training should be consistent with the universities' missions and main objectives. Training

programmes should also be designed in a way that helps to enhance academic research competencies, sustaining their research motivation and promoting their career success (Cooke and Green, 2000; Calma, 2010).

However, this recommendation may be particularly challenging in the Saudi context, where training may be seen as an additional expense rather than investment. If Saudi universities want to build research capacity, they should invest more in training academics. They should determine aspects in which faculty members need more training, then, design the training programs accordingly. Basic training courses are also suggested periodically.

Most importantly, universities need to look at the management of academics' research careers as an institutional responsibility (Helen, 2005; Nguyen, 2016). In other words, rather than just leaving academics to discover research advancement opportunities by themselves, universities should be proactive in term of helping and/or supporting their academics throughout their career life with such opportunities. For example, the Deanship of Academic Development can help to advance academics' informal research qualifications and skills. They could conduct occasional research training workshops to advance faculty members publishing skills, such as targeting a journal, support in preparing for research proposals, writing process, managing a research project, etc. (Taylor, 2006; Nguyen, 2016). They should also encourage a more cooperative culture where senior researchers provide mentoring support to early career researchers (Rath, 2009).

Additionally, this research demonstrates that the HRM practices of recognition have a significant impact on academics research performance, which in turn is a strong driver of academics success. Therefore, universities, deans of faculties and heads of departments should ensure that there are formal and informal practices to recognise the achievements of faculty members to motivate academics to increase performance. These practices may cost a little but are cost-effective and easy to develop in universities. For example, when a faculty member publishes a paper, it is possible to send an email to congratulate and acknowledge the publisher to all faculty members. The university and colleges can also organise a mini-event at the end of each year to honour faculty members with the most contributions to the research productivity and activity.

Moreover, this study did not demonstrate the effect of internal mobility on the research performance of faculty members. If Saudi universities want to motivate their academics to promote a higher level of research activities, they should

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reconsider redesign the current promotion system. As we have noted in the earlier, some theories suggest that promotion has influence in motivating employees (e.g. see Herzberg, 1959). Therefore, institutions should attempt to design a permeation system in a way that rewarded high performer academics. Indeed, prior research shows that promotion can be a key driver of research performance (Butler and Cantrell, 1989; Al-Gindan *et al.*, 2002; Azad and Seyyed, 2007; Jung, 2012). It would be better if Saudi universities consider rewarding faculty members who are more involved in research productivity with such opportunities for career advancement.

Furthermore, decision-makers and practitioners at universities can limit the process of participation in decision-making because the results indicate that this type of practice has a negative impact on faculty members' research productivity and career success. This is likely to be due to the busy schedule of a faculty member who will participate in administrative meetings which may lose focus in the core of his work and thus will adversely affect his career advancement. Overall universities should pay attention to the cultural aspects regarding the implementation of HPHRPS. Kats *et al.* (2010 p.12) argued that 'Organisations will only be able to carry out effective HR practices if they take specific cultural influences into account'.

The results also encourage decision-makers and practitioners in universities to work to create awareness and educate academics that their research productivity has a role in contributing to their success in academia both objectively and subjectively. They are also recommended to pay attention to the fit of faculty members with the university requirements during the recruitment process, as not all faculty members may be active in research. Some academics may be interested in teaching more than research, and some may be in service more than the research activities. Therefore there should be consistency between the vision of the university and academics interests. In other words, achieving congruence between the values of academics and universities is important.

It is worth mentioning that all the results and recommendations of this study will be sent to the Deanship of Academic Development in the participating universities, as a practical research outcome which may be of benefit to these organisations.

7.4 Limitations of the Study

Like any research, this study is not without limitations. The results of this study, therefore, need to be interpreted with caution given the following several limitations. First, the current research applied a cross-sectional strategy, and consequently, conclusions regarding causality are difficult to confirm. The cross-sectional strategy is limited in its explanation of the directions of associations between the variables of the research model (Saunders, Philip and Thornhill, 2016). For instance, it is plausible that the level of academic career success influences academic perceptions of HPHRPS, where academics who are satisfied with their level of career success may have a positive assessment of HRM practices. This would represent an element of reverse causality, compared to the proposed research model, which we cannot test in this study.

Second, there is also an important limitation related to the self-report technique of data collection in this research. This study used self-report questionnaires for academics as the source of data about the different study variables. Although the study tested for common method bias, there is still a possibility that some common method bias affected the findings.

Third, there is controversy upon which set of HRM practices should be studied when examining the relationship between HPHRPS and individual outcomes. Accordingly, there might be other HRM practices that should be included in order to give the most comprehensive picture of the impact of high-performance HR practices in academia. However, the five HR practices selected for the existing study are amongst the most widely reported practices connecting high-performance HR practices and individuals outcomes in previous research (Jiang *et al.*, 2012).

Fourth limitations apply to the research in regards to the single sector context, which was the higher education sector. Moreover, although the data was collected from five public universities from all regions of Saudi Arabia, private organisations were not represented. In private sector universities, the application of HPHRPS may be different as a result of their profit orientation and the nature of public sector workers compared to the private sector. These results, therefore, need to be interpreted with caution regarding the effect of the HPHRPS on academics research performance and career success in the private sector.

Fifth, this study is limited to only one component of academic performance, namely research. This focus on only research performance in this current study

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has several reasons mentioned in Chapter Two, but the work of academics overlaps between three main functions (Baruch and Hall, 2004; Baruch, 2013; Sutherland, 2017). Therefore, the Interferences between the HPHRPS and academics research performance and career success might be bias. In other words, the results of this study are not comprehensive because there are other elements in the performance of academics that have not been measured (teaching and service)

Sixth limitation is that this study included only universities from one country namely Saudi Arabia (SA). Saudi Arabia has a collectivist culture, and the power distance is high (Hofstede, 2001). Saudi academics are therefore more likely to be conservative in a way that would pay compliments when assessing HPHRPS that are provided by their employers. In countries with a more individualistic culture with fairly low power distance, academics may likely have more freedom to express their views regarding managerial practices. Therefore, these results are not generalised to other cultures, for example, Anglo-Saxon nations described as low power-distance and based on individualism principles.

Seventh, this research addressed the relationship between HPHRPS, academic research performance, and career success. Thus, the question of why such relationships take a specific form was beyond the aim of this research. These limitations could be an interesting area of research for future studies. Suggestion for future research will be elaborated next.

7.5 Directions for Future Research

Although this study represents an original conceptual and empirical investigation of the unique association between HPHRPS and academics research performance and career success, several questions remain unanswered at present. Future studies on the current topic are therefore recommended. For example, future research could try to compare the results of the public sector universities with the private to understand if the sector plays a role in determining the impact of HRM practices on academics performance and success.

This research has thrown up many questions in need of further investigation. For example, Future research may work a qualitative study to understand why practising as participation has a negative impact on academics performance. It would be interesting to know the point of view of academics and practitioners about how and why these practices have a negative impact on the performance in

academia. Moreover, Future research may also use a broader range of HPHRPSs, could shed more light on practices that develop academics knowledge, skill, and ability. Specifically, a further study could assess the long-term effects of practices such as recruitment and selection and their role in employee performance and success.

Additionally, although this research has verified the importance of examining the mechanisms mediating the association between HPHRPS and academics success, still more studies need to be conducted in order to gain a better understanding of how HPHRPS affect academics success. There is a need to expand the scope of academics performance, advancing more complex models which may include different elements of academics performance (such as teaching and service) indicators together with research performance. This may help to gain a better understanding of the associations of the causal chain that links HPHRPS and academics performance and estimate the degree in which HPHRPS, through the indirect effects of academics performance, influence career success.

Future research may also consider exploring the implementation of HPHRPS on academics performance and success in different cultures. This may worth investigation which helps to understand whether HPHRPS applications and influences are largely differentiated by culture. It would be interesting to examine the effect of the HPHRPS in different countries and cultures that differ from the culture in this research in order understand how the results may be contrasted according to the cultural dimension in which this HPHRPS model operated. This will have the benefit of identifying the appropriate practices that work best for each culture. In specific, it would be interesting to test the effect of the high performance practices in cultures which have what Hofstede (2001) describes as high 'power-distance' and strongly 'collectivistic' norms (e.g. Sub-continental and Eastern Asia), as opposed to the low 'power-distance' and 'individualistic' culture of the UK.

7.6 Conclusion

The research performance of academics has long been a focus of attention in academia. What factors affect research productivity and what motivates the research performance has been and continues to be one of the main concerns of universities. This study brings together research from the fields of Human Resource Management and Academic Career Studies in order to develop a model

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of the factors that play a crucial role in the research performance and career success of academics from the lens of Human Resource Management Practices.

The study is based on investigating High-Performance Human Research Practices (HPHRPS) as factors in the development of academic research performance and career success. Up to date, the majority of empirical studies on HPHRPS were conducted in profit-oriented multinational companies (Keegan and Boselie, 2006; Jackson, Schuler and Jiang, 2014). We, therefore, know little about HRM effectiveness in the public sector (Bach and Kessler, 2007; Harley, Allen and Sargent, 2007; Gould-Williams *et al.*, 2014; Knies *et al.*, 2015). Scholars are increasingly emphasising the significance of research examining the role and effect of HPHRPS outside the private sector, such as in the academic institutions (Smeenk *et al.*, 2006; Decramer, Smolders and Vanderstraeten, 2013; Van den Brink, Fruytier and Thunnissen, 2013; Amin *et al.*, 2014). Thus, the present study was designed to examine the effect of four HPHRPS (training, internal mobility, recognition, and participation) on academics research performance and career success. The second aim of this study was to investigate the effects of individual career orientations on the relationship between research performance and career success of the academics. Therefore, the current study aims to bridge the gap in the literature by addressing the following questions:

1. What HPHRPS is/are significantly associated with academic research performance at Saudi Arabian public universities?
2. What HRM practices is/are significantly associated with academics career success at Saudi Arabian public universities?
3. Does academic research performance mediate the relationship between HPHRPS and career success?
4. What individual career orientation has/have a significant impact on academics career success and on the relationship between academics research performance and career success?

Overall, the research shows that universities can make use of HPHRPS to influence academic research performance and career success in academia. The results of this study showed the practices of training and recognition could lead to higher research output by faculty members. Interestingly, the practice of participation was found to have a negative impact on faculty members' research performance. The results also revealed that only the practices of internal mobility and

recognition were associated with faculty members' objective and subjective career success.

Moreover, the study found that academics research performance do mediate the relationship between the practices of training and recognition and objective career success. It also mediates the relationship between the practices of recognition and subjective career success. The study showed no impact on individual career orientation on the relationship between faculty members' research performance and career success. However, the results of the study revealed that the attitudes of boundaryless career orientation lead to higher objective career success. The study also revealed that attitudes of protean career orientation lead to higher subjective career success.

As this study shows, research which bridges the gap between Human Resource Management Practices and Research Performance is essential to a proper understanding of factors affecting academics performance. The thesis, therefore, makes important contributions to the fields of Human Resource Management and Academic Career Studies and provides some critical evidence for the implementation of Human Resources Management in the academic sector. This study has expanded understanding of the AMO theory (Appelbaum, Bailey and Berg, 2000; Jiang, Takeuchi and Lepak, 2013; Boxall and Purcell, 2016) to the academic sector.

It is hoped that the thesis will encourage researchers in Human Resource Management to devote more attention to the role of HPHRPS as mean of academics superior performance and career success in academia. Additionally, the study hopes to notify researchers in Academic Career Studies to the significance of HPHRPS for academics research performance and career success. Universities can develop a good research output as a result of developing academics' abilities and motivation, and provide them with opportunities to perform their job. This thesis also informs practitioners of the critical role of HPHRPS in academia.

At the initial stage of the research, we were eager to understand the impact of human resource practices on the research performance and the career success of academics. While the results of this research contribute to our understanding of this question, there are still many other questions that have yet to be answered. To conclude the thesis, I am leaving the reader with some questions that are worth attention, for instance: Are there other factors that may have a stronger effect on academics research? Do culture and organisational environment have an

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impact on academics' outcomes? Moreover, does the type of university play a role in this relationship? I am enthusiastic to read the result of studies addressing these questions in the future.

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Appendices

Appendix A : Participant Information Sheet

Participant Information Sheet

Study Title: Increasing Research Productivity: The Impact of High-performance HR practices in Academic Research Performance as Mediator for Career Success

Researcher: Abdulrahman Alshaikhmubarak Ethics number:

Please read this information carefully before deciding to take part in this research. If you are happy to participate, you will be asked to sign a consent form.

What is the research about?

I am a PhD candidate at University of Southampton and focusing on academic work in Saudi public universities. I am examining factors associated with research performance and career success.

Why have I been chosen?

You are part of a representative sample of faculty members in Saudi public universities so your participation and opinions are critical to the success of this study. You have been chosen because you are a valuable information source for my study.

What will happen to me if I take part?

You will have provided with the questionnaire which should take 10 minutes to complete. All questionnaires are submitted confidentially.

Are there any benefits in my taking part?

There may be no benefit to the individual, but a benefit to others perhaps, or in respect of adding to current knowledge. Your participation in this study is critically important.

Are there any risks involved?

There is no risk associated with being part in this study.

Will my participation be confidential?

As part of complying with the Data Protection Act and the Data Protection Policy of the University, all your data will be kept confidential. There will be no-disclosure of research information except to authorise person by the University. Data will be coded and kept on a password protected computer.

What happens if I change my mind?

If you changed your mind and you are no longer interested to be part of the study, you have the right to withdraw at any time without your legal being affected.

What happens if something goes wrong?

In the unlikely case of concern or complaint, you may contact the research support officer (risethic@soton.ac.uk) or Head of Research Governance (0044-2380 595058, rgoinfo@soton.ac.uk)

Where can I get more information?

If you have any questions after reading this information sheet, you may contact the researcher anytime:

Abdulrahman Alshaikhmubarak
Email: aaia1v15@soton.ac.uk
Mobile (Saudi): 00966 - 564357735
Mobile (UK): 0044 - 79482 978597

Appendix B : Consent Form

CONSENT FORM (*Insert Version number*)

Study title: Increasing Research Productivity: The Impact of High performance HRM practises in Academic Research Performance as Mediator for Career Success

Researcher name: Abdulrahman Alshaikhmubarak

Ethics reference:

Please tick (check) this box to indicate that you consent to taking part in this survey

Data Protection

I understand that information collected about me during my participation in this study will be stored on a password protected computer and that this information will only be used for the purpose of this study. All files containing any personal data will be made anonymous.

Name of participant (print name).....

Signature of participant.....

Date.....

Appendix C : Research Questionnaire

Dear Faculty Member:

I am a PhD candidate at university of Southampton and focusing on academic work in Saudi public universities. I am examining factors associated with research performance and career success. Your participation and opinions are critical to the success of this study. If you are interested I would be happy to send you the report of the results.

The following questionnaire should take 10 minutes to complete. All questionnaires are submitted confidentially.

Confidentiality Statement:

Your responses and information obtained from this study will be held in confidence, and cannot be accessed by anyone except by the researcher. Completion and return of the questionnaire will indicate your willingness to participate in this study. If you require additional information or have questions, please contact us at the emails listed below. I appreciate the value of your time and your participation.

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Appendix B

Part I: Institutional Factors

Listed below is a series of statements that represent your feelings about various institutional factors related to your career at the University. Please indicate the degree of your agreement or disagreement with each statement by choosing the most correct response reflecting your opinion.

Strongly disagree	Disagree	Disagree somewhat	Undecided	Agree somewhat	Agree	Strongly agree
1	2	3	4	5	6	7
Training						
1. Extensive training programmes are provided to me in my job.					1 2 3 4 5 6 7	
2. In my job, I normally go through training after every few years.					1 2 3 4 5 6 7	
3. There are formal training programmes to train new faculty members to enhance their skills to perform their jobs well.					1 2 3 4 5 6 7	
4. Formal training is provided to me to increase my promotability.					1 2 3 4 5 6 7	
Internal mobility						
5. I have few opportunities for promotion.					1 2 3 4 5 6 7	
6. I do not have any future in my university.					1 2 3 4 5 6 7	

7. Promotion in my university is based on seniority.	1 2 3 4 5 6 7
8. I have clear career paths in my university.	1 2 3 4 5 6 7
9. Faculties who desire promotion have more than one potential position they could be promoted to.	1 2 3 4 5 6 7
Recognition	
10. My suggestions regarding work are seriously taken into account.	1 2 3 4 5 6 7
11. In this university, people regularly show their appreciation of suggestions that I make.	1 2 3 4 5 6 7
12. In this university, the dean or head of department uses different ways to recognise my efforts (oral praise, tickets for cultural events, free dinners etc.).	1 2 3 4 5 6 7
13. In this university I receive recognition in writing from my dean, head of department or deanship of faculty members (e.g. appreciation letters).	1 2 3 4 5 6 7
14. The Dean or head of department regularly congratulate sub-ordinates in recognition of their good efforts.	1 2 3 4 5 6 7

Appendix B

Participation	
15. In this job I am allowed to make many decisions.	1 2 3 4 5 6 7
16. In this job I am often asked by my dean or head of department to participate in decisions.	1 2 3 4 5 6 7
17. I am provided the opportunity to suggest improvements in the way things are done.	1 2 3 4 5 6 7
18. The Dean or head of department keep open communications with me in this job.	1 2 3 4 5 6 7

Part 2: Individual Factors

Listed below is a series of statements that represent your feelings about the various career factors which are related to your personality. Please indicate the degree of your agreement or disagreement with each statement by choosing the most correct response reflecting your opinion.

Strongly disagree	Disagree	Disagree somewhat	Undecided	Agree somewhat	Agree	Strongly agree
1	2	3	4	5	6	7
Career orientation						
19. For me, career success is how I am doing against my goals and values.					1 2 3 4 5 6 7	

20. I navigate my own career, mostly according to my plans.	1 2 3 4 5 6 7
21. If I have to find a new job, it would be easy.	1 2 3 4 5 6 7
22. I am in charge of my own career.	1 2 3 4 5 6 7
23. I take responsibility for my own development.	1 2 3 4 5 6 7
24. Freedom and autonomy are driving forces in my career.	1 2 3 4 5 6 7
25. For me, career success means having flexibility in my job.	1 2 3 4 5 6 7
Career orientation	
26. I enjoy working with people outside of my university.	1 2 3 4 5 6 7
27. I enjoy jobs that require me to interact with people in many different organisations.	1 2 3 4 5 6 7
28. I enjoy job assignments that require me to work outside of the organisation.	1 2 3 4 5 6 7
29. I like tasks at work that require me to work beyond my own department.	1 2 3 4 5 6 7

Appendix B

Career satisfaction	
32. I am satisfied with the success I have achieved in my career.	1 2 3 4 5 6 7
33. I am satisfied with the progress I have made toward meeting my overall career goals.	1 2 3 4 5 6 7
34. I am satisfied with the progress I have made toward meeting my goals for income.	1 2 3 4 5 6 7
35. I am satisfied with the progress I have made toward meeting my goals for advancement.	1 2 3 4 5 6 7
36. I am satisfied with the progress I have made toward meeting my goals for the development of new skills.	1 2 3 4 5 6 7
30. I would enjoy working on projects with people across many organisations.	1 2 3 4 5 6 7
31. I have sought opportunities in the past that allow me to work outside the organisation.	1 2 3 4 5 6 7

Part 3: personal information

For each item listed below, please check the most correct response and fill in the required Information.

37. Your gender

- Female
 Male

38. Your age
Years

39. Marital statues

- Single
 Married
 Widowed
 Divorced

40. Region of Citizenship

- Saudi
 Arab
 Asian
 Westerner

Other (please specify)

41. Academic rank

- Assistant Professor
 Associate Professor
 Professor

Other (please specify)

42. How long have you worked in academia since you earned your PhD degree

- Less than a year
 1-5 years
 6-10 years
 11-20 years
 Over 20 years

43. Origin of earned your PhD degree

Appendix B

Saudi

United States of America

United Kingdom

Other (please specify)

44. Your contract nature with your current university

Permanent contract

Fixed-term contract

Other (please specify)

45. Please give your best estimate of the number of your research works since you earned your PhD degree for each of the following.

Research work type	Number since earning PhD degree
1. Publication in peer reviewed journals	
2. Publication in professional journals	
3. Published book chapters	
4. Published books	
5. Edited and translated books	
6. Papers presented at conferences	
7. Obtained patents	

Saudi Riyal	up to 7,999	8,000 - 9,999	10,000 - 11,999	12,000 - 13,999	14,000 - 15,999	16,000 - 17,999	18,000 - 19,999	20,000 - 21,999	22,000 - 23,999	24,000 - 25,999	over 26,000
When you earned your PhD degree											

Appendix B

Today

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46. We know salary information is sensitive, but for this confidential study, please indicate the range of your monthly salary(including allowances and other direct income):

47. Please give your best estimate of the number of promotions you obtained since you earned your PhD degree (Promotions defined as “any increases in level and/or any significant increases in job responsibilities or job scope”)

Appendix D :Arabic Version of the Questionnaire

زيادة الإنتاج البحثي

عزيزي عضو هيئة التدريس: أنا طالب دكتوراه في جامعة ساوثهامبتون، وبحثي يركز على العمل الأكاديمي في الجامعات الحكومية السعودية. يدرس البحث العوامل المرتبطة بالأداء البحثي والنجاح في الحياة المهنية. مشاركتكم وآراؤكم أمر مهم ومقدر لنجاح هذه الدراسة. وسأكون سعيدا بإرسال تقرير النتائج لكم إذا رغبتم في ذلك. هذا الاستبيان يستغرق منك 10 دقائق لإكماله.

بيان السرية: الردود والمعلومات التي ستجمع من خلال هذا الاستبيان ستحفظ بسرية، حيث انه لا يمكن الوصول إليها من قبل أي شخص سوى الباحث.

إذا كنت بحاجة إلى معلومات إضافية أو لديك أي استفسار، يرجى الاتصال بنا عبر البريد الإلكتروني الوارد أدناه. مقدرين لك الاستقطاع من وقتك الثمين للمشاركة.

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إذا كنت توافق على أخذ الاستبيان الرجاء انقر فوق متابعة، وإلا انقر الخروج

المتابعة

الخروج

الجزء الأول: العوامل المؤسسية المدرجة أدناه هو عبارة عن سلسلة من العبارات التي تمثل مشاعرك تجاه العوامل المؤسسية المختلفة المتعلقة بحياتك المهنية في الجامعة. يرجى الإشارة إلى درجة الاتفاق أو الاختلاف مع كل عبارة عن طريق اختيار الإجابة الأكثر صحة في رأيك.

التدريب

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	موافق إلى حد ما	موافق	موافق بشدة
1. البرامج التدريبية المكثفة مقدمة لي في عملي.	<input type="radio"/>						
2. في عملي، عادةً أحصل على التدريب بعد كل بضع سنوات.	<input type="radio"/>						
3. هناك برامج تدريبية رسمية لتدريب أعضاء هيئة التدريس الجدد لتعزيز مهاراتهم لأداء عملهم بشكل جيد.	<input type="radio"/>						
4. يتم توفير التدريب الرسمي لي من أجل زيادة فرص الترقية.	<input type="radio"/>						

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	موافق إلى حد ما	موافق	موافق بشدة
5.لدي بعض الفرص للترقية.	<input type="radio"/>						
6.ليس لدي أي مستقبل في هذه الجامعة.	<input type="radio"/>						
7.الترقية في جامعتي مبنية على الأقدمية.	<input type="radio"/>						
8.لدي مسارات وظيفية واضحة في هذه الجامعة.	<input type="radio"/>						
9.أعضاء هيئة التدريس الذين لديهم الرغبة في الترقية , لديهم أكثر من منصب محتمل يمكنهم أن يترقوا له.	<input type="radio"/>						

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	موافق إلى حد ما	موافق	موافق بشدة
10. تؤخذ اقتراحاتي بشأن العمل بجدية وتوضع في عين الاعتبار.	<input type="radio"/>						
11. في هذه الجامعة، الناس بشكل منتظم يظهرون تقديرهم حول الاقتراحات التي أقدمها.	<input type="radio"/>						
12. في هذه الجامعة، العميد أو رئيس القسم يستخدم طرق مختلفة لتقدير جهودني (الثناء الشفهي، أو تذاكر للأحداث الثقافية، أو عشاء مجاني... الخ).	<input type="radio"/>						
13. في هذه الجامعة، أتلقى التقدير في شكل كتابي من قبل العميد أو رئيس القسم (مثل خطابات الشكر والتقدير).	<input type="radio"/>						
14. العميد أو رئيس القسم يقوم بانتظام بتهنئة أعضاء هيئة التدريس تقديراً لجهودهم الجيدة.	<input type="radio"/>						

المشاركة

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	موافق إلى حد ما	موافق	موافق بشدة
15. في هذه الوظيفة مسموح لي باتخاذ العديد من القرارات.	<input type="radio"/>						
16. في هذا العمل كثيرا ما يطلب مني من قبل عميدي أو رئيس قسمي المشاركة في اتخاذ القرارات.	<input type="radio"/>						
17. الفرصة متاحة لي لاقتراح التحسينات في الطريقة التي يتم تنفيذ الأمور بها.	<input type="radio"/>						
18. العميد أو رئيس القسم يحرص على إبقاء الاتصالات مفتوحة معي في هذه العمل.	<input type="radio"/>						

الجزء 2: العوامل الفردية المدرجة أدناه هي عبارة عن سلسلة من العبارات التي تمثل مشاعرك تجاه العوامل المهنية المختلفة التي ترتبط بشخصيتك. يرجى الإشارة إلى درجة الاتفاق أو الاختلاف مع كل عبارة عن طريق اختيار الإجابة الأكثر صحة والتي تعكس رأيك.

التوجه المهني

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	موافق إلى حد ما	موافق	موافق بشدة
9. بالنسبة لي، النجاح المهني هو كيف يكون مستوى عملي تجاه أهدافي وقيمي.	<input type="radio"/>						
20. أقوم بتأدية مهنتي في المقام الأول وفقاً لخططي.	<input type="radio"/>						
21. إذا كان يجب علي إيجاد فرصة عمل جديدة، سيكون من السهل.	<input type="radio"/>						
22. أنا المسؤول فيما يتعلق بحياتي المهنية.	<input type="radio"/>						
23. أنا أتحمل مسؤولية تطوير نفسي.	<input type="radio"/>						
24. الحرية والاستقلالية من العوامل المهمة والمؤثرة في مسيرتي المهنية.	<input type="radio"/>						
25. بالنسبة لي، النجاح المهني يعني وجود مرونة في عملي.	<input type="radio"/>						

التوجه المهني

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	موافق إلى حد ما	موافق	موافق بشدة
26. أستمتع بالعمل مع أشخاص من خارج جامعتي.	<input type="radio"/>						
27. أنا أستمتع بالوظائف التي تتطلب مني أن أتفاعل مع الناس في منظمات مختلفة عديدة.	<input type="radio"/>						
28. أنا أستمتع بالمهام الوظيفية التي تتطلب مني العمل خارج المنظمة.	<input type="radio"/>						
29. أنا أحب المهام في العمل التي تتطلب مني العمل خارج نطاق قسمي.	<input type="radio"/>						
30. أنا قد أستمتع بالعمل على مشاريع مع الناس من منظمات عديدة.	<input type="radio"/>						
31. لقد سعيت في الماضي إلى الفرص التي تسمح لي بالعمل خارج المنظمة.	<input type="radio"/>						

الرضا المهني

	لا أوافق بشدة	لا أوافق	لا أوافق إلى حد ما	محايد	موافق إلى حد ما	موافق	موافق بشدة
32. أنا راضي عن نجاح الذي حققته في مهنتي.	<input type="radio"/>						
33. أنا راضي عن التقدم الذي أحرزته نحو تحقيق أهدافي المهنية الشاملة.	<input type="radio"/>						
34. أنا راضي عن التقدم الذي أحرزته نحو تحقيق أهدافي المتعلقة بالدخل.	<input type="radio"/>						
35. أنا راضي عن التقدم الذي أحرزته نحو تحقيق أهدافي المتعلقة بالتقدم المهني.	<input type="radio"/>						
36. أنا راضي عن التقدم الذي أحرزته نحو تحقيق أهدافي المتعلقة بتطوير مهارات جديدة.	<input type="radio"/>						

الجزء 3: المعلومات الشخصية يرجى التحقق من الإجابة الأكثر صحة لك وملء المعلومات المطلوبة لكل بند من البنود الواردة أدناه.

37. ما هو جنسك

ذكر

أنثى

38. ما هو عمرك

39. الحالة الاجتماعية

أعزب

متزوج

أرمل

مطلق

40. الجنسية

سعودي

عربي

آسيوي

غربي

أخرى) من فضلك حدد _____)

41. الرتبة الأكاديمية

أستاذ مساعد

أستاذ مشارك

أستاذ) بروفيسور)

أخرى) من فضلك حدد _____)

42. منذ متى وأنت تعمل في المجال الأكاديمي من بعد حصولك على درجة الدكتوراه

أقل من سنة

1-5 سنوات

6-10 سنوات

11-20 سنة

أكثر من 20 سنة

43. البلد التي تم الحصول على الدكتوراه منها

السعودية

أمريكا

بريطانيا

أخرى) من فضلك حدد _____)

44. طبيعة عقدك مع الجامعة الحالية

عقد دائم

عقد محدد الأجل

أخرى) من فضلك حدد _____)

45. يرجى إعطاء أفضل تقدير حول عدد الأعمال البحثية الخاصة بك منذ حصولك على درجة الدكتوراه على كل مما يلي.

1. _____ النشر في مجلات علمية
2. _____ النشر في المجلات المهنية
3. _____ نشر فصل في كتاب
4. _____ نشر كتاب
5. _____ تحرير أو ترجمة كتاب
6. _____ الأوراق التي قدمت في المؤتمرات
7. _____ براءات الاختراع التي تم الحصول عليها

46. نحن نعلم أن معلومات الرواتب حساسة، ولكن لهذه الدراسة السرية، نرجوا منك أن تشير إلى مستوى الراتب الشهري) بما في ذلك العلاوات والدخل الأخر الغير المباشر: (ريال سعودي

	حتى 7,9 99	8,0 00 - 9,9 99	10,0 00- 11,9 99	12,0 00- 13,9 99	14,0 00- 15,9 99	16,0 00- 17,9 99	18,0 00- 19,9 99	20,0 00- 21,9 99	22,0 00- 23,9 99	24,0 00- 25,9 99	أكثر من 26,0 00
عندما حصلت على درجة الدكتوراه اليوم	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

47. يرجى إعطاء أفضل تقدير حول عدد الترقيات التي حصلت عليها منذ أن حصلت على درجة الدكتوراه) الترقيات عرفت على أنها" أي زيادة في مستوى و / أو أي زيادات كبيرة في مسؤوليات العمل أو نطاق العمل("

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