

**EXPLORING HIGH PERFORMANCE
MANAGEMENT PRACTICES AND THEIR
IMPACT UPON THE SUSTAINABILITY OF
SMALL AND MEDIUM-SIZE ENTERPRISES IN
PAKISTAN**

A dissertation submitted by

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ABSTRACT

Small and Medium Enterprises (SMEs) play a significant role in the economic development of a country both through employment creation and income generation. Prior research emphasises the optimal utilisation of human resources, technology and processes as a key to strengthen the SME sector. Within SMEs each employee constitutes a larger percentage of the total workforce than in large organisations thus highlighting the crucial importance of employing high performance management practices (HPMP) which create an environment within which the skills and capabilities of employees could be optimised and organisational sustainability could be enhanced.

This study on HPMP in SMEs was conducted within the Pakistani SME sector. SMEs comprise the largest and constantly growing proportion of the Pakistani economy, and the majority of these firms manufacture products and provide services to national and international markets. Pakistan has a unique culture and SMEs face quite unique challenges compared to other countries, which makes a study focusing on HPMP a worthwhile endeavour. Although there has been an increase in research emphasising the role of HPMP as a basis of competitive advantage, there is still a dearth of systematic research available on the nature and implementation of these practices, as well as the link between these practices and human resource and economic sustainability outcomes in the Pakistani SMEs. This study is filling a gap in relation to theory and practice regarding the nature and extent of HPMP and its association with Sustainability Outcomes in Pakistani SMEs. For the purposes of this study a SME is defined as a business employing twenty to two-hundred-and-fifty employees.

The objective of this study was to examine the nature and extent of adoption of HPMP and their impact upon Sustainability Outcomes in Pakistani SMEs. Four main research questions (RQ) were developed to inform this research objective, including: what is the extent (frequency) and nature (in terms of patterns of adoption) of HPMP in SMEs?; to what extent do firm size, strategic planning, industry type, and the presence of a HR manager, relate to the prevalence of HPMP in SMEs?; is there a significant positive relationship between HPMP (i.e. recruitment, selection, training

and development, compensation, performance appraisal and consultation) and sustainability outcomes (economic sustainability outcomes and HR sustainability outcomes) of SMEs?; and to what extent do HR sustainability outcomes mediate the relationship between HPMP and SME Sustainability Outcomes (economic sustainability outcomes and HR sustainability outcomes)? Twenty-eight hypotheses were developed and tested to inform RQ2; fourteen hypotheses to inform RQ3; and two hypotheses to inform RQ4.

To answer the research questions, the study employed a quantitative methodology. Data were collected through a self-administered survey questionnaire. The questionnaire was adopted from a previous validated survey measuring HPMP in Australian SMEs. The target population consisted of SMEs operating in the city of Karachi, Pakistan. Stratified random sampling was applied to collect data from two strata i.e. manufacturing and service-sector SMEs. A total of 703 firms were selected, contacted by phone, and invited to participate in this survey. Of these firms, 357 SMEs (50.78 percent response rate) accepted the invitation to fill out the survey questionnaire. Most of the respondents who agreed requested that the researcher visit their organisations personally. The data was analysed by using multivariate data analysis techniques including exploratory factor analysis, independent sample t-tests, hierarchical linear regression methods and mediation analysis by using Sobel test.

The results indicate that SMEs adopted high performance management practices (HPMP) to a low to moderate extent, with only thirteen of the one-hundred-and-sixteen practices (11%) adopted at a high level (practices adopted by more than 70% of SMEs). A mixed picture emerged regarding the overall picture of the impact of *firm size* on HPMP. In relation to *industry type*, overall the main trend evident is a significant greater adoption of HPMP by service-based firms compared to manufacturing firms, especially HPMP practices that are formal in nature. With regard to the impact of *strategic planning* upon HPMP, overall the results were mixed and partially supportive of a positive relationship. According to the findings a significant positive relationship between the *presence of a HR manager* (firms with a designated person responsible for HR in the firm) and the adoption of HPMP was partially supported. Even though only fifty-two percent of respondent SMEs

employed a person responsible for HR issues, service-based SMEs employed a HR manager to significantly greater extent than manufacturing firms. This presence may explain the greater emphasis in service-based firms on HPMP compared to manufacturing firms.

The results indicate a positive significant relationship between HPMP and economic sustainability outcomes. The findings also indicate a partial mediation effect of HR sustainability outcomes on the relationship between HPMP and economic sustainability outcomes showing that employee motivation, turnover, commitment, and skill development (HR sustainability outcomes) are key determinants of SME firm performance.

The conclusion was drawn that the respondent SMEs have a low to moderate affinity for a 'bright prospect' scenario and as such tend to have leanings towards a 'bleak house' scenario. However, the bleak house scenario evident from the findings, may not be all be negative since several initiatives to further develop and grow SMEs in Pakistan have been initiated in recent years. These initiatives combined with the proposed recommendations presented in this study, have the potential to assist SMEs in transforming themselves to a more high performance and 'bright prospect' scenario.

CERTIFICATION OF DISSERTATION

I declare that the work presented in the thesis is, to the best of my knowledge and belief, original and my own work, except as acknowledged in the text, and that the material has not been submitted, either in whole or in part, for a degree at this or any other university.

Signature of Candidate

Date

ENDORSEMENT

Signature of Supervisor/s

Date

Date

Publications arising from this thesis

Raziq, A & Wiesner, R 2011, 'Exploring high performance management practices in Pakistani SMEs', paper presented to Annual International Conference on Innovation and Entrepreneurship (IE 2011), Hotel Fort Canning, Singapore 25-26 July 2011.

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DEDICATION

To my respected parents

For their life-long support, belief and love

To my dear brothers, sisters, wife, little son (Waseem) and niece (Madia)

For their so much encouragement, good wishes, love and joy

To my uncle (Abdul Khaliq)

For his financial and moral support throughout my academic career.

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CHAPTER ONE: INTRODUCTION

1.1 Introduction

SMEs' contribution to the national economies of developed and developing countries is significant in terms of employment creation and income generation (Bacon & Hoque 2005; Khalique et al. 2011; Rohra & Panhwar 2009; SBP 2011; Singh & Garg 2008). Key to strengthening the SME sector is through the optimal utilisation of its human resources, technology and processes (Barney 1991; Huselid 1995). Within SMEs each employee constitutes a larger percentage of the total workforce (Hill & Stewart 2000) emphasising the crucial importance of employing high performance management practices (HPMP) which create an environment within which the skills and capabilities could be optimised and contribute to firm performance (Golhar & Deshpande 1997; Hornsby & Kuratko 2003).

However, SMEs have largely been ignored in research particularly in developing countries. The aim of this study is to determine the extent and nature of High Performance Management practices (HPMP) in Pakistani SMEs and to assess the impact of these practices upon SMEs' Financial and Market-based sustainability outcomes. SMEs comprise the largest and constantly growing proportion of the Pakistani economy, and the majority of these firms manufacture products and provide services to national and international markets. Despite this, there is still a dearth of systematic research available about the utilisation of HPMP in these organisations and the practices that contribute to their long-term sustainability.

The research studies (e.g. De Kok et al. 2003; Duberley & Walley 1995; Marlow 2000; Rowden 2002; Wiesner et al. 2007; Zheng et al. 2009) conducted in different countries (mostly related to developed economies and with different cultural contexts than those of Pakistan) are showing mixed results regarding the adoption of HPMP and their relationship with sustainability outcomes. Consequently, owing to the cultural differences, these results cannot necessarily be applied in the Pakistani context. Moreover, researchers also suggest that similar research studies should be conducted in developing countries to take into consideration different cultural backgrounds (Heneman et al. 2000; Shih et al. 2006).

This research study contributes both to theory (the resource-based view, the universalistic and configurational approaches used in this study) and practice (by informing public policies in relation to the SME sector). The study also adds value to the literature of HPMP by analysing the human resource aspects of SMEs within a developing country, hence assisting SME's in how to improve their management practices.

This chapter provides background to the study through discussing an overview of Pakistan's economy, culture and small and medium enterprises (SMEs). This is followed by the problem statement and justification for the research, key contributions of the study, research objective and research questions, definition of key terms, brief overview of the methodology, delimitations of the scope of the study and the structure of the thesis. Figure 1.1 illustrates the structure of this chapter.

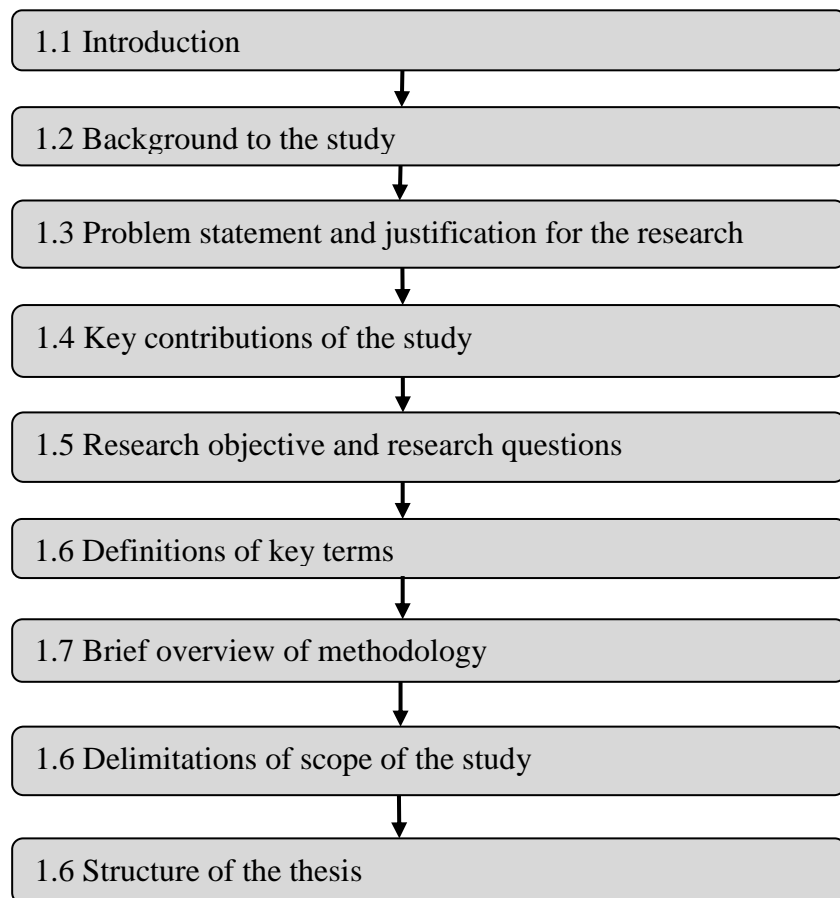


Figure 1.1 Structure of Introduction Chapter

1.2 Background to the Study

The context of this research is the SME sector in the city of Karachi, Pakistan. Situated in South Asia, Pakistan shares an eastern border with India and a north-eastern border with China. Iran makes up the country's south-west border, and Afghanistan runs along its western and northern edge. The country has four provinces including Punjab, Sindh, Khyber Pakhtunkhwa, and Balochistan; and the Federal Capital, Islamabad (Figure 1.2). It has a total area of 796,095 sq km with a population of 132.35 million (based on population census 1998). However, the current estimated population is 164 million (SBP 2011). Pakistan is a predominantly Muslim country. The society is multi-ethnic, with one main ethno-linguistic group in all provinces. The major languages spoken in the country are: Urdu (national), and English (official). The Parliament of the country consists of two Houses i.e., the Senate and the National Assembly (GoP 2011).



Figure 1.2 Map of Pakistan

Source: Pakistan (Education 2011)

1.2.1 Overview of the Pakistan Economy

The economy of Pakistan is the 27th largest economy in the world in terms of purchasing power(CIA 2010). The semi-industrialised economy, mainly consists of textiles, chemicals, food processing, agriculture and other industries. After its independence in 1947, Pakistan's economic growth rate was enhanced during the successive four decades, however slowed down in the late 1990's. During the period 2001-07, the poverty level decreased by 10%, as the Government gradually raised development expenditures (CIA 2010). Between 2004-07, the GDP growth rate of 5-8% was achieved by developments in the industrial and service sectors. However, growth slowed in 2008-09 due to global recession and war against terror. The inflation rate jumped from 7.7% in 2007 to 20.8% in 2008, and 14.2% in 2009 (CIA 2010).

According to the Economic Survey (2010-11), the economy of Pakistan is currently passing through a stabilization phase since macroeconomic stability is the key to increase growth rate, employment and enhancing the quality of life of the people. However, Pakistan is facing continuous security challenges since September 11, 2001. Moreover, in the recent years the country also faced shocks of commodity and oil prices and also a biggest shock of global financial crises. Both in the year 2010 and 2011, the country faced severe flooding in its major parts which cost her \$10 billion and also a substantial decrease on the overall growth rate of the economy. Around 20 million people were affected and more than 50,000 Sq. Km in area was flooded. Major crops such as rice and cotton were destroyed resulting in a negative growth of 4 percent in this sector. The manufacturing sector was significantly affected due to decrease in the output of textiles and petroleum products. The services sector also failed to achieve its target of 5.4 percent (Economic Survey 2010-11).

Moreover, during 2010-11, the economy achieved a GDP growth rate of 2.4 percent. There was significant development in performance of external sectors. First, exports crossed the \$20 billion mark with a growth rate of 28 percent. Second, remittances also crossed the double digit mark with more than \$11.2 billion. Third, for demand of imports, the current account shows a surplus of \$748 million. Finally, the external reserves indicated a remarkable growth with \$17.1 billion at the end of April 2011.

However, due to difficult circumstances, the budget deficit is estimated at 5.3% of GDP. Moreover, due to certain shocks such as flood and oil price, an inflation rate was recorded at 14 percent during the year 2010-11 (Economic Survey 2010-11).

Pakistan has a labour force of 54.92 million (female 12.48 million and male 42.44 million). The total number of people employed is 51.87 million with an overall unemployment rate of 5.6%. In addition, nearly 45 percent of the labour force is employed in agriculture, while manufacturing 13.2%, wholesale and retail trade 16.3% community, social and personal services have a participation of 11.2%. In addition, the literacy rate is 57.7% with 69.5% for male and 45.2% for female (Economic Survey 2010-11).

1.2.2 Overview of the Pakistani Culture

Pakistan has a unique culture with some basic characteristics such as collectivism, status-consciousness and large power distance (Hofstede 2009; Khilji 2001). Table 1.1 reflects the dimensions of Pakistan’s culture according to Hofstede (2009). These cultural dimensions have implications for how employees are managed in SMEs. In addition, Pakistanis tend to have a desire for security, independence in decision-making and seeking more authority. The society has two main classes, elite and non-elite (the general public). The elite class is represented by money, power and status. However, the non-elite-class desires basic rights of justice and democracy (Hussain 1999, cited in Khilji 2004, p. 142). These status differences are also reflected in Pakistani organisations which are in general authoritarian in nature, with top management making the major decisions. There tends to be minimum employee involvement in decision making and limited communication with staff (Khilji 2004). In addition, the majority of Pakistani organisations are bureaucratic and centralised, with little delegated authority to lower level employees (p. 143).

Table 1.1 Cultural dimensions of Pakistan

Region/country	Individualism (IDV)	Power Distance Index (PDI)	Uncertainty Avoidance Index (UAI)	Masculinity (MAS)	Long-term orientation (LTO)
Pakistan	Collectivism	High	High	Medium	Low

Source: Developed for this research. (Adapted from Hofstede 2009)

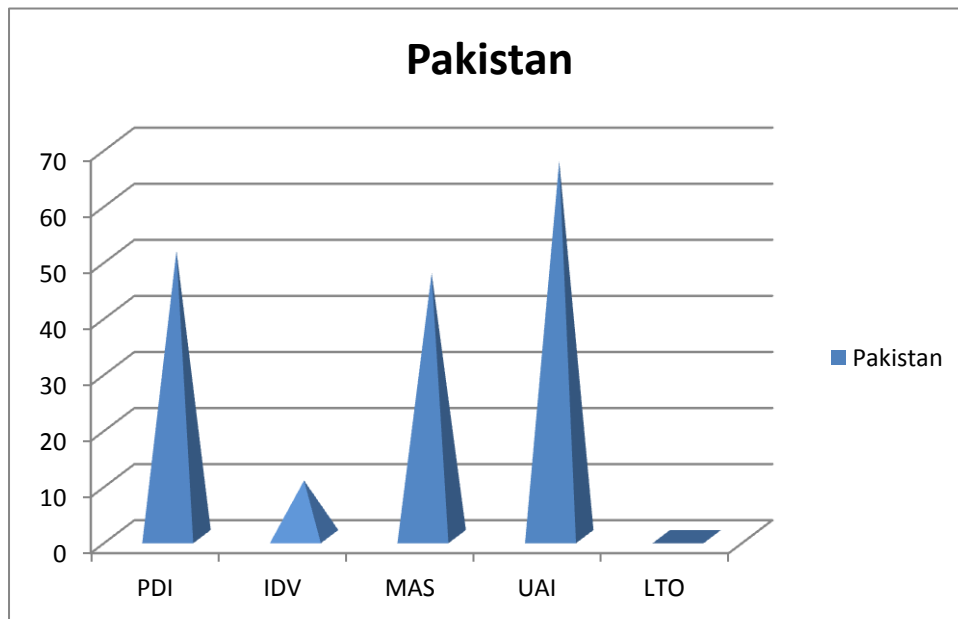


Figure 1.3 Cultural Dimensions of Pakistan

Source: Pakistan (Hofstede 2009)

1.2.3 SMEs in Pakistan

Pakistan's economy, like that of many developing countries is a direct reflection of its SME sector (Khalique et al. 2011). According to Economic Census of Pakistan 2005 (this is the latest census in Pakistan) , there are 3.2 million businesses in Pakistan. SMEs represent more than ninety percent of all private businesses and employ nearly 78 percent of the non-agriculture labour force in Pakistan (PBS 2011). SMEs' contribution to Pakistan's Gross Domestic Product is more than thirty percent. Additionally, the sector represents 25 percent of exports of manufactured goods and thirty-five percent in manufacturing value added. Almost 53 percent of all SME activity is in retail trade, wholesale, restaurants and the hotel sector. Twenty percent of SME activity is in industrial establishments and 22 percent in service provision (PBS 2011).

Recognising the significant contribution of SMEs to economic diversification, employment creation, income generation, and poverty alleviation, the Government of Pakistan (GoP) has been putting much effort and resources towards the promotion of the development of entrepreneurship and SMEs in general. For example, the GoP established a Small and Medium Enterprise Development Authority (SMEDA) in October 1998 with the aim of developing this sector. The GoP has also established a

SME bank to finance this sector. Moreover, as per the directions of GoP, most commercial banks in the country have specialised departments for the SME sector (Bhutta et al. 2008).

However, regardless their economic importance, SMEs in Pakistan suffer from a variety of shortcomings, which have confined their ability to adjust to the economic liberalisation measures introduced by the GoP and their capacity to take full advantage of the rapidly growing world markets. These shortcomings include for example a focus on low value-added products, absence of an effective business information infrastructure, an energy crisis, lack of strategic planning, low levels of financial literacy, unskilled human resources and non-aggressive lending strategies by banks (Bari et al. 2005; Khawaja 2006; Mustafa & Khan 2005; Rohra & Panhwar 2009; SBP 2010).

The focus of this study is on two specific sectors in the city of Karachi, the manufacturing and the service sector. The next two sections briefly outline these two sectors within the Pakistani context.

1.2.3.1 The Manufacturing Sector

The city of Karachi (the target population for this research study) falls in the top ten manufacturing districts in the country and contributes 12 percent of manufacturing production to the economy (Afaqi & Seth 2009; PBS 2011). According to the Economic Survey (2009-10), manufacturing is the third largest sector of Pakistan's economy. There are 583,329 manufacturing firms in Pakistan (Afaqi & Seth 2009; PBS 2011). The sector consists of automobile; leather goods; paper and board; pharmaceuticals; chemicals; engineering items; electronics and textile. It contributes 18.5 percent to GDP and 13 percent to total employment (Economic Survey 2009-10). The share of large scale manufacturing to GDP is 12.2 percent, compared to 4.9 percent of small scale manufacturing. The Economic survey 2009-10 reported that the manufacturing sector's share to GDP has increased since 2000 (see Table 1.2). However, its contribution to the overall economy has decreased since 2005 (Economic Survey 2009-10). As a result, the share of employment remained stable at approximately 13 percent. Additionally, there was an alarming decrease in the share

of manufacturing regarding fixed investment, from 22 percent to 16.2 percent (see Table 1.2).

Table 1.2 Share of manufacturing sector to GDP Employment and Fixed investment

Indicators	2000 (%)	2005 (%)	2010 (%)
GDP	14.7	18.3	18.5
Employment	11.5	13.6	13.0
Fixed Investment	23.0	22.0	16.2

Source: (Adopted from Economic Survey 2010, p. 39)

However, according to the Economic Survey (2010-11), there was a significant increase in the growth rate of the manufacturing sector for the first few months of 2010 (with the small and medium manufacturing sector maintaining its strong growth rate of 7.5 percent) while for the remaining months during 2010, the sector (large scale manufacturing) persisted with a negative growth rate. Moreover, the latest economic survey also reports the main causes of poor performance of this sector as low quality of products, lack of research and development, insufficient investment, less access to international markets, poor infrastructure, unskilled labour force, power failure, poor law and order situation, high input cost, and rising inflation (Economic Survey 2010-11).

1.2.3.2 The Services Sector

In recent years growth in the services sector has outpaced the growth in the commodity producing sector (Economic Survey 2010-11). The structure of Pakistan's economy has been shifting from a commodity producing economy to a services sector economy (Economic Survey 2010-11). Over the last few years, the services sector has played a significant role in the growth rate of Pakistan's economy (Economic Survey 2010-11). This sector comprise subsectors such as wholesale and retail trade; finance and insurance; ownership of dwellings; public administration and defence; transport, storages and communication; and social services. The contribution of the services sector to economic growth has increased to 53.3 percent in 2010-11 which is the highest contribution in the last two decades. The sector achieved a growth rate of 4.1 percent and has a share of 90 percent of the overall GDP growth rate (Economic Survey 2010-11).

1.2.4 Brief Overview of HRM in Pakistani Organisations

The Human Resource Management (HRM) systems employed in Pakistani firms is in a developing phase (Yasmin 2008). Many businesses have renamed their personnel and administration departments to Human Resource (HR) departments, while in reality they still tend to practise reactive HRM approaches (Yasmin 2008). Khilji (2001), argues that HRM practices are not applied in a systematic and integrated way in Pakistani firms. As a result, low motivation, lack of commitment and high turnover in employees are common problems within these organisations. Hence, there are very few businesses that have followed a systematic approach to HRM.

Khilji (2004) argue that Pakistani organisations which are in general authoritarian in nature, with top management making the major decisions. Her study highlighted the minimum employee involvement in decision making and limited communication with staff. In addition, her study notes that due to the authoritarian culture embedded in the Pakistani society (as mentioned Section 1.2.2), which are also reflected in majority of the Pakistani organisations, HRM tends to be bureaucratic and centralised, with little delegated authority to lower level employees.

In a recent study, Memon et al. (2010) argue that the lack of a formal HR policy and HR department in Pakistani SMEs have resulted in informal recruitment, selection, training and compensation practices. Due to the use of such practices, SMEs are facing difficulty in entering and competing in the international market (Akhtar et al. 2011). In another regional study, HafizUllah (2011) mentioned that the failure rate of SMEs in Pakistan is 90-95% in the initial stages. They identified a lack of training and education (before initiating a business), entrepreneurial skills, and characteristics as causes of failure of Pakistani SMEs.

With the expansion of the economy and direct foreign investment, there are however, signs that businesses are adopting a new perspective to their HRM systems. For example, several private sector organisations tend to encourage employee involvement in decision making and team work (Yasmin 2008, p. 56)

1.3 Problem Statement and Justification for the Research

The high performance management practices (HPMP) central to this study, include recruitment and selection, training and development, performance appraisal, remuneration and employee consultation. What makes a study on HPMP in Pakistan important? Pakistani SMEs are facing a big challenge in managing their human resources (SMEDA 2007). For example, the higher education institutions and the technical training infrastructure are the only two educational providers, both of which are not familiar with the unique requirements of SMEs nor are they equipped to deal with the challenges associated with SMEs. In addition, the limited financial resources of SMEs significantly limit their human resource development (Bari et al. 2005).

Only a few studies (Khilji 2001, 2004; Yasmin 2008) have briefly highlighted the HRM scenario in Pakistan (as highlighted in Section 1.2.4). However, these studies have been conducted in the context of large organisations and ignored an important sector – the SME sector. Keeping in mind the importance of SMEs to the economic development of Pakistan (Khalique et al. 2011; PBS 2011; SBP 2011; SMEDA 2007) and their unique characteristics (Heneman & Tansky 2002), efforts are needed to identify the broad nature of the patterns and developments in human resource management and more particularly HPMP in Pakistani SMEs.

Undertaking this research is justified on the basis of the following aspects. Firstly, as outlined in the previous section, SMEs comprise the largest and constantly growing proportion of the Pakistani economy, and the majority of these firms manufacture products and provide services to national and international markets. Despite this, there is still a dearth of systematic research available about the utilisation of HPMP in these organisations and the practices that contribute to their long-term sustainability.

Secondly as referred to earlier, Pakistan has a unique culture (Hofstede 2009; Khilji 2001) and SMEs face quite unique challenges compared to other countries, which makes a study focusing on HPMP a worthwhile endeavour. The results from similar studies (e.g. De Kok et al. 2003; Duberley & Walley 1995; Marlow 2000; Rowden 2002; Wiesner et al. 2007; Zheng et al. 2009) conducted in different countries

(mostly related to developed economies and with different cultural contexts than those of Pakistan) are showing mixed results regarding the adoption of HPMP and their relationship with sustainability outcomes. Consequently, owing to the cultural differences, these results cannot necessarily be applied in the Pakistani context. Moreover, researchers also suggest that similar research studies should be conducted in developing countries to take into consideration different cultural backgrounds (Heneman et al. 2000; Shih et al. 2006).

Thirdly, only one study has been conducted in Pakistan that examined general issues within the SME sector. This study, conducted by Rana et al. (2007) of 650 manufacturing Pakistani firms is more than seven years old (the study was conducted in 2003 but published in 2007). Rana's study discusses only the characteristics of successful SMEs in Pakistan and does not focus specifically on HPMP and its relationship with SME sustainability outcomes. His study only focused on the manufacturing sector with the exclusion of another very important sector – services, which represents 22.3 percent of all SMEs in Pakistan (Afaqi & Seth 2009; PBS 2011). Since Rana's study, there have been numerous developments in Pakistan, major changes have taken place in the macro environment and there has been an increase in foreign investment in Pakistan particularly in the service sector (Mian 2008).

Fourthly, on the one hand, research shows that high failure rates and poor performance levels are two main obstacles for SMEs (Volery & Schaper 2007). On the other hand, academic research reflects a positive relationship between HPMP and improved sustainability outcomes (Arthur 1994; Gollan 2005; Huselid 1995; Levine 1995; Pfeffer 1998; Pfeffer & F.Veiga 1999; Rana et al. 2007; Wiesner et al. 2007; Zheng et al. 2006; Zheng et al. 2009). The current study links these two aspects.

Finally, there is gap in theory relating to the effect of mediating variables such as HR sustainability outcomes (for example, employee commitment, employee turnover, job satisfaction and skill development) on the relationship between HPMP and sustainability outcomes in the SME context. In addition, previous studies in this regard have been conducted in the context of large organisations. The mediating role of HR sustainability outcomes in the relationship between HPMP and SME

sustainability outcomes is an unexplored area of research in SMEs. According to Katou and Budhwar (2007, p. 30), more research is needed to investigate the effect of mediating or moderating variables on the relationship between HPMP and organisational performance. Gerhart (2005) argue that without testing the moderating/mediating variables, the causal relationship between HR systems and firm performance remains vague.

Although there has been an increase in research emphasising the role of HPMP as a basis of competitive advantage (Barney & Clarke 2007; Connolly & McGing 2007; Khandekar & Sharma 2005; Pfeffer 1998), and a strong argument has been made that specific HPMPs in SMEs enhance organisational performance (Nguyen & Bryant 2004; Rowden 2002; Way 2002a), there is still a dearth of systematic research available on the nature and implementation of these practices, as well as the link between these practices and sustainability outcomes in Pakistani organisations (Yasmin 2008).

1.4 Key Contributions of the Study

There is a dearth of research on SMEs in Pakistan (Bhutta et al. 2007) with very few studies published in good quality refereed journals. This study will contribute to SME research by enhancing an understanding of the nature of high performance management practices (HPMP) employed by Pakistani SMEs as well as develop a theoretical model of HPMP. The research is anticipated to provide important data which could form the basis for an extensive analysis of Pakistan's SME sector, particularly in relation to the nature and prevalence of HPMP and its relationship with SME sustainability outcomes.

The study adds value to the literature on HPMP by analysing the human resource aspects of SMEs within a developing country which is an under researched topic area. Most of the prior studies in this area are conducted in the developed world (e.g. Bae et al. 2011; De Kok & Hartog 2006; Huselid 1995; Rowden 2002; Shih et al. 2006; Way 2002a; Wiesner et al. 2007; Wood & de Menezes 2008). The key contributions of the study are as follows:

- This research study contributes both to theory (by supporting the universalistic and configurational approaches used in this study) and practice.
- The literature review of this study specifically contribute to the literature by a critical analysis of the definition of HPMP and its measurement.
- The main contribution flowing from the empirical analysis is the provision of a profile of the extent and nature of HPMP in Pakistani SMEs; an examination of the relationship between contextual characteristics (firm, size, industry type, strategic planning, presence of HR manager) and the adoption of HPMP; an analysis of the relationship between HPMP and economic sustainability outcomes in SMEs, and an exploration of the mediating effect of HR sustainability outcomes on the relationship between HPMP and economic sustainability outcomes in Pakistani SMEs .
- Overall the study contributes to the limited research conducted in the area of high performance management practices (HPMP) in SMEs.
- More specifically, the study adds value to the literature of HPMP by analysing the human resource aspect of SMEs within a developing country which is under researched.
- The study addresses a research gap by analysing the role of mediating/moderating variables (HR sustainability outcomes) on the relationship between HPMP and firm performance (Gerhart 2005; Katou & Budhwar 2007). Gerhart (2005) pointed out that without analysing the role of mediating/moderating variables, the relationship between HR practices and firm performance remain uncertain.
- This study informs public policies in relation to the SME sector
- The study provides an understanding the concept of HPMP and its relationship with sustainability outcomes, and actions that that could be taken by SMEs to apply this knowledge in improving their performance.

1.5 Research Objective and Research Questions

In view of the discussion above, the main **objective** of this study is to determine the extent and nature of High Performance Management practices (HPMP) in Pakistani SMEs and to assess the impact of these practices upon SMEs' Financial and Market-based sustainability outcomes.

The following **research questions** are developed to inform the above research objective:

- RQ₁** What is the extent (frequency) and nature (in terms of patterns of adoption) of HPMP in SMEs?
- RQ₂** To what extent do firm size, strategic planning, industry type, and the presence of a HR manager, relate to the prevalence of HPMP in SMEs?
- RQ₃** Do different components of HPMP (recruitment, selection, training and development, performance appraisal, compensation and consultation) impact upon the sustainability outcomes (financial sustainability outcomes and market-based sustainability outcomes) of SMEs?
- RQ₄** To what extent do HR Sustainability Outcomes mediate the relationship between HPMP and SME Sustainability Outcomes?

1.6 Definition of Key Terms

Several key terms are now outlined with the aim of achieving a working definition of these concepts, hence advancing a consistent interpretation of these terminologies throughout this thesis.

1.6.1 Small and Medium Enterprise (SME)

The working definition for a SME in this study is as follows:

A small business is defined as an organisation employing one hundred or fewer employees. Medium-sized businesses are defined as ranging from 101 to 250 employees (the maximum size of employees are used as 250, as most of the official organisations in Pakistan use this size of employees in their definition of SMEs). However, twenty employees are used as the lowest extremity for size because five out of the six practices that the study focuses on are functional HRM practices and SMEs with a workforce with more than 20 employees will be expected to have some kind of management structure (Wiesner et al. 2007).

A more detailed discussion of SME definitions follows in Chapter 2.

1.6.2 High Performance Management Practices (HPMP)

The working definition of HPMP in this study is:

HPMP is a set of human resource management practices (recruitment, selection, training, remuneration and performance appraisal) and managerial practices that

enhance employee involvement and participation, which positively impact upon HR outcomes and organisational performance and/or competitive advantage.

A full discussion on HPMP definitions and the rationale for the definition above follows in Chapter 3.

1.6.3 Sustainability

The word ‘sustained’ is generally used alongside ‘success’ within the context of management and business literature. For example, the Oxford Dictionary defines it as ‘accomplishment of end aimed at’. Drawing on the work of (Dunphy & Griffiths 1998; Gollan 2000), within the context of this study, SME sustainability is defined as ‘the capacity of SMEs to create and regenerate value through the sustained application of HPMP and participative policies and practices. Value refers to ‘human’ and ‘economic’ value. According to (Gollan 2005) people management and development practices need to be integrated for sustained business performance and positive employee outcomes such as personal development and wellbeing.

Furthermore, human resource (HR) sustainability in this study is defined as building human capability and skills for sustainable high level organisational performance (Benveniste et al. 2000), while economic sustainability refers to financial performance of an organisation by taking a long term view and looking outside the organisation (Roy & Don 2002). In this study, HR sustainability outcomes include variables such as employee commitment, employee turn-over, skill development and job satisfaction, while economic sustainability outcomes comprised financial sustainability outcomes and market-based sustainability outcomes. Financial sustainability outcomes include variables such as revenue growth, return on sales, return on equity, and liquidity soundness, while market-based sustainability outcomes include customer satisfaction, quality of products and services, and market share change.

A more detailed discussion of the measurement of HR sustainability and economic sustainability can be found in Chapter 4.

1.7 Brief Overview of Methodology

This section provides brief information about methods used in data collection and analysis. A detailed discussion on research methodology follows in Chapter 4.

1.7.1 Research Design

Quantitative methodology is utilised in this study within a post positivist paradigm. The study is both explorative and descriptive in nature. The enquiry process consists of the conducting of a survey questionnaire.

The content validity was determined by submitting an initial draft questionnaire to ten SME owners/ managers, managers from the Small and Medium Enterprise Development Authority (SMEDA) and human resource (HR) experts. Thereafter a pilot study was administered by presenting the questionnaire to 20 different SME managers in the city of Karachi. The feedback from the pilot study was used to further determine the content validity of the instrument and the observations and criticisms that came out during these sessions was used to improve the questionnaire (Velde et al. 2004).

The second phase of the research consisted of collecting primary data. The target population consisted of SMEs operating in the city of Karachi, Pakistan. Stratified random sampling was applied to collect data from two strata i.e. manufacturing and service-sector SMEs (Zikmund et al. 2010). Further details of the sampling method follow in Chapter 4.

The survey data were analysed through descriptive and inferential statistics. Descriptive statistics were used to answer RQ1 (see Chapter 5). Exploratory factor analysis (EFA) was applied to extract factors from HPMP components. Independent-sample t-test was used to answer RQ2. Structural Equation Modeling (SEM) was used to examine RQ3 and RQ4. The rationale and details of these statistical techniques are presented in Chapter 4 and data analyses are presented in Chapter 5.

1.8 Delimitations of the Scope of the Study

There are a number of limitations embedded in the nature and scope of this study. This study focuses on a specific geographical area of Pakistan and the sample of the study is limited to SMEs located in the City of Karachi. Because the study involved

SMEs in the manufacturing and service sectors, the results only reflect what was happening in those sectors in relation to the specific sample within a specific time frame and therefore may not be generalised to apply in SMEs in all other sectors within Pakistan.

Since the chief executive officer (CEO) or HR manager has provided information on HPMP and perceived measurement of sustainability outcomes, it is possible that single respondent bias may have occurred. In addition, since the questionnaires were presented face to face to the respondents, the study may have data bias. Moreover, since the findings from the survey were obtained from voluntary participation of the respondents, self-selection bias may also have occurred in that only those SMEs viewing themselves appropriate in implementing HPMP chose to participate.

Furthermore, the survey questionnaire does not provide respondents with the opportunity to explain their ideas and clarify their answers (Wiesner et al. 2007).

1.9 Structure of the Thesis

This thesis is organised into six chapters. Figure 1.4 is designed to show the structure of this thesis. This includes: providing the background to the study, identifying the research problem and clarifying the research questions (Chapter 1); outlining the theoretical perspectives underpinning the study and drivers of HPMP (Chapter 2); providing a detailed discussion on individual practices relating to HPMP, and developing a theoretical model for this study (Chapter 3); describing the research methodology and detailing the data collection process including the use of quantitative methods (Chapter 4); providing a detailed analysis of the results (Chapter 5); and conducting an in-depth discussion of the results in view of the literature and outlining directions for future research (Chapter 6).

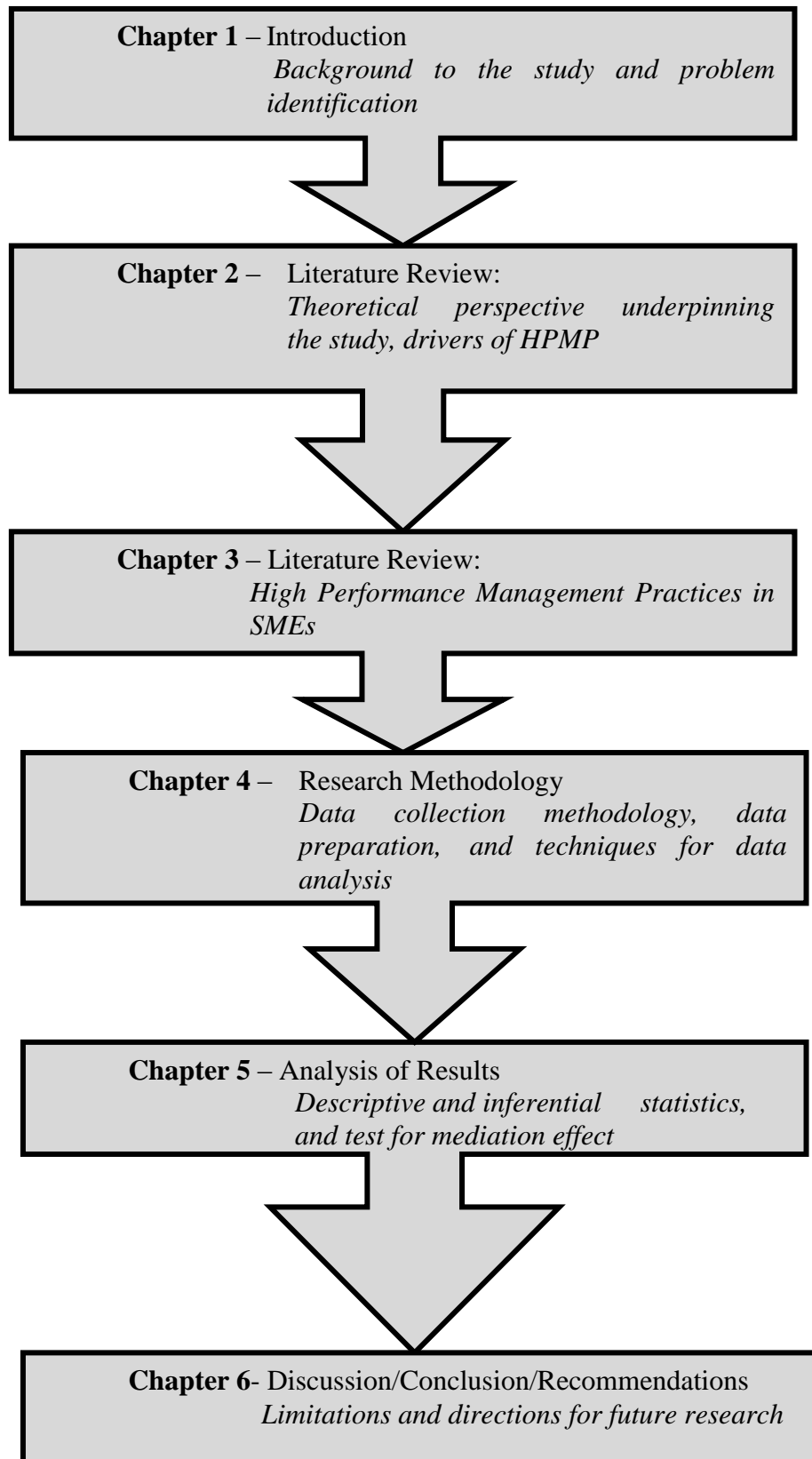


Figure 1.4 Structure of the Thesis

CHAPTER TWO – LITERATURE REVIEW:

THEORETICAL PERSPECTIVES UNDERPINNING THE STUDY AND DRIVERS OF HIGH PERFORMANCE MANAGEMENT PRACTICES (HPMP)

2.1 Introduction

The focus of this thesis is on high performance management practices (HPMP) within the Pakistani context. There has been a growing interest in this particular topic among human resource management scholars since the late 1980s. Furthermore, a number of human resource management writers argue that high performance management has contemporary significance.

The main focus of this chapter is on providing the theoretical basis for the study on high performance management practices (HPMP) in SMEs and critically discussing the drivers of HPMP. The chapter commences with a definition of SMEs, followed by what makes SMEs different from large organisations. The theoretical perspective underpinning the study are explored, including the resource based view, universalistic perspective, contingency perspective and configurational perspective. Finally, contextual characteristics impacting upon HPMP is discussed before the chapter concludes with a summary. Figure 2.1 summarises structure of this chapter.

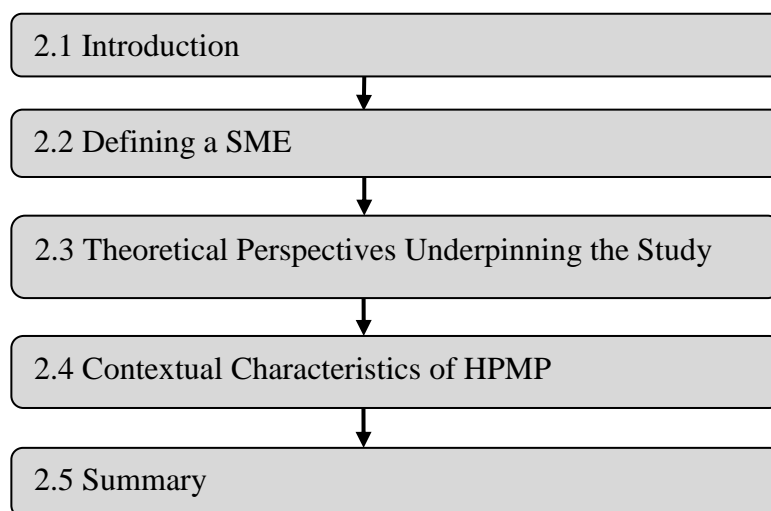


Figure: 2.1 Structure of Chapter 2

2.2 Defining a SME

The following section presents a discussion on the definition of a SME from an international and national (Pakistan) perspective as well as the difference between SMEs and large organisations.

2.2.1 Definitions of SMEs in International Countries

Table 2.1 summarises several definitions applied in various countries. These definitions are based upon various criteria such as number of employees, value of assets, sales and volume of output (Cunningham & Rowley 2008). These definitions vary from country to country and also within countries. For instance, France defines a SME as having less than 500 employees; whereas Germany uses less than 100 employees (see Table 2.1). Moreover, within countries, definitions may also vary by sector or type of business.

For instance in Japan, manufacturing, mining, and transportation and construction industries defines a SME as having less than 300 employees or invested capitalisation less than 100 million yen. While wholesale businesses define a SME as an organisation employing less than 100 employees or capitalisation less than 30 million yen. In retail it is defined as businesses employing less than 50 employees or capitalisation less than 10 million yen (see Table 2.1).

Table 2.1 Definitions of SMEs in International Countries

Country	Industry types	Definition of SMEs
Canada	SME	Independent firms having less than 200 employees
France	SME	<500 employees
Germany	SME	<100 employees
Hong Kong	Manufacturing	< 50 employees
Indonesia	SME	< 100 employees
Ireland	SME	< 500 employees
Italy	Small enterprises	< 200 employees
Japan	Manufacturing, mining and transportation construction	< 300 employees or invested capital less than 10 million yen
	Whole sale trade	< 100 employees or capitalization less than 30 million yen
	Retail trade and services	< 50 employees or capitalization less than 10 million
Korea	Manufacturing	< 300 employees
	Mining & transportation	< 300 employees construction
		< 200 employees commerce and other service business; < 20 employees
Malaysia	SMEs	< 75 full time workers or with a shareholder fund of < RM 2.5 million (US \$ 1 million)
	Sis	Manufacturing establishments employing between 5 and 50 employees or with a shareholders fund up to RM 500,000
	Mis	Manufacturing establishments
Netherlands	Small enterprises	< 10 employees
	Medium enterprises	10-100 employees
Philippines	Small enterprises	< 200 employees, revenue < P 40 million
Singapore	Manufacturing	Fixed assets < S\$ 15 million
	Services	< 200 employees and fixed assets < S\$ 15 million
Spain	Small enterprises	< 200 employees
	Medium enterprises	< 500 employees
Sweden	SME	Autonomous firms with < 200 employees
Switzerland	SME	No fixed definition
Taiwan	Manufacturing, mining and construction industries	< NT\$60 million of sale volume and < 200 employees
	Service industries	< NT\$80 million of sale volume < 50 employees
Thailand	Labour intensive sectors	< 200 employees
	Capital intensive sectors	< 100 employees
United Kingdom	SME	No fixed definition
United States	Very small enterprises	< 20 employees
	Small enterprises	20-99 employees
	Medium enterprises	100- 499 employees
Vietnam	SME	No fixed definition, generally < 200 employees

Source: (Adopted from Cunningham & Rowley 2008, pp. 355-56)

2.2.2 Defining SMEs within the Pakistani Context

There is no uniform definition of SMEs in Pakistan (Dasanayaka 2008; Mustafa & Khan 2005; Rana et al. 2007). The Small and Medium Enterprise Development Authority (SMEDA), SME Bank, Pakistan Bureau of Statistics (PBS) and State Bank of Pakistan (SBP) have defined SMEs in different ways. For example, SMEDA

defines a SME based upon the number of employees and total number of productive assets. The SME bank uses only total number of assets as the criterion. PBS takes into consideration only the number of employees. Whereas, SBP's definition of a SME is based on the nature of the business, number of employees, amount of capital employed and net sales value per annum. The details of these definitions are presented in Table 2.2.

Table 2.2 Definition of SMEs in Pakistan

Institution in Pakistan	Criterion	Medium Scale	Small Scale
Small and medium enterprise development authority (SMEDA)	No. of employees (< 250 employees for SME)	Between 36-99	Between 10-35
	Productive Assets	20-40 million PKR	2-20 million PKR
SME Bank	Total Assets	Over 100 million PKR	Less than 100 million
Federal Bureau of Statistics	No. of Employees	N/A	Less than 10 employees
State Bank of Pakistan	Nature of Business (Manufacturing Trade/Services) No. of employees Capital employed Net sale value	Less than 250 employees and less than 100 million PKR assets for manufacturing. Less than 50 employees and less than 50 million PKR for trade/services. Net sales less than 300 million PKR	Less than 250 employees and less than 100 million PKR assets for manufacturing. Less than 50 employees and less than 50 million PKR for trade/services. Net sales less than 300 million PKR

Source: (Adopted from Dasanayaka 2008, p. 71; SMEDA 2011)

In this study a SME is defined as: A small business is defined as an organisation employing one hundred or fewer employees, whereas medium-sized businesses are defined as ranging from 101 to 250 employees (the maximum size of employees are used as 250, as most of the official organisations in Pakistan use this size of employees in their definition of SMEs). As mentioned in Chapter 1, twenty employees are used as the lowest extremity for size because five out the six practices that the study focuses on are functional HRM practices and SMEs with a workforce with more than 20 employees will be expected to have some kind of management structure (Wiesner et al. 2007).

2.2.3 What Make SMEs Different From Large Organisations?

Small businesses differ from larger organisations in many different ways. Firstly, small firms tend to have distinct characteristics such as a lack of economies of scale,

the particular type of product, the type of technology, and the personality of owners/managers (Lange et al. 2000). In addition, small firms have a horizontal structure compared to that of large organisations which possess a more hierarchical (vertical) structure (Lange et al. 2000). Secondly, as a result of financial barriers, small firms are often unable to maintain a HR department or specifically assigned HR managers and thus face difficulties in recruiting, retaining and training employees (Cardon & Stevens 2004) as well as in the area of learning (Lange et al. 2000) in comparison to larger organisations. Large organisations usually have more resources to invest in innovative management practices (Shih et al. 2006). In addition, SMEs often consider HRM practices as a financial burden (Kaya 2006). Information about their environment is often hard to collect which makes SMEs less responsive to managing strategic changes in comparison to larger firms (Antonio & Gregorio 2005).

Moreover, according to Bacon et al. (1996), the communication in small organisations is more direct and informal and employees tend to have more flexibility. They also argue that small firms have a horizontal hierarchy and the contribution of each employee to organisation performance is more obvious. In addition, they assert that due to high insecurity, small firms are more responsive to changes in customer demands and markets. Similarly, small firms tend to use more informal approaches to change in comparison to formal bureaucratic approaches employed by large firms. As a result, it is much easier to bring about change in small firms than in large organisations (Bacon et al. 1996).

There are several differences between SMEs and large organisations. The following summary of differences reflects Storey and Greene's ((2010) detailed discussion of these differences:

- **Risk of Failure:** it is more likely for small business to close their trading in the short-run compared to large organisations. Large businesses with greater access to media coverage are more safe than small businesses. Such risk make the small firms more focused on short-term survival by giving more preference to cash rather than profit.
- **Management:** management in SMEs are often vested in the owner manager while large organisations are normally owned by private shareholders and

managed by professionals. The owner manager in small businesses tend to have the best interest of their organisations at heart. In large firms, the managers role is much wider and consistently seeks to increase of the wealth of shareholders.

- **Strategy:** Small firms are more flexible in executing their strategies since they don't have the same opportunities of economies of scale compared to their larger counterparts (Lange et al. 2000). Thus, smaller firms are more likely to switch to new products, services or new customers in comparison to large firms.
- **Internal organisation:** Small firms are generally more informal in their structure (Bacon et al. 1996). Most of the key decisions are taken by the owners/managers who are less likely to document such decisions. On the other hand, large firms exhibit a more formal structure with upper, middle and lower management. Moreover, large firms tend to follow particular procedures to ensure that decisions are implemented and communicated to everyone in the organisation.
- **Wages and benefits for workers:** Small firms are more likely to follow a low wage structure in comparison to large firms. Thus, small firms are less likely to attract more qualified and experienced human resource than large organisations.
- **Recruitment and Training:** Small firms tend to recruit new employees through informal ways and provide less training to their workforce than large firms (De Kok & Uhlaner 2001).
- **Investment policies:** Small businesses are less likely to spend on fixed assets. Based on changes in demand, small firms tend to invest in assets that can be converted into alternative uses. On the other hand, large firms are more likely to make large capital investments in order to gain an advantage of economies of scale.
- **Source of finance:** Small businesses tend to find it more difficult to compete for internal and external sources of finance than large firms. External finance providers have less relatively less knowledge about small firms in comparison to large firms.

- **Competitive advantage:** Small firms are more flexible in responding to customers and innovations. In contrast large firms are more able to invest heavily and provide reliable service to its customers.
- **Innovation:** Owing to limited expenditure on formal research and development, small businesses are less likely to adopt innovation in comparison to large firms.
- **Political influence:** Small businesses have relatively less power than large firms in impacting upon government policies.

Apart from these general differences between small and large businesses, small businesses are also significantly different from large organisation in using HRM practices. For example, because large organisations have more resources, they are able to implement HR practices to a much greater extent (Chow 2005). Large firms are also more likely to apply formal HRM planning and training than small firms (Koch & McGrath 1996). Larger firms have shown to use more formal, bureaucratic and resource intensive hiring practices in comparison to small firms (Barber et al. 1999). Similarly smaller companies (less than 100 employees) are found to have less formalised performance appraisal systems and lack of a HRM department (Wager 1998).

In considering these differences between smaller firms and their larger counterparts, it may not be appropriate for smaller firms to rely on management models developed within the context of large organisations (Wiesner & Innes 2010). Hence the focus of the current study is on exploring the patterns of HPMP and the way in which they impact upon human and economic sustainability outcomes in Pakistani SMEs.

2.3 Theoretical Perspectives Underpinning the Study

This study draws on three theoretical perspectives including the Resourced Based View, the Universalistic Perspective and the Configurational Perspective. These three theoretical perspectives are discussed and an explanation is provided as to why these perspectives are relevant to the study.

2.3.1 The Resource-based View

A resource is defined as ‘anything which could be thought of as a strength or weakness of a given firm’ (Wernerfelt 1984, p. 172) . Resources are classified into tangible and intangible assets. For example: machinery, brand names, trademarks, efficient procedures, capital and skilled employees (Wernerfelt 1984). Barney (1991, 1995) further classified these resources into three broad categories: physical capital resources, human capital resources and organisational capital resources. Physical capital resources of a firm include for example, raw materials, plant and equipment, technology and geographical location. Human capital resources include for example, training, experience, judgement and intelligence of individual employees in a firm. Organisational capital resources include for example, a firm’s formal and informal planning, controlling and coordinating systems and informal relationships among employees within a firm and with other firms in its surrounding (p. 101).

According to the resource-based view, the firm’s resources are the basis of competitive advantage (Wright et al. 1994). Barney (1991) defined competitive advantage as ‘when a firm is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors’ (p. 102). Based on the resource-based view, a firm can achieve competitive advantage, only if its resources are heterogeneous and immobile. Such resources are different for different firms and cannot be obtained from the resource market by the competing firms (Wright et al. 1994).

Furthermore, according to the resource-based view, the firm’s resources can be a source of sustained competitive advantage. Barney (1991) described the firm’s sustained competitive advantage as ‘when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy’(p. 102). As a result, for sustained competitive advantage, a firm’s resources must meet four criteria (a) it must provide value to the firm, (b) it must be unique among a firm’s current and potential competitors , (c) the resources must not be imitable and (d) the resources must not be substituted by other competing firms (Barney 1991, 1995).

The resource-based view therefore proposes that a firm's human resources are an important component of sustained competitive advantage (Barney 1991; Wernerfelt 1984). Wright, et al. (1994) defined human resources as 'the pool of human capital under the firm's control in a direct employment relationship' (p. 304). According to Schuler and MacMillan (1984), human resources (if managed effectively) can be a source of competitive advantages in the form of increased profitability, low employee turnover, high product quality and low production cost advantage. Moreover, Ferligoj and Prasnikar (1997) concluded that good relationships among employees, their skills and innovativeness can lead to a competitive advantage for the firm. In addition, their study indicated that higher level of staffing and benefits to employees will result in higher level of competitive advantage (p. 512). However, according to Wright et al. (1994), sustained competitive advantage comes from the human resources themselves, not the practices to manage them.

According to Koch and McGrath (1996) investments in the expansion of a distinctive human resource lead to enhanced productivity. Additionally, an increase in the skills and knowledge base of employees provide the firm a power of inimitability in a way that competitors cannot easily replicate. Similarly, Wright et al. (1994) assert that a firm with a highly skilled and motivated work force has greater probability to achieve sustainable competitive advantage.

Furthermore, Wright et al (2001) argue that HPMP relate to competitive advantage in several ways. Firstly, it helps in creating a culture that facilitates the continuation of core competencies. Secondly, HPMP may support and sustain socially composite relationships illustrated by trust, knowledge sharing and team work. Finally, HPMP tend to develop a high quality human team that is difficult and costly for competitors to imitate.

However, resource-based view (RBV) has been criticised by Priem and Butler (2001). They argue that: (1) more conceptual work is needed for the RBV to meet the requirements of a theoretical structure; (2) that the RBV makes implicit assumptions about product markets which are similar to the assumptions made by environmental-based models about resources; (3) the basic variable (value) is exogenous to the RBV (4) it is difficult to make contextual and specific boundaries in view of the specific

definition of resources (5) the static approach to RBV may lead to unanswered causal how and why questions.

They further note that one of the critical challenges for RBV researchers include formalising the RBV, meaning that the RBV concepts are not clearly defined and the interrelationships among statements in the RBV are not clearly specified and thus may need further development in order to meet the basic requirements of a theory.

Another challenge for RBV researchers is to answer the how questions such as: how the resource can be acquired? How and in which context does the resource lead to competitive advantage? How does this resource differ with other resources? Moreover, they also suggest that the answers to such questions may build perceptions and behavioural dimensions which can be used in future for RBV research.

Although the author of this thesis recognised that sustained competitive advantage comes from the human resources themselves, not the practices to manage them, the relevance of the resource based theory within the context of this study lays specifically in the notion that human resources (if managed effectively through HPMP) can be a source of competitive advantage in the form of increased financial performance, market performance and human resource performance. An examination of the way in which Pakistani SMEs employ specific HPMP and how these practices impact upon various performance outcomes is central to this study.

2.3.2 The Universalistic Perspective

The universalistic perspective assumes that specific HR practices are appropriate in all situations (Osterman 1994; Pfeffer 1994). According to this perspective, the relationship between an independent variable and a dependent variable is universal across all organisations (Delery & Doty 1996). The universal approach assumes a direct relationship between specific HR practices and organisational performance (Guthrie et al. 2002). The universalistic perspective supports the identification of strategic HR practices and developing a relationship between individual HR practices and organisational performance (Delery & Doty 1996, p. 805).

Strategic HR practices have been defined by several authors. For example, in the seminal article by Huselid (1995), he proposed 13 HR practices (based on Delaney, Lewin and Ichniowski's 1989 work). He used the word high performance management practices instead of HR practices because of the assumed performance link. He included practices such as: personnel selection, performance appraisal, incentive compensation, job design, grievance procedures, information sharing, attitude assessment, labour management participation, selection ratio, training, promotion criteria (seniority versus merit). Delery and Doty (1996) identified seven strategic HR practices. These are: internal career opportunities, formal training systems, performance appraisal, profit sharing, employment security, consultation, and job definition. Pfeffer (1998) defined strategic HR practices as: employment security, selective hiring, self-managed teams and decentralization, high compensation, training, reduction of status differences and sharing information.

The universalistic perspective hypothesises that specific HR practices will always result in a better or worse firm performance (Delery & Doty 1996). This relationship (universalistic perspective) has been supported by many researchers (e.g Datta et al. 2005; Huselid 1995; Katou & Budhwar 2007; Richard & Johnson 2001; Rose et al. 2006; Singh 2004; Wright et al. 2005; Zhang & Li 2009; Zheng et al. 2009). For instance, Huselid (1995) found that bundles of HR practices are associated with lower turnover and higher productivity and financial performance. Richard and Johnson (2001) found a relationship between effective HR systems and a decrease in employee turnover. Similarly, Guest et al. (2003) noted positive relationships between HR practices and lower turnover and higher profitability.

Moreover, Singh (2004) studied HR practices such as selection systems, job definition, training system, performance appraisal system, compensation system, career planning systems and employee participation and noted positive relationship between these practices and organisational and market performance. Zhang and Li (2009) examined bundles of HPMP such as training, participation, job definition, result-oriented performance appraisal, promotion from within and profit sharing, and noted positive relationships with a firm's market performance. Wright et al. (2005) found that HR practices (e.g. selection, pay for performance, training and participation) are positively correlated with operational and financial performance.

In addition, Zheng et al. (2009) examined a range of innovative HR practices (free market selection, performance-based payment, provision of social benefits, training & development, performance evaluation, employee involvement in decision making and role for trade unions) and found that firms with innovative HR practices are better able to achieve lower employee turnover, high employee commitment and employee competency.

However, Boxall and Purcell (2011) have strongly criticised the universalistic perspective by arguing that specific or best practices are not necessarily best for all stakeholders (shareholders and workers) all of the time. They argue that a situation may arise where some practices are bad for both shareholders and employees but ask the question what happens when such practices may enhance the bottom-line of the organisation, such as downsizing. Moreover, they object that a practice may be good for top management but do not benefit the shareholders or wage earners. Finally, they suggest that best practices can only be good for the organisation if it serves the employee's interests. They further note that one may not expect a complete alignment of interests however sustainable HRM models can be developed that can enjoy a high level of legitimacy within the organisation and the society in large.

Similarly, Marchington and Grugulis (2000) argue that the notion 'best practice' seems to be problematic if practices show a contradictory picture, when they are not universally acceptable to all, when they tend to ignore the input from employees and serve only the employer's interest. They suggest that the universalistic approach requires further research to make it more meaningful and rigorous to overcome criticisms. They further call for a new definition of best practice that should include different sets of practices that may be beneficial to different organisations with the recognition of employees' perceptions at their work place level.

The universalistic approach is relevant to this study since the measurement constructs utilised in this study, draw on the HR practices and bundles of HR practices identified by researchers advocating this approach. These HR practices and bundles of practices are linked to firm performance and HR performance outcomes.

2.3.3 Configurational Perspective

The configurational perspective is based on internally consistent configurations of HR practices, or employment systems that maximise horizontal fit and identify the relationship between HR practices and strategic configurations to maximise vertical fit (Arthur 1994; Delery & Doty 1996; Fernando et al. 2005; Huselid & Becker 1996; Ichniowski et al. 1997). Delery and Doty (1996) has proposed two types of employment systems: the market-type system and the internal system. They defined the market type system as hiring employees from the outside labour market, providing little training, and evaluate their performance through output measures. Employees are rewarded based on their performance. They do not have employment security and are not consulted in organisation decision making process (p. 810).

On the other hand, the internal system is described as recruiting employees from within an organisation. Employees have the opportunity for extensive socialisation and training. Their performance is evaluated through an appraisal feedback system. Employees are considered as an important source of information and are consulted in the vital issues of organisation. Their jobs are secure and narrowly defined (Delery & Doty 1996).

Moreover, the configurational perspective is supported by the strategic configurations developed by the Miles and Snow (1978) typology. Miles and Snow (1984) assessed the strategy types of defenders (firms that rarely innovate), analysers (firms that are moderately innovative) and prospectors (firms that are highly innovative) with regard to different types of HR practices needed. They further assume that HR practices vary among strategy types as a result of the different behaviours and skills necessary to carry out the strategy.

According to Delery and Doty (1996), the firms pursuing these strategies (defender, prospector and analyser) should implement different types of employment systems. They further argue that as defenders concentrate on producing low cost products and services, effective HR practices should direct long term commitment to an organisation. The firm should select employees with product specific skills and knowledge. Moreover, these skills can be enhanced through formal training and appraisal system. These HR practices direct the firm to create an environment of

long-term commitment to the organisation and reduce the cost of replacing knowledge based employees (p. 811).

On the other hand, prospectors are innovative firms and always search for new products and markets. These firms have less knowledge of the specific behaviours of employees that are required to perform these tasks. As a result, these firms always look outside to acquire the skills and knowledge-base of employees to produce the desired output. Thus, these firms should emphasise result oriented appraisal systems rather than a long term employment system (Delery & Doty 1996).

Analysers stand in the midpoint between defenders and prospectors. These types of firms operate in both stable market conditions like defenders, and changing market conditions like prospectors. These firms do not initiate change like prospectors. However, they follow the change more rapidly than defenders do (Delery & Doty 1996). As a result, specific HR practices consistent with the firm's internal system are appropriate for a defender strategy. These practices include: internal career opportunities, formal training, behavioural-based appraisal, hierarchy-based compensation, job security, employee consultation and tightly defined jobs. On the other hand, the prospector strategy consistent with the market system requires HR practices, which entail: few internal career opportunities, lack of formal training, output-based appraisal, profit sharing, job insecurity, little employee consultation and broadly defined jobs (Delery & Doty 1996).

The configurational perspective hypothesise that adopting an ideal employment system (market system and internal system), with specific HR practices and an appropriate strategy will enhance firm performance (Baird & Meshoulam 1988; Delery & Doty 1996; Wright & McMahan 1992). However, this perspective assumes that the relationship between the HR practices (configurational patterns) and organisational performance is not linear as these practices are interdependent and their combined effect can be multiplied or divided. Thus, the configurational approach analyses the HR system as a complex and interactive system (Fernando et al. 2005).

Furthermore, the configurational approach has been supported by previous research studies (e.g. Chow et al. 2008; Gould-Williams 2003; Shih et al. 2006). For instance, the findings of Shih et al. (2006) and Gould-Williams (2003) support the configurational perspective in a way that HPMP (employment security, selective hiring, team working, performance-related pay, training programs, participative work settings and incentive arrangements) work together to enhance organisational performance. In addition, the study by Chow et al. (2008) partially supports the notion that integrating HR configurations with business strategy enhances firm performance.

Although this study does not examine the strategy component within the configurational approach as discussed above, the configurational approach is relevant because the study explores how certain HPMP work together to enhance organisational performance. This study examines the relationship between HPMP and firm performance outcomes in two ways: direct link (i.e. resource based view) and an indirect link (i.e. configurational perspective approach) between HPMP and performance outcomes using the mediating role of HR Sustainability Outcomes. The resource based view approach is well accepted in the literature and widely used in high performance management research (e.g. Becker & Huselid 1998; Combs et al. 2006; De Kok & Uhlaner 2001; De Kok et al. 2006; Huselid 1995; Huselid et al. 1997; Shih et al. 2006; Tsai 2006). The link between HPMP and HR performance, financial performance and market performance outcomes is examined in this study.

Nevertheless, there is very little evidence of the configurational perspective in research focusing on developing countries such as Pakistan (Yasmin 2008, p. 49). In this study, the configurational perspective is used to examine the mediating impact of HR Sustainability Outcomes on the relationship between HPMP and firm performance outcomes and how certain HPMP work together to enhance organisational performance.

The next section contains a literature review of the contextual characteristics of HPMP. The specific characteristics discussed here also constitute specific measurement constructs utilised as part of the study.

2.4 Contextual Characteristics Impacting Upon HPMP

Research indicates that several contextual characteristics of SMEs could act as drivers of HPMP (Urbano & Yordanova 2008). The contextual characteristics examined in this thesis are organisational size, strategic planning, presence of a HR manager and type of industry. The impact of these internal characteristics on the prevalence of HPMP is examined as part of RQ2, *'To what extent do firm size, strategic planning, industry type, and the presence of a HR manager, relate to the prevalence of HPMP in Pakistani SMEs?'* This section provides the literature support for this research question.

2.4.1 Organisational Size

Prior research (e.g. De Kok & Uhlaner 2001; Duberley & Walley 1995; Kotey & Slade 2005; Lawler, Mohrman & Ledford 1995; Marlow & Patton 1993; Wager 1998; Wiesner & McDonald 2001; Wiesner et al. 2007) has found that firm size has a significant influence on the adoption of HPMP. For instance, a study of 1435 SMEs conducted in Australia shows that there is a positive relationship between organisational size and the implementation of HPMP (Wiesner et al. 2007). Moreover, Wiesner and McDonald (2001) found that medium sized firms have a significantly higher adoption rate of HPMP in comparison to small firms. The results of Marlow and Patton (1993) were similar, arguing that as the organisation's size increases, so does the adoption of HPMP. In addition, Kotey and Slade (2005) examined formal HRM practices in small growing firms and noted that most of growth oriented SMEs have implemented formal HRM practices.

According to Koch and McGrath (1996), firm size is positively related with the incidence of HRM planning and formal training. Similarly, De Kok and Uhlaner (2001) identified that employees are less likely to get formal training in small firms. In a study by Wager (1998), smaller companies (less than 100 employees) are found to have less formalised performance appraisal systems and lack of a HRM department. Moreover, Barber et al. (1999) argue that firm size is a key determinant of an effective recruitment process. Their study found that larger firms use more formal, bureaucratic and resource intensive hiring practices in comparison to small firms (p. 862).

In a study of three different countries Chow (2005) argues that large organisations have more resources, and thus can implement HPMP to a much larger extent. However, in contrast to previous research studies, Urbano and Yordanova (2008) did not find support for the relationship between firm size and adoption of HPMP. Similarly, Golhar and Deshpande (1997) indicated no difference in the use of recruitment and selection practices by small and larger sized manufacturing firms. The impact of size on HPMP is an unexplored area of research in the Pakistani context.

In view of the discussion above, the following hypothesis was developed to assist in informing RQ2:

H₁: Firm size is positively associated with the prevalence of HPMP.

2.4.2 Strategic Planning

Planning plays a vital role in business. Numerous studies have confirmed this (e.g. Fening et al. 2008; Gibbons & O'Connor 2005; Rue & Ibrahim 1998; Wiesner & Millet 2012). For instance, Fening et al. (2008) confirmed this in their study of 200 SMEs in Ghana by finding a positive relationship between strategic planning and firm performance. Moreover, Rue and Ibrahim (1998) examined the planning practices of small firms in the US and found positive relationship between planning sophistication and growth in sales. However, their study did not find significant relationship between planning sophistication and return on investment (ROI). Gibbons and O'Connor (2005) found formalised methods of strategic planning in entrepreneurial firms. They argue that formalised methods tend to help firms to learn about their environment and capabilities. They further suggest that such formalised planning can help SMEs to get competitive advantage over their competitors (Gibbons & O'Connor 2005).

A number of studies have also found a positive relationship between strategic planning and the adoption of HPMP (e.g. Banham 2006; De Kok et al. 2003; Wiesner & McDonald 2001; Wiesner et al. 2007). For instance, De Kok et al. (2003) found that organisations with business plans are more likely to implement HPMP. Moreover, Wiesner and McDonald (2001) and Wiesner, et al., (2007) noted a significant positive relationship between strategic planning and the adoption of

HPMP in SMEs. Their studies found that firms with a strategic plan tend to use more formal practices related to recruitment and selection, training and development and performance appraisal practices. Their studies however indicated that SMEs face problems in planning and responding to a volatile environment in comparison to larger firms (Wiesner & McDonald 2001). In addition, the study of Banham (2006), reported a strong positive relationship between the existence of a strategic plan and the implementation of organisation change practices. The impact of the existence of a strategic plan on HPMP has not been examined in the Pakistani context.

In view of the discussion above, the following hypothesis was developed to assist in informing RQ2:

H₂: SMEs with a strategic planning adopt HPMP to a significantly greater extent than those SMEs without a strategic plan

2.4.3 The Presence of a HR Manager

SMEs provide an ideal context to examine the effect of the presence of a HR manager on the adoption of HPMP since large firms tend to have a HR manager and HR department (De Kok & Uhlaner 2001; Wiesner & McDonald 2001; Wiesner et al. 2007). The HRM department, that plans and implements HPMP can be considered as a significant factor which may affect decisions and actions relating to HRM (Barney 2001). Moreover, the role of HR managers/professionals is a significant factor in the successful adoption of HPMP (Murphy & Southey 2003).

Heneman and Berkley (1999) studied 117 small firms in the U.S and found that most of small firms do not have a HR department. They argue that small firms can enhance their recruitment process by establishing a HR department and having a HR manager who can guide the firm to achieve its strategic goals. Their study further reported that small firms with a HR department used more formal methods of recruitment and selection in comparison to those firms operating without a HR department. Similarly, Urbano and Yordanova (2008) found that SMEs with a HR manager are more likely to implement HPMP. Their results are consistent with the work of Wiesner et al. (2007). However, HR managers of small firms tend to have less knowledge about HPMP and as a result adopt less formal training and development and performance appraisal practices (De Kok & Uhlaner 2001).

In the UK, Marlow and Patton (1993) studied 40 SMEs and found that the majority of small firms do not employ specialised managers for managing HR. In Australia, Wiesner and McDonald (2001) reported that only 31 percent of SMEs have employed HR managers in their organisations. The impact of the presence of HR a manager is an unexplored subject in the Pakistani context.

In view of the discussion above, the following hypothesis was developed to assist in informing RQ1:

H₃: SMEs with a HR manager adopt HPMP to a significantly greater extent than those SMEs without a HR manager.

2.4.4 Industry Type

There are different ways in which service organisations are distinguished from manufacturing organisations. Manufacturing organisations always produce physical products such as products that can be touched, weighted and examined while the output of service organisations are intangible (Lewis et al. 2007). Moreover, in service organisations, services are produced and consumed simultaneously (p. 436). In manufacturing organisations, the customers are not engaged in the production process. However, in service firms the customers interact directly in the 'production' process (Yavas & Yasin 1994). Furthermore, the operational management is more product oriented in manufacturing firms while the operational management in service-based organisations, is more people oriented (Jiang 2009). According to Yavas and Yasin (1994) the information flow in service firms is structured around the customers whereas in manufacturing organisations information technology is integrated with manufacturing processes and systems.

In most of the empirical studies, it is assumed that HRM practices of different types of small firms (e.g., manufacturing ,retail, wholesale, and service) are similar (Deshpande & Golhar 1994). Similarly, Guest et al.(2003) also found no consistent difference between HRM and organisational performance in manufacturing and service firms. However, Jackson and Schuler (1992) found that employees in service organisations receive more formal appraisals with greater input from customers, in comparison to manufacturing organisations. Moreover, they reported that employees

in the service sector need more diverse skills and abilities compared to employees in other jobs. Thus, service employees tend to receive more training in comparison to manufacturing employees. Moreover, in a comparative study of manufacturing and service-based firms in Malaysia, Othman (1999) found similar results that service firms tend to be more formal in their performance appraisal processes. The study found that service firms use the appraisal information to enhance training and reward employees, and attempt to create a more conducive work environment. Similarly, in a study of 498 small businesses, Bartman and Lindley (1995) found more sophisticated recruitment and selection practices in service firms than in manufacturing firms.

In view of the preceding discussion the following hypothesis has been formulated to inform research question

In view of the discussion above, the following hypothesis was developed to assist in informing RQ1:

H₄: Service-based SMEs adopt HPMP to a significantly greater extent than manufacturing SMEs

2.5 Summary

This chapter presented SME definitions both from an international and Pakistani perspective and discussed the differences between small and large organisation. The theoretical underpinnings of the study, the resource-based view, the universalistic perspective, and the configurational perspective were examined. The chapter concluded with a discussion on the relationship between certain firm contextual characteristics (firm size, strategic planning, presence of HR manager and industry type) and the adoption of HPMP. Several hypotheses which were developed to inform the second research question regarding the link between firm contextual characteristics and HPMP were outlined. The next chapter provides a critical analysis of the literature pertaining to HPMP.

CHAPTER THREE – LITERATURE REVIEW

HIGH PERFORMANCE MANAGEMENT PRACTICES (HPMP) IN SMEs

3.1 Introduction

This chapter presents a discussion on high performance management practices (HPMP) through an overview of the current knowledge on HPMP within SMEs. This is done through a research review and discussion on how HPMP is defined in the research studies and how HPMP is measured. This is followed by a critical analysis of the current state of HPMP within the SME context. The prevalence of individual practices of HPMP identified in the analysis, including recruitment, selection, compensation, training and development, performance appraisal and consultation, are discussed and their prevalence within the SME context is outlined. This is followed by a more general discussion on HPMP within the SME context. A critical discussion and analysis is presented regarding the HPMP performance link and the mediating effect of HR sustainability outcomes in the relationship between HPMP and economic sustainability outcomes. The gaps in the literature were carefully identified in order to support the rationale for conducting this research study. The chapter concludes with the development of a proposed conceptual framework for this study which illustrates the main measurement constructs and relationship between these constructs in the study. It further illustrates the inter-linkages between the various research questions and associated hypotheses.

Figure 3.1 illustrates the structure of this chapter.

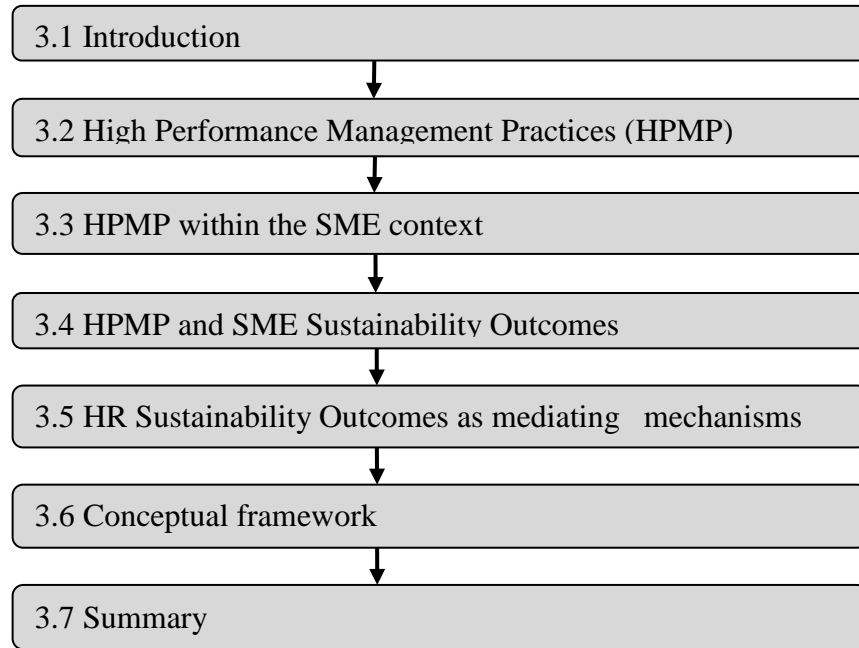


Figure 3.1 Structure of Chapter 3

3.2 High Performance Management Practices (HPMP)

Research in the past has primarily focused on the relationship between ‘individual’ human resource (HR) practices and firm performance, while recent research studies are based on ‘bundles’, ‘systems’ or ‘configurations’ of HR practices and their impact upon performance outcomes (De Kok & Hartog 2006; Drummond & Stone 2007). Such configurations of HR practices have been shown to lead to better firm performance (Delery & Doty 1996). These bundles of HR practices are called high performance management practices (HPMP) in the current study. The recent literature has used the term in various ways, for example, high involvement (Bryson et al. 2005; Gollan 2005; Guthrie et al. 2002), high commitment (Whitener 2001), high performance work systems (Beltrán-Martín et al. 2008; Chow 2005; Datta et al. 2005; De Kok & Hartog 2006; Drummond & Stone 2007; Hartog & Verburg 2004; Murphy et al. 2007; Takeuchi 2009; Tsai 2006; Way 2002a), high performance work practices (Bae et al. 2011; Connolly & McGing 2007; Huselid 1995; Zhang & Li 2009) and high performance management practices (Wiesner et al. 2007). Although various terms are employed and they are used interchangeably, they all refer to the same philosophy (Evans & Davis 2005; Pfeffer 1998; Wiesner et al. 2007).

Ichniovski et al. (1993) are among the first authors to assert that ‘bundles’ of specific HRM practices have a greater impact on organisational performance than isolated involvements (Huselid 1995). HPMP therefore constitutes complementary bundles of HRM practices (Marchal & Kegels 2008). This begs the question: how is HPMP defined and what specific practices constitute HPMP or how is HPMP measured in research studies? These issues are explored in the two sections to follow.

3.2.1 Defining HPMP

Various studies have been conducted across industries, identifying a number of specific HRM bundles. The 1980s era was represented by the collective use of specific personnel practices such as problem solving groups, job flexibility, team working and minimal status differences. The idea was that these variables would have a positive impact on sustainability outcomes (Wiesner et al. 2007). The idea of HPMP became very common during the 1990s. Osterman (1994) conducted a national study of work organisations in which he assessed the implementation of four important practices including TQM, quality circles, teams and job rotation. Becker and Huselid (1998) suggested several guidelines including, careful recruitment and selection, reward system and development strategies that emphasise training and development. Moreover, Lawler, Mohrman and Ledford (1995) conducted a study of 279 top 1000 Fortune manufacturing and service companies and found that employee involvement and TQM practices tend to improve the firms’ performance.

Appendix A summarises the definitions that various authors have used in defining HPMP. These definitions have been used firstly to determine the particular emphasis that various scholars place in defining HPMP and to derive a working definition of HPMP in this study.

Consistent with the criteria used by Wall and Wood (2005), the researcher of this study employed four criteria to select the studies for assessing the definitions of HPMP and identifying what practices constitute HPMP. Firstly, studies were chosen based on highly reputable journals to ensure quality and frequency (highly cited) of studies (see for example Gollan 2005; Huselid 1995; Wood & Menezes 1998). Secondly, the selection was restricted to studies from 1995 onwards, when research on High Performance Management Practices initially started to emerge. Thirdly, only

those studies were included, that covered the concept of ‘High Performance Management System’ or ‘High Involvement Management’ or ‘High Commitment Management’ or ‘High Performance HR practices’, or ‘High Performance Management Practices’ because the focus of this section is on assessing the definitions of HPMP and examining what practices constitute HPMP. Studies focusing merely on strategic human resource management or simple human resource management have been excluded. Finally, a focus of recent studies has been emphasised in order to see the latest views on the concept of HPMP. The selected studies are presented in Appendix A.

It is clear from Appendix A that four main themes emerged in the analysis of the definitions. These include the use of HR practices/approaches; managerial practice (wider interpretation); HR outcomes/HR sustainability; firm performance/competitive advantage. For the first theme, 21 out of 27 studies have used HR practices in their definitions of HPMP. This shows the importance of HR practices/approaches in defining HPMP. For the second theme, only six studies have used the concept of managerial practices. For the third theme, the majority of studies (22/27) used HR outcomes in defining HPMP. Finally, for the firm performance theme, most of the research articles (21 out of 27) employed this concept. Thus, based on this analysis, it can be concluded that researchers view HR practices; HR outcomes and firm performance as the most important components of the concept of HPMP while managerial practices are considered less important in research studies when defining HPMP (see Appendix A).

3.2.2 Measuring HPMP

The discussion now turns to what particular HR practices and/or managerial practices have been identified as constituting HPMP or what concepts have been used to measure HPMP. It is clear from Appendix B that the HPMP research studies show a lack of consistency in what HPMP practices they include in the measurement of the concept. In other words they have used a diverse set of HPMP in their studies. However, there seems to be consensus regarding some specific sets of practices such as recruitment, selection, training and development, performance appraisal, compensation, and consultation. Appendix B has been designed to show the

frequency of individual components of HPMP in prior research work (from 2000 to 2011).

It is evident from Appendix B that recruitment, selection, training, compensation, performance appraisal and employee consultation are the most frequently analysed practices in research studies.

In view of the findings in Appendix A & B the following working definition for the purposes of this study is:

HPMP is a set of human resource management practices (Recruitment, Selection, Training, Remuneration, and Performance Appraisal) and managerial practices that enhance employee involvement and participation, which positively impact upon HR outcomes and organisational performance and/or competitive advantage.

Furthermore, based upon the findings in the preceding two Tables, the six main practices constituting the focus of this study are: recruitment, selection, training, remuneration, performance appraisal and consultation.

3.2.3 High Performance Management Practices in SMEs: A Review of the Literature

This section reviews the literature on the six HPMP practices identified in the previous section: recruitment, selection, training and development, compensation, training and development, performance appraisal and consultation. The discussion to follow reflects on research findings regarding the prevalence of HPMP practices and the link between these individual practices and performance/sustainability outcomes.

3.2.3.1 Recruitment

Recruitment is defined as '*the process of attempting to locate and encourage potential applicants to apply for existing or anticipated job openings*' (Compton et al. 2009, p. 15). Moreover, recruitment strategies are directed to establishing a pool of qualified, skilled and experienced people for effective selection decisions (Compton et al. 2009). Thus, 'recruitment is about sourcing the right people at the right time in the right place at the right price' (p. 15). According to Golhar and Desphande (1997)

external recruitment methods such as employment agencies and educational institutions are the key source of attracting fresh talent to the organisation.

Pfeffer (1998) argues that firms can enhance their profitability by recruiting the right people in the first place. Moreover, previous research studies have found a positive relationship between effective recruitment and firm performance (e.g. Chand & Katou 2007; Delaney & Huselid 1996; Katou & Budhwar 2007; Pfeffer 1998). For instance, in a study of high performing hotels, Chand and Katou (2007) found a high correlation between recruitment and profitability.

Most of the literature focusing on recruitment in SMEs, argue that small firms tend to use informal channels for employee recruitment (Marlow and Patton (1993). Carroll et al. (1999) examined the recruitment methods of small firms and found little evidence of formal systematic procedures. For instance, they report that none of these firms use job analysis and all the firms in their study rely on word of mouth from the existing staff in their recruitment efforts (p. 248). Some other studies (e.g. Cassell et al. 2002; Connolly & McGing 2007; Kotey & Slade 2005) also found 'word of mouth' as the most common method used in the recruitment process within the small business context.

In comparative studies of small and large firms, Deshpande and Golhar (1994), and Golhar and Deshpande (1997) reported that small and large firms prefer to hire employees from within organisations and engaged in practices such as job posting and biddings. In addition, these studies indicated that small firms tend not to use external recruitment methods such as employment agencies and educational institutions (Deshpande & Golhar 1994). However, the study of Barrett and Mayson (2007) found that growth-oriented small firms tend to adopt more formal recruitment practices in comparison to non-growing firms.

In another study of small and larger firms, Barber et al. (1999) found that small firms apply less formal recruitment practices in comparison to large firms. Moreover, they assert that larger firms are more oriented to set recruitment goals while small firms are more focused on performance outcome and turnover (p. 863). Heneman and Berkley (1999) reported that small firms are using many different ways to attract

employees rather than focusing on a set of best practices. However, they suggested that small firms can enhance their recruitment practices by having a HR manager or establishing a HR department (p. 73).

3.2.3.2 Selection

The selection process involves evaluating suitable applicants, their information from application forms, resumes, references and documents, tests undertaken and information collected from interviews (Compton et al. 2009). According to Pfeffer (1998), firms should emphasise important attributes that differentiate applicants. In addition, he argued that employees should be selected on the basis of basic ability and attitude rather than on technical skills, which can be easily acquired (p. 101).

As in the case of recruitment, most of the small business literature argues that small firms tend to use less formal selection methods. According to Kotey and Slade (2005) small firms tend to use more formal selection practices as they grow. They reported the use of the interview method as the predominant selection method at the operational level and review of applications, assessment of qualifications, and the use of references at the managerial level (p. 26). Golhar and Deshpande (1997) found one-on-one interviews as a well-accepted selection method in both large and small firms. However, written tests and panel interviews were most often used by larger firms (pp. 35-6). Moreover, Bartman et al. (1995) in a study of 498 small businesses noted more informal and reactive approaches to selection practices by small firms. They reported unstructured interviews as the common selection method in small firms (p. 347). Their results are consistent with Marlow and Patton (1993). However, Rowden (2002) studied successful small firms in the US and found more formal selection practices with a focus on appropriate technical skills and positive work ethics.

Regarding the link between selection and firm performance, Delaney and Huselid, (1996) found a positive relationship between selective staffing and firm performance. Chand and Katou (2007) also noted a high correlation between selection and profitability.

3.2.3.3 Training and Development

Human resource development is the crucial element that affects the performance of SMEs (Pansiri & Temtime 2008; Temtime & Pansiri 2004). Two components of Human resource development are training and development. Training is defined as '*activities that teach employees how to better perform their present job*' and development is defined as '*activities that prepare an employee for future responsibilities*' (Stone 2008, p. 353).

Lange et al.(2000) argues that highly skilled employees are the key to enhancing a firm's competitiveness and sustainable growth. In line with the discussions in the previous two sections, research on small firms have shown that informal, on the job training is the predominant training method for human resource development (e.g. Kotey & Slade 2005; Lange et al. 2000; Nolan 2002).

Mixed results exist regarding the prevalence of training and development in SMEs. Duberley and Walley (1995) studied manufacturing SMEs in UK and report a very low level of training and development, whereas Cassell et al. (2002) found that SMEs are quite focused and targeted in their training. Low levels of training and development in small firms could be attributed to four key barriers to skill development. These are: cultural barriers, financial barriers, accessing skill development opportunities barriers and awareness barriers (Lange et al (2000).

Pansiri and Temtime (2008) noted that SMEs do not use the services of consultants in their human resource development. There are two possible reasons for this: it could be due to a lack of knowledge about the role of consultants; and it could also be that good consultants are hard to come by and expensive (Temtime & Pansiri 2004).

Regarding the training and development and firm performance link, a large number of research studies have shown a positive relationship (e.g. Akhtar et al. 2008; Chand & Katou 2007; Huang 2000; Ichniowski & Shaw 1999; Katou & Budhwar 2007; Lange et al. 2000; Michie & Sheehan 2003; Singh 2004; Van de Wiele 2010). According to Katou and Budhwar (2007), an effective training process can enhance firm performance by producing highly trained and skilled employees. Ichniowski and

Shaw (1999) argue that well-trained and skilled employees are able to react quickly to future changes in production and market conditions. Van de Wiele (2010) and Shih et al. (2006) noted a positive relationship between employee's participation in training programmes and firm performance.

Similarly, Michie and Sheehan (2003) found a negative relationship between low level of training and innovation. Singh (2004) indicated a positive and significant impact of training on firm performance. In a comparative study of high and low performer firms, Huang (2000) indicates that high performers tend to identify training and development as a highly important function and address these practices on a long-term basis in comparison to low performers. Chand and Katou (2007) examined 436 high performing hotels in India and found a high correlation between training and development and good service quality. Moreover, in a study of manufacturing and service sector firms, Akhtar et al. (2008) indicated a significant impact of training on both quality of products/services and financial performance.

3.2.3.4 Performance Appraisal

'Performance appraisal is a process through which an organisation measures an employee's contribution to the firm. The employee's performance is measured for a specific period of time and is assessed against concrete, job-related criteria'(Glidden & Whelan 1996). The rationale of performance appraisal is to support goal setting and feedback processes in a way that employees can enhance their performance (Lee et al. 2010).

A result-oriented appraisal system provides incentives for employees to put more effort in the achievement of their performance goals (Akhtar et al. 2008). Huang (2000) suggested that although performance appraisal is important in making compensation and promotion decisions, it can also be useful in enhancing other HRM activities such as recruiting, selection, orientation and training.

Connolly and McGing (2007) reported that annual appraisal systems could be found in the Irish hotel sector. In addition, monetary (pay increase, bonuses and promotion) and non monetary awards(written appreciation, verbal praise and training) were used as rewards for high performer employees.

Jackson and Schuler (1992) found that in comparison with manufacturing organisations, employees in service organisations tend to use formal appraisals, with input from customers, to a greater extent. Service firms also tend to use the results of these evaluations in determining compensation to a greater extent than manufacturing firms. Moreover, they reported that employees in the service sector need more diverse skills and abilities compared to other jobs. Thus, service employees tend to receive more training in comparison to manufacturing employees. A comparative study of manufacturing and service firms in Malaysia, Othman (1999) reports similar results. The study found that service firms use the appraisal information to enhance training and reward employees, and attempt to create a more conducive work environment.

Prior research has found a positive relationship between the prevalence of performance appraisals and firm performance (e.g. Akhtar et al. 2008; Bartel 2004; Collings et al. 2010; King-Kauanui et al. 2006). In a study of manufacturing and service sector firms, Akhtar et al. (2008) found a significant impact of result-oriented performance appraisal on both product/service performance and financial performance. Moreover, Bartel (2004) noted a positive relationship between the quality of employee evaluation, performance feedback and firm performance. Similarly, Collings et al. (2010) found strong support for the link between competence based performance appraisals and employee skills and abilities.

3.2.3.5 Compensation

Compensation is a tool used to shape the behaviour of employees in accordance with the business strategy of the firm (Singh 2004). A firm can compensate its employees in many different ways such as gain sharing, profit sharing, stock ownership, pay for skills, and individual or team incentives (Pfeffer & F.Veiga 1999, p. 42).

Incentive schemes have been found to enhance the interest of employees in the organisation (Katou & Budhwar 2007). According to Bae et al. (2011), financial participation schemes such as a profit sharing plan develop employee interest and a desire to become involved and influence the decision making process in the firm. Way (2002a) indicated that group-based pay is associated with low employee

turnover and high labour productivity. Similarly, Chand and Katou (2007) noted a high correlation between an incentive pay system and firm productivity. In addition, Lazear (2000) argues that employee productivity is enhanced when a firm incorporates incentives into their systems, for example switching from hourly wages to piece rates.

Regarding the link between compensation and firm performance, prior research has indicated a positive relationship between compensation practices and firm performance (e.g. Akhtar et al. 2008; Bartel 2004; Carlson et al. 2006; King-Kauanui et al. 2006; Singh 2004). For instance, Carlson et al. (2006) found that cash incentives are the key element of organisational success. Their study examined 168 family-owned SMEs in the US and found that cash incentives in compensation can enhance a firm's sales growth.

Similarly, Singh (2004) found a positive and significant link between compensation and firm performance. His study indicated a positive relationship between a performance-based compensation system and enhanced firm performance. In a study of branch operations of a large bank, Bartel (2004) found a positive relationship between incentives and firm performance. Moreover, Akhtar et al. (2008) noted a significant positive relationship between profit sharing and financial performance in both manufacturing and service sector firms.

King-Kauanui et al. (2006) noted a positive relationship between incentive compensation and firm performance in Vietnamese SMEs. Tsai (2010) found compensation practices such as cash bonuses, profit sharing and individual performance related schemes in both large and small Taiwanese firms. However, she reported that such schemes are dependent on both firm performance and individual performance (p. 1701). In a comparative study of 315 Taiwanese firms, Huang (2000) indicates that effective firms tend to pay high wages to attract talented employees in comparison to poor performing firms. Moreover, Yao (1997) reported enhanced firm productivity by profit sharing and bonus payment in Chinese state owned enterprises. The study asserts that profit sharing and a bonus system are not only important in firm productivity but also in the development of a competitive market system.

3.2.3.6 Consultation

The term consultation has been defined variously. For example, Wagner & Gooding (1987) define consultation as a decision making process by which an organisation shares influence on decision making between superiors and followers. A similar definition is proposed by Alexander and Lewer (1996, p. 297) who define consultation in terms of management seeking and considering the views of its employees before making a decision. However, they add that accountability for the decision rests with management and explicitly exclude joint decision-making from its purview. McDonald and Wiesner (2000) agree with the implication of Alexander and Lewer's definition that the term, consultation, at its core implies an exercise of management initiative, but differ with respect to their exclusion of joint decision making. They argue that this exclusion places too great a limitation on the concept, as it is possible for joint consultative committees to be established for the purpose of making decisions and not merely advising management. They define consultation as encompassing a deliberative attempt by management to incorporate employees to a greater or lesser degree into decision making. It constitutes a set of processes by which management involves employees in decision making at various levels of the organisation, and may take many forms. The latter definition is chosen as the working definition for the current study.

Through formal or informal consultation, managers and employees expect to achieve organisational objectives such as effectiveness, productivity, product quality and organisational change (Sagie & Koslowsky 2000). Moreover, the sustainability of HPMP can only be achieved by recognising the needs of employees and implementing sustainable policies and practices through employee involvement and participation (Gollan 2005). Wager (1998) argues that firms with open communication styles and employee participation in decision making tend to adopt more formal performance appraisal systems, employee attitude surveys, an employee pension plan, and an orientation program for new employees as well as job sharing.

The management decision making and organisational structure in SMEs are dependent upon the preferences and interests of owners/managers, who make the most of important decisions and supervise all activities (Duberley & Walley 1995; Hitt et al. 1996; Ramsey et al. 2003; Rana et al. 2007). In addition, an SME's

survival and growth are often based on the management style of owner/managers (Marlow & Patton 1993). Since owners/managers in SMEs closely interact with operating and administrative employees (Marlow & Patton 1993), they have a greater opportunity to influence employees directly (Pansiri & Temtime 2008).

Studies in western contexts have found that managerial prerogative is alive and well in SMEs and that the most important and strategic decisions are made by management. Within the Australian context, McDonald and Wiesner (2000) found that SME managers tend to consult mainly on operational issues and are less likely to consult their employees on strategic issues. Other large scale surveys such as the Australian Workplace Industrial Relations Surveys (AWIRS 1995) also revealed generally low levels of consultation within SMEs. Connolly and McGing (2007) also noted low levels of formal employee involvement in the Irish hotel sector. Their study indicated that, employees' views and suggestions were not sought for decision making.

Very few studies have been conducted on this topic area in non-western contexts, however, a few studies have been published in recent years. A recent comparative study of Japanese and Korean firms found that Japanese workers tend to make suggestions to enhance productivity and quality more often in comparison to Korean workers (Bae et al. 2011). Within the Pakistani context, a study by Rana et al. (2007) of 650 manufacturing firms found that about 82 percent of SME owners are the operating head and make the major strategic decisions in their firms.

Regarding the link between consultation and firm performance, prior research studies have indicated a positive relationship between employee consultation/involvement and firm performance (e.g. Gollan 2005; Kato & Morishima 2002; Kuye & Sulaimon 2011; Shih et al. 2006; Zwick 2004). For instance, Zwick (2004) noted strong positive association between employee participation in decision making and organisational productivity. In addition, his study indicates that team work; autonomous work groups and low levels of hierarchical arrangements provide organisations with productivity advantage. Similarly, Shih et al. (2006) found a positive relationship between employee involvement and enhanced firm performance. Furthermore, Kato and Morishima (2002) argue that employee

participation or involvement both at the top level and at the grass root level may enhance the productivity of a firm. In Nigera, Kuye and Sulaimon (2011) have also found support for the consultation–performance link. They studied 670 manufacturing firms and found a significant relationship between employee participation in decision making and firm performance. Their study indicated that firms with high employee participation perform well in comparison to low employee participation in decision making.

3.3 HPMP within the SME Context

Having discussed six specific individual HPMP practices in the previous section, the discussion now turns to studies which focused on HPMP generally. This broad brush discussion of the current state of HPMP in SMEs will now follow.

As mentioned earlier, research on HPMP has focused primarily on large organisations (Barrett & Mayson 2007, p. 309; Wiesner et al. 2007; Wilkinson 1999). For instance, in the US, Huselid (1995) studied the relationship among HPMP and turn-over, productivity and firm financial performance. He used 13 high performance management practices related to personnel selection, performance appraisal, incentive compensation, job design, grievance procedures, information sharing, attitude assessment and labour management participation. In the United Kingdom, Wood and Menezes (1998) performed an analysis of HPMP, including different facets of quality management, for example team work and quality circles. Furthermore, in a study of Fortune 1000 large companies, Lawler, Mohrman and Ledford (1995) analysed employee involvement and TQM. Their model was intended to improve employees' skills and knowledge, hence having an impact on motivation of employees.

The recent research on HPMPs include Way's (2002a) study in the US that researched 446 small firms and concluded that HPMP is associated with lower turnover and higher perceived productivity. In addition, the study proposed that HPMP may enhance the ability of small firms to select, develop, retain and motivate a work force that produces superior employee output which may be a key to success and a source of sustainable competitive advantage. Moreover, in a study of high performance and human resource characteristics of successful small manufacturing

firms in United States, Rowden (2002) illustrated similar findings. His study found that HPMP such as training and development, compensation and benefit packages and selective staffing were the most familiar HPMP among these companies. However, in a comparative study of large and small manufacturing firms in US, Desphande and Golhar (1994) found that small firms do not use formal recruitment and selection practices.

In Australia one of the few national studies on HPMP in Australian SMEs, examined the HR practices in 1435 SMEs (Wiesner et al. 2007). They found that the overall image concerning the prevalence of HPMP in SMEs is relatively bleak, with little use of employee participation practices in the context of low unionisation and a low prevalence of collective relations (Wiesner & McDonald 2001, p. 48; Wiesner et al. 2007). Furthermore, in a comparative study of SMEs and large organisations in Australia, Bartram (2005) found that small organisations are less likely to use formal HRM practices than medium or large firms due to lack of resources, management training and formal strategic planning. In addition, Barrett and Mayson (2007) examined 600 small Australian firms and found that growth-oriented small firms tend to implement more HPMP in comparison to non- growing firms.

In the UK, small companies utilize an informal approach to employee relations with lack of strategic approach (Duberley & Walley 1995; Marlow 2000). Moreover, in another empirical study in the UK revealed that the adoption of HPMP in SMEs is somewhat gradual and reactionary, rather than practical, holistic or logical (Cassell et al. 2002). However, in a study of 560 companies in UK, Bacon et al. (1996) found a high degree of the application of HPMP in small businesses. Moreover, according to some research studies (Bacon et al. 1996; Marlow & Patton 1993; Wilkinson 1999) the small business context is in many ways the perfect place for the development of a HPMP approach. Firstly, the communication in small organisations is more direct and informal and employees have more flexibility to work. Secondly, small firms have the horizontal hierarchy and the contribution of each employee to organisation performance is more obvious. Finally, due to high insecurity, small firms are more responsive to changes in customer demands and markets (Bacon et al. 1996).

In China, examples of research concentrating particularly on HPMP in SMEs include the study by Zheng et al. (2009) in which they identified HPMP such as performance-based pay, training and development, performance evaluation, encouragement of employee participation in decision making and strategic recruitment and selection as the most regularly implemented work practices among growth-oriented SMEs (p. 186).

In Netherlands, a comparative study of 700 Dutch firms by De Kok et al. (2003) found that smaller firms apply less formal HRM practices than that of large organisations. In addition, they found that smaller firms do not use formal recruitment and training practices. Their study further reported that most of the small firms do not have a HRM department.

Moreover, in Pakistan, a study of 650 manufacturing firms by Rana et al. (2007) found informal human resource practices in Pakistani SMEs. The study indicates a lack of formal appraisal system for their workforce and most of the human resource decisions are taken by their owners.

Appendix C summarises studies which focused on HPMPs in the SME context between 2000 and 2011.

3.4 HPMP and Sustainability Outcomes in SMEs

A substantial number of empirical studies conducted in large organisations have examined the effect of HPMP on sustainability outcomes (e.g Datta et al. 2005; Huselid 1995; Katou & Budhwar 2007; Richard & Johnson 2001; Rose et al. 2006; Singh 2004; Wright et al. 2005; Zhang & Li 2009; Zheng et al. 2009). For instance, Huselid (1995) found that bundles of HR practices are associated with lower turnover and higher productivity and financial performance. Richard and Johnson (2001) found a relationship between effective HR systems and a decrease in employee turnover. Similarly, Guest et al. (2003) noted positive relationships between HR practices and lower turnover and higher profitability.

However, the link between HR practices and firm performance has been strongly criticised by Fleetwood and Hesketh (2006). They argue that the HRM-Performance

link is under theorised with a lack of explanatory power. They further argue that more empirical evidence cannot provide the solution for this problem. They pointed out that the root cause of this problem is grounded philosophy level of science particularly ontology, epistemology, methodology and causality. They further note that since the HRM-Performance link lacks philosophical discussion, the under theorisation and explanatory power issues are not yet addressed.

Building upon the work of Huselid (2009), who analysed prior empirical studies for the relationship between HRM system and firm performance from 1995- 2003, the researcher of this study extended his work by conducting a similar analysis on 84 studies focusing on HPMP in firms generally during the period 2000 – 2011 (see Appendix D). The analysis include a few of the studies (2000-2003) that were already examined by Huselid (2009) in his work. However, the researcher of this study examined those and other new studies (2004 - 2011) in more depth, particularly the details of HR/HPMP indicators.

An analysis has also been conducted which focuses specifically on HPMP within the SME context for the period 2000–2011 (see Appendix C). The following three criteria were employed to select the studies for assessing the relationship between HPMP and firm performance in SMEs.

Firstly, only those studies were included, that specifically focused on SMEs, because the aim of this section is on assessing the relationship between HPMP and firm performance in SMEs. Secondly, studies were chosen that fitted with the definition of HPMP used for this study (as discussed above). Thus, all those studies were examined that have focused on either strategic HRM practices/general HRM/ HPMP or HR outcomes practices and also have examined the relationship between HPMP / HRM practices and firm performance. The reason for not focusing specifically on HPMP studies is that there are very few studies that have examined the relationship between HPMP and firm performance in SMEs. For instance, the study of Wiesner et al.(2007) was excluded from the analysis because their study has focused only on HPMP rather than examining the relationship between HPMP and firm performance. Finally, in order to focus on contemporary research work in the area of HPMP and

firm performance, studies were selected from 2000 onwards. The selected studies are presented in Appendix C.

The analysis focusing specifically on SMEs is presented in Appendix C. The following criteria have been utilised in the analysis: These studies have been analysed in terms of author(s), year of study, level of analysis, sample size, HPMP/HRM indicators, performance measures, and main effect (significant effect of independent variable on the dependent variable). The objective of this analysis was to gain an insight into recent research conducted examining the link between HPMP and firm performance.

The analysis in Appendix C shows that compared to the analysis on firms in general (studies including organisations of all sizes but with an emphasis on large organisations), the researcher could identify only 15 studies internationally that have been conducted specifically focusing on SMEs. This confirms the notion that the link between HPMP and firm performance/sustainability indicators in SMEs has been studied significantly less than within a large organisational context. It is further evident that eight of the studies showed a significant positive relationship between HPMP and performance/sustainability outcomes. A further six found mixed results regarding the HPMP-performance link, one study found a partial relationship and one study found a moderate relationship. Two of the three studies conducted within an Asian context have found a significant positive link between HPMP and performance/sustainability indicators.

In view of this analysis the following hypotheses have been formulated to inform **RQ3, Do different components of HPMP (recruitment, selection, training and development, compensation, performance appraisal and consultation) impact upon the sustainability outcomes (financial sustainability outcomes and market-based sustainability outcomes) of SMEs?:**

H₅: There is a significant positive relationship between HPMP (recruitment, selection, training and development, compensation, performance appraisal and consultation) and financial sustainability outcomes of SMEs.

H₆: There is a significant positive relationship between HPMP (recruitment, selection, training and development, compensation, performance appraisal and consultation) and market based sustainability outcomes of SMEs

3.5 HR Sustainability Outcomes as Mediating Mechanisms

High Performance Management Practices (HPMP) may also impact SME sustainability outcomes in an indirect way, through HR sustainability Outcomes. HR sustainability outcomes include: employee commitment, employee turnover, job satisfaction, and skill development. The relationship between HPMP and HR sustainability outcomes has been evidenced in many research studies (e.g. Batt 2002; Guchait & Cho 2010; Huselid et al. 1997; Richard & Johnson 2001; Takeuchi 2009; Way 2002a; Whitener 2001; Wright et al. 2005). For instance, Takeuchi (2009) found a positive relationship between adoption of HPMP and increased job satisfaction and more employee commitment. Similarly, the studies of Wright et al. (2005) and Whitener (2001) have indicated positive relationship between HPMP and employee commitment. Moreover, Richard and Johnson (2001) argue that an effective HR system tends to decrease employee turnover. Their results are consistent with the study of Huselid (1995) who found strong support for the relationship between HPMP and low employee turnover and increased productivity. Similarly, Guchait and Cho (2010) and Way (2002a) noted positive relationship between HPMP and low employee turnover.

Prior research studies have also indicated significant relationship between HR sustainability outcomes and firm performance (e.g. Koys 2001; Lado & Wilson 1994; Ton & Huckman 2008). For example, Ton and Hukman (2008) indicated an inverse relationship between turnover and profit margin. Koys (2001) found positive relationship between employee satisfaction and customer satisfaction.

Batt (2002) argues that HPMP affects firm performance (higher sales) directly by making employees capable of providing services to customers and also by building employee commitment and long-term employees with acquired skills that can bring high productivity for the firm. She also links her arguments with the resource-based theory of the firm by stating that creating a knowledgeable workforce for customers,

products, and processes may generate resources that are rare, valuable, and hard to imitate and ultimately act as a source of competitive advantage (Batt 2002).

In view of the foregoing discussion, the following hypotheses have been formulated to inform **RQ4, ‘To what extent do HR sustainability outcomes mediate the relationship between HPMP and SME Sustainability Outcomes?’**

H₇: HR Sustainability Outcomes partially mediate the relationship between HPMP and Financial Sustainability Outcomes

H₈: HR Sustainability Outcomes partially mediate the relationship between HPMP and Market-based Sustainability Outcomes

3.6 Gaps in the Literature

As discussed above, research on HPMP has focused primarily on large organisations (Barrett & Mayson 2007, p. 309; Wiesner et al. 2007; Wilkinson 1999) and there is a dearth of HPMP studies that have focused on small firms. Since small firms are quite different (in many respects) from large firms (as discussed in Chapter 2), research findings based on large organisations may not be fully relevant to smaller firms. Moreover, the dearth of research in developing countries and particularly in the context of Pakistan is evident from many research studies (as discussed above and in chapter 2). Consequently, it is expected that the results of this study will help in filling the research gap that exists in SMEs of developing countries particularly in Pakistan.

Within the context of this study, Pakistan has a unique culture (Hofstede 2009; Khilji 2001) and SMEs face quite unique challenges compared to other countries, which makes a study focusing on HPMP a worthwhile endeavour. The results from similar studies (e.g. De Kok et al. 2003; Duberley & Walley 1995; Marlow 2000; Rowden 2002; Wiesner et al. 2007; Zheng et al. 2009) conducted in different countries (mostly related to developed economies and with different cultural contexts than those of Pakistan) are showing mixed results regarding the adoption of HPMP and their relationship with sustainability outcomes. Consequently, owing to the cultural differences, these results cannot necessarily be applied in the Pakistani context. Moreover, researchers also suggest that similar research studies should be conducted

in developing countries to take into consideration different cultural backgrounds (Heneman et al. 2000; Shih et al. 2006).

Only one study has been conducted in Pakistan that examined general issues within the SME sector. This study, conducted by Rana et al. (2007) of 650 manufacturing Pakistani firms is more than seven years old (the study was conducted in 2003 but published in 2007). Rana's study discusses only the characteristics of successful SMEs in Pakistan and does not focus specifically on HPMP and its relationship with SME sustainability outcomes. His study only focused on the manufacturing sector with the exclusion of another very important sector – services, which represents 22.3 percent of all SMEs in Pakistan (Afaqi & Seth 2009; PBS 2011). Since Rana's study, there have been numerous developments in Pakistan, major changes have taken place in the macro environment and there has been an increase in foreign investment in Pakistan particularly in the service sector (Mian 2008).

There is gap in theory relating to the effect of mediating variables such as HR sustainability outcomes (for example, employee commitment, employee turnover, job satisfaction and skill development) on the relationship between HPMP and sustainability outcomes in the SME context. In addition, previous studies in this regard have been conducted in the context of large organisations. The mediating role of HR sustainability outcomes in the relationship between HPMP and SME sustainability outcomes is an unexplored area of research in SMEs. According to Katou and Budhwar (2007, p. 30), more research is needed to investigate the effect of mediating or moderating variables on the relationship between HPMP and organisational performance. Gerhart (2005) argue that without testing the moderating/mediating variables, the causal relationship between HR systems and firm performance remains vague.

Although there has been an increase in research emphasising the role of HPMP as a basis of competitive advantage (Barney & Clarke 2007; Connolly & McGing 2007; Khandekar & Sharma 2005; Pfeffer 1998), and a strong argument has been made that specific HPMPs in SMEs enhance organisational performance (Nguyen & Bryant 2004; Rowden 2002; Way 2002a), there is still a dearth of systematic research available on the nature and implementation of these practices, as well as the link

between these practices and sustainability outcomes in Pakistani organisations (Yasmin 2008).

Thus in view of the above literature and research gaps, there is a strong justification for conducting this study. The current study seeks to fill the above research gaps by not only testing the relationship between HPMP and SME sustainability outcomes in the Pakistani context but also the mediating effect of HR sustainability outcomes on the relationship between HPMP and SME sustainability outcomes through developing a conceptual framework. The current study also seeks to develop conceptual path model that will be tested by applying a structural equation model. The next section presents a detailed discussion on the conceptual frame work and path models of this study.

3.6 A Conceptual Frame Work for Studying HPMP in Pakistani SMEs

3.6.1 Introduction

Based on the literature and research gaps discussed in this chapter and the preceding chapters, a conceptual framework (see Figure 3.2) has been developed for the purpose of this study that illustrates the main measurement constructs utilised, as well as the hypotheses developed for this research.

The core of the model is the box depicting the six HPMP. The first research question examines the extent (frequency) and nature (in terms of patterns of adoption) of HPMP in Pakistani SMEs.

The model further depicts the associations among independent, dependent, and mediating variables used in this study. The model initially depicts the contextual characteristics of HPMP that may have an effect on the prevalence of HPMP. This represents the second research question which examines the extent that firm size, strategic planning, industry type, and the presence of a HR manager, impact upon the prevalence of HPMP in Pakistani SMEs (Hypotheses1-4 informs RQ2). In the second phase, the proposed model shows the relationship between HPMP and SME sustainability outcomes. This represents the third research question which analyses the link between different components of HPMP's and sustainability outcomes of

SMEs (Hypotheses 5 & 6 inform RQ3). Finally, in the third phase, the model also illustrates the mediation effect of HR sustainability outcomes on the relationship between HPMP and SME sustainability outcomes. This represents the fourth research question which examines the extent to which HR Sustainability Outcomes mediate the relationship between HPMP and SME Sustainability Outcomes (Hypotheses 7 & 8 inform RQ4). Following the criteria used by Zheng et al. (2006), the variables for this proposed model have been chosen based on three criteria: Firstly, the variables must have been used by prior research studies. Secondly, variables must be relevant to SMEs. Finally, variables must be able to measure the recent development of HPMP in Pakistani SMEs. The following section presents a detailed discussion on the proposed model.

The proposed model illustrates the relationship among variables in three ways. Firstly, there is a proposed relationship between firm contextual characteristics and the prevalence of HPMP. Secondly, there is also a proposed association between HPMP and SME sustainability outcomes. Thirdly, there is a proposed mediating effect of HR sustainability outcomes on the relationship between HPMP and SME sustainability outcomes.

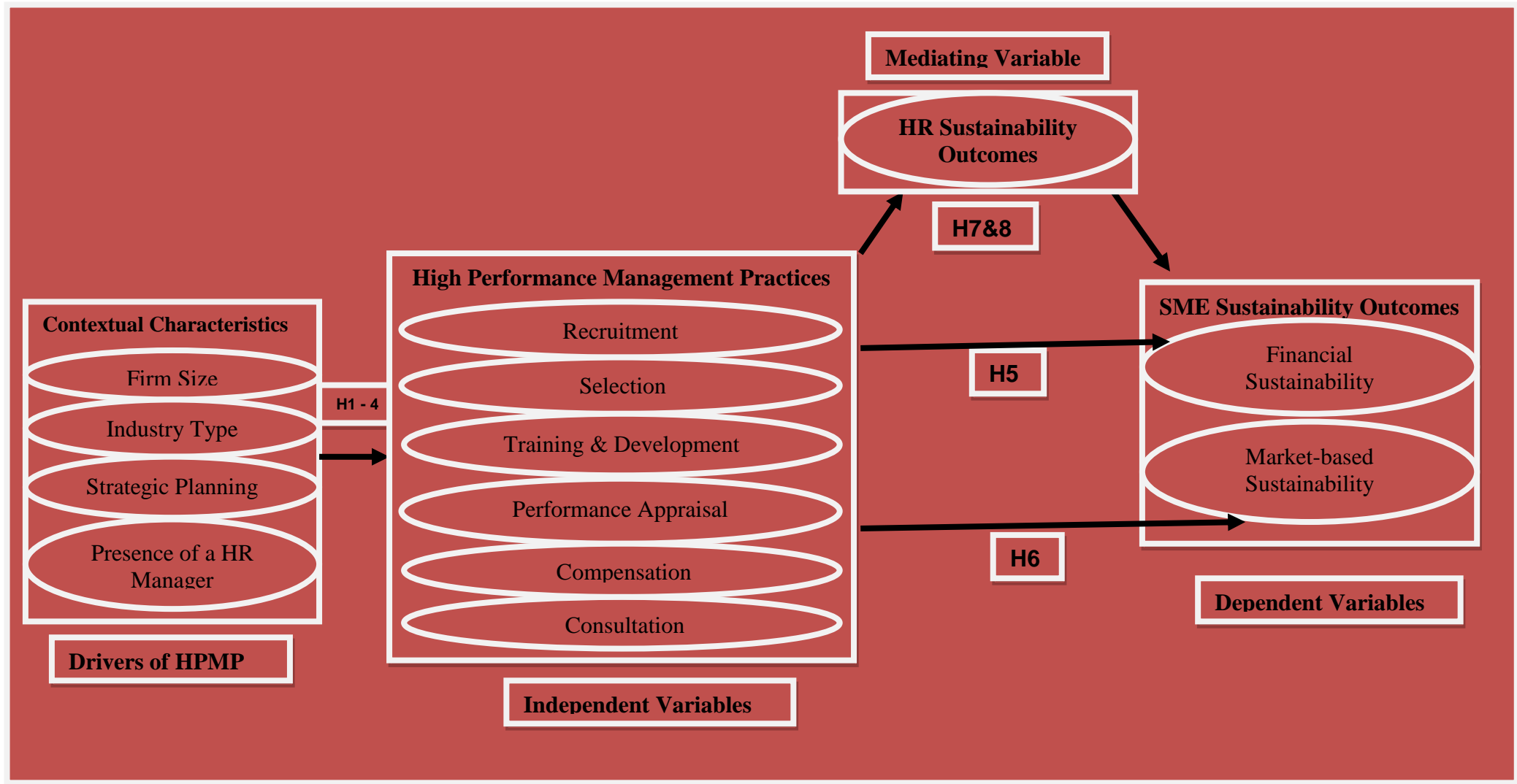


Figure 3.2 Conceptual Framework of study

3.6.2 The Relationship between Contextual Characteristics and HPMP

The contextual characteristics for this research study include: Firm size (De Kok et al. 2003; Urbano & Yordanova 2008; Wiesner et al. 2007); Industry type (Bartman et al. 1995; Othman 1999; Schuler 1992); Strategic planning (Chang & Huang 2005; Guthrie et al. 2002; Richard & Johnson 2001; Takeuchi 2009; Wiesner & Millet 2012); and presence of a HR manager (Katou & Budhwar 2007; Wiesner & Innes 2010). Six HPMP variables have been included in the conceptual model. These are: Recruitment (Barber et al. 1999; Bartman et al. 1995; Carroll et al. 1999); Selection (Bartman et al. 1995); Compensation (Lazear 2000); Training and Development (Lange et al. 2000; Van de Wiele 2010); Performance Appraisal; and Consultation (Connolly & McGing 2007; Kato & Morishima 2002; Kuye & Sulaimon 2011; Zwick 2004). The rationale for the inclusion of these practices has been discussed in section 3.2.2 in this chapter.

Research indicates that several internal characteristics of SMEs could have an impact upon HPMP (e.g. De Kok et al. 2003; Urbano & Yordanova 2008; Wiesner et al. 2007). The literature presented in Chapter 2 has discussed the relationship between contextual characteristics and HPMP in different countries. However, this study seeks to examine this relationship in the context of Pakistani SMEs. The proposed model examines whether there is a significant difference between small and medium firms regarding the adoption of HPMP. Secondly, the study seeks to examine whether HPMP are more prevalent in manufacturing or service-based SMEs. Thirdly, the study seeks to answer whether the existence of a strategic plan has an impact on the adoption of HPMP. Finally, the study also seeks to determine whether the presence of a HR manager has an impact on the prevalence of HPMP. Figure 3.3 is designed to present the relationships between contextual characteristics and HPMP. Thus to seek answers for these questions, the study will address the following research questions and its associated hypotheses.

RQ2: To what extent do firm size, strategic planning, industry type, and the presence of a HR manager, relate to the prevalence of HPMP in Pakistani SMEs?

The following main hypothesis and sub hypotheses have been developed to inform RQ2,

H1: Medium-sized firms are more likely to use HPMP than small firms

H1a: Medium-sized firms are more likely to use Recruitment practices than small firms

H1b: Medium-sized firms are more likely to use Selection practices than small firms

H1c: Medium-sized firms are more likely to use Training and Development practices than small firms.

H1d: Medium-sized firms are more likely to use Performance Appraisal practices than small firms

H1e: Medium-sized firms are more likely to use Compensationl practices than small firms

H1f: Medium-sized firms are more likely to use Consultation practices than small firms

H2: Service-based SMEs adopt HPMP to a significantly greater extent than manufacturing SMEs

H2a: Service-based SMEs adopt Recruitment practices to a significantly greater extent than manufacturing SMEs

H2b: Service-based SMEs adopt Selection practices to a significantly greater extent than manufacturing SMEs

H2c: Service-based SMEs adopt Training and Development practices to a significantly greater extent than manufacturing SMEs

H2d: Service-based SMEs adopt Performance Appraisal practices to a significantly greater extent than manufacturing SMEs

H2e: Service-based SMEs adopt Compensation practices to a significantly greater extent than manufacturing SMEs

H2f: Service-based SMEs Consult employees to a significantly greater extent than manufacturing SMEs

H3: SMEs with a strategic planning adopt HPMP to a significantly greater extent than those SMEs without a strategic plan

H3a: SMEs with a strategic planning adopt Recruitment practices to a significantly greater extent than those SMEs without a strategic plan

H_{3b}: SMEs with a strategic planning adopt Selection practices to a significantly greater extent than those SMEs without a strategic plan

H_{3c}: SMEs with a strategic planning adopt Training and Development practices to a significantly greater extent than those SMEs without a strategic plan

H_{3d}: SMEs with a strategic planning adopt Performance Appraisal practices to a significantly greater extent than those SMEs without a strategic plan

H_{3e}: SMEs with a strategic planning adopt Compensation practices to a significantly greater extent than those SMEs without a strategic plan

H_{3f}: SMEs with strategic plan Consult employees to a significantly greater extent than SMEs without a strategic plan

H₄: SMEs with a HR manager adopt HPMP to a significantly greater extent than those SMEs without a HR manager

H_{4a}: SMEs with a HR manager adopt Recruitment practices to a significantly greater extent than those SMEs without a HR manager

H_{4b}: SMEs with a HR manager adopt Selection practices to a significantly greater extent than those SMEs without a HR manager

H_{4c}: SMEs with a HR manager adopt Training and Development practices to a significantly greater extent than those SMEs without a HR manager

H_{4d}: SMEs with a HR manager adopt Performance Appraisal practices to a significantly greater extent than those SMEs without a HR manager

H_{4e}: SMEs with a HR manager adopt Compensation practices to a significantly greater extent than those SMEs without a HR manager

H_{4f}: SMEs with HR manager Consult employees to a significantly greater extent than SMEs without a HR manager

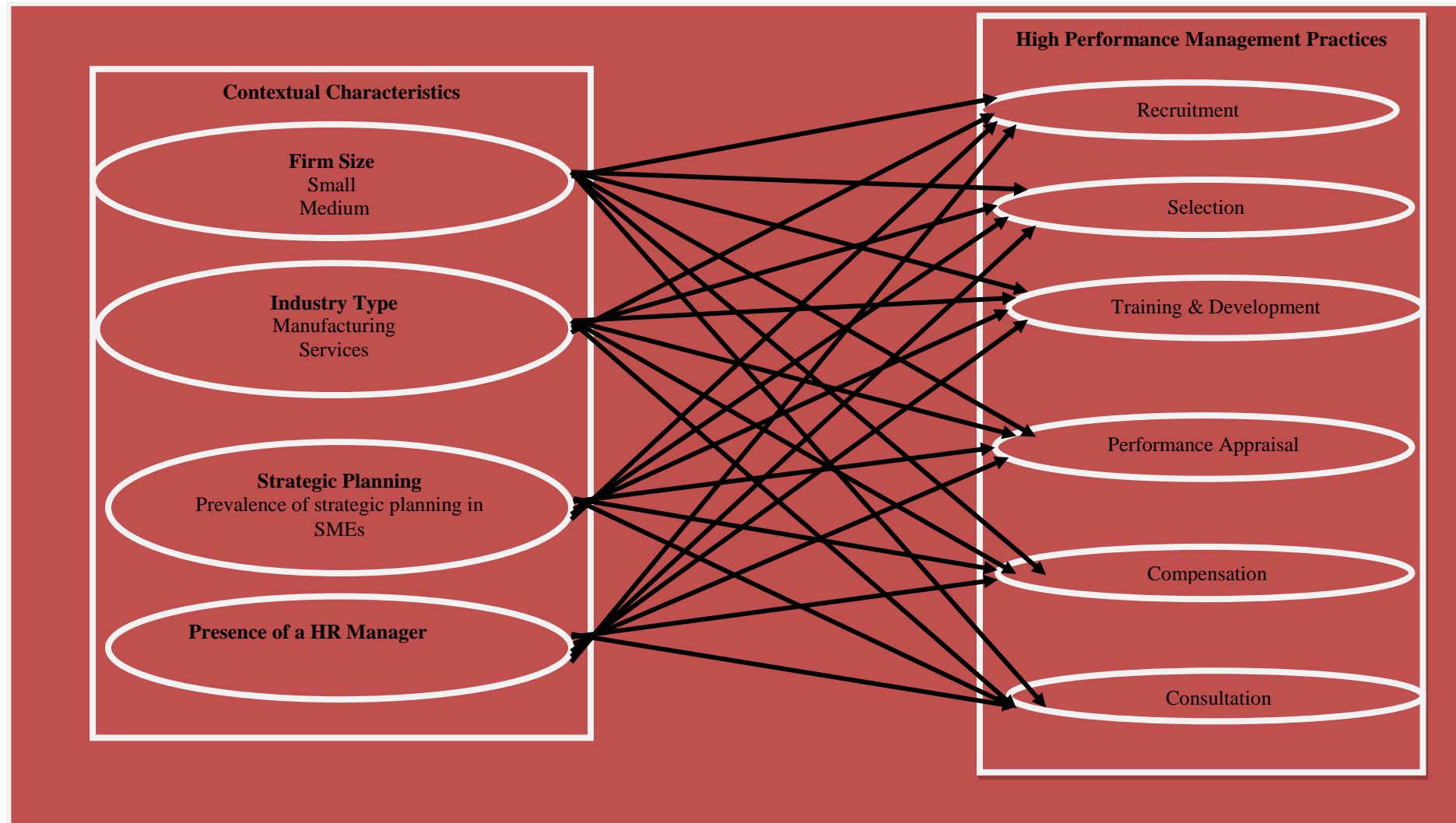


Figure 3.3 Relationship between contextual characteristics and HPMP

3.6.3 The Relationship between HPMP and SME Sustainability Outcomes

The dependent variables (SME sustainability outcomes or firm performance) utilised in this study are measured through a number of questions which are subjective nature of questions. Most of these measures were also used by Wiesner and Inness (2012) in a similar Australian study. Firm performance is measured variously in the literature, including objective and subjective measures (Apospori et al. 2008; Paauwe 2004; Shih et al. 2006). For instance, Shih et al. (2006) used both objective and subjective measures and found highly significant correlations between them. For this research study, since SMEs were mostly privately owned and operated, CEO's were reluctant to make available detailed financial and accounting data. According to Way (2002a), it is difficult to find the financial data of private firms and thus leaving the small business researchers being unable to acquire objective measures of organisational performance.

Moreover, Bhutta et al. (2008) reported that SMEs in Pakistan (as in other transition economies) are reluctant to share objective financial data. Hence, Garg et al. (2003) argue that "subjective, self-reporting measures of performance" are the solution to research in SMEs. In addition, Boyd et al. (1993) argue that employing subjective measures of firm performance is an acceptable practice when the focus is upon exploring the perspectives of organisational members when studying management behaviour and decision-making. Furthermore, utilising subjective performance data in SME research provides a broader perspective on organisational performance apart from just financial performance. Alternative or non-financial dimensions of performance indicators that are important are also part of measuring performance, such as perceived market share change, product/service quality and customer satisfaction (Chand 2010), which could be assessed through subjective measures (Dent 2001; Eccles 1995; Tsai 2006).

The proposed model shows two broad categories for SME sustainability outcomes (see Figure 3.4). These are: Financial Sustainability Outcomes; and Market-based Sustainability Outcomes. Financial sustainability outcomes are categorised into the following measures.

Firstly, four subjective variables have been selected to measure perceived financial performance. These are: *Annual revenues' growth* – the ratio of annual income in the current year to that of the last year; *Return on sales* – the ratio of net profit to net sales (revenues); the higher the ratio, the more profitable is the firm (e.g. Waldman, Ramirez, House and Furanam 2001); *Return on equity* – the ratio of net profit to total equity investment; the higher the ratio, the more profitable the firm (Richard & Johnson 2001); and *Liquidity soundness* – an assessment of liquidity soundness based on parameters such as the quick ratio and cash flow from operating activities (Chow 2005).

The second measure of financial sustainability outcomes, comprised a subjective item regarding the *perceived profit/loss level*. This is measured by asking respondents how they rate their firm's financial standing over the last three years. Five categories are provided: Resulted in a big loss; Resulted in a moderate loss; The firm broke even; Generated moderate profits ; and Generated big profits.

The third measure of financial sustainability outcomes include an objectively-oriented item *related to the position the SME's profitability*. This was measured by asking respondents what their firm's most recent financial statement result (profitability) was. Five categories were provided: under Rs100,000; Rs100, 000 - Rs500,000; Rs501,000 – 999,000; 1 – 5 million; 5 million plus.'

Moreover, three variables have been chosen to measure Market-based Sustainability Outcomes/perceived market performance. These are: *customer satisfaction* – an assessment of the extent to which the firm fulfils customer's needs, in comparison to its competitors, *Quality of products and services* – an assessment of the quality of the firm's products and/or services relative to its competitors (Akhtar et al. 2008; Andersen et al. 2007; Chand 2010; Fening et al. 2008; Fey & Bjorkman 2001; Huang 2000; King-Kauanui et al. 2006; Shih et al. 2006; Singh 2004; Thang & Quang 2005; Tsai 2006; Zhang & Li 2009) and *Market share change* – an estimate of the previous year's change in the firm's market share; the larger the increase in market share, the more successful is the firm (Chow 2005).

The association between HPMP and SME sustainability outcomes/firm performance has been supported by prior empirical research (see section 3.4). However, as discussed above, the proposed relationship will be examined in the context of Pakistan by presenting the following research question (RQ3).

Do different components of HPMP (i.e. recruitment, selection, training and development, compensation, performance appraisal and consultation) impact upon the sustainability outcomes (financial sustainability outcomes and market-based sustainability outcomes) of SMEs?

The research question is analysed by formulating two main hypotheses and their sub hypotheses

H₅: There is a significant positive relationship between HPMP (recruitment, selection, training and development, compensation, performance appraisal and consultation) and financial sustainability outcomes of SMEs

H_{5a}: There is a significant positive relationship between Recruitment and Financial Sustainability Outcomes

H_{5b}: There is a significant positive relationship between Selection and Financial Sustainability Outcomes

H_{5c}: There is a significant positive relationship between Training and Development and Financial Sustainability Outcomes

H_{5d}: There is a significant positive relationship between Performance Appraisal and Financial Sustainability Outcomes

H_{5e}: There is a significant positive relationship between Compensation and Financial Sustainability Outcomes

H_{5f}: There is a significant positive relationship between the use of employee Consultation and Financial Sustainability Outcomes

H₆: There is a significant positive relationship between HPMP (recruitment, selection, training and development, compensation, performance appraisal and consultation) and market based sustainability outcomes of SMEs

H_{6a}: There is a significant positive relationship between Recruitment and Market based Sustainability Outcomes

H_{6b}: There is a significant positive relationship between Selection and Market based Sustainability Outcomes

H_{6c}: There is a significant positive relationship between Training and Development and Market based Sustainability Outcomes

H_{6d}: There is a significant positive relationship between Performance Appraisal and Market based Sustainability Outcomes

H_{6e}: There is a significant positive relationship between Compensation and Market-based Sustainability Outcomes

H_{6f}: There is a significant positive relationship between the use of employee Consultation and Market based Sustainability Outcomes

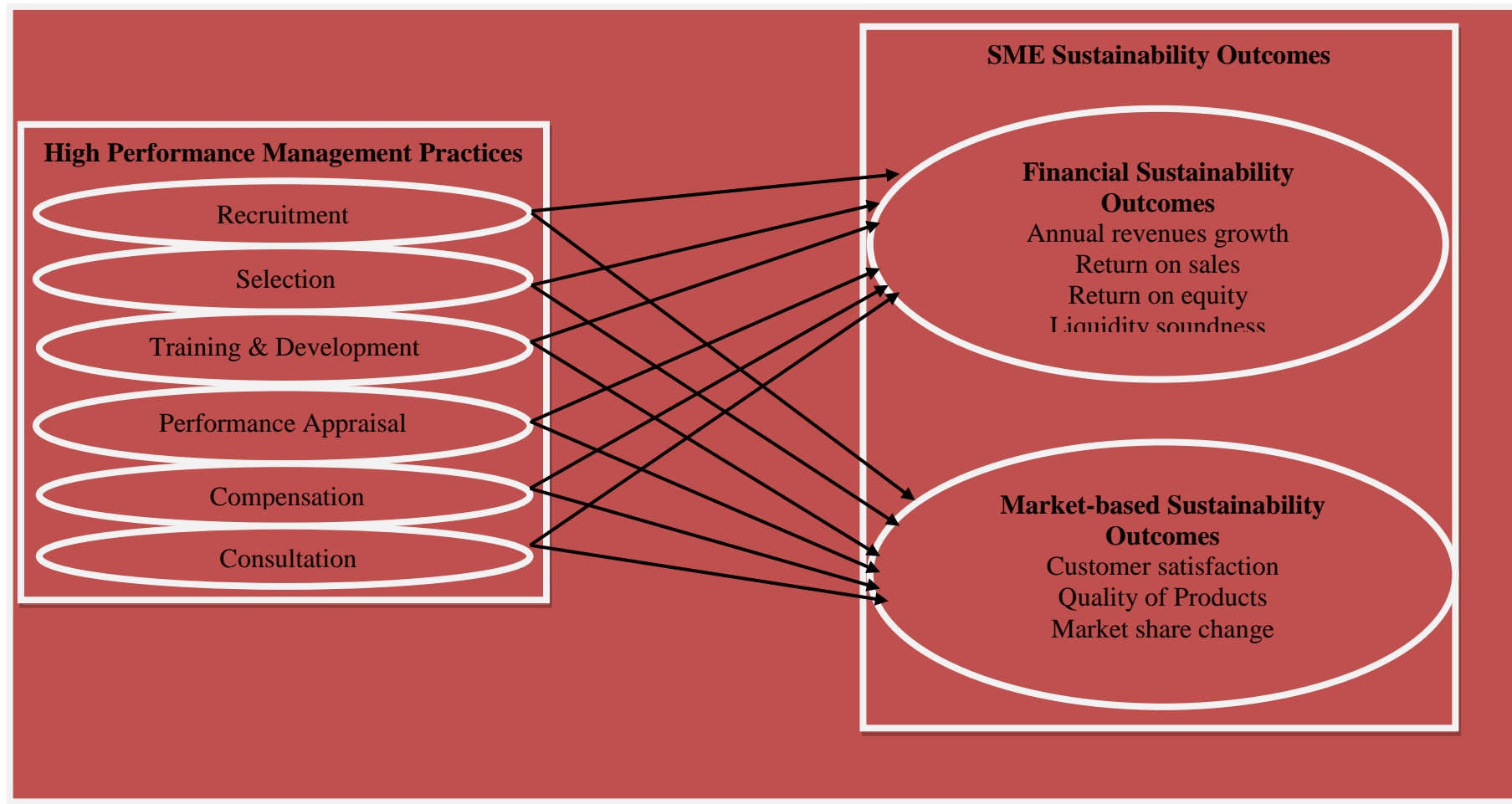


Figure 3.4 Relationship between HPMP and SME Sustainability Outcomes

3.6.4 HR Sustainability Outcomes as Mediating Mechanism

The proposed model depicts the mediating role of HR sustainability outcomes on the relationship between HPMP and SME Sustainability Outcomes (see Figure 3.5). Four mediating variables have been included to measure perceived HR Sustainability Outcomes (Katou & Budhwar 2006). These are: employee commitment (Shih et al. 2006); employee turnover (Guthrie 2001; Richard & Johnson 2001; Shih et al. 2006; Way 2002a; Yalabik et al. 2008); job satisfaction (Shih et al. 2006); and skill development (Gollan 2005; Zheng et al. 2006; Zheng et al. 2009). In this study, the variables are measured by asking the respondents (owner/manager) to report HR sustainability outcomes (Chow 2005; Delaney & Huselid 1996; Guthrie 2001; Lee et al. 2010; Zheng et al. 2006) over the past three years (Akhtar et al. 2008; Chang & Huang 2005; Katou & Budhwar 2007).

The significance of HR sustainability outcomes as a mediating variable has been discussed in section 3.5. The role of HR sustainability outcomes as a mediating variable on the relationship between HPMP and SME sustainability outcome will be examined by the following research question (RQ4) of this study.

To what extent do HR sustainability outcomes mediate the relationship between HPMP and SME Sustainability Outcomes?

The following two main hypotheses have been developed to answer this research question.

H7: HR sustainability outcomes partially mediate the relationship between HPMP and Financial Sustainability Outcomes

H8: HR sustainability outcomes partially mediate the relationship between HPMP and Market-based Sustainability Outcomes

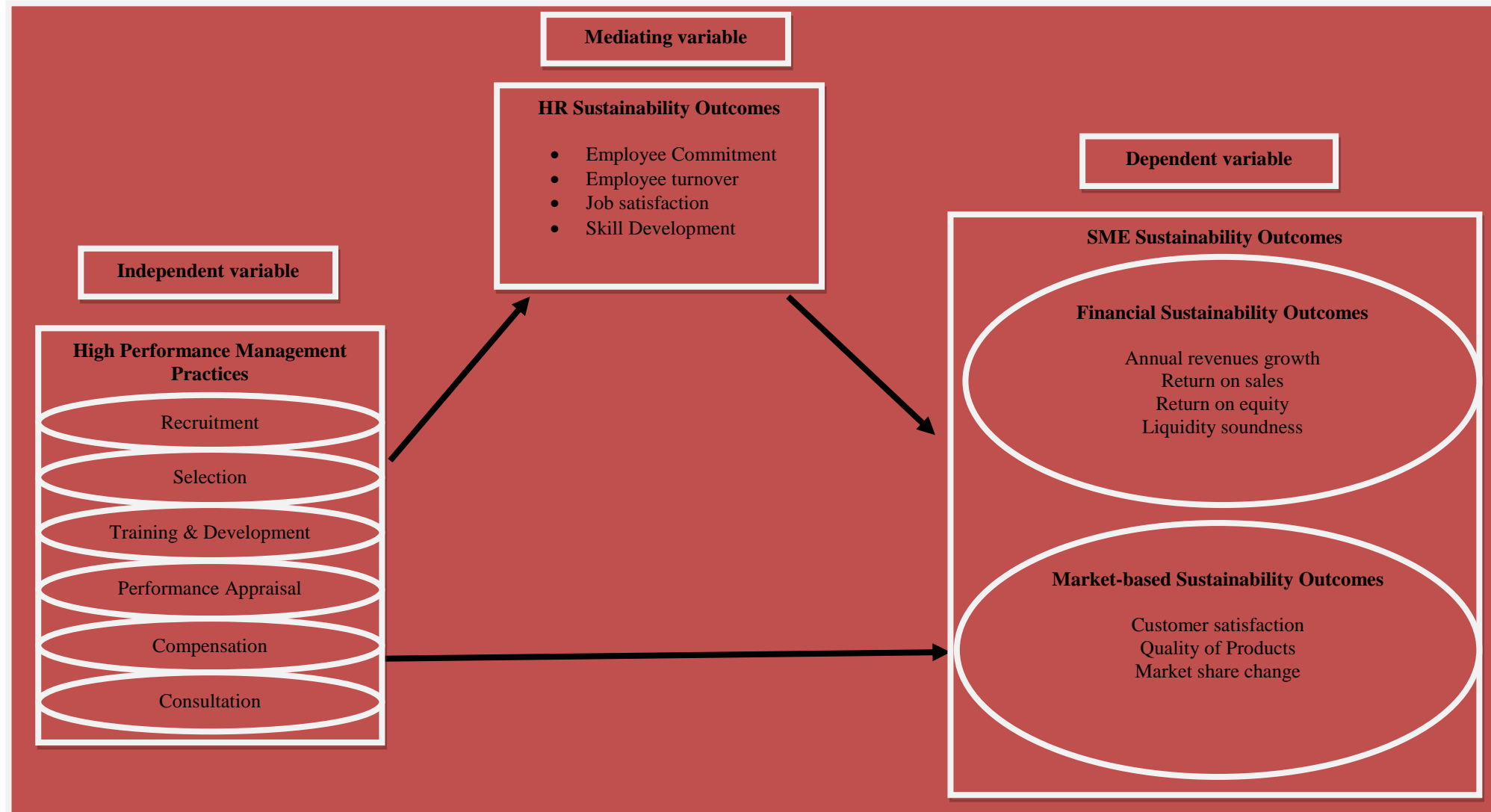


Figure 3.5 Mediating effect of HR sustainability outcomes on the relationship between HPMP and SME Sustainability Outcomes

3.7 Summary

This chapter presented a critical analysis of the literature pertaining to HPMP within the SME context. This included a detailed discussion and analysis on the definition of high performance management practices (HPMP), and components of HPMP. The prevalence of HPMP and the relationship between HPMP and firm performance/sustainability outcomes were discussed by presenting detailed summary and analysis of recent research studies in this area. The significance of a mediating role of HR sustainability outcomes was also highlighted with the support of prior research. Finally, a conceptual framework for the study was developed and discussed which illustrates the various linkages between the research questions and associated hypotheses. The next chapter discusses the research methodology utilised in this study.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 Introduction

The previous chapters examined the theoretical perspectives and the impact of various firm characteristics on HPMP. A critical analysis of the concept of HPMP has shown that six main practices constitute HPMP in the literature—recruitment, selection, training and development, compensation, performance appraisal and consultation. There has been considerable international and national interest in recent years in HPMP but SMEs have been a less examined focus of research. The growth in interest is primarily owing to the recognition of the importance of SMEs to the economy and the role that HPMP could play in enhancing the performance and sustainability of the SME sector. This chapter outlines the research methodology followed in examining HPMP within a specific region in Pakistan.

The purpose of this chapter is to present the research methodology utilised in this study. The chapter commences with outlining the hypotheses developed for informing the various research questions. The research paradigm, research methodology and measurement instrument are discussed. This is followed by exploring the data collection as well as sampling and data analysis techniques. Before discussing the ethical issues associated with this research, the limitations in the methodology are discussed. The chapter concludes with a chapter summary.

The following Figure is designed to present the structure of this chapter.

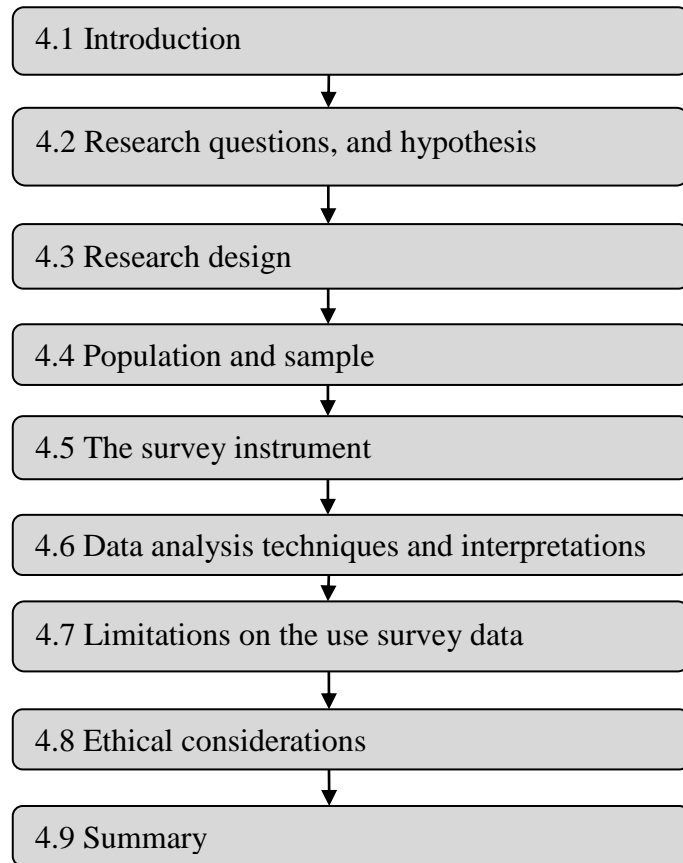


Figure: 4.1 Structure of Research Methodology

What follows first is an outline of the research objective, research questions and hypotheses tested in this study. These research questions and hypotheses have been based on the theoretical discussions in Chapter 2 and 3.

4.2 Research Questions and Hypotheses

Research objective

The research objective of this study is to determine the extent and nature of High Performance Management practices (HPMP) in Pakistani SMEs and to assess the impact of these practices upon SMEs' Financial and Market-based sustainability outcomes.

Research Questions

The following four **research questions** have been formulated to inform the research objective above:

- RQ1** What is the extent (frequency) and nature (in terms of patterns of adoption) of HPMP in SMEs?
- RQ2** To what extent do firm size, strategic planning, industry type, and the presence of a HR manager, relate to the prevalence of HPMP in SMEs?
- RQ3** Do different components of HPMP (recruitment, selection, training and development, compensation, performance appraisal and consultation) impact upon the sustainability outcomes (financial sustainability outcomes and market-based sustainability outcomes) of SMEs?
- RQ4** To what extent do HR Sustainability Outcomes mediate the relationship between HPMP and SME Sustainability Outcomes?

The following table is designed to show the main hypotheses and several sub-hypotheses as part of each main hypothesis, have been developed to inform ***RQ2, RQ3 and RQ5***

Table 4.1 Research questions, hypotheses and sub hypotheses

<p><i>R_{Q2}: To what extent do firm size, strategic planning, industry type, and the presence of a HR manager, relate to the prevalence of HPMP in Pakistani SMEs</i></p>	<p><i>H₁: Medium-sized firms are more likely to use HPMP than small firms</i></p> <p><i>H_{1a}: Medium-sized firms are more likely to use Recruitment practices than small firms</i></p> <p><i>H_{1b}: Medium-sized firms are more likely to use Selection practices than small firms</i></p> <p><i>H_{1c}: Medium-sized firms are more likely to use Training and Development practices than small firms.</i></p> <p><i>H_{1d}: Medium-sized firms are more likely to use Performance Appraisal practices than small firms</i></p> <p><i>H_{1e}: Medium-sized firms are more likely to use Compensationl practices than small firms</i></p> <p><i>H_{1f}: Medium-sized firms are more likely to use Consultation practices than small firms</i></p> <p><i>H₂: Service-based SMEs adopt HPMP to a significantly greater extent than manufacturing SMEs</i></p> <p><i>H_{2a}: Service-based SMEs adopt Recruitment practices to a significantly greater extent than manufacturing SMEs</i></p> <p><i>H_{2b}: Service-based SMEs adopt Selection practices to a significantly greater extent than manufacturing SMEs</i></p> <p><i>H_{2c}: Service-based SMEs adopt Training and Development practices to a significantly greater extent than manufacturing SMEs</i></p> <p><i>H_{2d}: Service-based SMEs adopt Performance Appraisal practices to a significantly greater extent than manufacturing SMEs</i></p> <p><i>H_{2e}: Service-based SMEs adopt Compensation practices to a significantly greater extent than manufacturing SMEs</i></p> <p><i>H_{2f}: Service-based SMEs Consult employees to a significantly greater extent than manufacturing SMEs</i></p> <p><i>H₃: SMEs with a strategic planning adopt HPMP to a significantly greater extent than those SMEs without a strategic plan</i></p> <p><i>H_{3a}: SMEs with a strategic planning adopt Recruitment practices to a significantly greater extent than those SMEs without a strategic plan</i></p> <p><i>H_{3b}: SMEs with a strategic planning adopt Selection practices to a significantly greater extent than those SMEs without a strategic plan</i></p> <p><i>H_{3c}: SMEs with a strategic planning adopt Training and Development practices to a significantly greater extent than those SMEs without a strategic plan</i></p> <p><i>H_{3d}: SMEs with a strategic planning adopt Performance Appraisal practices to a significantly greater extent than those SMEs without a strategic plan</i></p> <p><i>H_{3e}: SMEs with a strategic planning adopt Compensation practices to a significantly greater extent than those SMEs without a strategic plan</i></p> <p><i>H_{3f}: SMEs with a strategic plan Consult employees to a significantly greater extent than SMEs without a strategic plan</i></p> <p><i>H₄: SMEs with a HR manager adopt HPMP to a significantly greater extent than those SMEs without a HR manager</i></p> <p><i>H_{4a}: SMEs with a HR manager adopt Recruitment practices to a significantly greater extent than those SMEs without a HR manager</i></p> <p><i>H_{4b}: SMEs with a HR manager adopt Selection practices to a significantly greater extent than those SMEs without a HR manager</i></p> <p><i>H_{4c}: SMEs with a HR manager adopt Training and Development practices to a significantly greater extent than those SMEs without a HR manager</i></p> <p><i>H_{4d}: SMEs with a HR manager adopt Performance Appraisal practices to a</i></p>
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	<p>significantly greater extent than those SMEs without a HR manager</p> <p><i>H_{4e}: SMEs with a HR manager adopt Compensation practices to a significantly greater extent than those SMEs without a HR manager</i></p> <p><i>H_{4f}: SMEs with a HR manager Consult employees to a significantly greater extent than SMEs without a HR manager</i></p>
<p>R_{Q3}: Do different components of HPMP (recruitment, selection, training and development, compensation, performance appraisal and consultation) impact upon the sustainability outcomes (financial sustainability outcomes and market-based sustainability outcomes) of SMEs?</p>	<p><i>H₅: There is a significant positive relationship between HPMP (recruitment, selection, training and development, compensation, performance appraisal and consultation) and Financial Sustainability Outcomes of SMEs</i></p> <p><i>H_{5a}: There is a significant positive relationship between Recruitment and Financial Sustainability Outcomes</i></p> <p><i>H_{5b}: There is a significant positive relationship between Selection and Financial Sustainability Outcomes</i></p> <p><i>H_{5c}: There is a significant positive relationship between Training and Development and Financial Sustainability Outcomes</i></p> <p><i>H_{5d}: There is a significant positive relationship between Performance Appraisal and Financial Sustainability Outcomes</i></p> <p><i>H_{5e}: There is a significant positive relationship between Compensation and Financial Sustainability Outcomes</i></p> <p><i>H_{5f}: There is a significant positive relationship between the use of employee Consultation and Financial Sustainability Outcomes</i></p> <p><i>H₆: There is a significant positive relationship between HPMP (recruitment, selection, training and development, compensation, performance appraisal and consultation) and market based sustainability outcomes of SMEs</i></p> <p><i>H_{6a}: There is a significant positive relationship between Recruitment and Market based Sustainability Outcomes</i></p> <p><i>H_{6b}: There is a significant positive relationship between Selection and Market based Sustainability Outcomes</i></p> <p><i>H_{6c}: There is a significant positive relationship between Training and Development and Market based Sustainability Outcomes</i></p> <p><i>H_{6d}: There is a significant positive relationship between Performance Appraisal and Market based Sustainability Outcomes</i></p> <p><i>H_{6e}: There is a significant positive relationship between Compensation and Market-based Sustainability Outcomes</i></p> <p><i>H_{6f}: There is a significant positive relationship between the use of employee Consultation and market based Sustainability Outcomes</i></p>
<p>R_{Q4} To what extent do HR sustainability outcomes mediate the relationship between HPMP and SME Sustainability Outcomes</p>	<p><i>H₇: HR sustainability outcomes partially mediate the relationship between HPMP and Financial Sustainability Outcomes</i></p> <p><i>H₈: HR Sustainability Outcomes partially mediate the relationship between HPMP and Market-based Sustainability Outcomes</i></p>

4.3 Research Design

Figure 4.2 illustrates both the research design and methodology of this study.

The research design was based on the ex post facto method since the study was conducted retrospectively and examined what factors seem to be associated with certain occurrences, or conditions, or aspects of behaviour. In essence, the ex-post facto method explores antecedents of factors/events that have happened and cannot, therefore, be engineered or manipulated by the investigator (Guba & Lincoln 1994). Based on the research objectives, research questions and cross sectional nature of this study, a survey instrument (questionnaire) was used to collect

data. Quantitative analysis was used to address all research questions (descriptive, exploratory analysis and hypotheses testing).

Zikmund (2003) describes a research design as a strategic plan aiming at executing a research study. He outlines three types of research designs: exploratory; causal research and descriptive research. The aim of exploratory research is to classify the nature of problems and develop hypotheses; causal research attempts to ascertain the statistical causal effect that one variable has upon another; and in descriptive research, answers to who, what, where, when, where and how questions are sought through the description of a population. All three research designs are employed in this research. The nature of this study is exploratory, because limited subject material exists in the area of study (HPMP in a Pakistani context) within SMEs. It is expected that this study will assist in enhancing knowledge on HPMP within Pakistani SMEs and it is anticipated that the study will serve as a ‘jumping-off’ point for further research into Pakistani SMEs.

The study is also causal in nature (therefore predictive), and as such utilises structural equation modeling (SEM) in the sense that independent variables are used to determine the impact upon dependent variables (for example the impact of HPMP on economic sustainability of SMEs). The study examines various complex cause and effect relationships between variables (Zikmund 2003) by using SEM.

The study is also descriptive owing to the dearth of research regarding the research topic. In addition, the study provides data about a specific sample drawn from a population being studied. Furthermore, the objective of the study is to provide as best as possible, a systematic description of factual and accurate data (Zikmund 2003). The sample consisting of SME managers within Pakistan will be discussed in the next section.

The primary data in the form of a survey on HPMP in a particular region in Pakistan is quantitative in nature. A major benefit of utilising quantitative research conducted within the post positivist paradigm is that it enables the researcher to employ a survey strategy of statistically sampling a population which allows for a high degree of confidence in terms of how well the sample represents the population from which

it was drawn. In other words, the results of the hypothesis testing allows for relatively high generalisability of the results within other similar contexts (Brewer & Hunter 1989).

The unit of analysis is SMEs within Karachi, Pakistan and the focus in this thesis is on the nature and extent of HPMP and the impact of HPMP upon sustainability outcomes within these SMEs. As discussed previously in Chapter 1, for the purpose of this study, a SME is defined as an organisation employing between 20 and 250 employees with a small organisation employing 20-100 employees and a medium sized organisation employing 101 -250 employees.

The following section describes the research methodology based on the appropriate research paradigm chosen for this study.

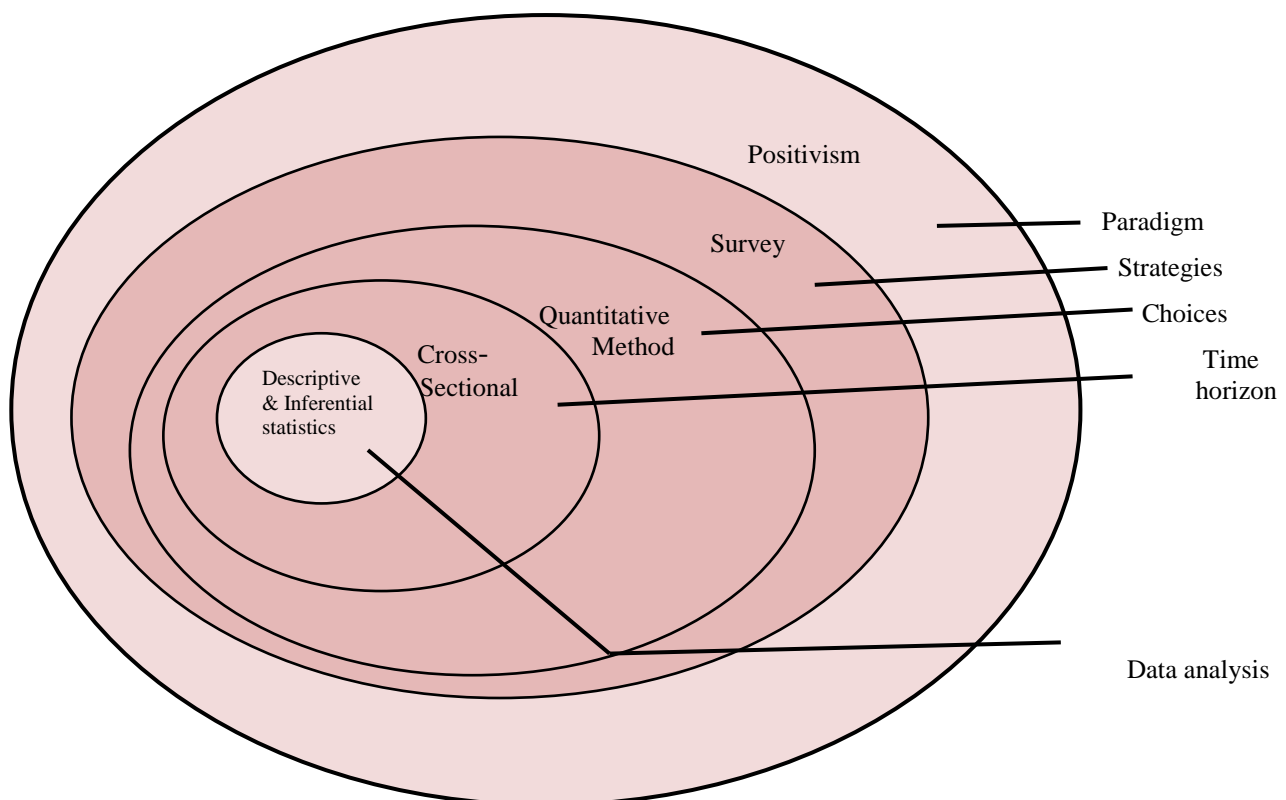


Figure 4.2 The research 'onion'

Source: Developed for this research and adapted from (Saunders et al. 2007)

4.3.1 Research Paradigm

A scientific research paradigm is understood as a conceptual framework or a world view of the researcher (Healy & Perry 2000). Babbie (2004, p. 33) defined paradigm

as ‘a model or framework for observation and understanding, which shapes both what we see and how we understand it’. According to Guba and Lincoln (1994, p. 107) ‘a paradigm may be viewed as a set of basic beliefs (or metaphysics) that deals with ultimates or first principles. It represents a worldview that defines, for its holder, the nature of the “world,” the individual’s place in it, and the range of possible relationships to that world and its parts’. How we observe and understand the world is important to us since it impacts upon the view we apply in our research. The selection of a particular paradigm might influence the direction of research (Sarantakos 1998). Consequently, a researcher should carefully select and apply a paradigm to his/her study.

Healy and Perry (2000) has discussed four different paradigms such as positivism; realism; critical theory; and constructivism. Positivism is based on the objective measurement of reality. In other words, the data are collected by observation and do not change (Guba & Lincoln 1994). The second paradigm realism or post positivism is characterised by an assumption that reality does exist, but this reality cannot be perfectly apprehended due to limited human intellectual capability and the complex nature of the phenomena (Guba & Lincoln 1994). The critical theory is based on subjective assumptions and is characterised by transforming the social, political, cultural, economic, ethnic and gender values. This type of research is based on long term historical studies of organisational studies and structures (Guba & Lincoln 1994; Healy & Perry 2000). Constructivism is also based on complete subjective measurement of the phenomenon. The researcher usually inquires the reality by interacting with the respondents through interviews (Guba & Lincoln 1994).

According to Guba & Lincoln (1994) a researcher should address three questions in view of the particular paradigm chosen for his/her study. These three questions are: ontology; epistemology; and methodology. The following table summarises the how these questions have been answered in the context of this study.

Table 4.2- Ontology, epistemology, and methodology questions

Dimension	Question/inquiry	Answer/ view in this study
Ontology	What is the form and nature of reality and therefore what is there that can be known about it?	Based on the literature review discussed in the previous chapter and the conceptual framework of this study, the researcher believes that HPMP are applied and practiced in businesses and the researcher attempts to explore these HPMP in SMEs. The data collected about the level of adoption of HPMP in SMEs represent the reality.
Epistemology	What is the nature of the relationship between the knower or would-be knower and what can be known?	Based on answering the ontology question. This study proposes that the data collected and analysed provide a limited real picture of the adoption of HPMP and its relationship with sustainability outcomes in SMEs
Methodology	How can the inquirer go about finding out whatever he or she believes to be known?	<p>Based on the two answers above in relation to ontology and epistemology, this study applies the following methodology:</p> <p>This study uses exploratory methods, as the researcher has insufficient knowledge about HPMP within Pakistani SMEs (Sekaran & Bougie 2009).</p> <p>Quantitative research is applied as this study addresses a research objective through empirical data and statistical analysis techniques such as descriptive statistics, t-statistics, and Structural equation model (Hair et al. 2006; Tabachnick & Fidell 2007; Zikmund et al. 2010).</p> <p>This study uses survey research methodology to collect primary data for addressing the research objective and ensure the validity and reliability of measurement instrument(Zikmund et al. 2010).</p> <p>Based on prior empirical research studies in similar areas (e.g. Huselid 1995; Shih et al. 2006; Tsai 2006), this study uses cross sectional research methods for data collection.</p>

Source: Adapted from Guba & Lincoln (1994)

The answers of ontology and epistemology in Table 4.2 show that the view of this research closely matches with the realism paradigm or post positivistic paradigm (Healy & Perry 2000). The realism paradigm chosen for this study is supported by prior research studies (e.g. Andersen et al. 2007; Bae & Lawler 2000; Beltrán-Martín et al. 2008; Bjorkman & Xiucheng 2002; Chand & Katou 2007; Chang & Chen 2002; Chang & Huang 2005; Chow 2005; Collings et al. 2010; Delaney & Huselid

1996; Fey & Bjorkman 2001; Gould-Williams 2003; Guthrie 2001; Guthrie et al. 2002; Huang 2000; Katou & Budhwar 2006; King-Kauanui et al. 2006; Lee et al. 2010; Liao 2006; Shih et al. 2006; Singh 2004; Stavrou et al. 2010; Temtime & Pansiri 2004; Urbano & Yordanova 2008; Way 2002b; Wood & de Menezes 2008; Wood et al. 2006).

These research studies have shown limited objectivity in their findings. The results of these studies indicate that their finding could be applied to a limited extent. These studies are also characterised by survey methodology with cross sectional research methods and single respondent bias.

Based upon these prior studies, the post positivism paradigm was found to be appropriate for this study and was utilised in this study to address the research questions.

4.4 Population and Sample

The target population of the study is manufacturing and service-based SMEs located in the industrial city of Karachi, Pakistan. The manufacturing sector SMEs includes leather goods; garments; textile; engineering; pharmaceutical/surgical; and furniture; while the service sector consists of telecom; information; technology; consulting; health; education; media; and restaurants.

The city of Karachi was selected due to its economic importance and industrial development (KCCI 2010). Karachi is the capital of Sindh province, and the largest city located in the south of Pakistan. Karachi is the commercial and financial capital of Pakistan. It contributes 25 percent to national GDP. It also shares 65 percent in national revenue such as federal and provincial taxes, customs and surcharges (CDGK 2011).

4.4.1 Sampling Procedure

The population statistics of this study was based on the Economic Census of Pakistan 2005. This census is the latest census available in the country. According to this census, there are 2.89 million businesses in Pakistan and the city of Karachi represents 12 percent of all businesses in Pakistan (346800) (Afaqi & Seth 2009; PBS 2011). Karachi falls in the top ten manufacturing districts of Pakistan (Afaqi &

Seth 2009; PBS 2011). Based on the definition of SME used for this research study (20-250 employees), the total number of firms in Karachi is 2011 (see Table 4.3) (Afaqi & Seth 2009; PBS 2011). Of the total number of firms in Pakistan (2.89 million), 583,329 are manufacturing firms (Afaqi & Seth 2009; PBS 2011). Of these 583,329 manufacturing firms, 3,383 falls within the parameters of the definition for a SME in this study (20–250). Of these 3,383 manufacturing firms, 406 firms are located in Karachi.

Owing to the absence of similar statistics for services firms, it was decided to take a random sample of 703 firms in total (35 percent of the total number of SMEs operating in the city of Karachi based upon the definition for a SME used in this study, of which 406 firms were from the manufacturing sector). Therefore 297 services firms were included in this total.

These 703 firms were contacted by the research team to invite them to participate in the study. Of the 703 firms, 243 manufacturing firms agreed to participate in the study and 114 services firms accepted the invitation.

In other words, a stratified sample of two industry sectors (manufacturing and services) were initially taken as per above. These two sector were then broken down in further sub-sectors including Furniture, Textile, Engineering, Garment, Leather Goods, and Pharmaceutical /Surgical in manufacturing and Telecom, IT, Consulting, Health, Education, Restaurants, and Media in services (see Figure 4.3). Once these stratum have been identified, firms were then randomly selected from within these sub-sectors. Table 4.3 summarises the profile of the population and sample organisations in the city of Karachi, Pakistan.

Table 4.3 Population and Sample Statistics of firms operating in Pakistan and in the city of Karachi

Population/sample	Pakistan (Number of firms)	Karachi (Number of firms)
Population	2890,000	346,800
Population based on SME definition used for this research study	16,762	2,011
Total number of manufacturing firms	583,329	69,999
Total number of manufacturing firms based on SME definition used for this research study	3,383	406
Total number of sample organisations selected (35% of the population based on SME definition used for this research study)		703

Source: Developed for this study (Adapted from PBS 2011)

The sampling frame was based on the following data bases: Karangi Association of Trade and Commerce (KATI) Karachi; Karachi Chamber of Commerce and Industry (KCCI) and Jamal’s Yellow pages, Pakistan (2010 databases). However, the three databases were not specifically designed for SMEs. Nevertheless, these data bases were deemed to be the most reliable and updated databases in Karachi, Pakistan. A random sample of 703 firms was selected. The population was stratified by industry sector (manufacturing and services). These two sectors were selected based on their economic importance (Economic Survey 2010-11) and their likelihood to have some management structure. Figure 4.3 illustrates the sampling design based upon respondent SMEs.

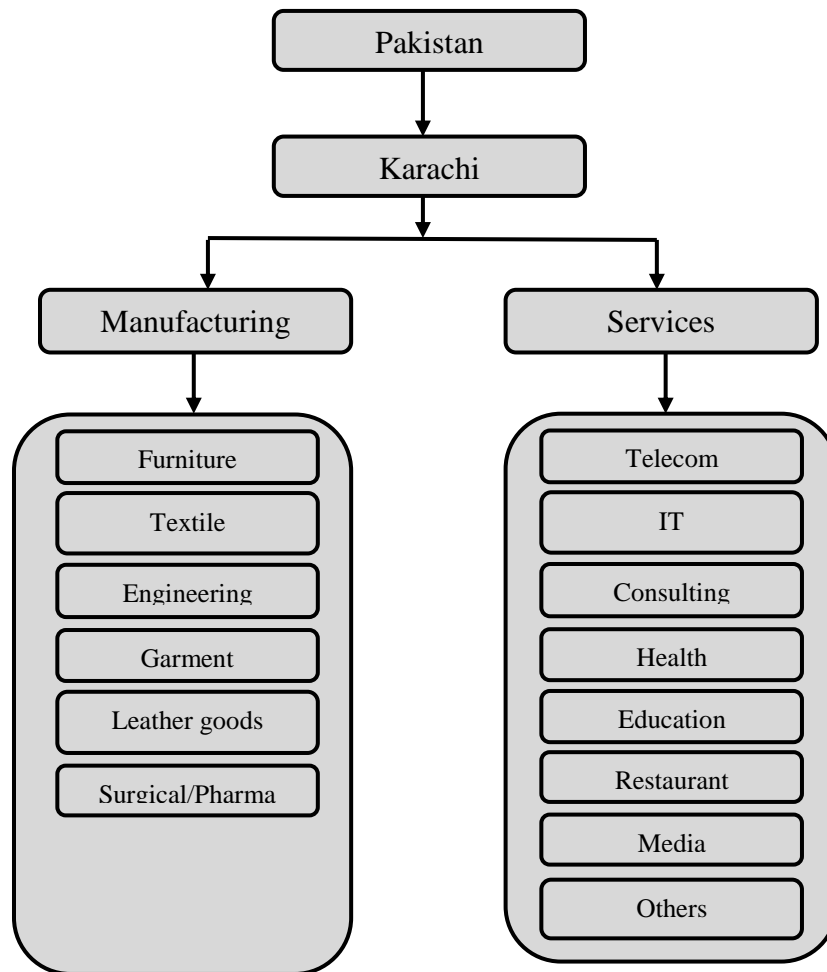


Figure 4.3 An overview of sampling design

4.4.2 Data Collection

It was not possible to collect data in the ‘normal’ postal survey method and the researcher had to utilise a team of 10 individuals to collect data from the selected sample owing to the following reasons: (1) security was an issue, (2) data collection commenced shortly after a major flood occurred in Pakistan, (3) SME managers who represented the target sample may not have a good command of the written English language, and (4) education levels of SME managers are low. The data collection team consisted of postgraduate research students at University of Karachi. The researcher is a senior university lecturer and was able to identify suitable individuals. The researcher provided a 2-day training course to the data collection team on the content of the survey itself and collection of the data through filling out the questionnaires by face-to-face collaboration with survey respondents. The team was continuously monitored by the researcher. To seek participation from the selected

organisations, the research team contacted the organisations first by telephone and through their personal interaction with the management of trade associations. The selected organisations were first asked about the size of their workforce and the number of employees they employ since the databases were not designed specifically for SMEs (as mentioned above). If the selected organisation fulfilled the requirements of the definition of a SME (20-250 employees), the SME manager was invited to participate in this survey. In cases where a particular organisation declined the invitation, it was replaced by contacting another organisation in the same industry as per the sampling frame.

A total of 703 firms were selected, contacted by phone and invited to participate in this survey. Of these firms, 357 SMEs (50.78 percent response rate) accepted the invitation to fill out the survey questionnaire. Most of the respondents who agreed requested that the researcher visit their organisations personally, and only a few respondents (from services sector) agreed to fill questionnaire by email (five firms). In each case, the procedure was explained to the respondents about how to fill the questionnaire out and they were assured that their responses would be treated as strictly confidential. The questionnaires were filled out by either the owner or human resource manager in each firm. In the end, 357 questionnaires were collected. Table 4.4 summarises the valid responses based on organisational size and industry type. Of the 357 responses collected from SMEs, 243 were from the manufacturing sector and 114 responses from the service sector. A total of 227 responses were collected from small firms (145 from manufacturing and 82 from service sector) and 130 responses from medium sized firms (98 from manufacturing and 32 from service sector) (see Table 4.4).

Table 4.4 Responses of the sample based on size of organisation and industry type

Type of industry		Size of organisation		Total
		Small	Medium	
	Manufacturing	145	98	243
	Service	82	32	114
Total		227	130	357

Source: Developed for this research

Table 4.5 provides an overview of the responses based on the subsectors of two strata (manufacturing and service sectors). The responses from the manufacturing sector SMEs include: Furniture 51, Textile 43, Engineering 31, Garment 38, Leather Goods 40, And Pharmaceutical /Surgical 40 responses. Responses from the Services sector SMEs include: Telecom 18, IT 13, Consulting 15, Health 14, Education 16, Restaurants 19, and Media 13 responses (see Table 4.5).

Table 4.5 Responses of the sample based on size of organisation and subsectors of strata

Sub sectors		Size of organisation		Total
		Small	Medium	
Manufacturing sector				
	Furniture	50	1	51
	Textile	19	24	43
	Engineering	16	15	31
	Garment	23	15	38
	Leather goods	18	22	40
	Pharmaceutical/Surgical	19	21	40
Services sector				
	Telecom	14	4	18
	IT	11	2	13
	Consulting	7	8	15
	Health	10	4	14
	Education	13	3	16
	Restaurant	13	6	19
	Media	10	3	13
	other	4	2	6
Total		227	130	357

Source: Developed for this research

4.5 The Survey Instrument

The survey instrument was adapted from Wiesner et al. (2007) and was applied in the Pakistani context for the purposes of this study. The survey questionnaire was originally developed and validated by Wiesner et al. (2007) for a study on 'high performance management practices' in Australian SMEs during 2007. Their survey

comprises a wider range of HPMP than the six HPMP identified in Chapter 3 and as such is a much longer survey than the one used in the current study. The reliability and validity of the original survey by Wiesner et al (2007) was satisfactory with the Cronbach Alpha Coefficients of between 0.70 and 0.90 for each section.

Because most of the surveys were filled out with the assistance of an individual research assistant which was a time consuming process and in view of the analysis conducted in Chapter 3 on what to measure regarding HPMP, it was decided to focus only on the six main practices as identified in Chapter 3 of this thesis. However, only questions which were deemed to be relevant to the Pakistani context were selected for inclusion in the adapted questionnaire. To measure sustainability outcomes, the economic sustainability measures (annual revenues growth, return on sales, return on equity, liquidity soundness, perceived profit/loss level, profitability, market share change, customer satisfaction, quality of products and services) utilised by Wiesner et al (2007) were used. However, because Wiesner et al. (2007) did not include HR sustainability measures, four HR sustainability measures (employee commitment, employee turnover, skill development, staff satisfaction) were added to the survey for the purposes of the current study, after conducting an in-depth literature review.

The survey questionnaire comprises four sections – A, B, C, and D, (see Appendix E) which will be discussed below.

Section A addresses the demographic characteristics of respondents (owner/managers) and SMEs. This section comprised 27 questions. Nominal data were collected in this section.

Table 4.6 provides an overview of the demographic/control variables measured in this survey.

Table 4.6 Measurement items for demographic/control variables

Construct	Survey	Measurement instrument	Variable names
Demographic/Control variables	Owners/managers	Size of organisation/number of employees	C_EMP
		organisation is an independently owned and operated business	C_IND
		organisation is a subsidiary/branch/department of a larger	C_SUB
		organisation operates in different locations	C_LOC
		FBS industry category	C_CAT
		Position of person in organisation	C_POS
		Respondent's ownership status in organisation	C_OWN
		Whether the respondent is a working director of this company	C_DIR
		Family ownership is measured by two questions	C_FAM1/2
		Whether the organisation is a franchise organisation	C_FRA
		Whether the organisation operates in subsector of industry	C_SEC
		Organisation age/Years in business	C_YOB
		Strategy of internationalisation as measured by two questions	C_INT1/2
		Organisation export as measured by nine questions	C_EXP1/9
		Human Resource Management Department	C_HRM
		A person responsible for HR	C_PHR
		Access the internet from your business as measured by two questions	C_AINT
		Presence of business web site	C_WEB
		Human resource information system	C_HRIS
		Respondent's experience in the organisation	C_R_EXP
Respondent's qualifications/education	C_R_EDU		
Respondent's age group	C_R_AGE		
Respondent's Gender	C_R_GEN		

Source: Developed for this research

Section B asks respondents questions about strategic planning employed by their business. B1 consists of four questions. These are: the business does not have a strategic plan; has a strategic plan, but it is not written down; has a strategic plan but it is not used to develop operational plans; has a strategic plan that is used to develop operational plans and drive day to day operations. The information from this section

is used to inform part of the second research questions. A nominal scale of ‘yes’ or ‘no’ is employed.

The following table is designed to provide an overview of the strategic planning variables used in this survey and the source where measurement instruments were adapted.

Table 4.7 Measurement items for business strategy variables

Construct	Survey	Measurement instrument	Variable names
Strategic Planning	Owners/managers	Strategic planning as measured by four questions	BS_SP1/4

Source: Developed for this research

Section C asks respondents to indicate the prevalence of HPMP in their organisations. This section is comprised of six parts i.e. C1, C2, C3, C4, C5, and C6. C1 measures 24 recruitment processes and methods used by the respondent SMEs; C2 measures 18 selection processes and practices; C3 measures 20 compensation practices; C4 measures 24 training and development practices; C5 measures 18 performance appraisal practices; C6 measures 13 consultation practices. This section informs the first research question and also part of the second, third and fourth research questions. The first five parts (C1, C2, C3, C4 and C5) employ a 3-point categorical scale of ‘never’, ‘for some jobs’ or ‘for all jobs’. While C6 employs a four point categorical scale represented by the following statements: ‘involves widespread involvement of employees in decisions’; ‘involves consultation with employees with their possible limited involvement in goal setting’; ‘managerial authority and direction is the main form of decision-making’; and ‘managers initiate and implement change’.

The following table is designed to provide an overview of the HPMP variables used in this survey and the source where measurement items were adapted.

Table 4.8 Measurement items for HPMP variables

Construct	Survey	Measurement instrument	Variable names
HPMP (Wiesner et al. 2007)	Owners/managers	Recruitment variables	HPMP_RE1/25
		Selection variables	HPMP_SE1/19
		Compensation variables	HPMP_COM1/21
		Training & Development variables	HPMP_TD1/24
		Performance appraisal variables	HPMP_PA1/18
		Consultation variables	HPMP_CON1/15

Source: Developed for this research

Section D asks respondents to report the performance of their organisation. This section consists of three parts i.e. D1, D2 and D3. D1 measures the overall financial performance of respondent SMEs as ‘resulted in a big loss’; ‘resulted in a moderate loss’; ‘the firm broke even’; ‘generated moderate profits’; ‘generated big profits’. D2 measures the objective profitability of organisation as ‘under Rs100,000’; ‘Rs 100,000 – Rs 500,000’; ‘Rs 501,000 – Rs 999,000’; ‘Rs1- Rs 5 million’; ‘Rs 5 million plus’. Part D3 focuses on the perceived measurement of both HR sustainability and economic sustainability. The first four questions of this part measures HR sustainability outcomes (employee commitment; employee turnover; job satisfaction; skill development) while the remaining 7 questions measures economic sustainability outcomes (customer satisfaction; quality of products and services; annual revenue growth; return on sales; return on equity; liquidity soundness and market share). This section informs the third and fourth research questions. Part D1 and D2 employ a categorical scale while D3 employs a 3-point categorical scale of ‘decreased’, ‘no change’ or ‘improved’.

Table 4.9 provides an overview of the SME Sustainability Outcome variables used in this survey and the source where measurement items were adapted.

Table 4.9 Measurement items/variables for SME sustainability

Construct	Survey	Measurement instrument	Variable names
HR sustainability outcomes (subjective)	Owners/managers	Employee Commitment	S_HR1
		Employee turnover	S_HR2
		Job satisfaction	S_HR3
		Skill development	S_HR4
Financial sustainability outcomes (subjective) (Wiesner et al. 2007)	Owners/managers	Annual revenues	S_FIN7
		Return on sales	S_FIN8
		Return on equity	S_FIN9
		Liquidity soundness	S_FIN10
Market-based sustainability outcomes (subjective) (Wiesner et al. 2007)	Owners/managers	Customer satisfaction	S_MBS5
		Quality of products and services	S_MBS6
		Market share change	S_MBS11

Source: Developed for this research

4.5.1 Pre-testing and Pilot study

As discussed above, the survey instrument was adapted from Wiesner et al. (2007) and was applied in the Pakistani context for the purposes of this study. The survey questionnaire was originally developed and validated by Wiesner et al. (2007) for a study on ‘high performance management practices’ in Australian SMEs during 2007. Furthermore, the survey instrument was pre-tested by interviewing and presenting the questionnaire to 10 SME owner-managers in different manufacturing and services-based SMEs of Karachi, Pakistan.

According to Remenyi et al. (1998), pre-testing assists the researcher to assess numerous important issues regarding the questionnaire. For instance, the clarity of the instructions and questions, the covering letter, the time taken to complete the questionnaire, the likely response rate, the cost of administering the questionnaire, which questions are irrelevant, which are relevant as well as whether questions on key issues have been overlooked (p. 151). The instrument was revised after pre-testing. In addition, five managers from SMEDA (Small and Medium Enterprise Development Authority Pakistan) were invited to comment on the questionnaire. The purpose of these interviews was to determine which aspects of ‘HPMP’ in the questionnaire are of practical importance to the Pakistani context and suitable to

Pakistani SMEs. The survey instrument was partially modified by adding and removing a few items to make it more suitable to the Pakistani context.

A pilot survey was also conducted in 20 different SMEs (10 SMEs from manufacturing and 10 SMEs from services sector) in Karachi, Pakistan. On the basis of the interview feedback and results from the pilot survey, the survey instrument was revised and presented to the selected sample.

4.5.1.1 Reliability

‘The reliability of a measure indicates the extent to which it is without bias and hence ensures consistent measurement across time and across the various items in the instrument’ (Sekaran & Bougie 2009, p. 161). According to Zikmund et al. (2010), an instrument is said to be reliable if it produces the same result after consistent measurement. In addition, alpha (α) Coefficient is the most common method of measuring the multi item scale’s reliability. The value of α indicates whether different items on the scale converge. The value of α ranges from 0 (no consistency) to 1 (with complete consistency). Moreover, instruments with α between 0.80 and 0.95 are considered to have very good reliability, instruments with α between 0.70 and 0.80 are considered to have good reliability, and instrument with α 0.60 to 0.70 have fair reliability and instrument below 0.60 are considered to have poor reliability (Zikmund et al. 2010). However, in exploratory research the value of alpha may be reduced to 0.60 (Hair et al. 1998).

In terms of reliability, the survey instrument was adapted from a validated survey of ‘high performance management practices’ in Australian SMEs during 2007 by Wiesner et al. (2007) and was applied in the Pakistani context of this study (as discussed above). However, the survey instrument was partially modified by adding and removing a few items to make it more suitable to the Pakistani context. The different dimensions of the instrument were subjected to reliability analysis. A Cronbach Alpha Coefficient (α) was used to check the reliability of updated questionnaire. The reliability analysis indicated α of 0.62 to 0.80 for each dimension.

4.5.1.2 Validity

Validity is a test of how well an instrument that is developed measures the particular concept it is intended to measure’ (Sekaran & Bougie 2009). In addition, validity is

defined as ‘the accuracy of a measure or the extent to which a score truthfully represents a concept’ (Zikmund et al. 2010, p. 307). Generally, validity tests are categorised into two different types such as content and construct validity which are discussed in this section. While the other validity types such as convergent and discriminant validity tests are discussed in using structural equation modelling (SEM) by analysing RQ3 and RQ4.

4.5.1.2.1 Content Validity

Content validity indicates that instrument contains an adequate and representative set of items that measure the concept (Sekaran & Bougie 2009). For this research study, content validity was ensured by pretesting and pilot survey of the questionnaire (as discussed in 4.5.1).

4.5.1.2.2 Construct Validity

Construct validity testing is used to measure how well the scores obtained from the use of an instrument correlate with the theories around which the instrument is designed (Sekaran & Bougie 2009). Construct validity testing can be performed in two ways such as ‘test for unidimensionality’ and ‘factor analyses’. For this research study, exploratory factor analysis was performed by using SPSS v. 19 principal components analysis (PCA) with Varimax rotation. The exploratory nature of the study and the need to develop formative composite measures of the variables under study justify the use of PCA. Under PCA, items are retained and used to form a composite factor if they have a minimum factor loading of .40 (Hair et al 2010). The results of the factor analysis are discussed in the next chapter.

4.6 Data Analysis Techniques and Interpretations

The primary objective of the study was to explore HPMP, their relationship with SME sustainability outcomes (Financial and Market-based) and how the latter relationship is mediated by HR sustainability outcomes. The raw data were initially prepared before the commencement of analysis. The statistical software SPSS 19 was used to analyse data, both for descriptive and inferential statistics. This section is used to describe the data preparation steps, and data analysis procedures by (1) identifying methods used to prepare the data (data entry, data coding, missing values, checking for outliers, normality of data, exploratory factor analysis and composite variables), (2) outlining the descriptive statistics utilised and (3) describing the

inferential statistics (Independent-sample t-test, and structural equation modelling (SEM).

4.6.1 Data Preparation

Data preparation/examination is a necessary step before any data analysis commences. This process involves the impact of missing data, identifying outliers, and tests for assumptions such as normality of distributions, regarding the use of multivariate techniques (Hair et al. 2006). The data must be converted into data files suitable for analysis. In addition, data coding and data cleaning must also be part of this process (Fowler 2009).

As discussed in section 4.5, the data were collected by survey methodology, with the unit of analysis as SMEs in Karachi, Pakistan. Accordingly, the data were entered into SPSS and organised so that each row represents a case (respondent organisation) and each column represent a questionnaire item or variable (Manning & Munro 2007).

4.6.1.1 Data Screening

Once the data are entered, the researcher must screen the data. This can be done by checking that scores entered are not out of range (i.e. too small or too large values) (Manning & Munro 2007). The researcher should also check whether respondents have correctly answered questions. In addition, the researcher need to check for missing values in the data (Manning & Munro 2007). The next three sections present the detail about how the researcher dealt with the issues of missing values, outliers, and normality of data.

4.6.1.2 Missing Data

Missing values is a problem for a researcher and there is no one specific way to deal with them (Manning & Munro 2007). A researcher should be able to address the problem of missing data and its effect on the generalisability of results (Hair et al. 2006). There are two common options for addressing the issue of missing values. Firstly, if the data contain few missing values and they are randomly distributed, then the simplest way is to delete those values from the data set. Secondly, a researcher should calculate the mean scores for a variable and replace them with the missing values (Tabachnick & Fidell 2007).

Since questionnaires were presented face to face by the survey team (as discussed above) in this study, respondents filled out all the sections. However, two types of missing values were identified in the data set of this research study. One of these types falls under the category of ignorable missing data (Hair et al. 2006). This type of missing values is the result of designing the data collection instrument where the respondent is asked to skip a particular section if it is not applicable (Hair et al. 2006). For this study, the HPMP_TD section was designed to answer questions regarding training and development. Respondents were asked to answer the question whether their organisation provide any kind of training or not. If the answer was no, they had to skip to another section.

The second type of missing values cannot be ignored and is characterised by respondents who refuse to answer sensitive questions such as income or controversial issues (Hair et al. 2006). For this study, missing values were identified in reporting the income of SMEs by their corresponding respondents (owners/managers). Almost 50 percent of SMEs (171 respondents) refused to answer the questions pertaining to financial data of the SME. Keeping in this in mind, it was decided not to include these questions in the analysis. Hair et al. (2006) argue that if certain variables are deleted from the analysis of the data set, a researcher must ensure that an alternative high correlated variable is available to represent the purpose of the deleted variable. For this study, S_FIN₁₋₄ (subjective questions regarding the financial information of SMEs) are used to represent the deleted variables.

4.6.1.3 Outliers

Observations that are distinctly different from other observations in the data set are termed as outliers (Hair et al. 2006). A researcher can identify outliers by too large or too small values in the data set (Manning & Munro 2007). Outliers may impact the analysis of the data. The advantages or disadvantages should be viewed in the context of the analysis and should be assessed in light of the information provided (Hair et al. 2006).

Outliers can be classified as univariate, bivariate, or multivariate based on the number of variables to be measured (Hair et al. 2006). The process of univariate

identification of outliers assesses the distribution of observations for each variable by selecting outliers as those observations with too high or too low values. Observations (sample size above 80) with a standard deviation greater than 4 can be identified as outlier (Hair et al. 2006). Bivariate assessment of outliers is characterised by evaluating pairs of variables jointly through a scatter plot. All those observations that fall outside the range of other observations can be assessed as outliers in the scatter plot. Multivariate detection of outliers is used when more than two variables are analysed. This can be done by Mahalanobis D^2 measure, a method used to measure each observation's distance from the mean value of all observations (Hair et al. 2006).

For this study, univariate outliers were identified by using statistical software SPSS 19. Responses with greater than 4 standard deviations were assessed as outliers (Hair et al. 1998). Consequently, univariate outliers were identified for 11 of the variables (HPMP_RE15, HPMP_RE16, HPMP_SE55, HPMP_SE112, HPMP_SE113, HPMP_COM206, HPMP_COM208, HPMP_COM209, HPMP_CON251, HPMP_CON276, HPMP_CON279). These outliers were analysed by deleting their values, creating missing values in their corresponding observations.

Multivariate outliers were assessed by calculating the Mahalanobis distance as suggested by (Tabachnick & Fidell 2007). The components of latent variable constructs (HPMP and SME sustainability) were analysed for multivariate outliers.

For Recruitment (RE), 24 variables were used for identifying multivariate outliers. The Mahalanobis distance was calculated for each case. Tabachnick & Fidell (2007) suggests that the Mahalanobis distance should be interpreted as a chi square (χ^2) statistic with the degree of freedom equal to the number of independent variables. They further suggest that a criterion of $p < 0.001$ be used to evaluate multivariate outlier. The χ^2 statistic for RE was found to be 51.18. Seven cases were identified with a Mahalanobis score greater than 51.18. These cases were deleted from the data set due to their potential impact on further statistical analysis.

For Selection (SE), 18 variables were used for identifying multivariate outliers. The Mahalanobis distance was calculated for each case. The χ^2 statistic was found to be

42.13 with $p < 0.001$. Two cases were identified with a Mahalanobis score greater than 42.13. These cases were deleted from the data set due their potential impact on further data analysis.

For Training and Development (TD), 23 variables were used for identifying multivariate outliers. The Mahalanobis distance was calculated for each case. The χ^2 statistic was found to be 49.73 with $p < 0.001$. Three cases were identified with a Mahalanobis score greater than 49.73. These cases were deleted from the data set due to their potential impact on further statistical analysis.

For Performance appraisal (PA), 17 variables were used for identifying multivariate outliers. Mahalanobis distance was calculated for each case. The χ^2 statistic was found to be 40.79 with $p < 0.001$. Only one case was identified with a Mahalanobis score greater than 40.79. This case was deleted from the data set due its potential impact on further data analysis.

For Compensation (COM), 20 variables were used for identifying multivariate outliers. The Mahalanobis distance was calculated for each case. The χ^2 statistic was found to be 45.31 with $p < 0.001$. Three cases were identified with a Mahalanobis score greater than 45.31. These cases were deleted from the data set due to their potential impact on further multivariate analysis.

For Consultation (CON), 14 variables were used for identifying multivariate outliers. The Mahalanobis distance was calculated for each case. The χ^2 statistic was found to be 36.12 with $p < 0.001$. Four cases were identified with a Mahalanobis score greater than 36.12. These cases were deleted from the data set due their potential impact on further statistical analysis.

For SME sustainability, 11 variables were used for identifying multivariate outliers. The Mahalanobis distance was calculated for each case. The χ^2 statistic was found to be 31.26 with $p < 0.001$. Six cases were identified with a Mahalanobis score greater than 31.26. These cases were deleted from the data set due their potential impact on further data analysis.

4.6.1.4 Normality of the Data

Normality of data is an important assumption in multivariate data analysis (Hair et al. 2006). In order to identify the applicability of the specific type of testing and its robustness, the researcher should know that the data are normally distributed (Eye & Bogat 2004). Normality of the data was assessed by graphical representation (histograms, stem and leaf plots and box-plots) and descriptive statistics such as skewness and kurtosis. Normality of data was also assessed in terms of univariate and multivariate normality (Hair et al. 2006).

For this study, statistical software SPSS 19 was used to assess the normality of the data. Values for skewness and kurtosis were calculated to see the peakedness (or flatness) and the balance of distribution (data shifted to left or right) respectively (Hair et al. 2006). Univariate normality was assessed by dividing the skewness (or kurtosis) statistic by the standard error of skew (or kurtosis) to create a z score (Tabachnick & Fidell 2007). For a sample size greater than 300, if the calculated value exceeds the z score of 3.29, the skewness is significant (Tabachnick & Fidell 2007). Following this criteria, all components and items and factors of HPMP and SME sustainability Outcomes were analysed for their z scores. Based on the normality test results, few components of the data set illustrated marginal deviations from normality. However, as the sample size of the study is large enough ($n = 331$), these effects are negligible (Hair et al. 2006, p. 81). Consequently, it was decided not to transform the data.

4.6.1.5 Summary of Data Preparation

Once the data were entered, the first step was to screen the data for missing values, too large or too small scores (outliers), and inconsistencies in the data (i.e. the respondents have marked the extreme value on all items in the questionnaire). The incomplete responses were coded as missing values and reported. The inconsistent data were matched with the respondent code (in the original hard copy of the questionnaire) for possible remedial action. The data were checked for univariate and multivariate outliers. In addition, normality of the data was also tested for skewness and kurtosis values.

4.6.2 Descriptive Statistics

Summary statistics were used to conduct analysis of the demographic characteristics of respondent SMEs and Owners/Managers (Sekaran 2003). SPSS software was used to extract frequencies and percentages in order to analyse the demographic characteristics of SMEs such as firm size (small or medium), firm age, HR department, HR manager, exporting and internet access. This analysis was also used to examine the response rate of subsectors of manufacturing and service sector SMEs. Moreover, descriptive statistics were used to determine the demographic characteristic of owner/managers in terms of age, level of education, gender and ownership (Sekaran & Bougie 2009). Summary statistics were used to answer the first research question (the prevalence of HPMP in Pakistani SMEs). This analysis includes frequency, percentages, central tendency, 95 percent confidence interval, standard deviations (S.D) and standard error (S.E) (Zikmund et al. 2010). The detailed descriptive data analysis for this research question provided trend data on the frequency and nature (in terms of adoption) of prevalence of HPMP practices in SMEs. In addition, these analyses were used to identify those practices that were most common and/or were marginalised among sample of SMEs. The details of the results are presented in Chapter 5.

4.6.3 Inferential Statistics

In order to draw inferences from the data, inferential statistic such as Independent-sample t-test was used to analyse the second research question, while Structural Equation Modelling (SEM) was used to examine the third, and fourth research questions (Tabachnick & Fidell 2007). The rationale and details of these statistical procedures are now discussed.

4.6.3.1 Independent-Sample t-test

An independent-sample t-test was used to analyse research question two (RQ2) of this study. This research question assesses the relationship between key firm characteristics (Firm size, Industry type, Strategic planning, and Presence of a HR manager) and the prevalence of HPMP. An independent-sample t-test test was employed to see whether group means of firm key characteristics are significantly different in relation to prevalence of HPMP (Hair et al. 2006). The firm key characteristics were used as independent variables or grouping variable while HPMP as dependent variable. All grouping variables were measured on a two-point

categorical (dichotomous) scale. For instance, respondents were grouped by firm size (Small or Medium); Industry type (Manufacturing or Services-based SMEs); Strategic planning (Yes or No); and Presence of a HR manager (Yes or No).

The output of independent-sample t-test was interpreted by comparing mean score of each group. For instance, a particular group with a high mean score could be interpreted as having a high prevalence of HPMP in relation to that group (see Chapter 5 and 6 for more detailed interpretations of results).

Assumptions of Independent-Sample t-test. The assumptions for Independent-samples t-test are the same as for an analysis of variance (ANOVA). The following three assumptions (Hair et al. 2006) are discussed in relations to this research study.

- *The dependent variable is normally distributed.* All components of HPMP were tested for normality assumptions (see section 4.6.1.4)
- *The groups are independent in their responses on the dependent variable.* During the data collection process, each organisation provided its own data to the researcher of this study.
- *The groups have equal variances (homoscedasticity).* Levene's test was applied to check the homogeneity of variance. The analysis of data did not show violation of this assumption.

4.6.3.2 Structural Equation Modeling

Structural equation modeling (SEM) is a statistical technique of analysing a structural theory (based on some phenomenon) by using a confirmatory (hypothesis testing) approach (Byrne 2010, p. 3). SEM also estimate multiple regression equation simultaneously by specifying a structural model used by the statistical program (Hair et al. 2006, p. 711). SEM consists of two main parts. The first part is known as the measurement part which links observed variables through a confirmatory factor model while the second part known as structural part linking latent variables to each other through systems of simultaneous equations (Kaplan 2009, p. 5).

The use of SEM technique has many advantages over the first generation techniques including principal component analysis, factor analysis, discriminant analysis and multiple regressions because it provides much flexibility to the researcher for

assessing the relationship between theory and data (Chin 1998a). SEM also assist to examine more complex and multidimensional relationships by conducting complete and simultaneous tests of all relationships (Tabachnick & Fidell 2007). Since this study seeks to simultaneously examine relationships among multiple independent and dependent variables and also assess the mediating effect in the model, SEM was considered as an appropriate statistical technique to examine such relationships in the model.

Within SEM, partial least square (PLS) was chosen an appropriate technique for analysing the relationship between exogenous and endogenous latent variables and also analysing the mediating effect in the model. The rationale for choosing PLS is grounded on the fact that the study is more exploratory in nature (Chin 2010). Moreover, the PLS method has several advantages. For instance, PLS is more flexible in dealing with different modelling issues related to hard assumptions of traditional multivariate statistics (Vinzi et al. 2010). In addition, PLS provides flexibility for research models with a measurement instrument either on interval or ratio scale and also deals with small sample sizes (Chin 1998b). However, the weakness of PLS approach lies on the fact that it tends to underestimate the structural parameter estimates (Wilson 2010).

Within PLS, PLS Path Modeling (PLS-PM) is an emerging culture in the field of social sciences. PLS-PM is a statistical technique used for modelling complex multivariate relationships among observed and latent variables (Vinzi et al. 2010, p. 2). PLS-PM (based on SEM) is a component-based approach alternative to covariance-based SEM with maximum likelihood estimation. The following section presents a discussion on PLS-PM of this study.

4.6.3.2.1 Model Conceptualisation

The development of the structural model is based on the relationships among variables presented in the conceptual model designed in chapter 3 of this study (Hair et al. 2006). The path models are specifically designed for testing H5 and H6 (testing the relationship between HPMP and SME sustainability outcomes) and H7 and H8 (testing the mediating effect of HR sustainability outcomes on the relationship between HPMP and SME sustainability outcomes) (see Figures 4.4 & 4.5).

Formative or Reflective Models: The path models presented in Figures 4.4 and 4.5 are based on the latent constructs or variables of HPMP such as Recruitment, Selection, Training & Development, Performance Appraisal, Compensation, Consultations. The latent constructs such as firm performance/sustainability outcomes comprised of Financial sustainability outcomes, and Market-based sustainability outcomes while HR sustainability outcomes represent mediating latent construct. Latent variables cannot be measured directly and are represented by one or more variables (Hair et al. 1998, p. 581). It is important for the researcher to identify the nature of latent variables. The latent variables may either be of formative or reflective nature (Diamantopoulos & Siguaw 2006). The researcher must be able to distinguish the two types since the decision may impact the measurement of the model and its results.

Reflective indicators are understood as changes in the latent construct are reflected in changes in the observable measures (Diamantopoulos & Siguaw 2006). Reflective indicators show high correlations between them and dropping an indicator does not affect the value of a construct (Jarvis et al. 2003). In comparison to reflective models, indicators are formative if changes in the indicators determine changes in the value of the latent variables (Diamantopoulos & Siguaw 2006). This means that the construct is formed by its measures and are also known as causal indicators. Due to causal nature, formative models are not characterised by high correlations. However, an indicator must not be dropped once it is verified as an element of a construct (Freeze & Raschke 2007; Jarvis et al. 2003).

For this study, the construct 'HPMP' is composed of several sub-constructs (first order constructs) such as recruitment, selection, compensation, training & development, performance appraisal, consultation and employee communication.

Prior research has shown little evidence of using SEM in HPMP studies. However, the way HPMP variables were analysed suggested that the first order constructs for HPMP have been built in a reflexive way by using questionnaire items as reflective indicators (Huselid 1995; Lee et al. 2010; Shih et al. 2006). In addition, Lopez-Cabrales et al. (2011) believe that HRM practices such as selection, training &

development, and appraisal practices are of reflective nature. Similarly, the second-order construct for HPMP was also built in a reflexive way by using factors extracted from exploratory factor analysis (EFA) for HPMP components such as recruitment, selection, compensation, training & development, performance appraisal and consultation. The results of EFA are presented in Chapter 5.

Prior studies have used subjective performance measures in a reflective way since the indicators of these constructs show high correlations and are interchangeable (e.g. Plouffe et al. 2009; Shih et al. 2006). For instance, Shih et al. (2006) explicitly analysed the first-order constructs of firm performance in a reflective way.

Based on the above discussion the following structure and measurement model was developed (see Figure 4.4) to test hypotheses H5 (with sub hypotheses H_{5a-f}) and H6 (with sub hypotheses H_{6a-f}) for RQ3. The results of hypotheses testing are presented in Chapter 5.

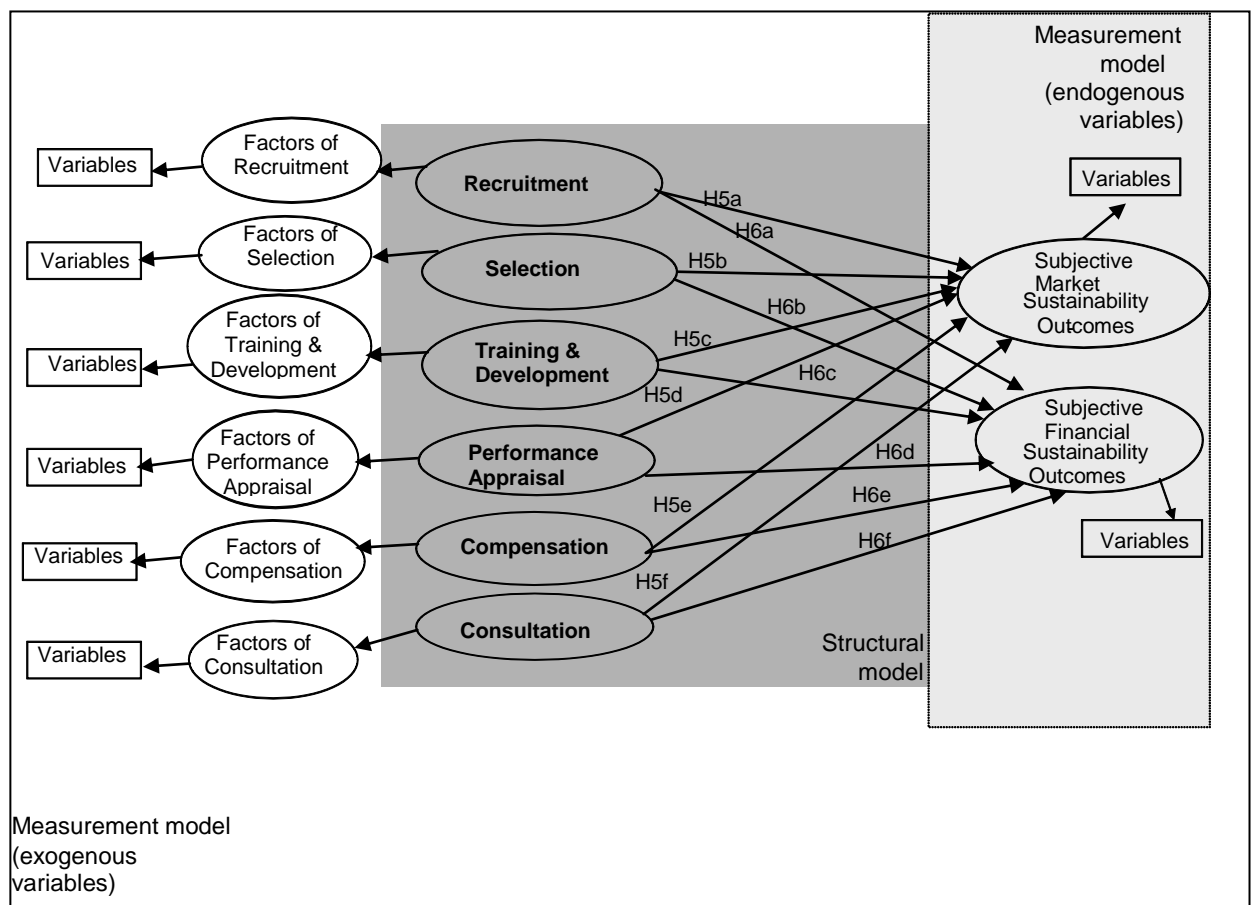


Figure 4.4 SEM structural and measurement model (hypothesis 5 & 6)

4.6.3.2.2 Data Analysis Strategy Within PLS

A two-step data analysis strategy is employed for this study (Wilson 2010). The first step is to evaluate the measurement model by assessing the reliability and validity of the item measures used. The rationale for using this step is to ensure the measures truly represent their constructs (Chin 2010). Once, the measures fulfil the criteria for reliability and validity (Convergent and Discriminant Validity), the next step is to present the validity and results for structural model (Chin 2010).

Evaluating the measurement model: The reliability and validity of the measurement model were assessed by first drawing the entire structural link (based on EFA results) among the constructs and then PLS weighting scheme option was applied using Smart PLS2 software.

Composite Reliability: In order to examine the reliability of the measurement items, the composite reliability results were assessed in the light of criterion 0.7 or higher to indicate adequate internal consistency among the indicators of constructs (Hair et al. 2006, p. 779; Malhotra 2010, p. 734). The formula for computing CR is as follows

$$\rho_c = \frac{(\sum \lambda_i)^2 \text{var } F}{(\sum \lambda_i)^2 \text{var } F + \sum \Theta_{ii}}$$

Source: (Chin 2010, p. 671)

Where ρ_c , λ_i , F , and Θ_{ii} are composite reliability, the factor loading, factor variance, and error variance respectively.

Convergent Validity: Convergent validity (CV) measures the extent to which indicators of the same construct are positively related to each other. The CV was examined in view of factor loadings of the indicators. The criteria (all factor loadings must be statistically significant and higher than 0.5, ideally above 0.7) of factor loading were followed as suggested by Malhotra (2010, p. 734) and Hair et al. (2006, p. 779). The factor loadings with more than 0.7 indicate 50 percent of the variance in the latent construct (Malhotra 2010, p. 734).

Another way of assessing the CV is the average variance extracted (AVE). AVE measures the extent of variance in the observed variables or indicators explained by the latent construct (Malhotra 2010, p. 734). The AVE is computed by using the following formula.

$$AVE = \frac{(\sum \lambda_i^2) \text{var } F}{(\sum \lambda_i^2) \text{var } F + \sum \Theta_{ii}}$$

Source: (Chin 2010, p. 670)

Where λ_i , F , and Θ_{ii} are the factor loading, factor variance, and error variance respectively.

The AVE is only used for reflective indicators (Chin 2010, p. 670). The AVE was examined by using the criterion of 0.5 meaning that latent constructs accounted for 50 percent or more of the variance in the observed variables was extracted (Hair et al. 2006). However, Malhotra (2010, p. 734), argues that the AVE is a more conservative measure than CR and for addressing CV a researcher may rely on CR value alone.

Discriminant Validity: Discriminant Validity (DV) measures the extent to which the construct is different from other constructs in the model (Hair et al. 2006, p. 778). The DV was examined by comparing the square root of AVE with the correlations among construct (Chin 2010, p. 671). The value for square root of AVE should be greater than the value of correlations among the construct (Malhotra 2010, p. 734). The outer model loadings and cross loadings were also computed to assess that each latent construct was more related to its own indicators than with other constructs (Chin 2010, p. 671).

Evaluating the Structural Model and Hypotheses Testing: The evaluation of structural or theoretical model is mainly based on the variance explained (R^2) and the significance of all path estimates. The R^2 value is particularly important to assess the impact of each exogenous independent variable on the endogenous dependent variables (Chin 2010, p. 674). The R^2 results were obtained from PLS algorithm (by using Smart PLS2) for both the endogenous dependent variables such as financial sustainability outcomes (FSUS) and market-based sustainability outcomes (MSUS).

The next step in evaluating the structural model was to examine the significance of path estimates. The significance of all path coefficients was obtained by applying bootstrapping (by using Smart PLS2). According to Chin (2010, p. 675) the bootstrapping indicates a non parametric technique for estimating the precision of PLS estimates. The bootstrapping process creates N sample sets in order to obtain N estimates for each parameter in the PLS model. A sampling with replacement method is applied to create each sample set from the original data set. A simple approach for estimating confidence interval is a semi parametric technique that uses N bootstrap estimates to calculate the standard error and t-test for each parameter in the model.

The Hypotheses (H5 and H6) were tested in the light of results obtained from bootstrapping. The path coefficients and their significance (t- test statistics and *p* values) were examined for testing H5 and H6. The null hypothesis of no significant effect by exogenous independent variable on endogenous dependent variable was rejected if the t-statistic $> +1.96$ or < -1.96 .

4.6.3.3 Analysing the Mediating Effect

In a hypothetical mediating model, the causal relationship between an independent variable (predictor) and dependent variable (outcome) is specified by a third explanatory variable known as a mediator variable (indirect effect). According to Baron and Kenny (1986) a mediator variable has to meet three basic conditions. Firstly, the relationship between the independent variable and dependent variable (path c) must be significant. Secondly, the relationship between the independent variable and mediator variable must be significant (path a). Finally, the relationship between the mediator variable and dependent variable must also be significant by controlling for the independent variable (path b) (see Figure 4.5). Moreover, in the presence of mediator variable, a perfect mediation is employed, if the relationship between independent variable and dependent variable is zero (Baron & Kenny 1986). While, in the presence of the mediator variable, partial mediation has occurred if the relationship between the independent variable and dependent variable is decreased but not to zero (Tabachnick & Fidell 2007). Sobel (1982) test is used to analyse the mediation effect (Baron & Kenny 1986). However, bootstrapping may also be used

as an alternative procedure for testing the indirect effect in the model (Frazier et al. 2004).

For the purpose of this research study, the mediating effect of HR sustainability outcomes (HRSUS) was examined by the difference between the relationship of independent latent construct (HPMP) and dependent latent constructs (sustainability Outcomes (Financial sustainability Outcomes (FSUS) and Market-based sustainability Outcomes (MSUS)) with and without consideration of HRSUS (Tabachnick & Fidell 2007). This type of analysis is consistent with other similar prior studies on HPMP (e.g. Batt 2002; Beltrán-Martín et al. 2008; Liao et al. 2009; Zheng et al. 2006). Figure 4.5 shows the SEM structural and measurement model for the mediating effect of HRSUS on the relationship between HPMP and FSUS and MSUS.

In order to verify that whether HRSUS has a significant mediating effect in the model, a Sobel (1982) test was used based on the following formula (Baron & Kenny 1986).

$$z = \frac{\gamma_{p_a} * \gamma_{p_b}}{\sqrt{\gamma_{p_b}^2 * \sigma(\gamma_{p_a})^2 + \gamma_{p_a}^2 * \sigma(\gamma_{p_b})^2}}$$

Source: (Sobel 1982)

Whether γ_{p_a} and γ_{p_b} are the coefficients of path a and b respectively. Whereas $\sigma(\gamma_{p_a})$ and $\sigma(\gamma_{p_b})$ are the standard errors of path coefficients a and c respectively.

Sobel test was conducted by using the calculation tools of Preacher and Leonardelli (see <http://quantpsy.org/sobel/sobel.htm>). The significant mediating effect of HRSUS was analysed by comparing the t-statistic results (obtained from Sobel test) with the criteria of $> +1.96$ and < -1.96 . Huber et al (2007) suggested that the null hypothesis of HRSUS as a mediating variable should be rejected if the t-statistic $> +1.96$ or < -1.96 . The detailed results are presented in Chapter 5.

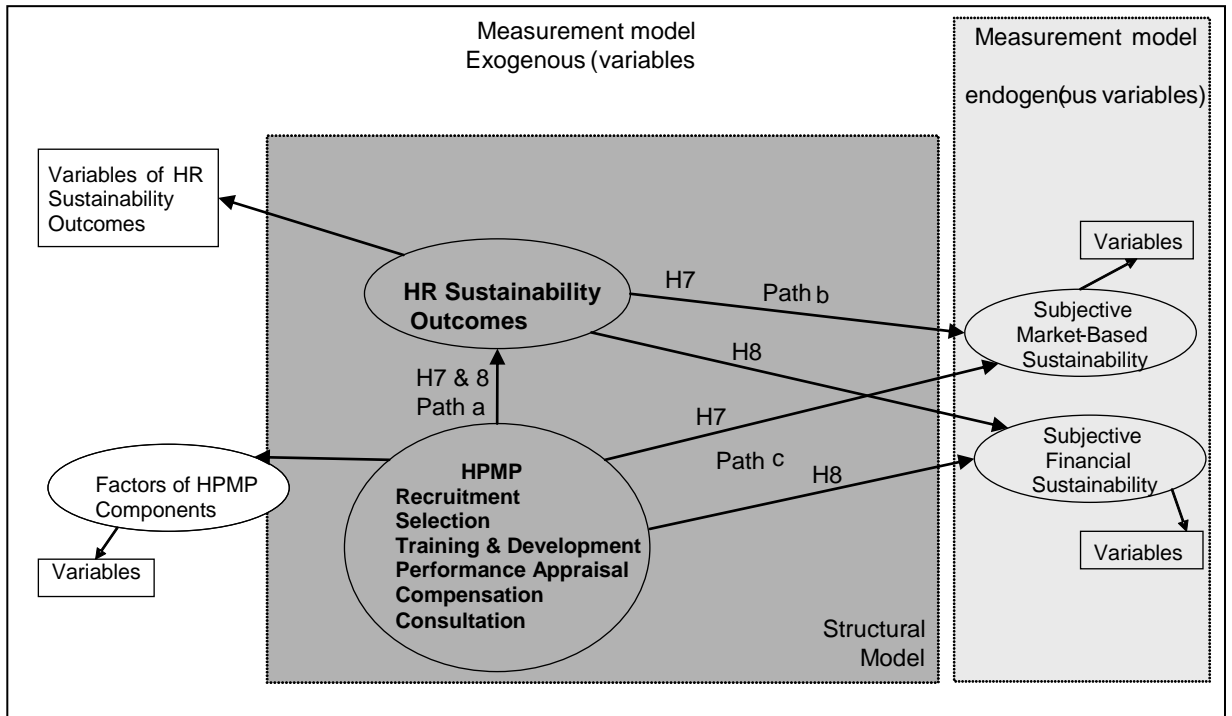


Figure 4.5 SEM structural and measurement model: Mediating effect (Hypothesis 7 & 8)

4.7 Limitations of the Use of Survey Data

There are various limitations embedded in the use of survey data used for this research study.

For this research, a personally administered questionnaire method was used since the intention of the researcher was to gain a quick and high response rate under conditions that limited a mail survey (this was discussed in Section 4.4.2). Although, the researcher utilised a team of 10 individuals, the researcher was able to obtain responses from only 357 firms during the period of four to five months. This is due to the fact that firms were geographically dispersed and the high cost associated with gaining access to these firms (Sekaran 2003).

Social desirability bias may have occurred since some respondents may have chosen to present a favourable image of his/her organisation, either consciously or unconsciously (Zikmund et al. 2010). Extremity bias may also have occurred since some respondents consistently marked low or high options throughout the questionnaire (Zikmund et al. 2010). The researcher screened data thoroughly for extremity bias (see Chapter 5). Moreover, interviewer bias may have occurred since most of the respondents requested the research team to visit their organisations and the respondents assisted SME respondents in filling out their questionnaires (see Section 4.4.2).

The survey for this research study may also contain bias owing to the subjective nature of questions used in the firm performance section (SME sustainability outcomes). However, this issue is addressed in detail in the theoretical model of this study (see Chapter 3).

Finally, the survey may have been affected by single respondent bias as the same respondent (owner/manager) has provided data on independent variables (HPMP), the mediating variable (HR sustainability outcomes) and on the dependent variable (SME sustainability outcomes) (Katou & Budhwar 2007). However, numerous prior studies have used such methodology (e.g. Andersen et al. 2007; Bae & Lawler 2000; Beltrán-Martín et al. 2008; Bjorkman & Xiucheng 2002; Chand & Katou 2007; Chang & Chen 2002; Chang & Huang 2005; Chow 2005; Collings et al. 2010;

Delaney & Huselid 1996; Fey & Bjorkman 2001; Gould-Williams 2003; Guthrie 2001; Guthrie et al. 2002; Huang 2000; Katou & Budhwar 2006; King-Kauanui et al. 2006; Lee et al. 2010; Liao 2006; Shih et al. 2006; Singh 2004; Stavrou et al. 2010; Temtime & Pansiri 2004; Urbano & Yordanova 2008; Way 2002a; Wood & de Menezes 2008; Wood et al. 2006). In this study, this bias was reduced by taking a large sample (357 respondents) and also by first putting the independent variables (HPMP) in the questionnaire followed by dependent variables (SME sustainability).

4.8 Ethical Considerations

Ethics is defined as a 'code of conduct or expected societal norm of behaviour while conducting research' (Sekaran & Bougie 2009, p. 15). Ethical considerations are applied to participating organisations, their employees, the researcher who conducts the research and the respondents who provide data for the research project. The researcher should conduct research in good faith, consider the results of the study, and need to ensure organisational rather than self-interest (Sekaran & Bougie 2009). According to Zikmund et al. (2010) survey research should ensure the voluntarily participation of the respondents. Participants should know what the researcher wants them to do and consents to the research study (informed consent). In addition, participants expect that their information would not be shared with others (confidentiality). Furthermore, participants have a right to privacy (participant's right to privacy) (Zikmund et al. 2010).

The protocol for this research study was approved by the Ethics Committee at the University of Southern Queensland (USQ) (see Appendix F). The following issues guidelines have been followed in the conduct of this study.

Informed Consent: Initially through the use of a database, the participants were selected through stratified random sampling. The consent of the participants (owner/managers) was obtained before initiating a study. In this regard, a covering letter was sent to each organisation in the sample. The participants were also contacted by telephone and emails. The consent of the participants (available date and time) was confirmed by telephone and emails.

Language Used for Consent Mechanism: The consent was provided in plain language in English (see Appendix E)

Respondents Free to Withdraw at Any Stage: It was initially indicated to the respondents in the consent form that they can withdraw from the study at any time by simply not continuing the questionnaire.

Preservation of Confidentiality: All possible measures were undertaken to ensure the confidentiality of the participants. In this regard, questions were not related to participants' personal data other than some demographics (See Appendix E). In addition, no question was designed to annoy, intimidate or offend participants. The participants and their organisations were not required to mention their names in the questionnaire. The participants were assured that only aggregate findings would be reported and would not identify any individuals or their organisations. Additionally, confidentiality of the information was ensured following the USQ policy. The participants were assured that their responses would be accessible only by the researcher and his supervisor. Furthermore, all data collected, data coding and data analysis were undertaken only by the principal researcher, under the supervision of his supervisor.

Research Findings Reported to Participants: At the conclusion of this study, the aggregate results of the study will be communicated to the interested participants by emails or by post.

Data Security and Storage: The original completed questionnaires and any additional information obtained in the data collection process were treated in the strictest of confidence. In addition, these responses (forms) were locked in the office of the supervisor at USQ and accessible only to the researcher and principle supervisor. The digital data were stored on secondary storage devices and locked away, not leaving it on a computer's hard drive.

Contact Details Provided: The contact details of the researcher and principal supervisor were provided in the covering letter of the questionnaire (see Appendix E)

Privacy Regulations: The survey was conducted based on the privacy regulations of USQ. The questionnaire was submitted and approved by the Ethics committee at USQ.

Psychological and Other Risks: The covering letter of the questionnaire informed the participants that the questionnaire would be with no reference to names of participants and their organisations (see Appendix E). In addition, a covering letter clearly indicated the objective and importance of the study; the time taken to complete the questionnaire. The fact that participation was voluntary was also indicated to the participants in the cover letter. Participants were assured that only aggregate data would be reported. The participants were assured that their responses would be accessible only to the researcher.

4.9 Summary

The main research objective, research questions, and hypotheses development were outlined in this chapter. The research design and methodology were discussed in detail by outlining the population, sample and sampling technique utilised. Data collection procedures were described in detail. The sections of the measurement instrument (with codification of each section of the survey) were elaborated upon and the reliability and validity methods (content and construct validity) were discussed. Data analysis techniques and interpretations such as descriptive statistics and inferential statistics (Independent-sample t-test, HMLR and test for mediation effect) were described in depth. The limitations of survey method were identified and possible actions to overcome such limitations were also discussed. Finally, ethical considerations such as informed consent, voluntary participation, and confidentiality of respondents, data security, and other ethical issues were identified and discussed within the context of this research study.

CHAPTER FIVE: ANALYSIS OF RESULTS

5.1 Introduction

The previous chapter discussed the research design, methodology, data collection and data analysis techniques utilised in this study. This chapter details the results after analysing the data collected for this study. The chapter commences with outlining the key characteristics of respondents and their organisations. This is followed by detailing the results of the extent of adoption of high performance management practices (HPMP). The results regarding the exploratory factor analysis are presented which also informs part of the discussion on the nature of HPMP in SMEs. The results pertaining to the group differences analysis are then discussed including the relationship between key firm contextual characteristics and the prevalence of HPMP, the relationship between HPMP and economic sustainability outcomes in SMEs and the mediating effect of HR sustainability on the relationship between HPMP and SME sustainability outcomes. The chapter concludes with a summary of the hypotheses testing.

Figure 5.1 summarises the structure of this chapter.

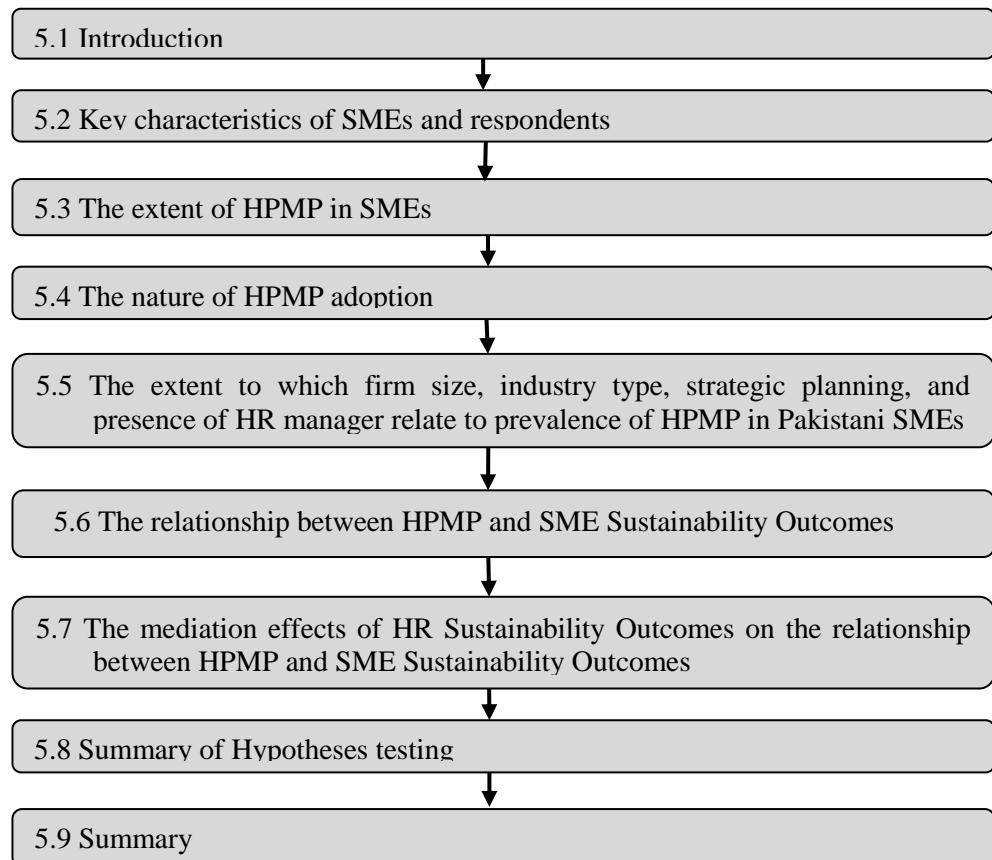


Figure 5.1 Structure of Analysis of Results Chapter

5.2 Key Characteristics of SMEs and Respondents

This section outlines the demographic characteristics of SMEs and their respective respondents.

5.2.1 Organisational Characteristics of SMEs

The following organisational characteristics of SME respondent organisations were analysed: firm size; type of industry; industry subsectors; whether SMEs export their products/services; how long SMEs have been exporting their products/services; whether the SME is a franchise operation; whether the SME operate in different locations; the presence of a HR department; the presence of a HR manager; the existence of a strategic plan; whether the SME has internet access; whether the SME has a human resource information system. For this purpose, descriptive statistics such as frequency and percentages were calculated for each characteristic. The details are presented in Table 5.1.

Table 5.1 Organisational Characteristics of SME Respondent Organisations

SME Characteristics	Response Categories	Frequency (n = 331)	Percent
Firm size	Small	215	65.0
	Medium	116	35.0
Industry type	Manufacturing	237	71.6
	Service	94	28.4
Industry subsectors Manufacturing	Furniture	51	15.0
	Textile	41	12.4
	Engineering	30	9.1
	Garment	36	10.9
	Leather goods	37	11.2
	Pharmaceutical/surgical	39	11.8
Services	Telecommunication	16	4.8
	Information Technology	12	3.6
	Consulting	9	2.7
	Health	10	3.0
	Education	14	4.2
	Hotel	18	5.4
	Media	12	3.6
	Others	4	1.2
SMEs exporting their products/services	Yes	86	26.0
	No	245	74.0
How long SMEs are exporting their products	Less than 3 years	23	6.9
	3 to 5 years	17	5.1
	More than 5 years	47	14.2
SMEs as franchise operations	Yes	27	8.2
	No	304	91.8
SMEs operate in different locations	One only	280	84.6
	2-4	41	12.4
	5-10	4	1.2
	11-12	01	0.3
	>20	05	1.5
Age of SMEs	Less than 1 year old	03	0.9
	1 to 2 years	11	3.3
	2 to 3 years	31	9.4
	3 to 5 years	47	14.2
	5 to 10 years	103	31.1
	More than 10 years	136	41.1
SME with HR department	Yes	143	43.0
	No	188	57.0
SME with HR Manager	No specialist manager for HR	128	38.7
	Industrial relations	5	1.5
	Employee relations	24	7.3
	Human resource management	124	37.5
	Personnel	19	5.7
	Others	31	9.4
SMEs with Strategic Planning	Does not have a strategic plan	32	9.7
	Has a strategic plan, but it is not written down	136	41.1
	Has a strategic plan, but it is not used to develop operational plans	45	13.6
	Has a strategic plan that is used to develop operational plans and drive day to day operations	118	35.6
SMEs with internet access	Yes	192	58.0
	No	139	42.0
SMEs using Human Resource Information System	Yes	115	34.7
	No	216	65.3

Source: Developed for this research

Following now are some main interpretations evident from Table 5.1:

Firm size, Type of Industry, Industry subsector: The sampling frame was based on small and medium-sized firms operating in Karachi, Pakistan. Small firms (1-100 employees) accounted for 65 percent of the sample, and medium firms (100-250 employees), 35 percent. The sample is represented by two main industries, manufacturing and service sectors. The majority of respondent firms were from the manufacturing sector (71.6 percent) while service sector firms accounted for 28.4 percent. The manufacturing sector includes subsectors such as leather goods, garments, textile, engineering, pharmaceutical/surgical and furniture. Services sector includes telecom, information technology, consulting, health, education, media, and restaurants (see Table 5.1).

Exporting, Franchising, Location, Age: SMEs were asked to report their level of internationalisation. Only 26 percent of the responding firms exported their products or services. Only 14.2 percent of SMEs were exporting their products or services for more than five years. While the remaining 12 percent of firms were new to internationalisation. Only 8.2 percent (out of 331 firms) of firms were franchise operations. Most of the respondent SMEs (84.6%) operated from a single location, 12.4 percent operated in 2 - 4 locations and the remaining firms in more than 5 locations. Forty one percent of the respondent firms were more than 10 years old, 31.1 percent were 5-10 years, 14.2 percent were 3-5 years, and the remainders were less than 5 years old.

HR Department, HR Manager, Strategic Plan, Internet, Human Resource Information System: SMEs were asked to indicate the presence of a HR department within their organisations. Table 5.1 shows that of the 331 respondent firms, 143 SMEs (43%) reported the presence of HR department. Regarding the presence of a HR manager, 37.5 percent of firms responded they have a manager with the following title: 'human resource management': 7.3 percent: 'employee relations', 5.7% : 'personnel', and 1.5 percent: 'industrial relations'. However, 38.7 percent of firms did not have a specialist manager responsible for HR issues in the firm. Regarding the use of strategic planning in day to day operations, 9.7% SMEs did not have any strategic plan, 41.1% had a strategic plan, but it is not written down, and

13.6% had a strategic plan, but it is not used to develop operational plans. However, a formal strategic plan was used by only 35.6% of the responding SMEs. Regarding internet access, out of 331 sample firms, 192 SMEs (58 %) had an internet facility. Regarding the use of a human resource information system, only 115 firms (34.7 %) reported the use of human resource information system.

5.2.2 Key Characteristics of Respondents (Owners/Managers)

Table 5.2 summarises the key characteristics of respondents.

Table 5.2 Key Characteristics of SME Respondents (Owners/Managers)

Respondent's characteristics	Response categories	Frequency (n = 331)	Percent
Level of qualification	Secondary school certificate	59	17.8
	Undergraduate degree	119	36.0
	Postgraduate diploma or certificate	76	23.0
	Post graduate degree	77	23.3
Age	Under 30 years old	95	28.7
	31-45 years	178	53.8
	46-55 years	54	16.3
	56-65 years	04	1.2
Ownership	Yes	119	36.0
	No	212	64.0
Gender	Male	322	97.3
	Female	09	2.7

Source: Developed for this research

It is clear from Table 5.2 that 17.8 percent of respondents had a secondary school certificate, 36% had an undergraduate degree and 23% had a postgraduate diploma or certificate at the time of the survey. However, only 23.3 % had a postgraduate degree. More than half of respondents (53.8 %) were 31-45 years old at the time of the survey, while 28.7 percent were under 30 years of age. One third of respondents (36%) were owners or part time owners of their firms. The majority of respondents (owners/managers) are male, with only 2.7% respondents indicating they are female.

The next section will present results for RQ1 regarding the extent and nature of HPMP in SMEs. RQ1 is analysed in two parts. The first part analyses results for the extent of HPMP followed by second part focussing on the nature of HPMP in SMEs.

5.3 RQ1: The Extent (frequency) of High Performance Management Practices in SMEs

This section informs RQ1 regarding the extent of HPMP in SMEs. The data are analysed to generate information on the level of adoption of HPMP in Pakistani SMEs. Descriptive statistics such as frequencies and percentages were used to examine the level (low, moderate or high) of adoption of HPMP. Consistent with Wiesner et al.(2007) a low level of adoption of HPMP is defined as where 30 percent or less of respondent SMEs have adopted that practice. A moderate level of adoption falls between 31 and 69 percent and high level of adoption of HPMP occurred where 70% or more firms have employed that practice. The following section presents the detailed results regarding the extent of individual HPMP in SMEs. The extent to which HPMP is practiced in SMEs is profiled in various Tables in this section. The Tables have also been broken up to reflect the occurrence of practices in the two size categories. However a full discussion of the difference between small and medium firms regarding their adoption of HPMP follows in section 5.5.1 which addresses RQ2.

5.3.1 Recruitment

The *Recruitment* results in Table 5.3 indicates that most of the respondent SMEs relied on informal recruitment practices such as referrals by employees, referral from other sources and walk-ins. Only 13 percent of SMEs were utilising internet recruitment, 3 percent used educational institution recruitment services, and 3 percent reported using recruitment consultants. There was high level of adoption in 6 out of 24 recruitment practices (Internal recruitment methods, External recruitment methods, Job analysis, Referrals by employees, Walk-in, Referral from other sources), a moderate level of adoption in 4 practices (Written job description, Role specification, Newspaper advertising, Employee requisition forms), and low level of adoption in 9 practices (Job analysis computer software, Advertising via bulletin board/newsletter, Internal data base search for internal applicants, Government employment agency, Private employment agency, Radio advertising, Television advertising, Internet recruitment, Direct mail, Advertising in magazines, Educational institutions' recruitment services, Recruitment strategy specifically targeting older workers, Recruitment consultants, Professional associations).

Table 5.3 The extent of Recruitment practices in SMEs

Practices	Overall								Small								Medium													
	Never (a)		For some jobs (b)		For jobs (c)		all		Total (b+c)		Never (a)		For some jobs (b)		For jobs (c)		all		Total (b+c)		Never (a)		For some jobs (b)		For jobs (c)		all		Total (b+c)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Internal recruitment methods	4	1	191	58	136	41	327	99	3	1	109	51	103	48	212	99	1	1	82	71	33	28	115	99						
External recruitment methods	7	2	259	78	65	20	324	98	4	2	163	76	48	22	211	98	3	3	96	83	17	15	113	98						
Job analysis	93	28	117	35	121	37	238	72	61	28	70	33	84	39	154	72	32	28	47	41	37	32	84	72						
Job analysis computer software	320	97	2	1	9	3	11	3	211	98	0	0	4	2	4	2	109	94	2	2	5	4	7	6						
Written job description/specification	210	63	74	22	47	14	121	37	145	67	40	19	30	14	70	33	65	56	34	29	17	15	51	44						
Role specification	114	34	124	38	93	28	217	66	77	36	73	34	65	30	138	64	37	32	51	44	28	24	79	68						
Employee requisition forms	228	69	73	22	30	9	103	31	156	73	44	21	15	7	59	28	72	62	29	25	15	13	44	38						
Advertising via bulletin board/news letter	299	90	27	8	5	2	32	10	194	90	18	8	3	1	21	10	105	91	9	8	2	2	11	10						
Internal data base search for internal applicants	252	76	76	23	3	1	79	24	167	78	45	21	3	1	48	22	85	73	31	27	0	0	31	27						
Newspaper advertising	207	63	82	25	42	13	124	38	133	62	53	25	29	14	82	38	74	64	29	25	13	11	42	36						
Government employment agency	331	100	0	0	0	0	0	0	215	100	0	0	0	0	0	0	116	100	0	0	0	0	0	0						
Private employment agency	302	91	26	8	3	1	29	9	194	90	20	9	1	1	21	10	108	93	6	5	2	2	8	7						
Referrals by employees	44	13	263	80	24	7	287	87	28	13	171	80	16	7	187	87	16	14	92	79	8	7	100	86						
Referral from other sources	71	22	246	74	14	4	260	79	46	21	158	74	11	5	169	79	25	22	88	76	3	3	91	79						
Walk-ins	96	29	234	71	1	0	235	71	55	26	159	74	1	1	160	75	41	35	75	65	0	0	75	65						
Radio advertising	329	99	0	0	2	1	2	1	215	100	0	0	0	0	0	0	114	98	0	0	2	2	2	2						
Television advertising	329	99	1	0	1	0	2	1	215	100	0	0	0	0	0	0	114	98	1	1	1	1	2	2						
Internet recruitment	289	87	39	12	3	1	42	13	188	87	25	12	2	1	27	13	101	87	14	12	1	1	15	13						
Direct mail	263	80	60	18	8	2	68	21	184	86	26	12	5	2	31	14	79	68	34	29	3	3	37	32						
Advertising in magazines	329	99	0	0	2	1	2	1	214	100	0	0	1	1	1	1	115	99	0	0	1	1	1	1						
Educational institutions' recruitment services	321	97	10	3	0	0	10	3	209	97	6	3	0	0	6	3	112	97	4	3	0	0	4	3						
Professional associations	331	100	0	0	0	0	0	0	215	100	0	0	0	0	0	0	116	100	0	0	0	0	0	0						
Recruitment consultants	321	97	10	3	0	0	10	3	209	97	6	3	0	0	6	3	112	97	4	3	0	0	4	3						
Recruitment strategy specifically targeting older workers	329	99	2	1	0	0	2	1	213	99	2	1	0	0	2	1	116	100	0	0	0	0	0	0						

Source: Developed for this research

5.3.2 Selection

Regarding *Selection*, 61 percent of SMEs were utilising informal selection practices. The one-on-one interview method was the dominant selection method (90 percent of SMEs). Furthermore, there was high level of adoption in 2 out of the 18 selection practices (one-on-one interviews, unstructured interviews), moderate level of adoption in 6 practices (Informal Selection procedures, Application forms, Line manager makes selection decision, Panel interviews, Work samples, Structured interviews), and low level of adoption in 9 practices (Behaviourally based interviews, Written reference checks, Verbal (telephone) reference checks, Other employees have input in final selection decision, Assessment centre, Use consultants in selection process, External consultant have input in the final selection decision, Other managers/employees have input in selection design, Psychological tests) (see Table 5.4).

Table 5.4 The extent of Selection practices in SMEs

Practices	Overall								Small								Medium							
	Never (a)		For some jobs (b)		For all jobs (c)		Total (b+c)		Never (a)		For some jobs (b)		For all jobs (c)		Total (b+c)		Never (a)		For some jobs (b)		For all jobs (c)		Total (b+c)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Informal Selection procedures	129	39	161	49	41	12	202	61	102	47	84	39	29	14	113	53	27	23	77	66	12	10	89	77
Formal selection procedures #	56	17	193	58	82	25	275	83	30	14	121	56	64	30	185	86	26	22	72	62	18	16	90	78
Application forms	171	52	108	33	52	16	160	49	123	57	63	29	29	14	92	43	48	41	45	39	23	20	68	59
One-on-one interviews	33	10	204	62	94	28	298	90	18	8	129	60	68	32	197	92	15	13	75	65	26	22	101	87
Unstructured interviews	59	18	181	55	91	28	272	83	35	16	115	54	65	30	180	84	24	21	66	57	26	22	92	79
Structured interviews	154	47	157	47	20	6	177	53	108	50	90	42	17	8	107	50	46	40	67	58	3	3	70	60
Panel interviews	179	54	145	44	7	2	152	46	132	61	76	35	7	3	83	39	47	41	69	60	0	0	69	60
Behaviourally based interviews	236	71	69	21	26	8	95	29	169	79	29	14	17	8	46	21	67	58	40	35	9	8	49	42
Work samples	162	49	119	36	50	15	169	51	116	54	68	32	31	14	99	46	46	40	51	44	19	16	70	60
Written reference checks	251	76	69	21	11	3	80	24	166	77	38	18	11	5	49	23	85	73	31	27	0	0	31	27
Verbal (telephone) reference checks	274	83	45	14	12	4	57	18	171	80	32	15	12	6	44	21	103	89	13	11	0	0	13	11
Psychological tests	321	97	9	3	1	0	10	3	209	97	5	2	1	1	6	3	112	97	4	3	0	0	4	3
Assessment centre	298	90	21	6	12	4	33	10	201	94	7	3	7	3	14	7	97	84	14	12	5	4	19	16
Use consultants in selection process	319	96	12	4			12	4	208	97	7	3			7	3	111	96	5	4			5	4
Line manager makes selection decision	222	67	91	28	18	5	109	33	139	65	61	28	15	7	76	35	83	72	30	26	3	3	33	29
Other managers/employees have input in selection design	242	73	76	23	13	4	89	27	145	67	58	27	12	6	70	33	97	84	18	16	1	1	19	16
Other employees have input in final selection decision	292	88	38	12	1	0	39	12	181	84	33	15	1	1	34	16	111	96	5	4	0	0	5	4
External consultant have input in the final selection decision	327	99	3	1	1	0	4	1	213	99	1	1	1	1	2	1	114	98	2	2	0	0	2	2

Source: Developed for this research

5.3.3 Training and Development

Regarding *Training and Development*, 65 percent of SMEs reported providing training to their employees. However, informal on the job training (52%) and informal mentoring (62%) were the dominant training methods. None of the practices was adopted to a high extent. There was a moderate level of adoption in 4 out of 23 practices (Does your business provide any kind of training, Conduct an informal training needs analysis, Does your provide informal on-the-job training, Provision of informal mentoring) and a low level of adoption in the rest of the practices (Conduct a formal training needs analysis, Does your business have a formal training budget, Does your business have informal individual development plans for employees, Formal individual development plans for employees, Training of a vocational or technical nature, Management and development training, Has your business increased training where a program previously existed, Introduced formal training where none previously existed, Introduced new career paths, Provision of formal mentoring, Provide computer-based/aided instruction/training, Evaluate the satisfaction of trainees regarding training programs, Evaluate the results of training, Utilise web-based learning, Management values learning as long as it's related to performance, Formal in-house training provided by own staff, Formal in-house training provided by an external consultant, Provide external training (e.g. provided by a training body or institution) (see Table 5.5).

Table 5.5 The extent of Training and Development practices in SMEs

Practices	Overall								Small								Medium							
	Never (a)		For some jobs (b)		For jobs (c)		all (b+c)		Never (a)		For some jobs (b)		For jobs (c)		all (b+c)		Never (a)		For some jobs (b)		For jobs (c)		all (b+c)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Does your business provide any kind of training?	115	35	214	65	2	1	216	65	77	36	137	64	1	1	138	64	38	33	77	66	1	1	78	67
Conduct a formal training needs analysis	315	95	15	5	1	0	16	5	205	95	9	4	1	1	10	5	110	95	6	5	0	0	6	5
Conduct an informal training needs analysis	183	55	145	44	3	1	148	45	118	55	94	44	3	1	97	45	65	56	51	44	0	0	51	44
Does your business have a formal training budget?	317	96	14	4			14	4	205	95	10	5			10	5	112	97	4	3			4	3
Does your business provide informal on-the-job training	158	48	151	46	22	7	173	52	96	45	104	48	15	7	119	55	62	53	47	41	7	6	54	47
Formal individual development plans for employees #	312	94	19	6			19	6	203	94	12	6			12	6	109	94	7	6			7	6
Does the business have informal individual development plans for employees	263	80	64	19	4	1	68	21	167	78	45	21	3	1	48	22	96	83	19	16	1	1	20	17
Training of a vocational or technical nature	252	76	62	19	17	5	79	24	167	78	36	17	12	6	48	22	85	73	26	22	5	4	31	27
Management and development training	301	91	30	9			30	9	195	91	20	9			20	9	106	91	10	9			10	9
Introduced formal training where none previously existed	310	94	21	6			21	6	207	96	8	4			8	4	103	89	13	11			13	11
Has your business increased training where a program previously existed	301	91	30	9			30	9	198	92	17	8			17	8	103	89	13	11			13	11
Introduced new career paths	295	89	36	11			36	11	198	92	17	8			17	8	97	84	19	16			19	16
Provision of informal mentoring	125	38	184	56	22	7	206	62	82	38	116	54	17	8	133	62	43	37	68	59	5	4	73	63
Provision of formal mentoring	293	89	38	12			38	12	193	90	22	10			22	10	100	86	16	14			16	14
Provide computer-based/aided instruction/training	300	91	31	9			31	9	197	92	18	8			18	8	103	89	13	11			13	11
Evaluate the satisfaction of trainees regarding training programs	281	85	25	8	25	8	50	15	183	85	18	8	14	7	32	15	98	85	7	6	11	10	18	16
Evaluate the results of training (ROI)	282	85	27	8	22	7	49	15	187	87	14	7	14	7	28	13	95	82	13	11	8	7	21	18
Utilise web-based learning	312	94	19	6			19	6	203	94	12	6			12	6	109	94	7	6			7	6
Management values learning as long as it's related to performance	297	90	18	5	16	5	34	10	197	92	9	4	9	4	18	8	100	86	9	8	7	6	16	14
Formal in-house training provided by own staff	279	84	43	13	9	3	52	16	186	87	21	10	8	4	29	14	93	80	22	19	1	1	23	20
Formal in-house training provided by an external consultant	318	96	13	4			13	4	203	94	12	6			12	6	115	99	1	1			1	1
Provide external training (e.g. provided by a training body or institution)	329	99	2	1			2	1	213	99		1			2	1	116	100	0	0			0	0

Source: Developed for this research

5.3.4 Performance Appraisal

In relation to *Performance Appraisal*, Table 5.6 indicates that 84 percent of the respondents reported the use of informal performance appraisal which represents a high level of adoption. There was moderate level of adoption in 6 practices (Formal PA system, Management by objectives, Informal mentoring is use as part of the PA system, Ranking, 360 degree appraisal, Narrative essay) , and a low level of adoption in 10 practices (Performance is rated on a rating scale, Critical incidents, Assessment centre, Balanced score card approach, Provide training to managers who appraise performance, Provide training to employees who receive PA, Consultants used as part of the PA system, Formal mentoring is used as part of the PA system, Appraisees receive formal feedback on their PA, PA system links individual performance to business unit or company strategy).

Table 5.6 The extent of prevalence of Performance Appraisal practices in SMEs

Practices	Overall								Small								Medium							
	Never (a)		For some jobs (b)		For all jobs (c)		Total (b+c)		Never (a)		For some jobs (b)		For all jobs (c)		Total (b+c)		Never (a)		For some jobs (b)		For all jobs (c)		Total (b+c)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Formal PA system	193	58	104	31	34	10	138	42	144	67	49	23	22	10	71	33	49	42	55	47	12	10	67	58
Informal PA	54	16	200	60	77	23	277	84	34	16	127	59	54	25	181	84	20	17	73	63	23	20	96	83
Management by objectives (goal setting)	185	56	146	44			146	44	120	56	95	44			95	44	65	56	51	44			51	44
Performance is rated on a rating scale	270	82	52	16	9	3	61	18	173	81	36	17	6	3	42	20	97	84	16	14	3	3	19	16
Critical incidents (dairy keeping of on-the-job behaviour)	255	77	73	22	3	1	76	23	166	77	46	21	3	1	49	23	89	77	27	23	0	0	27	23
Narrative essay (unstructured report on performance) #	193	58	128	39	10	3	138	42	130	61	75	35	10	5	85	40	63	54	53	46	0	0	53	46
Ranking (ranks employees on job performance) #	206	62	108	33	17	5	125	38	135	63	69	32	11	5	80	37	71	61	39	34	6	5	45	39
Assessment centre	306	92	25	8			25	8	199	93	16	7			16	7	107	92	9	8			9	8
Balanced score card approach (measures contribution to org vision and strategy)	315	95	16	5			16	5	205	95	10	5			10	5	110	95	6	5			6	5
360 degree appraisal (feedback by multiple sources i.e. supervisors, sub, peers, customers)	211	64	120	36			120	36	135	63	80	37			80	37	76	66	40	35			40	35
Provide training to managers who appraise performance	279	84	52	16			52	16	177	82	38	18			38	18	102	88	14	12			14	12
Provide training to employees who receive PA	262	79	62	19	7	2	69	21	168	78	45	21	2	1	47	22	94	81	17	15	5	4	22	19
PA system links individual performance to business unit or company strategy	273	83	57	17	1	0	58	18	175	81	39	18	1	1	40	19	98	85	18	16	0	0	18	16
Formal mentoring is used as part of the PA system	302	91	29	9			29	9	201	94	14	7			14	7	101	87	15	13			15	13
Informal mentoring is use as part of the PA system	146	44	168	51	17	5	185	56	101	47	102	47	12	6	114	53	45	39	66	57	5	4	71	61
Do appraisals receive formal feedback on their PA	283	86	33	10	15	5	48	15	180	84	24	11	11	5	35	16	103	89	9	8	4	3	13	11
Are consultants use as part of the PA system	331	100	0	0	0	0	0	0	331	100	0	0	0	0	0	0	331	100	0	0	0	0	0	0

Source: Developed for this research

5.3.5 Compensation

Regarding *Compensation*, Table 5.7 shows a high level of adoption in four practices including performance-based pay (99%) and pay based on acquired skills (96%), market competitive wages (96%) and pay based on seniority (81%). A moderate level of adoption was found with regard to 7 practices (Use of job evaluation in setting pay levels, Flexible salary packaging, Individual merit pay, Group/team incentive programs, Bonus plan, Commission plan, Pay levels based on awards classification) and low level of adoption in 9 practices (Incentive compensation, Pay (based in performance of business unit, Incentive compensation pay based on performance of the company, Profit sharing/gain sharing schemes, Individual incentive program, Project team incentive plan, Salary packaging with fixed benefits, Benefits other than superannuation, Employees recognised in other ways than take-home pay or compensation practices).

Table 5.7 The extent of Compensation practices in SMEs

Practices	Overall								Small								Medium							
	Never (a)		For some jobs (b)		For all jobs (c)		Total (b+c)		Never (a)		For some jobs (b)		For all jobs (c)		Total (b+c)		Never (a)		For some jobs (b)		For all jobs (c)		Total (b+c)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Use of job evaluation in setting pay levels	151	46	120	36	60	18	180	54	124	58	70	33	21	10	91	42	27	23	50	43	39	34	89	77
Pay levels based on awards classification	124	38	195	59	12	4	207	63	104	48	107	50	4	2	111	52	20	17	88	76	8	7	96	83
Pay based on performance	2	1	100	30	229	69	329	99	0	0	50	23	165	77	215	100	2	2	50	43	64	55	114	98
Market competitive wages	14	4	51	15	266	80	317	96	6	3	28	13	181	84	209	97	8	7	23	20	85	73	108	93
Pay based on acquired skills	12	4	106	32	213	64	319	96	6	3	54	25	155	72	209	97	6	5	52	45	58	50	110	95
Individual merit pay	192	58	90	27	49	15	139	42	120	56	62	29	33	15	95	44	72	62	28	24	16	14	44	38
Group/team incentive programs	228	69	102	31	1	0	103	31	146	68	68	32	1	1	69	32	82	71	34	29	0	0	34	29
Incentive compensation	274	83	56	17	1	0	57	17	177	82	37	17	1	1	38	18	97	84	19	16	0	0	19	16
Pay (based in performance of business unit)	311	94	16	5	4	1	20	6	203	94	10	5	2	1	12	6	108	93	6	5	2	2	8	7
Incentive compensation pay (pay based on performance of the company)	283	86	15	5	33	10	48	15	185	86	9	4	21	10	30	14	98	85	6	5	12	10	18	16
Pay base on seniority	62	19	212	64	57	17	269	81	32	15	145	67	38	18	183	85	30	26	67	58	19	16	86	74
Profit sharing/gain sharing schemes	303	92	9	3	19	6	28	8	194	90	7	3	14	7	21	10	109	94	2	2	5	4	7	6
Individual incentive program	303	92	27	8	1	0	28	9	198	92	16	7	1	1	17	8	105	91	11	10	0	0	11	10
Bonus plan	174	53	78	24	79	24	157	48	121	56	34	16	60	28	94	44	53	46	44	38	19	16	63	54
Commission plan	210	63	115	35	6	2	121	37	146	68	67	31	2	1	69	32	64	55	48	41	4	3	52	45
Project team incentive plan	299	90	32	10			32	10	201	94	14	7			14	7	98	85	18	16			18	16
Salary packaging (with fixed benefits)	246	74	62	19	23	7	85	26	165	77	35	16	15	7	50	23	81	70	27	23	8	7	35	30
Flexible salary packaging (with salary sacrificing)	104	31	126	38	101	31	227	69	49	23	94	44	72	34	166	77	55	47	32	28	29	25	61	53
Benefits other than superannuation(e.g. life insurance, health insurance)	270	82	54	16	7	2	61	18	186	87	26	12	3	1	29	14	84	72	28	24	4	3	32	28
Employees recognised in other ways than take-home pay or compensation practices above	331	100	331				331	0	215	100					0	0	116	100					0	0

Source: Developed for this research

5.3.6 Consultation

It is clear from Table 5.8 that respondents did not consult to a high degree with their employees. By far the majority of SMEs reported low to moderate levels of adoption of *Consultation* practices. The practice which scored highest was reliable customer service and delivery (44%), followed by securing enterprise efficiency and productivity (40%). A moderate level of adoption was found with relation to the following 12 issues: Major change issues, Occupational health and safety, Changes to job design and work, Securing enterprise efficiency and productivity, Training and skills development, Reliable customer service and delivery, Corporate planning, Market performance, Employee amenities, Major change decisions, Major policy decisions, Quality and cost improvement). A low level of consultation was found in relation to only one issue (The performance of firm) (see Table 5.8 and 5.9).

Table 5.8 The extent of Consultation practices (overall results) in SMEs

practices	Overall											
	Widespread consultation (1)		Consultation with employees with limited involvement (2)		Total		Managerial authority and direction (3)		Mangers initiate and implement change (4)		Total	
	(% (a)		(% (b)		(% (a + b)		(% (c)		(% (d)		(% (c + d)	
	n	%	n	%	n	%	n	%	n	%	n	%
Consult: Major change issues	5	2	96	29	101	31	129	39	101	31	230	70
Consult: Occupational health and safety	6	2	98	30	104	31	116	35	111	34	227	69
Consult: Changes to job design and work	4	1	112	34	116	35	97	29	118	36	215	65
Quality and cost improvement	9	3	101	31	110	33	132	40	89	27	221	67
Training and skills development	6	2	106	32	112	34	110	33	109	33	219	66
Reliable customer service and delivery	36	11	109	33	145	44	103	31	83	25	186	56
The performance of the firm	22	7	67	20	89	27	136	41	106	32	242	73
Corporate planning	3	1	103	31	106	32	126	38	99	30	225	68
Market performance	4	1	103	31	107	32	131	40	93	28	224	68
Employee amenities	4	1	94	28	98	30	133	40	100	30	233	70
Major change decisions			103	31	103	31	133	40	95	29	228	69
Major policy decisions			98	30	98	30	124	38	109	33	233	70
Securing enterprise efficiency and productivity	20	6	112	34	132	40	93	28	106	32	199	60

Source: Developed for this research

Table 5.9 The extent of Consultation practices (Small and Medium firms) in SMEs

practices	Small												Medium											
	Widespread consultation (1)		Consultation with employees with limited involvement (2)		Total (%) (a + b)		Managerial authority and direction (3)		Mangers initiate and implement change (4)		Total (%) (c + d)		Widespread consultation (1)		Consultation with employees with limited involvement (2)		Total (%) (a + b)		Managerial authority and direction (3)		Mangers initiate and implement change (4)		Total (%) (c + d)	
	(%) (a)	(%) (b)	(%) (c)	(%) (d)	(%) (a + b)	(%) (c)	(%) (d)	(%) (c + d)	(%) (a)	(%) (b)	(%) (a + b)	(%) (c)	(%) (d)	(%) (a)	(%) (b)	(%) (a + b)	(%) (c)	(%) (d)	(%) (c + d)	(%) (a)	(%) (b)	(%) (c)	(%) (d)	(%) (c + d)
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Consult: Major change issues	5	2	61	28	66	31	90	42	59	27	149	69	0	0	35	30	35	30	39	34	42	36	81	70
Consult: Occupational health and safety	5	2	63	29	68	32	73	34	74	34	147	68	1	1	35	30	36	31	43	37	37	32	80	69
Consult: Changes to job design and work	3	1	77	36	80	37	56	26	79	37	135	63	1	1	35	30	36	31	41	35	39	34	80	69
Quality and cost improvement	7	3	63	29	70	33	82	38	63	29	145	67	2	2	38	33	40	35	50	43	26	22	76	66
Training and skills development	6	3	70	33	76	35	63	29	76	35	139	65	0	0	36	31	36	31	47	41	33	28	80	69
Reliable customer service and delivery	28	13	75	35	103	48	54	25	58	27	112	52	8	7	34	29	42	36	49	42	25	22	74	64
The performance of the firm	17	8	42	20	59	27	74	34	82	38	156	73	5	4	25	22	30	26	62	53	24	21	86	74
Corporate planning	3	1	63	29	66	31	77	36	72	34	149	69	0	0	40	35	40	35	49	42	27	23	76	66
Market performance	4	2	65	30	69	32	77	36	69	32	146	68	0	0	38	33	38	33	54	47	24	21	78	67
Employee amenities	4	2	61	28	65	30	80	37	70	33	150	70	0	0	33	28	33	28	53	46	30	26	83	72
Major change decisions			67	31	67	31	87	41	61	28	148	69			36	31	36	31	46	40	34	29	80	69
Major policy decisions			62	29	62	29	78	36	75	35	153	71			36	31	36	31	46	40	34	29	80	69
Securing enterprise efficiency and productivity	18	8	76	35	94	44	60	28	61	28	121	56	2	2	36	31	38	33	33	28	45	39	78	67

Source: Developed for this research

The discussion now turns to the results of the exploratory factor analysis which also informs part of the discussion on RQ1.

5.4 RQ1: The Nature of HPMP Adoption

This section presents the results of the Exploratory Factor Analysis (EFA) in creating new composite variables/factors reflecting the nature of adoption of HPMP in SMEs. For the purpose of preparing the data for further analysis and hypotheses testing, Principal Components Analysis (PCA) was performed on both HPMP and SME sustainability variables as discussed in Chapter 3. However, the analysis also provides a partial answer to RQ1 regarding the nature of adoption of HPMP in SMEs. It indicates how SMEs combine HPMP practices in their usage of such practices.

A Varimax rotation (orthogonal) was used since the factors extracted were not designed to correlate (Costello & Osborne 2005). The exploratory nature of the study and the need to develop composite measures of the variables under study, justify the use of PCA. Under PCA, items were retained and used to form a composite factor if they have a minimum factor loading of .40 (Hair et al. 2006, p. 128). Based on the PCA results, Table 5.10 indicates that Bartlett's Test of Sphericity was significant for all components of HPMP and SME sustainability constructs. The Kaiser-Meyer-Olkin (KMO) values were all above 0.60 (Tabachnick & Fidell 2007).

Table 5.10 Results-based on PCA for HPMP construct

Basic Components	KMO value	Bartlett's test		Factors/Factors Extracted	Eigen - values	Variance explained	Alpha(α)
		χ^2	Sig.				
Recruitment	0.626	1066.940	.000	<ul style="list-style-type: none"> • Normative • Niche • Referrals • Internal sources • External sources 	1.257	68.848	0.62
Selection	0.667	2038.154	.000	<ul style="list-style-type: none"> • Normative Formal • Informal • Participatory • Evaluative • External Input 	1.459	65.808	0.66
Training & Development	0.825	4166.516	.000	<ul style="list-style-type: none"> • Niche • Informal • Formal • Organisational Development 	1.501	67.895	0.87
Performance Appraisal	0.722	1845.883	.000	<ul style="list-style-type: none"> • Systemic • Traditional • Training • Contemporary 	1.586	65.95	0.61
Compensation	0.672	1799.169	.000	<ul style="list-style-type: none"> • Normative • Company-wide incentives • Unit/team-based incentives • specific incentives 	1.487	67.32	0.64
Consultation	0.867	1947.494	.000	<ul style="list-style-type: none"> • Strategic • operational 	3.437	58.833	0.80

Source: Developed for this research

The following section discusses the component extractions summarised in Table 5.3 in more detail.

5.4.1 Extracting Components for the HPMP Construct

The previous section outlined the results of the PCA as applied to the overall components of HPMP. These results are now scrutinised in greater depth. Results are summarised for the six HPMP components including recruitment; selection; compensation; performance appraisal; and consultation practices.

5.4.1.1 Recruitment

The *Recruitment* component consisted of 24 items. Based on the PCA results, eight Factors with a total variance of 64.84% were extracted with Eigen values greater than 1. However, the scree plot test suggested a five factor solution for this data set. The factor loadings (based on a rotated factor matrix) resulted in five interpretable Factors.

Factor 1 accounted for 16.11% of the variance. The items with a loading above 0.4 on this component were ‘Job analysis, ‘Role specification’, ‘Written job description/specification’ and ‘Newspaper advertising’. Based on the frequency of these practices by the respondent SMEs, it was decided to label this factor ‘Normative’ since most of firms employed these practices. Factor 2 accounted for 9.79% of the variance. Items loaded on this component were ‘Direct mail’, and ‘Internet recruitment’. Based on the adoption of these practices by respondent firms, it was decided to label this Factor ‘Niche’ since such practices were marginally used by respondent SMEs but these practices can be regarded as more specialist in nature within the Pakistani context .

Factor 3 accounted for 8.00% of the variance. The items loading on this factor were ‘Referral by employees’, and ‘Referral from other sources’. Based on the theme ‘referral’ in these items, it was decided to label this factor ‘Referrals’. Factor 4 accounted for 7.38%. The items loaded on this factor were ‘Job analysis computer software’ and ‘Internal data base search for internal applicants’. It was decided to label this factor ‘Internal sources’. Factor 5 accounted for 6.615 %. Items loading on this factor were ‘Advertising via bulletin board/newsletter’ and ‘Recruitment consultants’. It was decided to label this factor ‘External sources’. Finally, the remaining three factors accounted for 16% of the variance. These factors had items with cross loadings and it was decided not to interpret these factors.

The descriptive statistics after the PCA was conducted. Normative practices such as Job analysis was highly adopted, while role specification, written job description and newspaper advertising were moderately adopted. Niche practices such as Internet recruitment and direct mail had low level of adoption while Referral practices such as referral by employees and referral from other sources were highly adopted. Both

internal and external sources practices such as Job analysis computer software, internal data base search for internal applicants, advertising via bulletin board/newsletter and recruitment consultant also had low level of adoption.

5.4.1.2 Selection

The *Selection* component comprised 18 items. Based on the PCA results, six factors with a total variance of 65.808% were extracted with an Eigen value greater than 1. The scree plot test suggested a four factors solution for this data set. The factor loading (based on the rotated factor matrix) resulted in four interpretable factors.

Factor 1 accounted for 21.108% of the variance. The items with loadings above 0.4 on this factor were ‘Application forms’, ‘Structured interviews’, ‘Panel interviews’, and ‘Behaviourally-based interviews’. Based upon the usage and nature of these practices by the respondent SMEs, it was decided to label this factor ‘Normative Formal’. These practices are formal in nature and most of firms were using these practices. Factor 2 accounted for 14.011% of the variance. Items loading on this factor were ‘One-on-one interviews’ and ‘Unstructured interviews’. Based on the practices employed by respondent firms, it was decided to label this factor ‘Informal’ since such practices were informal in nature. Factor 3 accounted for 9.50% of the variance. The items loading on this factor were ‘Work samples’, ‘Written reference checks’, ‘Verbal (telephone) reference checks’, ‘Other managers/employees have input in selection design’, ‘Line manager makes selection decision’, and ‘Assessment centre’. It was decided to label this Factor ‘Participatory-Evaluative’ since these practices include participation of others in the selection process and they are evaluative in nature. Factor 4 accounted for 8.108%. The items loading on this factor were ‘Psychological tests’, ‘Other managers have input in final selection design’, and ‘External consultant have input in the final selection decision’. Based on the pattern of results, it was decided to label this Factor ‘External Input’ since other managers or consultants have an input in the decision making process. Finally, the remaining two Factors accounted for 13% of the variance. These Factors had items with cross loadings and it was decided not to include these Factors in further analysis.

The descriptive statistics after the PCA was conducted. Normative Formal practices such as application forms, structured interviews and panel were moderately adopted

while behaviourally-based interviews had low level of adoption. Informal practices such as one-on-one interviews and unstructured interviews were highly adopted. Participatory-evaluative practices such as work samples and line manager makes selection decision were moderately adopted while written and verbal reference check, assessment centre and other managers/employee have input in selection design had low level of adoption. All External input practices such as Psychological tests, other employees have an input in final selection decision and input of external consultant in final selection decision also had low level of adoption.

5.4.1.3 Training and Development

The *Training and Development* component consisted of 23 items. Six factors with a total variance of 67.895% were extracted with an Eigen value greater than 1. The scree plot results suggested four factors solution for this data set. The factor loadings (based on rotated factor matrix) resulted in four interpretable Factors.

Factor 1 accounted for 30.61% of the variance. The items with a loading above 0.4 on this factor were ‘Training of a vocational or technical nature’ ‘Provision of formal mentoring’ ‘Formal in-house training provided by own staff’, ‘Evaluate the satisfaction of trainees regarding training programs’, ‘Evaluate the results of training’, ‘Utilise web-based learning’, ‘Management values learning as long as it's related to performance’, and ‘Provide computer-based/aided instruction/training’. Based on the marginal use of these practices and the fact that these practices can be regarded as more specialist by the respondent SMEs, it was decided to label this Factor ‘Niche’ practices. Factor 2 accounted for 11.54% of the variance. Items loading on this factor were ‘Does your business provide any kind of training’, ‘Conduct an informal training needs analysis’, ‘Does your provide informal on-the-job training’, and ‘Provision of informal mentoring’. Based on the informal nature of such practices, it was decided to label this factor ‘Informal’. Factor 3 accounted for 9.30% of the variance. The items loading on this factor were ‘Conduct a formal training needs analysis’, ‘Does your business have a formal training budget’, and ‘Formal individual development plans for employees’. Based on the pattern of results, it was decided to label this factor ‘Formal’ owing to the formal nature of these practices. Factor 4 accounted for 6.52%. The items loaded on this Factor were ‘Management and development training’, ‘Introduced new career paths’, ‘Has your

business increased training where a program previously existed’, and ‘Introduced formal training where none previously existed’. Based on the nature of practices, it was decided to label this factor ‘Organisational Development’. Finally, factors 5 and 6 accounted for 10% of the variance. These factors had items with cross loadings and it was decided not to include these factors.

The descriptive statistics after the PCA was conducted (see Appendix E). All Niche practices such as vocational training, formal mentoring, computer-based training, evaluation of satisfaction of trainees, evaluation of results of training, web-based learning, management values learning related to performance, and formal in house training by own staff had a low level of adoption. Informal practices such as informal training need analysis, informal on the job training and informal mentoring were moderately adopted. All Formal practices such as formal need analysis, formal training budget, formal individual development plan had a low level of adoption. All Organisational Development practices (management and development training, introduction of new formal training, increasing training programs, new career paths) also had low level of adoption.

5.4.1.4 Performance Appraisal

The *Performance Appraisal* component comprised 17 items. Based on PCA results, five factors with total variance of 65.95% were extracted with an Eigen value greater than 1. The scree plot test results suggested a four factors solution for this data set. The rotated factor matrix also resulted in four interpretable factors .

Factor 1 accounted for 24.12% of the variance. The item loadings above 0.4 on this factor were ‘360 degree appraisal’, ‘PA system links individual performance to business unit or company strategy’, ‘Formal mentoring is used as part of the PA system’, ‘Informal mentoring is use as part of the PA system’ and ‘Do appraises receive formal feedback on their PA’. Because of the combined focus from mentoring through to linkages to company strategy it was decided to label this factor ‘Systemic’. These practices show a common focus from company strategy to mentoring. Factor 2 accounted for 13.87% of the variance. Items loading on this factor were ‘Performance is rated on a rating scale’, ‘Critical incidents’, ‘Ranking’, and ‘Narrative essay’. Based on the nature of these practices, it was decided to label

this Factor 'Traditional'. These practices typically represent PA practices traditionally used. Factor 3 accounted for 11.05% of the variance. The items loading on this factor were 'Provide training to managers who appraise performance', and 'Provide training to employees who receive PA'. Based upon the nature of these practices, it was decided to label this factor 'training'. Factor 4 accounted for 9.91%. The items loading on this factor were 'Management by objectives', 'Assessment centre', and 'Balanced score card approach'. It was decided to label this factor 'Contemporary' since these practices tend to represent more recent approaches to PA. Finally, the last factor accounted for 7% of the variance. This factor had cross loading items and hence it was decided not to include this factor.

The descriptive statistics after the PCA was conducted. Systemic practices such as 360 degree appraisal and informal mentoring used as part of PA system were moderately adopted while PA links individual performance to business unit or company strategy, the use of formal mentoring in PA system, formal feedback received by appraisees had low level of adoption. Traditional practices such as narrative essays and ranking were moderately adopted while rating scale and critical incidents had low level of adoption. Moreover, PA training practices such as training to managers and employees linked to the PA system had low level of adoption. Finally, contemporary practices such management by objectives was moderately adopted. However, assessment centre and balance score card approach had low level of adoption.

5.4.1.5 Compensation

The Compensation component consisted of 20 items. The extraction process resulted in seven factors with a total variance of 67.32% and with an Eigen value greater than 1. The scree plot results proposed a four factors solution for this data set. The items loaded on the factor matrix also resulted in four interpretable Factors .

Factor 1 accounted for 17.05% of the variance. The loaded items on this Factor were 'Pay based on performance', 'Market competitive wages', 'Pay based on acquired skills', 'Flexible salary packaging', and 'Pay base on seniority'. It was decided to label this Factor 'Normative' since these practices were adopted by most of respondent firms . Factor 2 accounted for 14.83% of the variance. Items loading on

this factor were, 'Incentive compensation pay (pay based on performance of the company)', 'Bonus plan', and 'Profit sharing/gain sharing schemes'. Based on the nature of these practices, it was decided to label this factor 'Company-wide Incentives'. Factor 3 accounted for 10.35% of the variance. The items loading on this factor were 'Group/team incentive programs', 'Incentive compensation', 'Commission plan', and 'Pay based on performance of business unit'. It was decided to label this factor 'Unit/ Team-based Incentives' since these practices tend to be based upon unit/team performance. Factor 4 accounted for 7.82%. The items loaded on this factor were 'Individual incentive program', and 'Project team incentive plan'. It was decided to label this factor 'Specific Incentives'. Finally, the last three factors accounted for 17% of the variance. These factors had items with cross loadings and it was decided not to include these factors.

The descriptive statistics after the PCA was conducted. Almost all Normative practices (pay based on performance, market competitive wages, pay based on acquired skills, pay based on seniority) were highly adopted. Unit/team-based incentive practices such as group/team incentive program and commission plan were moderately adopted while incentive compensation and pay based in performance of business unit has low level of adoption. Most of Company-wide incentives (incentive compensation pay, profit sharing scheme) had low level of adoption. However, bonus plan was moderately adopted. Moreover, all specific practices such as individual incentive program and project team incentives plan had low level of adoption.

5.4.1.6 Consultation

The Consultation component comprised 14 items. Based on PCA results, two factors were extracted with total variance of 58.83% and with an Eigen value greater than . The scree plot results proposed two factors solution for this data set. The factor matrix also produced two interpretable factors.

Factor 1 accounted for 32.391% of the variance. The items with loadings above 0.4 on this factor were 'Major organisational change issues', 'The performance of the firm', 'Corporate Planning', 'Major change decisions', and 'Major policy decisions'. Based on the nature of these practices, it was decided to label this factor 'Strategic'

since these practices were related to consultation of employees in major strategic change decisions. Factor 2 accounted for 26.442% of the variance. Items loading on this factor were ‘Changes to job design and work organisation’, ‘Quality and cost improvement’, ‘Training and skills development’, ‘Reliable customer service and delivery’, ‘Market performance’, ‘Employee amenities’, and ‘Securing enterprise efficiency and productivity’. Since these issues have to do with consultation on operational issues, it was decided to label this factor ‘Operational’.

A low level of consultation on operational and strategic issues is evident (see Appendix E). Using the typology of McDonald and Wiesner (2000) it seems that respondents tend to be exclusionist in relation to all consultation issues. McDonald and Wiesner (2000, p. 8) defined ‘exclusionist’ as ‘An ‘exclusionist’, or non-consultative, management style applies to managers who use managerial authority and direction in decision-making without employee input or unilaterally initiate and implement change’.

5.4.2 Extracting Components for the Sustainability Outcomes Construct

The sustainability outcomes construct comprised three components including: Financial Sustainability Outcomes, Market-based Sustainability Outcomes and Human Resource (HR) Sustainability Outcomes (see Table 5.11). Financial and Market-based Sustainability Outcomes are used as independent SME Sustainability Outcome variables, while HR Sustainability Outcomes are used as a mediating variable in further analysis.

Table 5.11 indicates that the Bartlett’s Test of Sphericity was significant for all components of the SME sustainability constructs. The Kaiser-Meyer-Olkin (KMO) values were all above 0.60 (Tabachnick & Fidell 2007).

Table 5.11 Results-based on PCA for SME Sustainability Outcomes and HR sustainability outcomes

Basic Components	KMO	Bartlett's test		Components extracted	Eigen-values	Variance explained	Alpha (α)
		χ^2	Sig.				
Financial sustainability Outcomes	0.700	206.437	.000	Financial sustainability Outcomes	2.047	51.164	0.68
Market-based sustainability Outcomes(MBS)	0.679	241.515	.000	Market-based sustainability Outcomes	2.012	67.067	0.75
HR sustainability Outcomes	0.749	238.139	.000	HR sustainability Outcomes	2.169	54.220	0.71

Source: Developed for this research

The following sections examine the sustainability outcomes factors to a greater extent.

5.4.2.1 Financial Sustainability Outcomes

The Financial sustainability component consisted of 4 items. The extraction process resulted in one factor with a total variance of 59.82% and with an eigen value greater than 1. The scree plot results proposed only one factor/Factor solution for this data set. The items loading on the component matrix also resulted in one interpretable Factor. The rotation process failed since only one factor could be extracted. The items loaded on this factor were 'Annual revenue growth', 'Return on sales', 'Return on equity', and 'Liquidity soundness'. Based on nature of items, it was decided to label this component 'Financial Sustainability' since all these items relate to the financial performance of the firm.

5.4.2.2 Market-based Sustainability Outcomes

The Market-based sustainability component comprised 3 items. Only one Factor/Factor was extracted with a total variance of 59.18% and with an Eigen value greater than 1. The results of scree plot suggested only one factor solution for this data set. The component matrix also resulted in one interpretable Factor. The rotation process was not possible since only one factor could be extracted. The items loading on this factor were 'Customer satisfaction', 'Quality of products/services', and 'Market share change'. It was decided to label this component 'Market-based sustainability'.

5.4.2.2 HR Sustainability Outcomes

The HR sustainability component consisted of 4 items. Only one factor was extracted with a total variance of 57.05% and with an eigen value greater than 1. The scree plot test results proposed only one factor/Factor solution for this data set. The component matrix also resulted in one interpretable Factor. The rotation process failed since one factor could be extracted. The items loaded on this factor were ‘employee commitment’, ‘employee turnover’, ‘job satisfaction’, and ‘skill development’.

The next section analyses the relationship between Key Firm Characteristics and Prevalence of HPMP in Pakistani SMEs.

5.5 The Extent to which Firm Size, Industry Type, Strategic Planning, and Presence of HR Manager, relate to the prevalence of HPMP in Pakistani SMEs

This section is used to analyse the data relevant to RQ2: To what extent do firm size, strategic planning, industry type, and the presence of a HR manager, relate to the prevalence of HPMP in Pakistani SME? For this purpose, an independent sample t-test was conducted to compare the adoption of HPMP in each subgroup of firm size (small and medium), industry type (manufacturing and services), existence of a strategic planning (yes and no), and the presence of a HR manager (yes, no) in SMEs. The results shown in the Tables below provide the Mean (M), Standard Deviation (S.D), Standard Error Mean, t statistics, and its significance. The following section presents the results regarding the relationship between firm size and HPMP, followed by relationship between industry type and HPMP, relationship between strategic planning and HPMP and then the relationship between presence of a HR manager and HPMP. Several hypotheses and sub-hypotheses are also tested.

5.5.1 The Relationship between Firm Size and HPMP

An independent sample-test was conducted to compare the prevalence of HPMP between small and medium-size firms. The hypothesis, H_1 : *Firm size is positively associated with the prevalence of HPMP*, has been developed to test this relationship. The results are presented in Table 5.12.

It is clear from Table 5.12 that there is no significant difference between small and medium firms regarding the use of the composite *Recruitment practices* (Normative, Niche, Referrals, Internal sources and External sources). Therefore, the sub-hypothesis: H_{1a} : *Medium-sized firms are more likely to use Recruitment practices than small firms in SMEs*, is not supported.

Regarding the use of the composite *Selection practices*, there was a significant difference between small and medium firms regarding only two practices. Normative formal practices were used significantly more in medium firms than small firms ($p < .01$), however small firms employed informal selection practices to a significantly greater extent than medium firms ($p < .05$). Therefore, the sub-hypothesis, H_{1b} : *Firm size is positively associated with the Selection practices*, is only partially supported.

Table 5.27 shows that in relation to *Training and Development*, organisational development practices are employed significantly more in medium firms than small firms ($p < .05$). No significant differences were found regarding the other composite *Training and Development* practices. In view of this finding, the sub-hypothesis, H_{1c} : *Firm size is positively associated with the Training and Development practices*, is only partially supported.

The results showed that small and medium firms did not differ regarding their use of any of the performance appraisal practices. Therefore, the sub-hypothesis, H_{1d} : *Firm size is positively associated with the Performance Appraisal practices*, is not supported.

In relation to *Compensation practices*, normative compensation practices are used to a significantly greater extent in medium firms than small firms ($p < .01$). However medium firms employed specific incentive practices to a significantly greater extent than small firms ($p < 0.1$). No significant difference was found regarding the other compensation practices. Therefore, the sub-hypothesis, H_{1e} : *Firm size is positively associated with the Compensation practices*, is only partially supported.

Similarly there is no significant difference between the extent to which small and medium firms consult their employees. However, small firms employed operational practices to a significantly greater extent than medium firms ($p < 0.1$). In view of this finding, H_{1f} : *Firm size is positively associated with the degree of Consultation of employees*, is only partially supported.

Based upon the discussion above, the hypothesis H_1 : *Firm size is positively associated with the prevalence of HPMP*, is partially supported.

5.5.2 The Relationship between Industry Type and HPMP

An independent sample-test was conducted to compare the prevalence of HPMP between manufacturing and services-based firms. The comparative analysis was made for each component of HPMP. The hypothesis, H_2 : *Service-based SMEs adopt HPMP to a significantly greater extent than manufacturing SMEs*, is tested in this section.

It is clear from Table 5.12 that the prevalence of all composite *Recruitment practices* were significantly greater in services-based firms compared to manufacturing firms ($p < .01$). Therefore, the sub-hypothesis H_{2a} : *Service-based SMEs adopt Recruitment practices to a significantly greater extent than manufacturing SMEs*, is supported.

Regarding *Selection*, three of the four composite practices were employed significantly more in service-based firms compared to manufacturing firms (Normative formal practices, Participative-evaluative practices, External input practices) ($p < .01$). However, manufacturing and services-based firms showed no significant difference between the use of Informal selection ($p > 0.1$) (see Table 5.12). In view of this finding, the sub-hypothesis, H_{2b} : *Service-based SMEs adopt selection practices to a significantly greater extent than manufacturing SMEs*, is partially supported.

As evident from Table 5.12, all *Training and Development* practices were employed to a significantly greater extent in services-based firms compared to manufacturing firms ($p < .01$). The sub-hypothesis, H_{2c} : *Service-based SMEs adopt Training and*

Development practices to a significantly greater extent than manufacturing SMEs, is therefore supported.

Three of the four *Performance Appraisal (PA)* composite practices were significantly more prevalent in services-based firms compared to manufacturing firms (Systemic PA practices, Contemporary PA practices and PA Training practices). However, there is no significant difference between small and medium firms regarding their use of Traditional PA practices ($p > 0.1$). In view of this finding, the sub-hypothesis, H_{2d} : *Service-based SMEs adopt performance appraisal practices to a significantly greater extent than manufacturing SMEs, is partially supported.*

All composite *Compensation practices* were significantly more prevalent in service-based firms ($p < .01$). The sub-hypothesis, H_{2e} : *Service-based SMEs adopt compensation practices to a significantly greater extent than manufacturing SMEs, is therefore supported.*

Regarding employee *Consultation*, services-based SMEs consult their employees significantly more on both strategic and operational issues ($p < .01$). The sub-hypothesis, H_{2f} : *Service-based SMEs consult employees to a significantly greater extent than manufacturing SMEs, is therefore supported.*

Based on the discussion above, the hypothesis, H_2 : *Service-based SMEs adopt HPMP to a significantly greater extent than manufacturing SMEs, is partially supported.*

5.5.3 The Relationship between Strategic Planning and HPMP

This section presents the results regarding the relationship between strategic planning and components of HPMP. An independent sample-test was conducted to determine whether SMEs with a strategic plan differ from SMEs without a strategic plan. The hypothesis, H_3 : *SMEs with a strategic planning adopt HPMP to a significantly greater extent than those SMEs without a strategic plan*, is tested in this section. The results are summarised in Table 5.12.

The results regarding the prevalence of the *Recruitment* component indicate that firms with a strategic plan compared to firms without a strategic plan, do not significantly differ with regard to any of the recruitment components ($p > 0.1$). In view of this result, H_{3a} : *SMEs with a strategic planning adopt Recruitment practices to a significantly greater extent than those SMEs without a strategic*, is not supported (see Table 5.12).

With regard to the *Selection* components, firms with a strategic plan use Normative selection practices to a significantly greater extent than those firms without a strategic plan ($p < .01$). However, with regard Informal selection, and Participatory-evaluative practices firms without a strategic plan use these practices significantly more ($p < .05$, $p < 0.1$). Both firms with and without a strategic plan showed no significant differences in their use of External input practices planning ($p > 0.1$). Therefore, H_{3b} : *SMEs with a strategic planning adopt Selection practices to a significantly greater extent than those SMEs without a strategic plan*, is partially supported.

Interestingly, the opposite is true for the adoption of Informal *Training and Development practices*. Firms with a strategic plan use these practices to a greater extent than firms with no strategic plan ($p < .05$). However, firms with strategic planning employed Organisational development practices to significantly greater extent than firms without strategic planning ($p < 0.1$). Firms with and without a strategic plan employed Niche and Formal, practices to a similar extent (see Table 5.12). In view of these results, H_{3c} : *SMEs with a strategic planning adopt Training*

and Development practices to a significantly greater extent than those SMEs without a strategic plan, is only partially supported.

In relation to the *Performance Appraisal components*, firms with a strategic plan used Traditional performance appraisal and performance appraisal training practices to a significantly greater extent than firms without a strategic planning ($p < .05$). However, the use of Systemic and Contemporary performance appraisal practices were not significantly different in firms with a strategic plan as opposed to firms without a strategic plan ($p > 0.1$). Therefore, H_{3d} : *SMEs with a strategic planning adopt Performance Appraisal practices to a significantly greater extent than those SMEs without a strategic plan, is partially supported.*

With regard to the *Compensation components*, firms with no strategic plan used Company-wide incentive practices to a significantly greater extent than firms with a strategic plan ($p < .01$). Conversely, specific incentive practices were significantly more prevalent in firms with a strategic plan as opposed to firms with no strategic plan ($p < .05$). No difference was found in the use of Normative and Team-based incentive practices in firms with or without a strategic plan ($p > 0.1$). Therefore, H_{3e} : *SMEs with a strategic planning adopt Compensation practices to a significantly greater extent than those SMEs without a strategic plan, is only partially supported.*

It is evident from Table 5.12 that firms with a strategic plan and firms without strategic plan did not differ significantly with regard to the degree to which they consult their employees on strategic or operational issues ($p > 0.1$). In view of this result, H_{3f} : *SMEs with a strategic plan consult employees to a significantly greater extent than SMEs without a strategic plan, is not supported.*

Based on the discussion above, the hypothesis, H_3 : *SMEs with a strategic planning adopt HPMP to a significantly greater extent than those SMEs without a strategic plan, is only partially supported.*

5.5.4 The Relationship between Presence of A HR Manager and HPMP

An independent sample t-test was used to compare the prevalence of HPMP between firms with HR manger and firms without HR manager. The comparative analysis was once again made for each component of HPMP. The sub-hypothesis, H_4 : *SMEs with a HR manager adopt HPMP to a significantly greater extent than those SMEs without a HR manager*, is tested in this section. The results are summarised in Table 5.12.

With regard to the *Recruitment* components, firms with HR manager tended to use Normative and Niche practices significantly more than those firms without a HR manager ($p < .01$, $p < 0.1$). However, the presence of a HR manager had no significant impact on the use of the other recruitment practices ($p > 0.1$). Therefore, the sub-hypothesis, H_{4a} : *SMEs with a HR manager adopt Recruitment practices to a significantly greater extent than those SMEs without a HR manager*, is only partially supported.

In relation to the *Selection* components, firms with a HR manager employed Normative formal selection practices and Participatory-evaluative practices, significantly more than firms without a HR manager ($p < .01$). However, firms without a HR manger employed Informal practices to a significantly greater extent than firms with a HR manager ($p < 0.1$); the presence of a HR manager showed no significant impact upon the use of External input selection practices. Therefore, the sub-hypothesis, H_{4b} : *SMEs with a HR manager adopt selection practices to a significantly greater extent than those SMEs without a HR manager*, is only partially supported.

All *Training and Development* practices were significantly more prevalent in firms with a HR manager including Niche practices, Informal practices, Formal practices and Organisational development practices ($p < .01$). In view of this finding, the sub-hypothesis, H_{4c} : *SMEs with a HR manager adopt training and development practices to a significantly greater extent than those SMEs without a HR manager*, is supported.

Three of the *Performance Appraisal* were employed to a significantly greater extent in firms with a HR manager than those without a HR manager (Systemic practices, Contemporary practices and Performance Appraisal Training practices ($p < .05$). However, the presence of HR manager had no significant impact upon Traditional performance practices ($p > 0.1$). Therefore, the sub-hypothesis, H_{4d} : *SMEs with a HR manager adopt performance appraisal practices to a significantly greater extent than those SMEs without a HR manager*, is only partially supported.

With regard to the *Compensation* components, the presence of a HR manager had a significant positive impact upon the adoption of Company-wide incentive practices, Team-based incentive practices and Specific incentive practices ($p < .01$). However, Normative practices were used significantly more in firms without a HR manager ($p < .01$). Therefore, the sub-hypothesis H_{4e} : *SMEs with a HR manager adopt compensation practices to a significantly greater extent than those SMEs without a HR manager*, is only partially supported.

In relation to the degree that SMEs consult with their employees, the presence of HR manager had a significant positive impact upon consultation with staff on both strategic and operational issues ($p < .05$). In view of this finding, the sub-hypothesis, H_{4f} : *SMEs with a HR manager consult employees to a significantly greater extent than SMEs without a HR manager*, is supported.

In view of the discussion above, H_4 : *SMEs with a HR manager adopt HPMP to a significantly greater extent than those SMEs without a HR manager*, is only partially supported.

Table 5.12 Relationship between Firm Size, Industry type, strategic planning, presence of HR manager and HPMP

HPMP Component	Factor	Firm Size					Industry Type					Strategic Planning					Presence of a HRmanager				
		Small		Medium		t	Manufacturing		Services		t	Yes		No		t	Yes		No		t
		N = 215		N = 116			N = 237		N = 94			N = 299		N = 32			N = 203		N = 128		
		Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
Recruitment	Normative	1.852	0.494	1.819	0.481	0.587	1.670	0.374	2.270	0.483	12.076***	1.840	0.498	1.850	0.400	0.116	1.910	0.505	1.730	0.442	3.322***
	Niche	1.814	0.332	1.797	0.336	0.431	1.770	0.320	1.904	0.346	3.359***	1.808	0.339	1.813	0.277	0.078	1.835	0.335	1.766	0.326	1.853*
	Referrals	1.893	0.396	1.858	0.348	0.806	1.840	0.312	1.984	0.500	3.163***	1.873	0.336	1.953	0.664	1.137	1.887	0.422	1.871	0.303	0.364
	Internal sources	1.142	0.305	1.177	0.369	0.921	1.103	0.228	1.282	0.478	4.59***	1.162	0.340	1.078	0.184	1.377	1.172	0.372	1.125	0.243	1.279
	External sources	1.067	0.197	1.060	0.200	0.312	1.044	0.142	1.117	0.288	3.061***	1.070	0.205	1.016	0.088	1.490	1.067	0.215	1.063	0.166	0.179
Selection	Normative Formal	1.463	0.465	1.627	0.427	3.155***	1.439	0.408	1.726	0.512	5.354***	1.543	0.461	1.313	0.376	2.726***	1.656	0.453	1.305	0.378	7.322***
	Informal	2.186	0.514	2.056	0.506	2.208**	2.118	0.507	2.197	0.530	1.256	2.117	0.508	2.359	0.527	2.555**	2.101	0.473	2.203	0.570	1.766*
	Participatory-Evaluative	1.341	0.417	1.306	0.324	0.786	1.193	0.191	1.672	0.522	12.241***	1.316	0.350	1.453	0.633	1.92*	1.438	0.436	1.156	0.194	6.880***
	External Input	1.023	0.159	1.026	0.111	0.157	1.011	0.072	1.059	0.242	2.767***	1.027	0.151	1.000	0.000	1.002	1.030	0.170	1.016	0.087	0.859
Training & Development	Niche	1.206	0.328	1.228	0.368	0.565	1.111	0.179	1.473	0.489	9.87***	1.213	0.336	1.222	0.403	0.152	1.287	0.399	1.096	0.169	5.132***
	Informal	1.608	0.481	1.580	0.443	0.526	1.490	0.462	1.872	0.359	7.218***	1.620	0.460	1.398	0.495	2.563**	1.664	0.443	1.494	0.489	3.260***
	Formal	1.051	0.201	1.049	0.154	0.108	1.035	0.148	1.089	0.255	2.379**	1.055	0.194	1.010	0.059	1.281	1.069	0.217	1.021	0.116	2.311**
	Organisational Development	1.072	0.183	1.119	0.237	1.985**	1.061	0.164	1.157	0.269	3.934***	1.095	0.211	1.023	0.098	1.902*	1.112	0.224	1.051	0.161	2.687***
Performance Appraisal	Systemic	1.286	0.295	1.286	0.260	0.019	1.202	0.176	1.498	0.376	9.744***	1.279	0.274	1.350	0.356	1.354	1.352	0.319	1.181	0.167	5.583***
	Traditional	1.333	0.387	1.330	0.296	0.068	1.333	0.322	1.327	0.435	0.142	1.348	0.365	1.180	0.231	2.55**	1.337	0.347	1.322	0.374	0.376
	Contemporary	1.188	0.215	1.190	0.229	0.081	1.151	0.180	1.284	0.276	5.614***	1.194	0.222	1.135	0.187	1.435	1.209	0.241	1.156	0.177	2.120**
	Training	1.202	0.377	1.177	0.374	0.591	1.154	0.351	1.293	0.417	3.062***	1.209	0.387	1.047	0.195	2.335**	1.229	0.399	1.138	0.330	2.189**
Compensation	Normative	2.482	0.396	2.266	0.480	4.392***	2.298	0.463	2.679	0.188	7.719***	2.395	0.445	2.506	0.373	1.360	2.334	0.452	2.520	0.393	3.836***
	Companywide incentive	1.372	0.542	1.356	0.465	0.265	1.162	0.235	1.883	0.653	14.779***	1.338	0.471	1.635	0.787	3.145***	1.499	0.577	1.156	0.299	6.220***
	Team-based Incentive	1.226	0.278	1.257	0.258	0.988	1.198	0.216	1.332	0.360	4.153***	1.243	0.270	1.180	0.278	1.245	1.266	0.276	1.190	0.258	2.519**
	Specific Incentive	1.074	0.230	1.125	0.286	1.748*	1.061	0.194	1.170	0.348	3.615***	1.102	0.263	1.000	0.000	2.19**	1.126	0.291	1.039	0.161	3.083***
Consultation	Strategic	1.321	0.381	1.314	0.353	0.167	1.230	0.323	1.540	0.393	7.391***	1.316	0.368	1.338	0.405	0.305	1.354	0.386	1.263	0.340	2.190**
	operational	1.407	0.372	1.337	0.331	1.691*	1.280	0.297	1.641	0.372	9.249***	1.388	0.362	1.332	0.328	0.838	1.427	0.384	1.313	0.303	2.851***

*** $p < .01$, ** $p < .05$, * $p < 0.1$

S.D = Standard Deviation

5.5.5 Hypothesis Testing: Summary

Hypotheses (4 main and 24 sub hypotheses) were formulated to analyse RQ2: To what extent do firm size, strategic planning, industry type, and the presence of a HR manager, relate to the prevalence of HPMP in Pakistani SME? Based on the foregoing results (Table 5.12), the following outcomes were obtained for hypothesis testing.

Overall all four main hypotheses: H_1 : *Firm size is positively associated with the prevalence of HPMP*; H_2 : *Service-based SMEs adopt HPMP to a significantly greater extent than manufacturing SMEs*; H_3 : *SMEs with a strategic planning adopt HPMP to a significantly greater extent than those SMEs without a strategic plan*; H_4 : *SMEs with a HR manager adopt HPMP to a significantly greater extent than those SMEs without a HR manager* were only partially supported.

However the analysis provided support for the several sub-hypotheses, including:

H_{2a} : *Service-based SMEs adopt Recruitment practices to a significantly greater extent than manufacturing SMEs*

H_{2c} : *Service-based SMEs adopt Training and Development practices to a significantly greater extent than manufacturing SMEs*

H_{2e} : *Service-based SMEs adopt Compensation practices to a significantly greater extent than manufacturing SMEs*

H_{2f} : *Service-based SMEs Consult employees to a significantly greater extent than manufacturing SMEs*

H_{4c} : *SMEs with a HR manager adopt Training and Development practices to a significantly greater extent than those SMEs without a HR manager*

H_{4f} : *SMEs with a HR manager Consult employees to a significantly greater extent than SMEs without a HR manager.*

The following sub-hypotheses were only partially supported by the analysis:

H_{1b} : *Firm size is positively associated with the Selection practices, is only partially supported*

H_{1c} : *Medium-sized firms are more likely to use Training and Developmen practices than small firms*

H_{1e} : *Medium-sized firms are more likely to use Compensationl practices than small firms*

H_{1f} : *Firm size is positively associated with the degree of Consultation of employees.*

H_{2b} : *Service-based SMEs adopt Selection practices to a significantly greater extent than manufacturing SMEs*

H_{2d} : *Service-based SMEs adopt Performance Appraisal practices to a significantly greater extent than manufacturing SMEs.*

H_{3b}: SMEs with a strategic planning adopt Selection practices to a significantly greater extent than those SMEs without a strategic plan.

H_{3c}: SMEs with a strategic planning adopt Training and Development practices to a significantly greater extent than those SMEs without a strategic plan.

H_{3d}: SMEs with a strategic planning adopt Performance Appraisal practices to a significantly greater extent than those SMEs without a strategic plan.

H_{3e}: SMEs with a strategic planning adopt Compensation practices to a significantly greater extent than those SMEs without a strategic plan.

H_{4a}: SMEs with a HR manager adopt Recruitment practices to a significantly greater extent than those SMEs without a HR manager.

H_{4b}: SMEs with a HR manager adopt Selection practices to a significantly greater extent than those SMEs without a HR manager.

H_{4d}: SMEs with a HR manager adopt Performance Appraisal practices to a significantly greater extent than those SMEs without a HR manager.

H_{4e}: SMEs with a HR manager adopt Compensation practices to a significantly greater extent than those SMEs without a HR manager.

The following sub-hypotheses were not supported by the analysis.

H_{1a}: Medium-sized firms are more likely to use Recruitment practices than small firms in SMEs.

H_{1d}: Medium-sized firms are more likely to use Performance Appraisal practices than small firms

H_{3a}: SMEs with a strategic planning adopt Recruitment practices to a significantly greater extent than those SMEs without a strategic

H_{3f}: SMEs with a strategic plan Consult employees to a significantly greater extent than SMEs without a strategic plan.

The next section will examine the impact of high performance management practices (HPMP) on SME Sustainability Outcomes.

5.6 The Relationship between HPMP and SME Sustainability Outcomes

This section reports the results pertaining to RQ3: Do different components of HPMP (recruitment, selection, training and development, compensation, performance appraisal and consultation) impact upon the sustainability outcomes (financial sustainability outcomes and market-based sustainability outcomes) of SMEs? For analysing this research question, Structural equation modelling (SEM) was used to examine the relationship between independent and dependent variables. Based on the data preparation (discussed in chapter 4) and the results of the exploratory factor analysis (discussed in section 5.4) all latent construct variables were entered in SmartPLS 2. The following constructs (with their codes) were used in the structural and measurement model.

- Recruitment (REC)
- Selection (SE)
- Training & Development (T&D)
- Performance appraisal (PA)
- Compensation (COM)
- Consultation (CONS)
- Financial Sustainability outcomes (FSUS)
- Market-based sustainability outcomes (MSUS)
- Normative (Recruitment) (RNOR)
- Internal sources (Recruitment) (RINT)
- Normative Formal (Selection) (SNOR)
- Participatory Evaluative (Selection) (SPART)
- Informal (Training & Development) (TINF)
- Niche (Training & Development) (TNIC)
- Organisational Development (Training & Development) (TOD)
- Contemporary (Performance Appraisal) (PACON)
- Systemic (Performance Appraisal) (PASYS)
- Company-wide incentives (Compensation) (CCOMP)
- Specific incentives (Compensation) (CSP)
- Operational (Consultation) (CONOP)
- Strategic (Operational) (CONST)

The PLS algorithm was used with the path weighting scheme and standard values in terms of iterations and abort criteria. For the purpose of using standardised model parameters, a z-transformation was applied on the data set. The Chin (2010) two phases approach was applied (as discussed in chapter 4). The first phase was approached by analysing the reliability and validity of the measurement model while the second phase was undertaken by running the structural model with standardised path coefficients, R square values, and t-statistics.

5.6.1 Model Evaluation: Measurement Model Results

As discussed above, a measurement model is assessed by its reliability and validity. In order to address the reliability and validity of the measurement model (first phase), the below Table 5.13 is designed to show the Average Variance Extracted (AVE), the composite reliability (CR), construct correlation matrix, and the square root of AVE. The results of the CR values for most of the constructs are above 0.8 showing high internal consistency among the variables of each construct. Moreover, the outer model loadings (presented in Table 5.14) are well above the accepted criteria of 0.7 indicating internal consistency of the measurement model.

The convergent validity (CV) results presented in Table 5.13 show that the AVE values for most of the constructs are above 0.5 (with the exception of few constructs showing slightly below 0.5) indicating 50 percent or more variance of the indicators. The AVE and CR values indicate that each latent construct is well represented by its indicators. However, according to Malhotra (2010, p. 734), the AVE is a more conservative measure than CR and for addressing CV a researcher may rely on CR value alone (as discussed in Chapter 4).

For assessing the discriminant validity of the measurement model, the construct correlations are calculated and compared with the square root of AVE. The results show that all constructs are highly related to their own measures than with other constructs (Chin 2010). Moreover, Table 5.14 is designed to present the outer model loadings and cross loadings of the constructs (Chin 2010). The results indicate that each item relates to its own construct (loadings) and do not have a stronger relationship with the indicators of other constructs (cross loadings).

Table 5.13 Measurement Model: Composite Reliability, Average Variance Extracted (AVE), Square roots of AVE, and Correlation Matrix

	Constructs	AVE	CR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	FSUS	0.591	0.812	0.768																				
2	CCOMP	0.682	0.811	0.237	0.825																			
3	COM	0.435	0.753	0.200	0.790	0.659																		
4	CONOP	0.624	0.892	0.273	0.186	0.169	0.789																	
5	CONS	0.441	0.825	0.325	0.227	0.193	0.678	0.664																
6	CONST	0.801	0.889	0.274	0.203	0.119	0.044	0.249	0.895															
7	CSP	0.729	0.843	0.077	0.236	0.583	0.078	0.075	0.017	0.854														
8	MSUS	0.669	0.858	0.498	0.301	0.275	0.319	0.375	0.294	0.130	0.818													
9	PA	0.471	0.814	0.345	0.522	0.492	0.295	0.333	0.208	0.250	0.400	0.687												
10	PACON	0.680	0.809	0.187	0.319	0.372	0.201	0.225	0.129	0.266	0.207	0.607	0.825											
11	PASYS	0.663	0.855	0.349	0.506	0.437	0.276	0.312	0.198	0.180	0.408	0.619	0.371	0.814										
12	REC	0.403	0.799	0.308	0.422	0.417	0.300	0.340	0.224	0.233	0.309	0.504	0.413	0.431	0.635									
13	RINT	0.669	0.801	0.142	0.324	0.351	0.194	0.200	0.046	0.229	0.119	0.381	0.341	0.312	0.681	0.818								
14	RNOR	0.522	0.813	0.318	0.369	0.351	0.282	0.329	0.261	0.181	0.329	0.444	0.351	0.387	0.528	0.359	0.723							
15	SEL	0.477	0.815	0.354	0.638	0.577	0.291	0.353	0.329	0.266	0.388	0.685	0.440	0.651	0.567	0.307	0.564	0.690						
16	SNOR	0.776	0.874	0.240	0.237	0.241	0.159	0.189	0.161	0.141	0.265	0.240	0.179	0.214	0.373	0.163	0.393	0.621	0.881					
17	SPART	0.735	0.892	0.307	0.663	0.585	0.275	0.336	0.320	0.254	0.336	0.520	0.449	0.692	0.499	0.292	0.485	0.600	0.218	0.857				
18	T&D	0.474	0.914	0.412	0.478	0.457	0.206	0.243	0.184	0.240	0.429	0.506	0.476	0.661	0.447	0.322	0.404	0.594	0.224	0.616	0.689			
19	TINF	0.816	0.930	0.310	0.307	0.281	0.260	0.295	0.190	0.133	0.389	0.430	0.256	0.422	0.326	0.180	0.323	0.456	0.191	0.461	0.624	0.903		
20	TNIC	0.621	0.919	0.361	0.492	0.459	0.177	0.206	0.144	0.228	0.376	0.633	0.508	0.680	0.424	0.320	0.375	0.583	0.211	0.609	0.637	0.485	0.788	
21	TOD	0.739	0.850	0.329	0.216	0.272	0.000	0.027	0.116	0.212	0.228	0.342	0.247	0.310	0.267	0.236	0.220	0.241	0.088	0.251	0.644	0.325	0.508	0.860

AVE = Average variance extracted

CR = Composite reliability

Table 5.14 Measurement Model: Outer Model Loadings and Cross Loadings

	RINT	RNOR	SNOR	SPART	TINF	TNIC	TOD	PASYS	PACON	CCOMP	CSP	CONST	CONOP	FSUS	MSUS
HPMP_RE 4	0.79	0.25	0.08	0.32	0.17	0.36	0.27	0.35	0.36	0.36	0.26	0.03	0.15	0.14	0.16
HPMP_RE 9	0.84	0.33	0.18	0.17	0.12	0.18	0.13	0.17	0.21	0.19	0.12	0.04	0.16	0.10	0.05
HPMP_RE 3	0.25	0.75	0.20	0.32	0.23	0.33	0.19	0.34	0.25	0.23	0.00	0.22	0.21	0.29	0.30
HPMP_RE 5	0.33	0.72	0.28	0.29	0.18	0.27	0.18	0.19	0.25	0.18	0.24	0.12	0.10	0.18	0.13
HPMP_RE 6	0.30	0.79	0.31	0.44	0.33	0.32	0.22	0.33	0.28	0.31	0.17	0.20	0.23	0.23	0.23
HPMP_RE 10	0.13	0.62	0.36	0.36	0.19	0.14	0.02	0.25	0.24	0.38	0.12	0.23	0.30	0.21	0.31
HPMP_SE 6	0.04	0.34	0.87	0.16	0.16	0.18	0.11	0.18	0.11	0.13	0.09	0.14	0.13	0.21	0.25
HPMP_SE 7	0.23	0.35	0.89	0.22	0.17	0.19	0.05	0.19	0.20	0.28	0.16	0.15	0.15	0.21	0.22
HPMP_SE 10	0.21	0.48	0.28	0.91	0.38	0.61	0.20	0.65	0.40	0.59	0.22	0.29	0.24	0.28	0.29
HPMP_SE 11	0.27	0.47	0.14	0.90	0.41	0.54	0.22	0.68	0.43	0.59	0.24	0.31	0.30	0.22	0.31
HPMP_SE 15	0.28	0.28	0.13	0.75	0.40	0.39	0.23	0.43	0.33	0.52	0.20	0.22	0.16	0.29	0.25
HPMP_TD 1	0.11	0.23	0.20	0.35	0.92	0.38	0.26	0.33	0.17	0.22	0.15	0.15	0.21	0.26	0.33
HPMP_TD 5	0.25	0.37	0.16	0.48	0.88	0.54	0.37	0.47	0.26	0.35	0.15	0.19	0.26	0.32	0.40
HPMP_TD 13	0.11	0.26	0.16	0.41	0.90	0.37	0.23	0.32	0.26	0.25	0.05	0.18	0.23	0.24	0.31
HPMP_TD 8	0.28	0.33	0.18	0.52	0.48	0.82	0.53	0.46	0.40	0.40	0.24	0.14	0.10	0.32	0.28
HPMP_TD 15	0.27	0.25	0.23	0.31	0.28	0.70	0.24	0.41	0.40	0.24	0.21	0.02	0.14	0.23	0.18
HPMP_TD 16	0.20	0.30	0.10	0.55	0.43	0.90	0.47	0.63	0.41	0.48	0.16	0.16	0.17	0.32	0.34
HPMP_TD 17	0.22	0.28	0.07	0.55	0.41	0.86	0.46	0.61	0.39	0.44	0.14	0.15	0.10	0.27	0.30
HPMP_TD 18	0.35	0.23	0.17	0.33	0.24	0.72	0.40	0.41	0.45	0.26	0.20	0.05	0.09	0.23	0.25
HPMP_TD 20	0.30	0.32	0.24	0.42	0.33	0.77	0.34	0.59	0.40	0.36	0.18	0.09	0.19	0.29	0.32
HPMP_TD 21	0.17	0.34	0.21	0.62	0.45	0.72	0.32	0.62	0.38	0.50	0.14	0.14	0.20	0.31	0.39
HPMP_TD 10	0.21	0.21	0.06	0.24	0.27	0.45	0.86	0.30	0.23	0.17	0.17	0.09	0.00	0.26	0.18
HPMP_TD 11	0.19	0.16	0.09	0.19	0.29	0.42	0.86	0.23	0.19	0.21	0.20	0.11	0.00	0.31	0.21
HPMP_PA 15	0.22	0.39	0.26	0.69	0.37	0.58	0.32	0.83	0.32	0.49	0.24	0.26	0.24	0.33	0.42
HPMP_PA 14	0.31	0.26	0.14	0.39	0.27	0.50	0.18	0.75	0.34	0.30	0.10	0.04	0.25	0.26	0.19
HPMP_PA 16	0.24	0.28	0.12	0.59	0.39	0.58	0.25	0.85	0.25	0.43	0.09	0.18	0.19	0.26	0.37
HPMP_PA 8	0.32	0.34	0.17	0.41	0.23	0.45	0.23	0.35	0.85	0.32	0.31	0.11	0.16	0.15	0.18
HPMP_PA 9	0.24	0.23	0.12	0.33	0.19	0.39	0.17	0.26	0.80	0.20	0.12	0.10	0.17	0.16	0.16
HPMP_COM 10	0.39	0.30	0.01	0.56	0.21	0.46	0.23	0.46	0.34	0.79	0.13	0.15	0.15	0.18	0.19
HPMP_COM 14	0.17	0.31	0.37	0.54	0.29	0.36	0.14	0.39	0.20	0.86	0.25	0.18	0.16	0.21	0.29
HPMP_COM 13	0.17	0.19	0.15	0.30	0.14	0.21	0.14	0.20	0.27	0.26	0.88	0.01	0.11	0.07	0.17
HPMP_COM 16	0.23	0.11	0.09	0.12	0.08	0.18	0.23	0.10	0.18	0.14	0.83	0.02	0.01	0.05	0.04
HPMP_CON 1	0.01	0.20	0.14	0.32	0.20	0.11	0.10	0.17	0.09	0.19	0.05	0.88	0.03	0.22	0.23
HPMP_CON 9	0.09	0.26	0.15	0.25	0.14	0.14	0.10	0.19	0.14	0.18	0.01	0.91	0.05	0.26	0.29
HPMP_CON 2	0.12	0.20	0.09	0.24	0.21	0.11	0.01	0.22	0.14	0.05	0.01	0.03	0.82	0.17	0.18
HPMP_CON 3	0.16	0.23	0.10	0.20	0.14	0.13	0.00	0.23	0.11	0.11	0.04	0.00	0.80	0.20	0.19
HPMP_CON 6	0.09	0.11	0.14	0.02	0.12	0.01	0.12	0.07	0.07	0.07	0.03	0.06	0.72	0.15	0.19
HPMP_CON 7	0.22	0.31	0.19	0.36	0.35	0.30	0.11	0.34	0.29	0.29	0.14	0.11	0.79	0.37	0.41
HPMP_CON 14	0.15	0.25	0.11	0.23	0.19	0.13	0.00	0.21	0.17	0.20	0.08	0.08	0.81	0.18	0.27
S_FIN 7	0.12	0.28	0.20	0.27	0.22	0.28	0.17	0.27	0.11	0.26	0.08	0.27	0.25	0.80	0.43
S_FIN 8	0.16	0.23	0.20	0.16	0.18	0.29	0.25	0.25	0.16	0.12	0.10	0.14	0.15	0.76	0.35
S_FIN 10	0.06	0.22	0.16	0.27	0.30	0.27	0.33	0.28	0.17	0.16	0.00	0.21	0.22	0.75	0.37
S_MBS 5	0.12	0.25	0.22	0.27	0.31	0.32	0.20	0.38	0.18	0.26	0.06	0.24	0.28	0.42	0.84
S_MBS 6	0.09	0.26	0.14	0.21	0.30	0.24	0.17	0.24	0.12	0.20	0.12	0.24	0.17	0.39	0.74
S_MBS 11	0.08	0.30	0.27	0.33	0.35	0.35	0.19	0.37	0.20	0.27	0.15	0.25	0.31	0.41	0.87

5.6.2 Model Evaluation: Structural Model Results

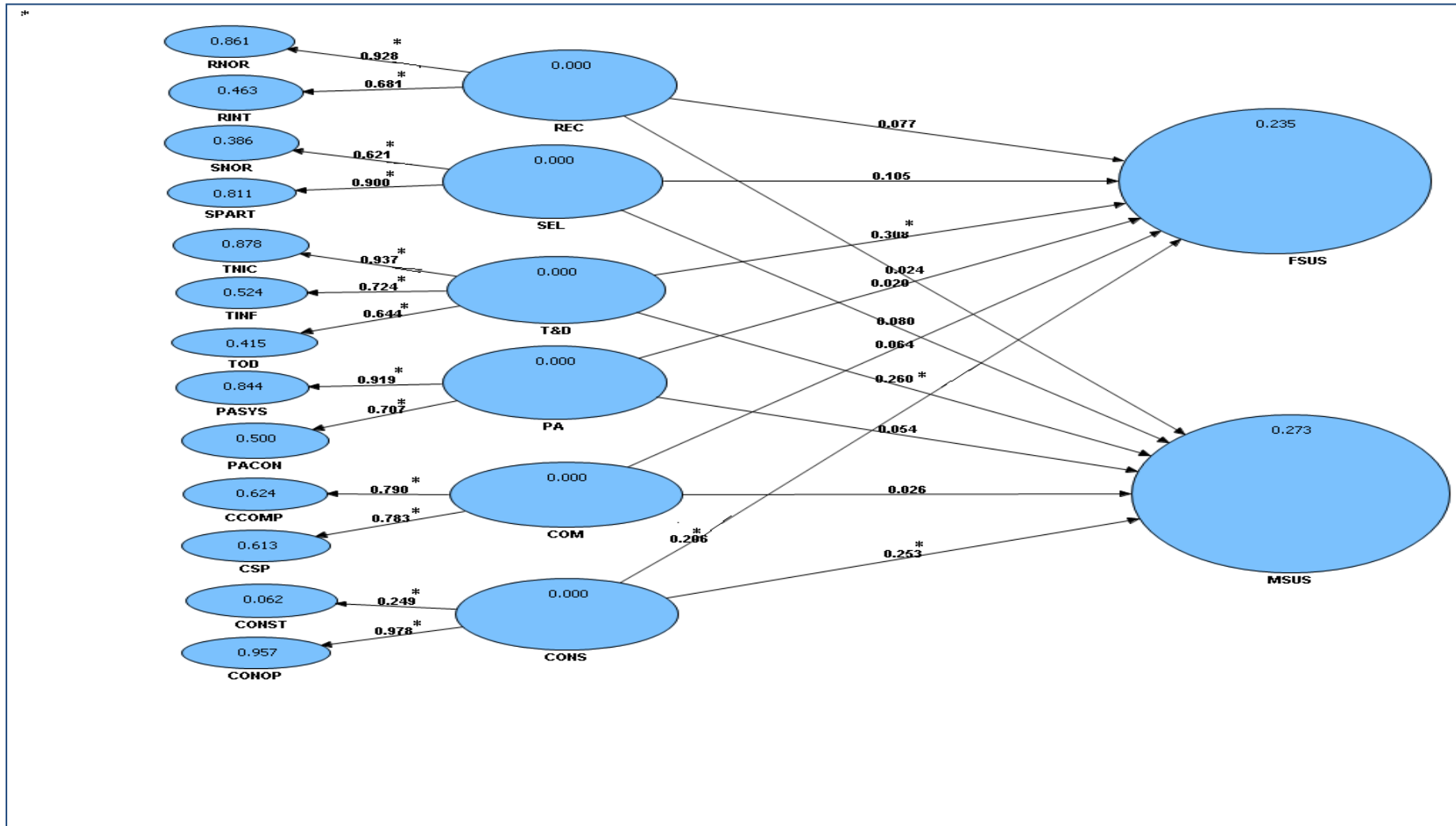
The structural model results represent the second phase of model evaluation (Chin 2010). The R-square values (explaining variance in the model) for the endogenous constructs (Financial sustainability outcomes (FSUS); Market-based sustainability outcomes (MSUS)) are shown in Table 5.15. The R^2 value for FSUS indicates 0.235 variance in the model predicted by independent latent variables (Recruitment (RE), election (SE), Training & Development (T&D), Performance Appraisal (PA), Compensation (COM) and Consultation (CONS)). The R^2 value for MSUS indicates a 0.273 variance in the model predicted by independent variables.

The significance of path coefficients (γ_p) was tested by bootstrapping. A 1000 sample is taken for 331 cases. A t-statistics was calculated for each path coefficients among the latent constructs. All first-order latent construct indicated positive significant path coefficients towards their respective second-order latent constructs at significance level $p < 0.05$. While the path coefficients from second-order latent construct to endogenous dependent variables (FSUS; MSUS) indicated mixed results. The path coefficients for T&D to FSUS and MSUS; and CONS to FSUS and MSUS indicate significant relationships at $p < 0.05$ while all second-order latent variables showed an insignificant relationship with neither FSUS or MSUS (see Table 5.15 and Figure 5.2).

Table 5.15 Measurement Model: Standardised path coefficients, Mean, standard deviation, and standard error

	Standardised Path coefficient	Sample Mean	Standard Deviation	Standard Error	t-statistics
COM -> FSUS	0.06	0.06	0.06	0.06	1.07
COM -> CCOMP	0.79	0.79	0.03	0.03	25.64***
COM -> CSP	0.78	0.78	0.05	0.05	17.14***
COM -> MSUS	0.03	0.03	0.07	0.07	0.35
CONS -> FSUS	0.21	0.21	0.05	0.05	3.96***
CONS -> CONOP	0.98	0.98	0.01	0.01	67.12***
CONS -> CONST	0.25	0.25	0.12	0.12	2.04**
CONS -> MSUS	0.25	0.25	0.05	0.05	4.71***
PA -> FSUS	0.02	0.02	0.08	0.08	0.27
PA -> MSUS	0.05	0.07	0.09	0.09	0.58
PA -> PACON	0.71	0.70	0.06	0.06	11.41***
PA -> PASYS	0.92	0.92	0.02	0.02	59.46*
REC -> FSUS	0.08	0.08	0.06	0.06	1.30
REC -> MSUS	0.02	0.03	0.07	0.07	0.34
REC -> RINT	0.68	0.68	0.05	0.05	14.76***
REC -> RNOR	0.93	0.93	0.01	0.01	97.98***
SEL -> FSUS	0.11	0.10	0.07	0.07	1.44
SEL -> MSUS	0.08	0.07	0.09	0.09	0.89
SEL -> SNOR	0.62	0.61	0.07	0.07	8.30***
SEL -> SPART	0.90	0.90	0.02	0.02	53.88***
T&D -> FSUS	0.31	0.31	0.06	0.06	4.77***
T&D -> MSUS	0.26	0.26	0.09	0.09	3.03***
T&D -> TINF	0.72	0.73	0.03	0.03	28.00*
T&D -> TNIC	0.94	0.94	0.01	0.01	102.80*
T&D -> TOD	0.64	0.65	0.06	0.06	10.20*

* : significant at p -value < 0.10 **:significant at p -value < 0.05***:significant at p -value < 0.01
 R^2 for FSUS = 0.235
 R^2 for MSUS = 0.273



* : significant at p -value < 0.05

Figure 5.2 Structural Model:, Path coefficients, Significance level, and R square values

5.6.2.1 Model Evaluation: First-order Constructs and Dependent Latent Variables

The measurement and structural model was further evaluated by examining the relationship between first-order constructs (factors of High Performance Management Practices) and individual endogenous dependent variables (Financial sustainability outcomes (FSUS) and Market-based sustainability outcomes (MSUS)). Although such analysis is not part of the hypothesis testing, the analysis could help the researcher of this study to further investigate the effect of each first-order latent construct on FSUS and MSUS. The table below presents the results for the relationship between the first-order construct and FSUS. The results indicate that SNOR (Normative Selection practices), TOD (Training organisation development practices), CONOP (Consultation operating practices) and CONST (Consultation Strategic practices) are positive significant predictors of FSUS (see Table 5.16 and Figure 5.3).

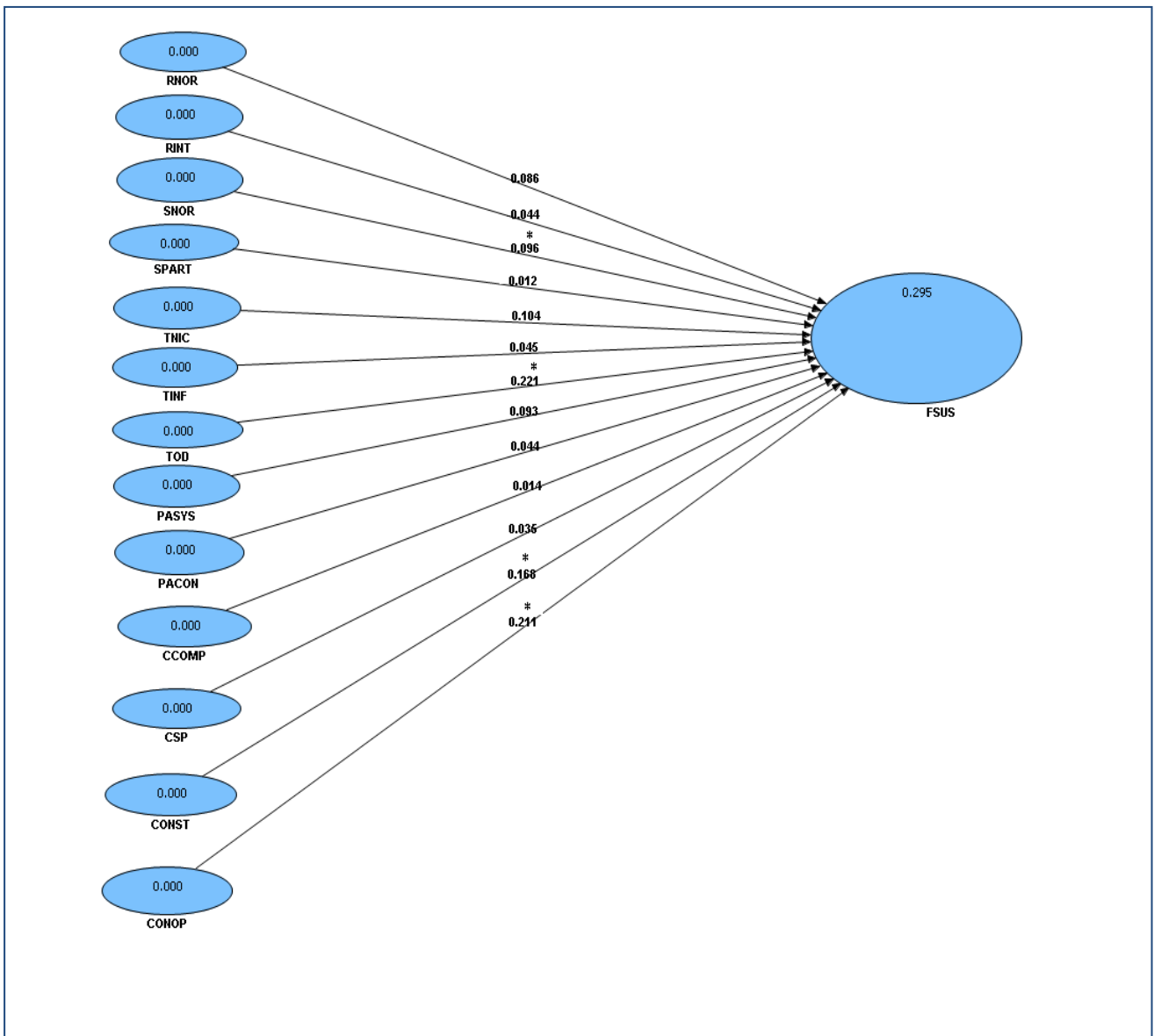
Table 5.16 Measurement Model: Path Coefficients, Sample Mean, Standard Deviation, Standard Error, and T Statistics of First-Order Constructs and Financial Sustainability Outcomes construct

	Standardised Path coefficient (γ_p)	Sample Mean	Standard Deviation	Standard Error	t-statistics
RINT -> FSUS	0.04	0.04	0.06	0.06	0.76
RNOR -> FSUS	0.09	0.09	0.06	0.06	1.43
SNOR -> FSUS	0.10	0.09	0.05	0.05	1.82*
SPART -> FSUS	0.01	0.02	0.08	0.08	0.14
TINF -> FSUS	0.04	0.05	0.05	0.05	0.83
TNIC -> FSUS	0.10	0.11	0.09	0.09	1.22
TOD -> FSUS	0.22	0.22	0.06	0.06	3.96***
CSP -> FSUS	0.04	0.02	0.05	0.05	0.75
CCOMP -> FSUS	0.01	0.02	0.06	0.06	0.22
PACON -> FSUS	0.04	0.05	0.06	0.06	0.74
PASYS -> FSUS	0.09	0.10	0.09	0.09	1.04
CONOP -> FSUS	0.21	0.21	0.05	0.05	4.58***
CONST -> FSUS	0.17	0.17	0.05	0.05	3.40***

* : significant at p -value < 0.10

** : significant at p -value < 0.05

*** : significant at p -value < 0.01



* : significant at p -value < 0.05

Figure 5.3 Structural Model: Path coefficients, and R square of first-order constructs and Financial Sustainability construct

The relationship between first-order construct and MSUS are presented in Table 5.17. The results indicate that RNOR (Normative Recruitment practices); SPART(Selection Participatory evaluative practices); TINF (Training Informal practices); PASYS(Performance Appraisal Systemic); CONOP(Consultation operating practices); and CONST(Consultation Strategic practices) are positive significant predictors of MSUS (see Table 5.17 and Figure 5.4).

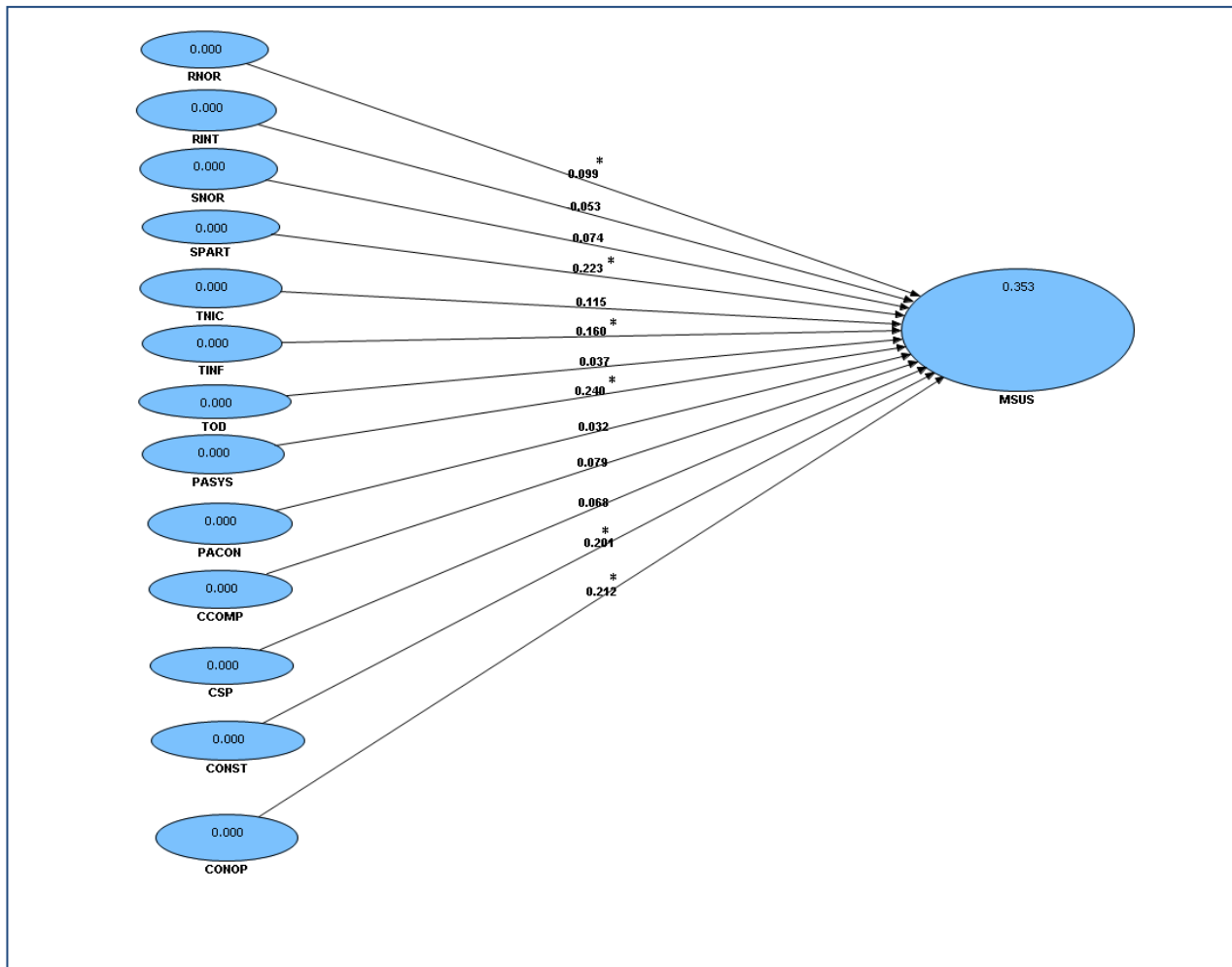
Table 5.17 Measurement Model: Path Coefficients, Sample Mean, Standard Deviation, Standard Error, and T Statistics of First-Order Constructs and Market-based Sustainability Outcomes construct

	Standardised Path coefficient	Sample Mean	Standard Deviation	Standard Error	t-statistics
RINT -> MSUS	0.05	0.04	0.07	0.07	0.77
RNOR -> MSUS	0.10	0.10	0.06	0.06	1.60
SNOR -> MSUS	0.07	0.07	0.05	0.05	1.44
SPART -> MSUS	0.22	0.24	0.09	0.09	2.49**
TINF -> MSUS	0.16	0.16	0.05	0.05	2.98**
TNIC -> MSUS	0.12	0.12	0.09	0.09	1.27
TOD -> MSUS	0.04	0.05	0.06	0.06	0.57
PACON -> MSUS	0.03	0.03	0.07	0.07	0.46
PASYS -> MSUS	0.24	0.24	0.09	0.09	2.60**
CCOMP -> MSUS	0.08	0.09	0.07	0.07	1.20
CSP -> MSUS	0.07	0.08	0.06	0.06	1.19
CONOP -> MSUS	0.21	0.21	0.05	0.05	4.54***
CONST -> MSUS	0.20	0.20	0.05	0.05	4.39***

* : significant at p -value < 0.10

** : significant at p -value < 0.05

*** : significant at p -value < 0.01



* : significant at p -value < 0.05

Figure 5.4 Structural Model: Path coefficients, and R square of first-order constructs and Market-based Sustainability construct

5.6.3 Testing for Hypotheses 5 and 6

Based on the data analysis above (measurement and structural model), hypotheses 5 and 6 (formulated in Chapter 3) were tested using t-tests by applying the bootstrapping technique (as discussed in Chapter 4). The results presented in Table 5.18 indicate exogenous constructs, hypotheses, path coefficients, standard deviations and t-test results.

Table 5.18 Path coefficient significance tests for hypotheses 5 & 6

Exogenous Constructs	Hypotheses	Path Coefficients	Standard Deviation	t-statistics
Recruitment	5a	0.08	0.06	1.30
Selection	5b	0.11	0.07	1.44
Training & Development	5c	0.31	0.06	4.77*
Performance Appraisal	5d	0.02	0.08	0.27
Compensation	5e	0.06	0.06	1.07
Consultation	5f	0.21	0.05	3.96*
Recruitment	6a	0.02	0.07	0.34
Selection	6b	0.08	0.09	0.89
Training & Development	6c	0.26	0.09	3.03*
Performance Appraisal	6d	0.05	0.09	0.58
Compensation	6e	0.03	0.07	0.35
Consultation	6f	0.25	0.05	4.71*

*:significant at p -value < 0.01

The results show that the data do not support hypotheses 5a, 5b, 5d, 5e, 6a, 6b, 6d, and 6e which indicate that there is no significant effect of *recruitment*, *selection*, *performance appraisal*, and *compensation* on both *financial* and *market-based sustainability outcomes*. However, hypotheses 5c, 5f, 6c, and 6f are supported by the data. The findings indicate that exogenous independent constructs such as *Training & Development* and *Consultations* are significantly affecting both the dependent variables such as *financial sustainability outcomes* and *market-based sustainability outcomes* ($p < 0.01$). These results are discussed in chapter 6.

5.7 Analysing the Mediating Effect of HR Sustainability Outcomes (HRSUS) on the Relationship between High Performance Management Practices (HPMP) and SME Sustainability Outcomes

This section is used to analyse data pertaining to RQ4: *To what extent do HR Sustainability Outcomes mediate the relationship between HPMP and SME Sustainability Outcomes?* For analysing this research question, Structural equation modelling was used to examine the relationship between independent latent construct (HPMP), the mediator (HRSUS) and dependent variables (FSUS; MSUS). As in the analysis of RQ3, the same latent constructs were used except with the inclusion of

two more latent constructs such as HPMP and HRSUS . All latent construct variables were entered in SmartPLS 2. The PLS algorithm was used with the path weighting scheme and standard values in terms of iterations and abort criteria. As per the discussion for RQ3, the Chin (2010) two phases approach was applied by first analysing the reliability and validity of the measurement model followed by examining the structural model with standardised path coefficients, R square values, and t-statistics.

5.7.1 Model Evaluation: Measurement Model Results

The convergent validity results presented in Table 5.19 indicate that the Average Variance Extracted (AVE) values for most of the constructs are above 0.5 (with the exception of few constructs showing slightly below 0.5) indicating 50 percent or more variance of the indicators. The results of the composite reliability (CR) values for most of the constructs are above 0.8 showing high internal consistency among the variables of each construct (see Table 5.19). The AVE and CR values indicate that each latent construct is well represented by its indicators. The construct correlations are calculated and compared with square root of AVE. The results show that all constructs are highly related to their own measures than with other constructs (Chin 2010). The discriminant validity of the measurement model, is presented in Table 5.20 as outer model loadings and cross loadings of the constructs (Chin 2010). The results indicate that each item relates to its own construct (loadings) and do not have stronger relationship with the indicators of other constructs (cross loadings).

Table 5.19 Measurement Model: Composite reliability, Average variance extracted (AVE), Square roots of AVE, and Correlation matrix

Construct	AVE	Composite Reliability	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1 FSUS	0.593	0.813	0.770																						
2 CCOMP	0.683	0.811	0.232	0.826																					
3 COM	0.433	0.752	0.207	0.821	0.657																				
4 CONOP	0.624	0.892	0.267	0.186	0.173	0.790																			
5 CONS	0.443	0.824	0.310	0.220	0.195	0.685	0.665																		
6 CONST	0.801	0.889	0.268	0.202	0.128	0.044	0.216	0.894																	
7 CSP	0.729	0.843	0.082	0.235	0.547	0.078	0.076	0.017	0.853																
8 HPMP	0.471	0.885	0.455	0.652	0.632	0.425	0.474	0.311	0.317	0.686															
9 HRSUS	0.542	0.825	0.692	0.299	0.299	0.287	0.331	0.273	0.162	0.582	0.736														
10 MSUS	0.670	0.859	0.497	0.298	0.281	0.314	0.362	0.295	0.132	0.502	0.589	0.818													
11 PA	0.571	0.814	0.342	0.524	0.507	0.295	0.328	0.207	0.252	0.649	0.429	0.395	0.686												
12 PACON	0.680	0.809	0.186	0.321	0.378	0.200	0.222	0.129	0.266	0.579	0.268	0.205	0.611	0.824											
13 PASYS	0.663	0.855	0.346	0.507	0.453	0.276	0.307	0.198	0.180	0.591	0.413	0.403	0.517	0.371	0.814										
14 REC	0.502	0.799	0.307	0.425	0.431	0.299	0.333	0.222	0.237	0.672	0.408	0.307	0.507	0.416	0.432	0.634									
15 RINT	0.669	0.801	0.148	0.329	0.361	0.194	0.199	0.046	0.229	0.445	0.192	0.120	0.384	0.342	0.313	0.590	0.817								
16 RNOR	0.522	0.813	0.317	0.369	0.359	0.281	0.322	0.260	0.182	0.626	0.422	0.329	0.445	0.351	0.386	0.623	0.359	0.722							
17 SEL	0.479	0.813	0.343	0.651	0.603	0.293	0.348	0.333	0.269	0.633	0.455	0.380	0.602	0.449	0.670	0.564	0.310	0.559	0.692						
18 SNOR	0.775	0.873	0.241	0.232	0.239	0.159	0.184	0.161	0.141	0.375	0.374	0.261	0.240	0.179	0.214	0.371	0.163	0.393	0.556	0.880					
19 SPART	0.735	0.892	0.299	0.664	0.604	0.275	0.329	0.320	0.254	0.614	0.371	0.333	0.520	0.450	0.693	0.500	0.293	0.485	0.632	0.218	0.857				
20 T&D	0.475	0.914	0.407	0.482	0.471	0.207	0.239	0.182	0.239	0.592	0.534	0.426	0.510	0.480	0.665	0.450	0.324	0.405	0.609	0.224	0.618	0.688			
21 TINF	0.816	0.930	0.303	0.306	0.287	0.260	0.291	0.190	0.133	0.652	0.464	0.389	0.430	0.256	0.422	0.327	0.181	0.324	0.463	0.191	0.461	0.617	0.903		
22 TNIC	0.621	0.919	0.362	0.494	0.473	0.177	0.202	0.144	0.228	0.555	0.462	0.373	0.633	0.508	0.680	0.426	0.322	0.375	0.597	0.211	0.609	0.642	0.485	0.787	
23 TOD	0.739	0.850	0.325	0.218	0.274	0.001	0.023	0.116	0.212	0.486	0.351	0.228	0.342	0.247	0.310	0.270	0.237	0.220	0.246	0.088	0.251	0.636	0.325	0.508	0.859

Table 5.20 Measurement Model: Outer Model Loadings and Cross Loadings

	RINT	RNOR	SNOR	SPART	TINF	TNIC	TOD	PASYS	PACON	CCOMP	CSP	CONST	CONOP	FSUS	MSUS	HRSUS
HPMP_RE 4	0.79	0.25	0.08	0.32	0.17	0.36	0.27	0.35	0.36	0.36	0.26	-0.03	-0.15	0.15	0.16	0.19
HPMP_RE 9	0.84	0.33	0.18	0.17	0.12	0.18	0.13	0.17	0.21	0.19	0.12	-0.04	-0.16	0.10	0.05	0.13
HPMP_RE 3	0.25	0.75	0.20	0.32	0.23	0.33	0.19	0.34	0.25	0.23	0.00	-0.22	-0.21	0.29	0.30	0.34
HPMP_RE 5	0.33	0.72	0.28	0.29	0.18	0.27	0.18	0.19	0.25	0.18	0.24	-0.12	-0.10	0.19	0.14	0.27
HPMP_RE 6	0.30	0.79	0.31	0.44	0.33	0.32	0.22	0.33	0.28	0.31	0.17	-0.20	-0.23	0.23	0.23	0.33
HPMP_RE 10	0.13	0.62	0.36	0.36	0.19	0.14	0.02	0.25	0.24	0.38	0.12	-0.23	-0.30	0.21	0.30	0.28
HPMP_SE 6	0.04	0.34	0.87	0.16	0.16	0.18	0.11	0.18	0.11	0.13	0.09	-0.14	-0.13	0.21	0.25	0.34
HPMP_SE 7	0.23	0.35	0.89	0.22	0.17	0.19	0.05	0.19	0.20	0.28	0.16	-0.15	-0.15	0.21	0.22	0.32
HPMP_SE 10	0.21	0.48	0.28	0.91	0.38	0.61	0.20	0.65	0.40	0.59	0.22	-0.29	-0.24	0.28	0.29	0.36
HPMP_SE 11	0.27	0.47	0.14	0.90	0.41	0.54	0.22	0.68	0.43	0.59	0.24	-0.31	-0.30	0.21	0.31	0.30
HPMP_SE 15	0.28	0.28	0.13	0.75	0.40	0.39	0.23	0.43	0.33	0.52	0.20	-0.22	-0.16	0.29	0.25	0.29
HPMP_TD 1	0.11	0.23	0.20	0.35	0.92	0.38	0.26	0.33	0.17	0.22	0.15	-0.15	-0.21	0.26	0.33	0.42
HPMP_TD 5	0.25	0.37	0.16	0.48	0.88	0.54	0.37	0.47	0.26	0.35	0.15	-0.19	-0.26	0.31	0.39	0.43
HPMP_TD 13	0.11	0.26	0.16	0.41	0.90	0.37	0.23	0.32	0.26	0.25	0.05	-0.18	-0.23	0.24	0.32	0.40
HPMP_TD 8	0.28	0.33	0.18	0.52	0.48	0.82	0.53	0.46	0.40	0.40	0.24	-0.14	-0.10	0.32	0.28	0.41
HPMP_TD 15	0.27	0.25	0.23	0.31	0.28	0.70	0.24	0.41	0.40	0.24	0.21	-0.02	-0.14	0.23	0.18	0.28
HPMP_TD 16	0.20	0.30	0.10	0.55	0.43	0.90	0.47	0.63	0.41	0.48	0.16	-0.16	-0.17	0.32	0.34	0.41
HPMP_TD 17	0.22	0.28	0.07	0.55	0.41	0.86	0.46	0.61	0.39	0.44	0.14	-0.15	-0.10	0.27	0.29	0.37
HPMP_TD 18	0.35	0.23	0.17	0.33	0.24	0.72	0.40	0.41	0.45	0.26	0.20	-0.05	-0.09	0.24	0.25	0.31
HPMP_TD 20	0.30	0.32	0.24	0.42	0.33	0.77	0.34	0.59	0.40	0.36	0.18	-0.09	-0.19	0.30	0.31	0.38
HPMP_TD 21	0.17	0.34	0.21	0.62	0.45	0.72	0.32	0.62	0.38	0.50	0.14	-0.14	-0.20	0.31	0.38	0.38
HPMP_TD 10	0.21	0.21	0.06	0.24	0.27	0.45	0.86	0.30	0.23	0.17	0.17	-0.09	0.00	0.25	0.18	0.24
HPMP_TD 11	0.19	0.16	0.09	0.19	0.29	0.42	0.86	0.23	0.19	0.21	0.20	-0.11	0.00	0.31	0.21	0.37
HPMP_PA 15	0.22	0.39	0.26	0.69	0.37	0.58	0.32	0.83	0.32	0.49	0.24	-0.26	-0.24	0.33	0.42	0.42
HPMP_PA 14	0.31	0.26	0.14	0.39	0.27	0.50	0.18	0.75	0.34	0.30	0.10	-0.04	-0.25	0.26	0.19	0.28
HPMP_PA 16	0.24	0.28	0.12	0.59	0.39	0.58	0.25	0.85	0.25	0.43	0.09	-0.18	-0.19	0.25	0.36	0.31
HPMP_PA 8	0.32	0.34	0.17	0.41	0.23	0.45	0.23	0.35	0.85	0.32	0.31	-0.11	-0.16	0.15	0.18	0.24
HPMP_PA 9	0.24	0.23	0.12	0.33	0.19	0.39	0.17	0.26	0.80	0.20	0.12	-0.10	-0.17	0.16	0.16	0.20
HPMP_COM 10	0.39	0.30	-0.01	0.56	0.21	0.46	0.23	0.46	0.34	0.79	0.13	-0.15	-0.15	0.18	0.19	0.20
HPMP_COM 14	0.17	0.31	0.37	0.54	0.29	0.36	0.14	0.39	0.20	0.86	0.25	-0.18	-0.16	0.21	0.29	0.29
HPMP_COM 13	0.17	0.19	0.15	0.30	0.14	0.21	0.14	0.20	0.27	0.26	0.88	0.01	-0.11	0.08	0.17	0.16
HPMP_COM 16	0.23	0.11	0.09	0.12	0.08	0.18	0.23	0.10	0.18	0.14	0.83	0.02	-0.01	0.06	0.05	0.11
HPMP_CON 1	0.01	-0.20	-0.14	-0.32	-0.20	-0.11	-0.10	-0.17	-0.09	-0.19	0.05	0.88	0.03	-0.22	-0.23	-0.23
HPMP_CON 9	-0.09	-0.26	-0.15	-0.25	-0.14	-0.14	-0.10	-0.19	-0.14	-0.18	-0.01	0.91	0.05	-0.26	-0.29	-0.25
HPMP_CON 2	-0.12	-0.20	-0.09	-0.24	-0.21	-0.11	0.01	-0.22	-0.14	-0.05	-0.01	0.03	0.82	-0.16	-0.18	-0.20
HPMP_CON 3	-0.16	-0.23	-0.10	-0.20	-0.14	-0.13	0.00	-0.23	-0.11	-0.11	-0.04	0.00	0.80	-0.20	-0.19	-0.20
HPMP_CON 6	-0.09	-0.11	-0.14	-0.02	-0.12	-0.01	0.12	-0.07	-0.07	-0.07	-0.03	-0.06	0.72	-0.15	-0.19	-0.16
HPMP_CON 7	-0.22	-0.31	-0.19	-0.36	-0.35	-0.30	-0.11	-0.34	-0.29	-0.29	-0.14	0.11	0.79	-0.36	-0.41	-0.38
HPMP_CON 14	-0.15	-0.25	-0.11	-0.23	-0.19	-0.13	0.00	-0.21	-0.17	-0.20	-0.08	0.08	0.81	-0.17	-0.27	-0.18
S_FIN 7	0.12	0.28	0.20	0.27	0.22	0.28	0.17	0.27	0.11	0.26	0.08	-0.27	-0.25	0.80	0.43	0.62
S_FIN 8	0.16	0.23	0.20	0.16	0.18	0.29	0.25	0.25	0.16	0.12	0.10	-0.14	-0.15	0.80	0.35	0.63
S_FIN 10	0.06	0.22	0.16	0.27	0.30	0.27	0.33	0.28	0.17	0.16	0.00	-0.21	-0.22	0.71	0.37	0.58
S_MBS 5	0.12	0.25	0.22	0.27	0.31	0.32	0.20	0.38	0.18	0.26	0.06	-0.24	-0.28	0.42	0.82	0.46
S_MBS 6	0.09	0.26	0.14	0.21	0.30	0.24	0.17	0.24	0.12	0.20	0.12	-0.24	-0.17	0.39	0.77	0.46
S_MBS 11	0.08	0.30	0.27	0.33	0.35	0.35	0.19	0.37	0.20	0.27	0.15	-0.25	-0.31	0.41	0.86	0.52
S_HR 1	0.13	0.29	0.29	0.27	0.30	0.29	0.23	0.30	0.19	0.21	0.15	-0.22	-0.22	0.64	0.48	0.77
S_HR 2	0.09	0.27	0.16	0.29	0.26	0.27	0.20	0.31	0.19	0.19	0.05	-0.24	-0.22	0.58	0.41	0.69
S_HR 3	0.08	0.30	0.33	0.18	0.21	0.27	0.21	0.20	0.16	0.20	0.14	-0.16	-0.23	0.61	0.41	0.75
S_HR 4	0.24	0.36	0.31	0.34	0.58	0.52	0.39	0.40	0.25	0.28	0.13	-0.18	-0.17	0.50	0.43	0.74

5.6.2 Mediating Model Evaluation: Structural Model Results

The mediation analysis steps (as discussed in Chapter 4) were followed to test the mediating effect of HRSUS on the relationship between HPMP and FSUS and MSUS. The significance of path coefficients was tested by bootstrapping. A 1000 sample was taken for 331 cases. A t-statistics were calculated for each path coefficients among the latent constructs. The results presented in Table 5.21 indicate that the path coefficient between exogenous independent latent construct (HPMP) and endogenous dependent latent constructs (FSUS; MSUS) are significant (path c) indicating that the first condition of mediating effect is met. The path coefficient between HPMP and HRSUS (the mediator) is significant (path a) indicating that the model fulfils the second condition of mediating effect. Finally, the path coefficients between HRSUS and FSUS and MSUS are also significant (path b) indicating that the third condition of mediating effect is met (see Table 5.21 and Figure 5.5).

The model was further evaluated by examining the difference between the relationship of HPMP and FSUS and MSUS with and without consideration of HRSUS (see Figure 5.5 & 5.6). The path coefficient between HPMP and FSUS (with the consideration of HRSUS) is significantly reduced from 0.587 to 0.100 indicating that there is a mediating effect of HRSUS in the model. Similarly, the path coefficient between HPMP and MSUS (with the consideration of HRSUS) is reduced from 0.638 to 0.451 showing mediating effect of HRSUS in the model.

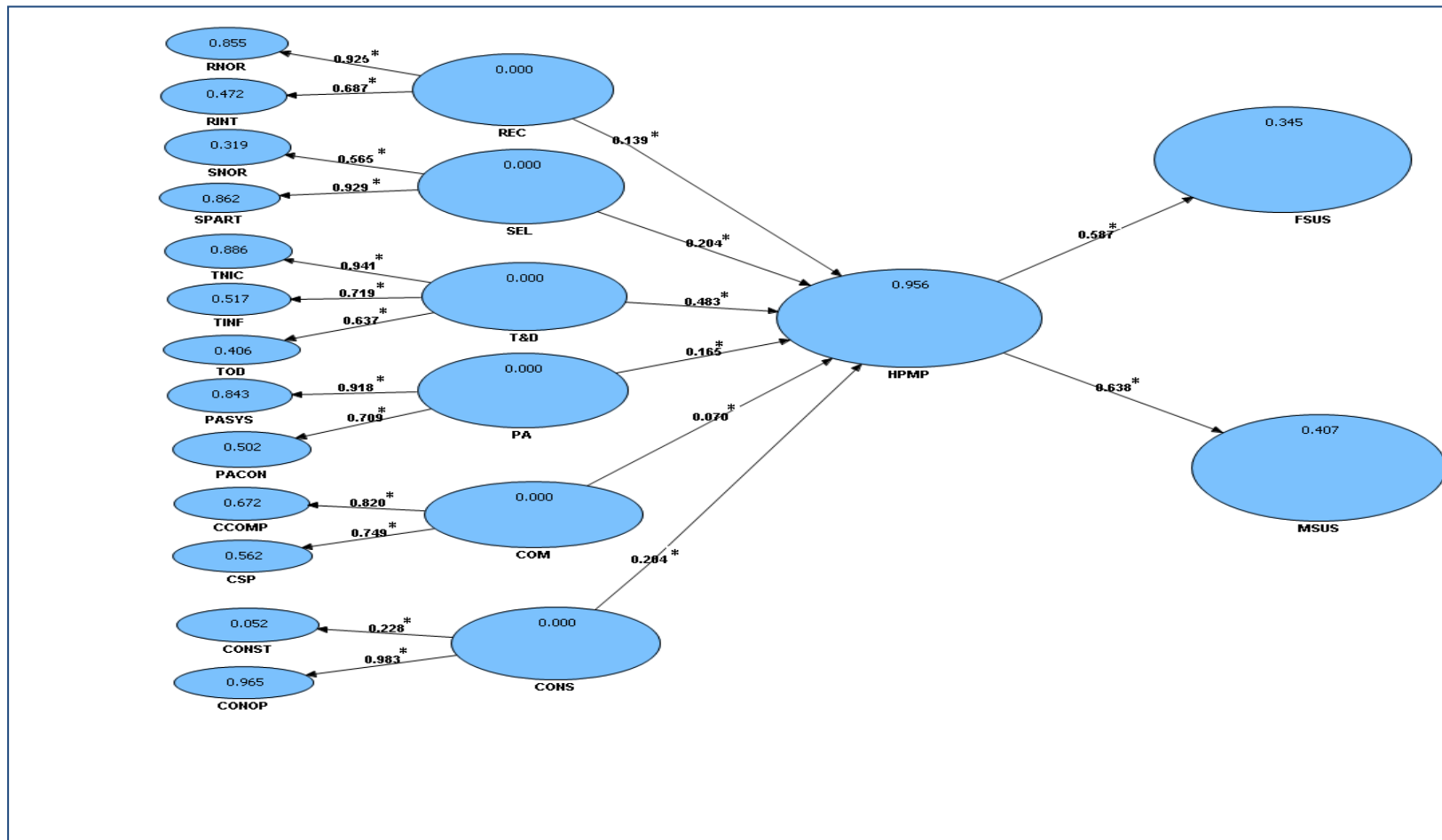
Table 5.21 Measurement Model: Standardised path coefficients, sample mean, standard deviation, standard error, and t-statistics

	Standardised Path coefficient	Sample Mean	Standard Deviation	Standard Error	t-statistics
COM -> CCOMP	0.82	0.82	0.03	0.03	30.04***
COM -> CSP	0.75	0.75	0.05	0.05	13.65***
COM -> HPMP	0.07	0.07	0.02	0.02	2.71**
CONS -> CONOP	0.98	0.98	0.01	0.01	78.33***
CONS -> CONST	0.23	0.23	0.12	0.12	1.98*
CONS -> HPMP	0.20	0.20	0.03	0.03	6.07***
HPMP -> FSUS	0.10	0.10	0.04	0.04	2.40**
HPMP -> HRSUS	0.69	0.69	0.03	0.03	23.74***
HPMP -> MSUS	0.45	0.46	0.06	0.06	7.53***
HRSUS -> FSUS	0.72	0.72	0.04	0.04	16.97***
HRSUS -> MSUS	0.28	0.27	0.06	0.06	4.49***
PA -> HPMP	0.15	0.16	0.03	0.03	5.15***
PA -> PACON	0.71	0.71	0.06	0.06	12.40***
PA -> PASYS	0.92	0.92	0.02	0.02	49.30***
REC -> HPMP	0.14	0.14	0.03	0.03	5.15***
REC -> RINT	0.69	0.68	0.05	0.05	14.59***
REC -> RNOR	0.92	0.93	0.01	0.01	90.96***
SEL -> HPMP	0.21	0.20	0.03	0.03	6.93***
SEL -> SNOR	0.57	0.56	0.09	0.09	6.32***
SEL -> SPART	0.93	0.93	0.02	0.02	54.78***
T&D -> HPMP	0.49	0.49	0.04	0.04	13.45***
T&D -> TINF	0.72	0.72	0.03	0.03	26.53***
T&D -> TNIC	0.94	0.94	0.01	0.01	114.18***
T&D -> TOD	0.64	0.63	0.07	0.07	9.51***

* : significant at p -value < 0.10

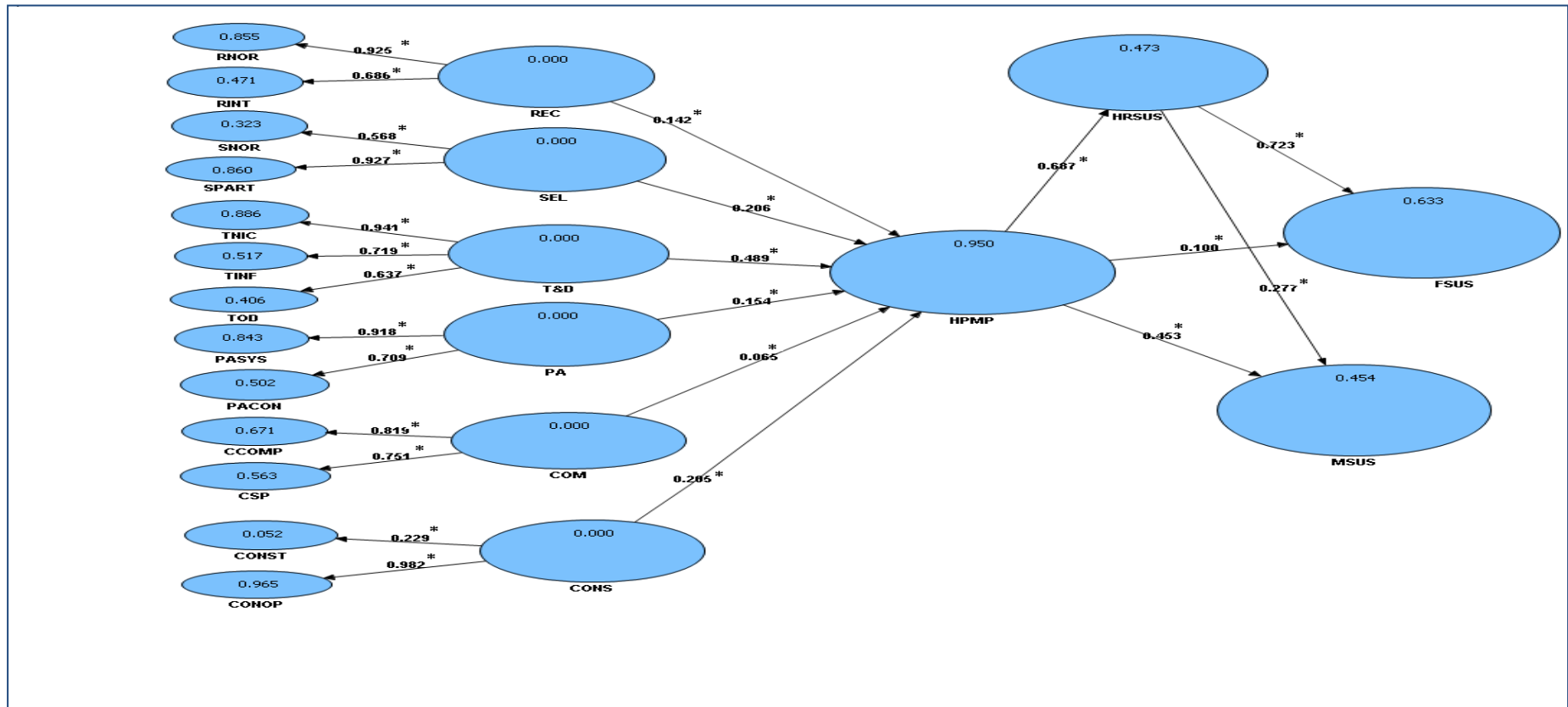
** : significant at p -value < 0.05

*** : significant at p -value < 0.01



* : significant at p -value < 0.05

Figure 5.5 Direct Effect: Structural Model: Mediating Effect: Path coefficients, Significance level, and R square values without mediator variable



* : significant at p -value < 0.05

Figure 5.6 Indirect Effect: Structural Model with Mediating Effect: Path coefficients, Significance level, and R square values with mediator variable

5.7.3 Testing for Hypothesis 7 and 8

Two main hypotheses (H7 and H8) were formulated for analysing the mediation effect of HR sustainability outcomes on the relationship between HPMP and SME sustainability outcomes (see Chapter 3). Based on the procedure (discussed in Chapter 4) the bootstrapping technique was applied for testing the mediating effect in the model. The results are presented in the table below.

Table 5.22 Path coefficient significance tests for hypotheses 7 & 8

Path description	Hypotheses	Path coefficients	t-statistics
HPMP → HRSUS (path a)	7	0.69	23.74**
HRSUS → FINSUS (path b)		0.72	16.97**
HPMP → FINSUS (path c)		0.10	2.40*
HPMP → HRSUS (path a)	8	0.69	23.74**
HRSUS → MSUS (path b)		0.28	4.49**
HPMP → MSUS (path c)		0.45	7.53**

*: Significant at p -value < 0.05; **: Significant at p -value < 0.01

HPMP = High Performance Management Practices

HRSUS = HR Sustainability outcomes

FINSUS = Financial Sustainability outcomes

MSUS = Market-based Sustainability Outcomes

It is clear from Table 5.22 that the results for all paths (a, b & c) are significant at $p < 0.05$ and $p < 0.01$ indicating that there is a mediating effect of HR sustainability outcomes in the model. However, in order to test whether the mediating effect of HR sustainability outcomes is significant, Sobel (1982) test is used based on the following formula (as discussed in Chapter 4).

$$z = \frac{\gamma_{p_a} * \gamma_{p_b}}{\sqrt{\gamma_{p_b}^2 * \sigma(\gamma_{p_a})^2 + \gamma_{p_a}^2 * \sigma(\gamma_{p_b})^2}}$$

Source: (Sobel 1982)

Sobel test is conducted by using the calculation tools of Preacher and Leonardelli (Preacher 2012).

The results extracted from Sobel test indicate that the mediating effect of HRSUS on the relationship between HPMP and HRSUS is significant at $p < 0.05$ (t-statistic = 14.09). The results also indicate that the mediating effect of HRSUS on the relationship between HPMP and MSUS is significant at $p < 0.05$ (t-statistics = 4.44). The t-statistic values for both the models meet the criteria of $> +1.96$ and < -1.96 .

These results indicate that both hypotheses H7 and H8 are supported by the data indicating that there is a partial mediating effect of HRSUS on the relationship between HPMP and FSUS and also between HPMP and MSUS.

5.8 Summary of Hypotheses Testing for RQ2, RQ3 and RQ4

In order to provide a summary overview of the numerous hypotheses tested in this chapter the following table has been compiled.

Table 5.21 Research questions, hypotheses, and Conclusions

RQ2: To what extent do firm size, strategic planning, industry type, and the presence of a HR manager, relate to the prevalence of HPMP in Pakistani SMEs.	
<i>H₁: Medium sized firms are more likely to use HPMP than small firms</i>	Conclusion: Partially Supported. <i>Medium sized firms are more likely to use HPMP than small firms</i>
<i>H_{1a}: Medium sized firms are more likely to use Recruitment practices than small firms</i>	Conclusion: Not supported. <i>Medium sized firms are not more likely to use Recruitment practices than small firms</i>
<i>H_{1b}: Medium sized firms are more likely to use Selection practices than small firms</i>	Conclusion: Partially supported.: <i>Medium sized firms are more likely to use Selection practices than small firms</i>
<i>H_{1c}: Medium sized firms are more likely to use Training and Development practices than small firms</i>	Conclusion: Partially supported. <i>Medium sized firms are more likely to use Training and Development practices than small firms</i>
<i>H_{1d}: Medium sized firms are more likely to use Performance Appraisal practices than small firms</i>	Conclusion: Not supported. <i>Medium sized firms are not more likely to use Performance Appraisal practices than small firms</i>
<i>H_{1e}: Medium sized firms are more likely to use Compensation practices than small firms</i>	Conclusion: Partially supported. <i>Medium sized firms are more likely to use Compensation practices than small firms</i>
<i>H_{1f}: Medium sized firms are more likely to use Consultation practices than small firms</i>	Conclusion: Partially supported. <i>Medium sized firms are more likely to use Consultation practices than small firms</i>
<i>H₂: Service-based SMEs adopt HPMP to a significantly greater extent than manufacturing SMEs</i>	Conclusion: Partially Supported. <i>Service-based SMEs adopt HPMP to a significantly greater extent than manufacturing SMEs</i>
<i>H_{2a}: Service-based SMEs adopt Recruitment practices to a significantly greater extent than manufacturing SMEs</i>	Conclusion: Supported. <i>Service-based SMEs adopt Recruitment practices to a significantly greater extent than manufacturing SMEs</i>
<i>H_{2b}: Service-based SMEs adopt Selection practices to a significantly greater extent than manufacturing SMEs</i>	Conclusion: Partially Supported. <i>Service-based SMEs adopt Selection practices to a significantly greater extent than manufacturing SMEs</i>
<i>H_{2c}: Service-based SMEs adopt Training and Development practices to a significantly greater extent than manufacturing SMEs</i>	Conclusion: Supported. <i>Service-based SMEs adopt Training and Development practices to a significantly greater extent than manufacturing SMEs</i>
<i>H_{2d}: Service-based SMEs adopt Performance Appraisal practices to a significantly greater extent than manufacturing SMEs</i>	Conclusion: Partially Supported. <i>Service-based SMEs adopt Performance Appraisal practices to a significantly greater extent than manufacturing SMEs</i>
<i>H_{2e}: Service-based SMEs adopt Compensation practices to a significantly greater extent than manufacturing SMEs</i>	Conclusion: Supported. <i>Service-based SMEs adopt compensation practices to a significantly greater extent than manufacturing SMEs</i>
<i>H_{2f}: Service-based SMEs Consult employees to a significantly greater extent than manufacturing SMEs</i>	Conclusion: Supported. <i>Service-based SMEs Consult employees to a significantly greater extent than manufacturing SMEs</i>

<i>H₃: SMEs with a strategic planning adopt HPMP to a significantly greater extent than those SMEs without a strategic plan</i>	Conclusion: Partially Supported. <i>SMEs with a strategic planning adopt HPMP to a significantly greater extent than those SMEs without a strategic plan</i>
<i>H_{3a}: SMEs with a strategic planning adopt Recruitment practices to a significantly greater extent than those SMEs without a strategic plan</i>	Conclusion: Not supported. <i>SMEs with a strategic planning do not adopt Recruitment practices to a significantly greater extent than those SMEs without a strategic plan</i>
<i>H_{3b}: SMEs with a strategic planning adopt Selection practices to a significantly greater extent than those SMEs without a strategic plan</i>	Conclusion: Partially supported. <i>SMEs with a strategic planning adopt Selection practices to a significantly greater extent than those SMEs without a strategic plan.</i>
<i>H_{3c}: SMEs with a strategic planning adopt Training and Development practices to a significantly greater extent than those SMEs without a strategic plan</i>	Conclusion: Partially supported. <i>SMEs with a strategic planning adopt Training and Development practices to a significantly greater extent than those SMEs without a strategic plan.</i>
<i>H_{3d}: SMEs with a strategic planning adopt Performance Appraisal practices to a significantly greater extent than those SMEs without a strategic plan</i>	Conclusion: Partially supported. <i>SMEs with a strategic planning adopt Performance Appraisal practices to a significantly greater extent than those SMEs without a strategic plan.</i>
<i>H_{3e}: SMEs with a strategic planning adopt Compensation practices to a significantly greater extent than those SMEs without a strategic plan</i>	Conclusion: Partially supported. <i>SMEs with a strategic planning adopt Compensation practices to a significantly greater extent than those SMEs without a strategic plan.</i>
<i>H_{3f}: SMEs with a strategic plan Consult employees to a significantly greater extent than SMEs without a strategic plan</i>	Conclusion: Not supported. <i>SMEs with a strategic plan do not Consult employees to a significantly greater extent than SMEs without a strategic plan</i>
<i>H₄: SMEs with a HR manager adopt HPMP to a significantly greater extent than those SMEs without a HR manager</i>	Conclusion: Partially Supported. <i>SMEs with a HR manager adopt HPMP to a significantly greater extent than those SMEs without a HR manager</i>
<i>H_{4a}: SMEs with a HR manager adopt Recruitment practices to a significantly greater extent than those SMEs without a HR manager</i>	Conclusion: Partially supported. <i>SMEs with a HR manager adopt Recruitment practices to a significantly greater extent than those SMEs without a HR manager</i>
<i>H_{4b}: SMEs with a HR manager adopt Selection practices to a significantly greater extent than those SMEs without a HR manager</i>	Conclusion: Partially supported. <i>SMEs with a HR manager adopt Selection practices to a significantly greater extent than those SMEs without a HR manager</i>
<i>H_{4c}: SMEs with a HR manager adopt Training and Development practices to a significantly greater extent than those SMEs without a HR manager</i>	Conclusion: Supported. <i>SMEs with a HR manager adopt Training and Development practices to a significantly greater extent than those SMEs without a HR manager</i>
<i>H_{4d}: SMEs with a HR manager adopt Performance Appraisal practices to a significantly greater extent than those SMEs without a HR manager</i>	Conclusion: Partially supported. <i>SMEs with a HR manager adopt Performance Appraisal practices to a significantly greater extent than those SMEs without a HR manager.</i>
<i>H_{4e}: SMEs with a HR manager adopt Compensation practices to a significantly greater extent than those SMEs without a HR manager</i>	Conclusion: Partially supported. <i>SMEs with a HR manager adopt Compensation practices to a significantly greater extent than those SMEs without a HR manager</i>
<i>H_{4f}: SMEs with a HR manager Consult employees to a significantly greater extent than SMEs without a HR manager</i>	Conclusion: Supported. <i>SMEs with a HR manager Consult employees to a significantly greater extent than SMEs without a HR manager</i>
RQ3: Do different components of HPMP (recruitment, selection, training and development, compensation, performance appraisal and consultation) impact upon the sustainability outcomes (financial sustainability outcomes and market-based sustainability outcomes) of SMEs?	
<i>H₅: There is a significant positive relationship between HPMP (recruitment, selection, training and</i>	Conclusion: Partially Supported. <i>There is a significant positive relationship between HPMP</i>

<i>development, compensation, performance appraisal and consultation) and Financial Sustainability Outcomes of SMEs</i>	<i>(recruitment, selection, training and development, compensation, performance appraisal and consultation) and Financial Sustainability Outcomes of SMEs</i>
H _{5a} : There is a significant positive relationship between Recruitment and Financial Sustainability Outcomes	Conclusion: Not Supported. <i>There is not a significant positive relationship between Recruitment and financial sustainability outcomes</i>
H _{5b} : There is a significant positive relationship between Selection and Financial Sustainability Outcomes	Conclusion: Not Supported. <i>There is not a significant positive relationship between Selection and Financial Sustainability Outcomes</i>
H _{5c} : There is a significant positive relationship between Training and Development and Financial Sustainability Outcomes	Conclusion: Supported. <i>There is a significant positive relationship between Training and Development and Financial Sustainability Outcomes</i>
H _{5d} : There is a significant positive relationship between Performance Appraisal and Financial Sustainability Outcomes	Conclusion: Not Supported. <i>There is not a significant positive relationship between Performance Appraisal and Financial Sustainability Outcomes</i>
H _{5e} : There is a significant positive relationship between Compensation and Financial Sustainability Outcomes	Conclusion: Not Supported. <i>There is not a significant positive relationship between Compensation and Financial Sustainability Outcomes</i>
H _{5f} : There is a significant positive relationship between the use of employee Consultation and Financial Sustainability Outcomes	Conclusion: Supported. <i>There is a significant positive relationship between the use of employee Consultation and Financial Sustainability Outcomes</i>
<i>H₆: There is a significant positive relationship between HPMP (recruitment, selection, training and development, compensation, performance appraisal and consultation) and market based sustainability outcomes of SMEs</i>	Conclusion: Partially Supported. <i>There is a significant positive relationship between HPMP (recruitment, selection, training and development, compensation, performance appraisal and consultation) and market based sustainability outcomes of SMEs</i>
H _{6a} : There is a significant positive relationship between Recruitment and Market based Sustainability Outcomes	Conclusion: Not Supported. <i>There is not a significant positive relationship between Recruitment and Market based Sustainability Outcomes</i>
H _{6b} : There is a significant positive relationship between Selection and Market based Sustainability Outcomes	Conclusion: Not Supported. <i>There is not a significant positive relationship between Selection and Market based Sustainability Outcomes</i>
H _{6c} : There is a significant positive relationship between Training and Development and Market based Sustainability Outcomes	Conclusion: Supported. <i>There is a significant positive relationship between Training and Development and Market based Sustainability Outcomes</i>
H _{6d} : There is a significant positive relationship between Performance Appraisal and Market- based Sustainability Outcomes	Conclusion: Not Supported. <i>There is not a significant positive relationship between Performance Appraisal and Market-based Sustainability Outcomes</i>
H _{6e} : There is a significant positive relationship between Compensation and Market-based Sustainability Outcomes	Conclusion: Not Supported. <i>H_{6e}: There is not a significant positive relationship between Compensation and Market-based Sustainability Outcomes</i>
H _{6f} : There is a significant positive relationship between the use of employee Consultation and market based Sustainability Outcomes	Conclusion: Supported. <i>There is a significant positive relationship between the use of employee Consultation and Market based Sustainability Outcomes</i>
RQ4: To what extent do HR sustainability outcomes mediate the relationship between HPMP and SME Sustainability Outcomes?	
<i>H₇: HR sustainability outcomes partially mediate the relationship between HPMP and Financial Sustainability Outcomes</i>	Conclusion: Supported. <i>HR Sustainability Outcomes partially mediate the relationship between HPMP and Financial Sustainability Outcomes</i>

	<i>Outcomes</i>
<i>H₈: HR Sustainability Outcomes partially mediate the relationship between HPMP and Market-based Sustainability Outcomes</i>	Conclusion: Supported. <i>HR Sustainability Outcomes partially mediate the relationship between HPMP and Market-based Sustainability Outcomes</i>

5.9 Summary

This chapter presented the results pertaining to the four research questions formulated for this study. Descriptive analysis was presented for the demographic variables of SMEs and owners managers. The first research question (RQ1) regarding the extent and nature of high performance management practices (HPMP) was examined in two parts. The first part analysed the extent of HPMP in SMEs while the second part focused on the nature of HPMP in SMEs. The latter part was informed by an exploratory factor analysis with the aim to reduce the data and to obtain appropriate factors for further in depth analysis. The second research question (RQ2) focusing on the relationship between contextual characteristics (firm size, industry type, strategic planning, and presence of HR manager) and the prevalence of HPMP in SMEs was analysed by an independent sample t-test. The third research question (RQ3) regarding the relationship between HPMP and SME sustainability outcomes was examined through a Structural Equation Modeling (SEM). The fourth research question (RQ4) explored the mediating effect of HR sustainability Outcomes on the relationship between HPMP and SME sustainability outcomes by SEM.

All four main hypotheses that inform RQ2 were partially supported. However, most of the sub hypotheses developed for informing the relationship between industry type, and presence of a HR manager and prevalence of HPMP were fully supported by the data. The outcome of hypotheses testing reflects that Services-based SMEs have adopted more HPMPs in comparison to manufacturing firms. It also shows that SMEs have adopted more HPMPs in the presence of a HR manager. Similarly, the two main hypotheses that inform RQ3 were also partially supported. However, the sub hypotheses focusing on the relationship between training & development, and employee consultation and both financial and market-based sustainability outcomes were fully supported showing positive a significant relationship between employee training & development, and consultation practices and SME sustainability

outcomes. Finally, the two main hypotheses informing RQ4 were full supported indicating that HR sustainability outcomes (employee commitment, employee turnover, job satisfaction, skill development) partially mediate the relationship between HPMP and SME sustainability outcomes. The chapter concluded with a summary review of the Hypotheses testing. The next chapter discusses these results in view of the literature.

CHAPTER SIX: DISCUSSION, FUTURE RESEARCH AND CONCLUSION

6.1 Introduction

The objective of this chapter is to discuss the research findings presented in Chapter 5 and also to integrate these findings with the relevant literature discussed in Chapter 2 and 3. In addition, recommendations and conclusions based on research findings are also discussed. The main objective of this research study was: **To determine the extent and nature of High Performance Management practices (HPMP) in Pakistani SMEs and to assess the impact of these practices upon SMEs' Financial and Market-based Sustainability outcomes.** Four research questions were designed to address this research objective. The discussion in this chapter is focused on these research questions.

A brief overview of the structure of this chapter is presented below.

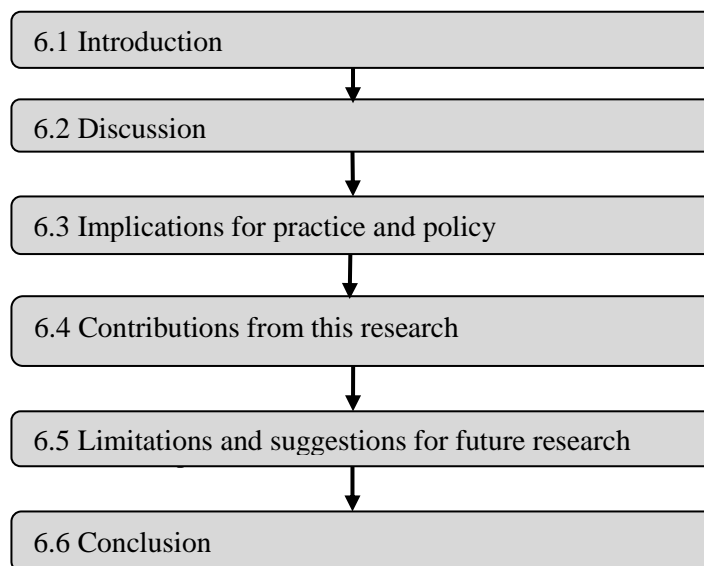


Figure 6.1 Structure of Chapter 6

6.2 Discussion

6.2.1 The extent (frequency) and nature (in terms of patterns of adoption) of HPMP in Pakistani SMEs

The first research question examines the extent and nature of HPMP in SMEs. The overall results showed that there is a low level of adoption of HPMP by the respondent SMEs. Overall one hundred and sixteen practices were examined for 6 components of HPMP (recruitment, selection, compensation, training and development, performance appraisal, and consultation). Using Wiesner et al. (2007) criteria of adoption, only eleven of these one hundred and sixteen practices indicated a high level of adoption (70% or more of the respondents adopted these practices), thirty nine to a moderate extent (31 to 69% of the respondents adopted these practices), and sixty six practices were adopted at a minor extent (less than 30% of respondents adopted these practices).

The overall survey findings regarding the extent of HPMP in SMEs, therefore illustrates an informal picture of HPMP in Pakistani SMEs, with a low to moderate level of adoption of all components of HPMP which is consistent with SME studies reported elsewhere in the literature (see for example, (e.g. Bartram 2005; De Kok et al. 2003; Deshpande & Golhar 1994; Duberley & Walley 1995; Marlow 2000; Memon et al. 2010; Rana et al. 2007; Wiesner & McDonald 2001). This picture resembles the 'bleak house' concept explored in other SME contexts. More recently Wiesner and Innes (2010) has explored the 'bleak house' concept within the Australian context. More specifically they have explored the notion of a bleak house versus bright prospect scenario in Australian SMEs. Bacon et al. (1996, p. 82) defined bleak house as 'employment relations practices typified by 'direct management control, poor terms and conditions, high staff turnover and little training'. Sisson (1993) portray the bleak house scenario as firms with no HR practices or no trade unions. The bleak house scenario suggest that firms are run by owner/mangers in an autocratic manner with poor working environment for employees and limited participation of employees in the decision making (Rainnie 1985). Even though the role of unions is not examined as part of this study, the bleak house scenario seems to be an appropriate point of departure when interpreting the overall picture of HPMP in Pakistani SMEs. It is appropriate because the focus of

this study is on HPMP which comprise both HRM and employee participation in decision making (consultation) components.

Guest and Conway (1999) describes the situation where there is neither collective representation nor participation and employee involvement in HR practices, as a 'black hole'. They explored the impact of low labour unionism and HRM respectively by analysing the assumption that employees are more likely to be treated in an unfair and arbitrary way in organisations that are characterised by an absence of a trade union and human resource practices. Their study found that unions did not necessarily have a positive impact. However, their results indicate the presence of HRM in a firm does have positive consequences. Their study also reported on the concept of a psychological contract as an intervening variable describing how HRM policies and practices could impact on the attitude of employees which in turn may lead to employee satisfaction and commitment.

What does the picture look like with respect to each HPMP component examined in this study?

In relation to *Recruitment practices*, SMEs have a low to moderate level of adoption regarding most of the practices. There was a high level of adoption in six out of twenty four recruitment practices, a moderate level of adoption in four practices, and low level of adoption in nine practices. Thus, sixty three percent of practices by SMEs were adopted to a low or moderate level which indicates a 'bleak prospect' (Wiesner and McDonald 2001) for recruitment practices in Pakistani SMEs.

The results suggest the dominance of certain types of practices. The survey results for *recruitment practices* indicate that most SMEs rely on informal practices such as referrals by employees, and referrals from other sources. This trend regarding the adoption of informal recruitment practices is consistent with the only two other prior studies conducted in Pakistan on HRM practices (e.g. Memon et al. 2010; Rana et al. 2007). However, it is also reflective of similar studies in other countries (e.g. Barber et al. 1999; Carroll et al. 1999; Cassell et al. 2002; Connolly & McGing 2007; Deshpande & Golhar 1994; Heneman & Berkley 1999; Kotey & Slade 2005; Marlow & Patton 1993). For example, the use of 'word of mouth' (referrals) as a recruitment

tool by SMEs, has been reported in several studies (see. Carroll et al. 1999; Cassell et al. 2002; Connolly & McGing 2007; Kotey & Slade 2005).

The results indicated that less than fifty percent of SMEs utilised newspaper advertisement. Niche practices such as Internet recruitment and direct mail only showed a marginal level of adoption. Recruitment consultants were the least popular method of recruitment. These findings are supported by (Deshpande & Golhar 1994) who also found a marginal use of external recruitment methods such as educational institutions, employment agencies and newspaper advertisement.

In relation to *Selection practices*, SMEs have shown to have a low to moderate level of adoption in most of the practices. There was a high level of adoption in only two of the eighteen selection practices, a moderate level of adoption in six practices, and a low level of adoption in half of the practices. Thus, eighty three percent of practices by SMEs were adopted to a low or moderate level which indicates a 'bleak prospect' (Wiesner and McDonald 2001) for selection practices in Pakistani SMEs.

The survey results pertaining to *Selection practices*, once again illustrate an informal picture in Pakistani SMEs. The most common selection practices were led by informal selection practices such as one on one interview and unstructured interviews were the most common practices reported whilst formal practices such as application forms, structured interviews, panel interviews and work samples were adopted to a moderate extent. Participatory evaluative practices such as, the line manager makes the selection decision, was also moderately adopted. However, Psychological tests, input of other employees and using an external consultant in the final selection decision, have been adopted at a low level. These results are supported by prior studies such as (e.g. Bartman et al. 1995; Golhar & Deshpande 1997; Memon et al. 2010). An explanation for the reliance of informal selection practices in Pakistani SMEs could be the lack of sufficient resources in small firms (Kaya 2006; Shih et al. 2006). The use of psychologists or external consultants in the selection process could be a costly exercise (Pansiri & Temtime 2008) which small firms try to avoid.

In relation to *Training and Development practices*, SMEs have a low level of adoption in all of the practices. None of the practices was adopted to a high extent.

There was a moderate level of adoption in only 4 practices, and a low level of adoption in nineteen of the practices. Thus, eighty two percent of practices by SMEs were adopted to a low level which indicates a 'bleak prospect' (Wiesner & McDonald 2001) of *Training and Development* practices in Pakistani SMEs.

In relation to *Training and Development practices*, the results were indicative of an avoidance of formal practices. Once again there was a reliance of mainly informal practices training practices such as: an informal training need analysis, informal on the job training and informal mentoring. In the UK, a study by Hughes et al. (2002) reported mixed reactions of SME managers towards formal training and development practices. For instance, they acknowledge the positive side of formal training such as employee motivation, increased productivity and high business growth. However, they also report some negative aspects of formal training such as increased wages, disruption in the workplace and high turnover rates (competitors or larger firms may attract them).

In addition prior research provides significant evidence on the use of informal training and development practices in SMEs (e.g. Kotey & Slade 2005; Lange et al. 2000; Nolan 2002). SMEs tend to shy away from the use of consultants in their human resource development (Duberley & Walley 1995; Pansiri & Temtime 2008). The general lack of training and development activities and the trend towards predominant informal training practices in Pakistani SMEs may be the result of certain key barriers. However, it could also be owing to barriers in accessing skill development opportunities and awareness of these opportunities (Lange et al. 2000). For instance, in a recent study, Memon et al. (2010) argue that lack of formal HR policies and a HR department have resulted in informal HR practices such as recruitment, selection, training and compensation. Due to this SMEs are facing difficulty in entering and competing in the international market (Akhtar et al. 2011). In another regional study, (HafizUllah et al. 2011) mentioned that the failure rate of SMEs in Pakistan is 9095% at the initial stages. They identified a lack of training and education (before initiating a business), entrepreneurial skills, and SME characteristics as causes of failure of Pakistani SMEs.

SMEs in Pakistan are facing challenges such as political instability, lack of intellectual capital and infrastructure, and an energy crises (Khalique et al. 2011).

Such problems have been highlighted by the State Bank of Pakistan in its annual report of 2009/2010 (SBP 2010). According to this report, SME's financial and economic health have been significantly affected due to power failures, the economic down turn, and the poor law and order scenario of the country (SBP 2010). As a result, SMEs received low credit provision compared to 2009 (p. 27). The report further mentions the effect of the global economic crises on Pakistani SMEs as a result of a conservative lending approach by Pakistani banks to the SME sector since they consider SMEs as one of the more risky sectors of Pakistan economy (SBP 2010).

In relation to *Performance Appraisal practices*, SMEs have a low to moderate level of adoption in most of the practices. Only one practice was adopted to a high extent. There was a moderate level of adoption in six practices, and a low level of adoption in ten of the practices. Thus, ninety four percent of practices by SMEs were adopted to a low or moderate level which is indicative of a 'bleak prospect' (Wiesner & McDonald 2001) for *Performance Appraisal practices* in Pakistani SMEs

Regarding *Performance Appraisal practices*, once again an informal picture emerged. Similar results are reported by Cassell et al.'s (2002) UK study. The low level of adoption of formal performance appraisal practices such as the utilisation of assessment centres, the balance score card approach, not linking individual performance to the business unit/company strategy and a lack of formal mentoring as part of performance appraisals indicate a bleak prospect for improving the performance of Pakistani SMEs (Akhtar et al. 2011; Memon et al. 2010). Management by objectives and 360 degree appraisals did feature to a moderate extent in respondent organisations however this may be due to the fact that certain Pakistani SMEs (26%) (mainly manufacturing) (see section 5.2.1) are engaged in international business and thus are more concerned about quality management practices (Rohra & Panhwar 2009).

The current picture of performance appraisal practices call for future research to explore the attitudes of Pakistani SME managers in relation to the use of several types of appraisal methods and also the purposes for which they are used.

In relation to *Compensation*, only four of the twenty practices were adopted to a high extent. There was moderate level of adoption in seven practices, and a low level of adoption in nine of the practices. Thus, eighty percent of practices presented in this study were adopted by SMEs to a low or moderate level which indicates a 'bleak prospect' (Wiesner & McDonald 2001) of *Compensation* practices in Pakistani SMEs.

Compensation practices presented a somewhat different picture regarding the inclusion of formality in practices. Most of the formal practices such as pay based on performance, market competitive wages, pay based on acquired skills and pay based on seniority have been employed to a great extent by respondents. These practices could be indicative of a desire of SMEs to increase their organisational productivity. Prior studies have reported a positive relationship between formal pay systems and productivity (e.g. Chand & Katou 2007; Huang 2000; Lazear 2000). However, there was only a minor emphasis in respondent firms on incentive compensation pay, profit sharing and individual incentive compensation practices. This may be owing to a lack of awareness about the value and benefits these types of practices could add to the economic sustainability of firms. For example, engaging in profit sharing could enhance opportunities of employee involvement in SMEs which in turn could have significant benefits for enhanced economic performance, as was found in this study (Akhtar et al. 2008; Bae et al. 2011; King-Kauanui et al. 2006; Yao 1997). It could also be that SMEs do not engage in these practices because in order to effectively utilise these practices, the firm has to have achieved a certain level of financial performance, and because SMEs often have limited financial resources, this may prevent them from considering these types of practices.

Finally, in relation to *Consultation practices*, SMEs have a low to moderate level of adoption in all of the practices. None of the consultation practices were adopted to high extent. There was a moderate level of adoption in twelve practices, and a low level of adoption in only one of the practices. Thus, 100% of practices presented in this study were adopted by SMEs to a low or moderate level which once again indicates a 'bleak prospect' (Wiesner and McDonald 2001) for *Consultation* practices in Pakistani SMEs.

The survey findings indicate a low to moderate level of adoption of almost all strategic and operational consultation practices in respondent firms. This general low level of consultation is also reflected in SME studies in other countries (Connolly & McGing 2007; Guest et al. 2003; Rana et al. 2007; Wiesner & McDonald 2001; Wiesner et al. 2007)

The low level of consultation may be due to the fact that most of the respondent SMEs are also managed by their owners (82%) and as operating heads of their firms, they make the major strategic decisions in their firms (Rana et al. 2007). It could also be the view of small owner managers that since most of their employees possess only low levels of education, they feel their employees are not equipped to participate in decisions. This type of managerial assumption could be reinforced by the high power distance that exists within the Pakistani culture (Hofstede 2009; Khilji 2001, 2004). Khilji (2004) argue that the same type of culture is present in Pakistani organisations. Due to large power distance, the decision making authority tends to remain with top management. There tends to be minimum employee involvement in decision making and limited communication (top to bottom and bottom up) with staff (Khilji 2004). In addition, the majority of Pakistani organisations are bureaucratic and centralised, with little delegated authority to lower level employees (p. 143).

In view of the high power distance existing in Pakistani organisations there is an assumption that 'manager knows best'. Furthermore, there is a very low level of unionisation within the SME sector in Pakistan (Sameer 2011) and is more prevalent in larger organisations. This may further compound the low degree of consultation in SMEs.

The reflection of a low degree of consultation is a serious issue for Pakistani SMEs given the positive relationship between employee involvement and firm performance (McNabb and Whitefield (1998). McNabb and Whitefield (1998) argue that providing opportunities to employees for participation in decision making, offering a financial share scheme and developing communication channels are important in the enhancement of loyalty, motivation and commitment amongst employees. They

further argue that firms with recognised unions have a positive effect on the financial performance of firms.

Apart from the degree of consultation, this study has also measured several HPMP practices with a participative component to it. The only two participative practices that had a moderate level of adoption were '360 degree appraisal' (36%) and 'group/team incentive program' (31%). Other HPMPs with a participative component had a low level of adoption. These include: 'Other manager or employees have an input in the selection design' (27%), 'other employees have an input in the final selection decisions' (12%), and profit sharing/gain sharing (8%). Thus, the lack of participative components in HPMP in Pakistan paints a less than positive picture for SMEs.

The limited consultation in Pakistani SMEs together with the low uptake of other HPMP is therefore reflective of a 'bleak house' scenario. Rana et al. (2007) argue that most Pakistani SMEs are run by owners/managers who take all major decisions in their firms. Studies conducted in other countries have also found similar results such as less formal consultative methods in small organisations (Bacon et al. 1996; Duberley & Walley 1995; McDonald & Wiesner 2000). McDonald and Wiesner (2000) identified two management styles for the degree of employee involvement in decision making such as participation and exclusionism. They described 'participation' as widespread involvement of employees in decision making while they term 'exclusionism' as a decision making style characterised by managerial authority and direction as the main forms of decision making. Their study found a minimum level of consultation practices and less than of Australian SMEs could be classified as using 'participation'.

In conclusion, based on the survey findings of this research study, SMEs have a low to moderate level of inclination for the 'bright prospect' (Wiesner & McDonald 2001) with respect to high performance management practices (HPMP). In relation to the prevalence of HPMP over six components, the survey findings of this study indicate a high level of adoption of only thirteen (11%) of the one hundred and sixteen practices measured (practices adopted by more than seventy percent of SMEs). This includes: six of the twenty four recruitment practices; two of the

eighteen selection practices; none of the twenty four training and development practices; only one of the seventeen performance appraisal practices; four of the twenty compensation practices; and none of the thirteen consultation practices. Thirty nine (33.5%) of the one hundred and sixteen practices were adopted at a moderate level (practices adopted by thirty one to sixty nine percent of SMEs). Finally, sixty six (57%) of the one hundred and sixteen practices were adopted at a low level (practices adopted by less than thirty percent of SMEs). Thus, the vast majority of HPMP practices (90.5%) measured in this research study were adopted at low or moderate level by the Pakistani SMEs

6.2.2 The impact of firm size, industry type, strategic planning, and the presence of a HR manager upon the prevalence of HPMP in Pakistani SMEs

The second research question examines the extent to which key firm characteristics (firm size, industry type, strategic planning and presence of HR manger) differentiate the prevalence of HPMP in SMEs.

A mixed picture emerged regarding the overall picture of the impact of *Firm size* on HPMP. The literature is also quite mixed on this topic area. Some researchers such as (Barber et al. 1999; Wager 1998; Wiesner et al. 2007) found that firms size has a significant positive impact on HPMP overall. However, Urbano and Yordanova (2008) found no significant effect of firm size on the adoption of HR practices included in the current study.

The findings in this study showed no significant differences between small and medium firms in their adoption of three HPMP components including: recruitment, performance appraisal and consultation practices. Within the context of these studies, these practices, especially practices of a formal nature, were adopted to a minor extent in both small and medium size firms. Golhar and Deshpande's (1997) work is supportive of this finding regarding a non significant impact of firm size on recruitment practices. Even though no significant differences were found between small and medium firms, regarding the consultation on both strategic and operational issues, one would expect that the consultative methods are far less formal and relatively unstructured in smaller organisations since this has been indicated in

studies by Wright (1995, p. 217), Duberley and Walley (1995), Bacon et al. (1996) and Morehead et al. (1997, p. 302).

However, a few HPMP subcomponents did show a significant relationship with firm size. Within the selection component, some contradictions occurred with regard to some sub components. Normative formal practices were used to a significantly greater extent by medium firms whereas small firms employed informal selection practices to significantly greater extent. The latter finding is consistent with the results of (De Kok et al. 2003) The other two sub selection components including 'participative evaluative' and 'external input show no differences with regard to firm size. Both of these components were used to a minor extent in both small and medium firms despite acknowledged ability to enhance the general validity and acceptability of selection decisions (Heraty & Morley 1998). Jameson has found that employing more formal sophisticated methods may enhance SMEs' ability to improve the appropriateness of appointments as a means to lower employee turnover (Jameson 2000). These more sophisticated selection practices are relatively more costly and time consuming to implement in small firms than in larger firms (McEvoy 1984; Reid & Harris 2002) especially as SMEs often may not have managerial resources and expertise in the area of selection and other HRM activities (Chandler & McEvoy 2000; Hornsby & Kuratko 2003; Klaas et al. 2000; McLarty 1999). Furthermore, these practices are normally sourced external to the SME owing to the mentioned lack of expertise within the SME.

Within the training and development component, the subcomponent organisational development featured significantly more in medium firms as opposed to small firms. This finding is consistent with other studies including (e.g. De Kok & Uhlener 2001; Kotey & Slade 2005; Marlow & Patton 1993; Wiesner & McDonald 2001; Wiesner et al. 2007).

Regarding *Industry type*, overall the main trend evident is a significant greater adoption of HPMP by service-based firms compared to manufacturing firms, especially practices that are formal in nature. The only exception was with regard to the use of informal selection practices and traditional performance appraisal practices, where the prevalence of these practices is similar in both these industries.

This trend where service-based firms employ HPMP to a greater extent is consistent with the findings of other studies (e.g. Bartman et al. 1995; Jackson & Schuler 1992; Othman 1999). Jackson and Schuler (1992) specifically found a greater use of a formal appraisal system and training practices in services-based firms than manufacturing firms. One explanation for the greater reliance of services-based firms on HPMP could lay in their main type of operation which is ‘service by and through people’. In view of this one could argue that the HR component would be a lot stronger in services-based firms than in manufacturing firms which normally would rely mainly on manufacturing processes and equipment. In other words, there would a much heavier reliance in services-based firms upon HR functional aspects to recruit, select, train and develop, appraise and compensate their main type of operation—‘service by and through people’. The functional components of HR may therefore be deemed less important in manufacturing firms.

One could argue that the greater reliance of the services-based firms on HPMP as opposed to the manufacturing sector has had positive impact on their economic performance in the country. The services sector has outpaced the growth in the commodity producing sector in recent years growth (Economic Survey 2010-11). Another explanation for this could be that the Economic survey (2010-11) in Pakistan, identified that the structure of Pakistan’s economy has been shifting from a commodity producing economy to a services sector economy. This shift could have in itself created greater reliance on human resource management issues.

With regard to the impact of *Strategic planning* upon HPMP, overall the results were mixed and partially supportive of a positive relationship. A significant positive relationship between strategic planning and formal normative selection practices was evident however informal selection practices were adopted to a greater extent by firms without a strategic plan.

The results of Wiesner et al. (2007) are consistent with these findings. They found positive relationship between strategic planning and formal recruitment, selection, training and development, and performance appraisal practices. Interestingly, a positive significant relationship between strategic planning and informal training practices was also found where one would rather have expected a relationship

between strategic planning and formal training. This may be owing to the overall informal training practices trend in Pakistani SMEs rather than formal practices. Strategic planning also had a positive impact upon the prevalence of traditional performance appraisal practices, normative compensation and companywide incentives.

The non significant relationships between strategic planning and formal HPMP may be indicative of the overall informal nature of strategic planning in Pakistani SMEs. Hutter and Wiechmann, (cited in Wiesner & Innes 2012, p. 102) argues that firms utilising an emergent strategy can be likened to a 'pattern in a stream of decisions and actions, where the strategic relevance of the pattern is identified in retrospect'. He further argues that emergent strategies are therefore intention interpreted, not intention driven. This seems to be case in Pakistani SMEs where sixty five percent of SMEs do not use strategic planning in developing operational plans and as such may not go as far as delineating plans for HPMP issues.

Joyce and Wood (2003) argue that strategic planning tend to bring change and innovation and is positively related to the growth of SMEs. Prior research has also acknowledged the positive relationship between formal strategic planning and firm performance (Fening et al. 2008; Gibbons & O'Connor 2005; Rue & Ibrahim 1998). Gibbons and O'Connor (2005) argue that formal strategic planning facilitates the firm to know about its environment and capabilities. They further suggest that such formalised planning can help SMEs to gain a competitive advantage over their competitors. Similarly, Poole and Jenkins (1996) argue that strategy formulation may affect the development of HR strategies which are used to attract and retain human resources for competitive advantage. Moreover, studies have also shown a positive effect of formal strategic planning on the adoption of HPMP (e.g. Banham 2006; De Kok et al. 2003; Wiesner & McDonald 2001; Wiesner et al. 2007). Thus, within the context of this study, strategy formalisation could affect the adoption of HPMP which ultimately lead to organisational performance. The latter could be an area for further research.

According to the findings a significant positive relationship between the *Presence of a HR Manager* (firms with a designated person responsible for HR in the firm) and the adoption of HPMP was partially supported.

Heneman and Berkley(1999) found that few SMEs had a HR department but recruitment and selection was more successful and resulted in a significantly higher retention rate where the organisation did have an HR manager. Similarly Kotey and Sheridan (2004) argue that as firms grow the SME manager tend to put administrative controls and specialised staff in place and as a consequence, formalisation ensues. This could explain the finding that the presence of a HR manager correlated positively with two of the sub selection components including formal normative selection practices and Participatory Evaluative selection practices of which both tend to have a formal dimension to it. The presence of a HR manager also had a positive impact on the prevalence of the subcomponent normative recruitment.

The presence of an HR manager tended to work to increase the prevalence of all training and development practices and the degree to which employees consult with their employees both on strategic and operational issues. Furthermore, three of the performance appraisal subcomponents (Systemic practices, Contemporary practices and Performance Appraisal Training practices) positively related to the presence of a HR manager. The presence of a HR manager also had a significant impact on all compensation subcomponents, however a positive relationship was found regarding three subcomponents (Companywide incentive practices, Teambased incentive practices and Specific incentive practices) but Normative compensation practices were used significantly more in firms without a HR manager.

The fact that the presence of a HR manager had a significant positive impact on seventeen of the twenty three sub HPMP components is indicative of the important role of this person in the adoption of HPMP. This finding is supported by Wiesner et al's (2007) study that found greater prevalence of HPMP in the presence of a HR manager in the Australian SME context. Similarly, Urbano and Yordanova (2008) also reported a significant effect of the presence of a HR manger on the adoption of HRM practices in Spanish SMEs. However, certain variables such as assumptions,

beliefs and education of HR managers are associated with the information they search and as well as the adoption of HR practices (Terpstra et al. 1996). Similarly, Murphy and Southey (2003) identified five individual characteristics of HR managers that allow them to adopt innovative HR practices. These characteristics include: knowledge and experience, networking activities, political influence, professionalism and personality characteristics of the HR manager. However, regardless of the significant role of a HR manager, there is dearth of research that examines the important role of HR manager in the adoption of HPMP in SMEs.

The findings of the current study assist in alleviating this gap within the Pakistani context.

Within the context of this study, even though only 52 percent of respondent SMEs employed a person responsible for HR issues, services-based SMEs employed a HR manager to significantly greater extent than manufacturing firms. This presence may explain the greater emphasis in services-based firms on HPMP compared to manufacturing firms.

Within the context of the resource based view, it could be argued that because a HR Manager possesses a superior knowledge base about the requirements of HPMP, their participation would add value. In other words, valuable and difficult to imitate new combinations (Denrell et al. 2003) that add value to firm performance are more possible when the HR expertise in the firm is utilised and involved in HPMP. Therefore, within the context of HPMP, it could be argued that when HR is an integral part of firm strategy, it would positively impact upon the SMEs ability to recruit and select staff that fit optimally with the job, train and develop, appraise and compensate these staff and provide them with the opportunity to be involved in decision-making, both in strategic and operational issues. They can therefore contribute to firm performance through valuable and difficult to imitate new combinations of human resources in the firm (Denrell et al. 2003).

It should however be noted that even with HR manager involvement, more may be required than just rolling out' HPMP practices. For example, within the context of selection, what may be required is greater use of additional selection practices that

add validity to the selection process (external input) and draw on the knowledge of other stakeholders (participatory evaluative) in order to enhance the possibility of valuable and difficult to imitate new human resource combinations in the SME, which in turn add value to firm performance. Furthermore, the argument could also be made that the HR manager should be instrumental in the use of ‘external formal’ selection practices and ‘participation in decision making’ because their broader knowledge and experience base of HR and selection issues would alert them to the benefits of these practices and processes in adding value to firm through more objective and valid selection decisions.

Informality of HPMP has shown to be a trend in the results. In terms of informal HPMP, it could be argued that these are less likely to be related to HR managerial knowledge, given their informal and subjective elements. These practices are also not viewed as strategic and the potential of a negative or nonexistent relationship between strategic planning and HR manager involvement in strategic planning would seem to be high. This has been indeed the outcome in this study with regard to informal selection practices however it has not been the case in relation to informal training. Nevertheless, the fact that the latter was the only training component that related positively with the existence of a strategic plan does indicate that Pakistani SMEs could potentially be more proactive in their planning which in turn could have a more significant impact upon HPMP.

6.2.3 The impact of HPMP components upon the Economic Sustainability Outcomes of Pakistani SMEs

The third research question examines the relationship between HPMPs and SME economic sustainability outcomes (Financial and Market-based sustainability outcomes) in Pakistan.

Of the twenty–three HPMP components eight are positively associated with Financial Sustainability outcomes and nine are positively associated with Market Sustainability Outcomes.

Wiesner and Innes (2012) argue that there is a contradiction of HRM in SMEs, in terms of formal and informal management approaches, which highlight important debates between explanatory frameworks regarding the nature of interaction in the wider rubric of work organisations. They further argue that HRM in SMEs represents the introduction of a level of formalisation in terms of the management of work practices. In tension with this formalisation in SMEs is the importance of informality in interaction to balance managerial control with employee consent. The less formalised tendencies of SMEs are potentially reinforced by the greater likelihood of family and owner operation than larger firms. Employees are more likely to experience close relationships with managers through informal interaction, which, in turn, reinforce the espoused values and norms of the SME. As in the case of their work (Wiesner & Innes 2012) this study also examine more closely, beyond the rendering of the SME by context, the formality informality relatedness with two types of SME economic performance.

Normative recruitment, Formal Normative Selection and Normative Compensation, which represent generally mainstream practices used by Pakistani SME aside from the most popular informal practices, show a positive association with both Financial and Market Sustainability outcomes. These components are less informal than some other more popular informal components such as recruitment through informal referrals, informal selection and informal training and development which are favoured by Pakistani SMEs, they do contain some degree of formality. One could argue that this finding is generally good news for the Pakistani context since these practices do feature relatively strongly in the respondent organisations.

Other HPMP components which comprise more formal practices such as: Other formal components such as Niche Recruitment, External Recruitment Sources, Participatory evaluative selection, external input in selection, Niche T&D, Formal T&D, Systemic PA and Traditional PA, Companywide compensation, Team based compensation and Specific compensation featured very weak in the respondent organisations. One explanation that has been put forward is the possible lack of knowledge about the value these practices could add to the management of their employees. However, these HPMP components did not significantly relate to either the Financial or Market-based sustainability in Pakistani SMEs.

Similarly, no significant associations were found between the aforementioned informal components and Financial Sustainability outcomes and Market Sustainability Outcomes. One could argue that this represents a bleak picture for Pakistani SMEs in view of their overreliance upon these types of informal HPMP practices.

Broadly, Wiesner & Innes (2012) argue that there are two orientations to the literature concerning HPMP practices relevant to the context of SMEs which align with the formal and informal orientations of management more commonly found in the SME literature. The first, concerning formality, draws upon normative business management approaches as HPMP provides tactical level practices to operationalise strategic planning. The majority of the published research indicates the positive role of formal HPMP as a source of competitive advantage and that certain HPMP practices improve organisational performance and firm resilience (e.g. Apospori et al. 2008; Arthur 1994; Bartram 2005; Huselid 1995; Ichniowski et al. 1997; Tsai 2006). Therefore, a lack of formal HPMP approaches could be interpreted as a negative within the Pakistani SME context.

However, another perspective has also been argued in the literature. Dekok and Uhlner (2001) and Wiesner et al. (2007) argue that small firms tend to adopt more informal HPMP in comparison to large firms. This notion has widely been acknowledged in research studies indicating the positive relationship between firm size and the adoption of HPMP (DeKok & Uhlaner 2001; Duberley & Walley 1995; Kotey & Slade 2005; Lawler, Mohrman & Gerald E. Ledford 1995; Marlow & Patton 1993; Wager 1998; Wiesner & McDonald 2001; Wiesner et al. 2007). However, Wiesner & Innes (2012) argue that informality in small firms reflect their needs and types of management and thus are more dependent on informal interactions which integrate their norms and direct behaviours. Moreover, Bacon et al. (1996) argue that the communication in small organisations is more direct and informal and employees tend to have more flexibility. They also argue that small firms have a horizontal hierarchy and the contribution of each employee to organisation performance is more obvious. In addition, they assert that due to high insecurity, small firms are more responsive to changes in customer demands and

markets. Similarly, small firms tend to use more informal approaches to change in comparison to formal bureaucratic approaches employed by large firms. As a result, it is much easier to bring about change in small firms than in large organisations (Bacon et al. 1996). Misztal (2000) argue that informality may be driver of effective interactions and communication in a small, family owned and single owner/manager SMEs as is mainly the case in this study

In view of this second argument, the lack of relationship between the aforementioned informal HPMP components and both Financial and Market-based Sustainability, does not necessarily predict an overall negative picture for Pakistani SMEs.

Two other practices that showed a positive impact upon both Financial and Market-based sustainability are the training component, Organisational Development practices (management and development training, introduced new formal training, increased training programs, introduced new career paths) and the performance appraisal component Contemporary Performance Appraisal (management by objective, assessment centre, balance score card approach). Performance Appraisal Training also positively correlates with Financial Sustainability and Systemic Performance Appraisal positively correlates with Market-based Sustainability, both of which these performance appraisal practices were employed to a minor extent in respondent organisations. Other authors found similar results (e.g. Akhtar et al. 2008; Chand & Katou 2007; Huang 2000; Ichniowski & Shaw 1999; Katou & Budhwar 2007; Lange et al. 2000; Michie & Sheehan 2003; Singh 2004; Van de Wiele 2010).

Even though these components are employed to a minor extent in the respondent firms, the link between these HPMP components and the economic sustainability of SMEs demonstrates the value and importance of these HPMP components in achieving economic sustainability. In view of the fact that Pakistani SMEs are in a growth phase, there seems to a need for Pakistani SMEs to realise the prominence and importance of the role of a skilled and a more career oriented labour force could play in economic sustainability. There is also a need for raising the awareness of Pakistani SMEs of the important role performance appraisal could play in improving the performance of SMEs (Ichniowski & Shaw 1999; Lange et al. 2000; Pansiri &

Temtime 2008) especially in view of the mentioned growth phase in which Pakistani SMEs find themselves. The adoption of formal practices such as a 360 degree appraisal method, management by objectives, assessment centres, provision of training to managers who appraise performance, and provision of training to employees who receive performance appraisal could enhance the performance profile of SMEs (Bartel 2004).

A positive link was found between the degree of consulting employees in decisionmaking (in relation to both strategic and operational issues) and both Financial and Marketbased sustainability. This finding is supported by studies such as (e.g. Gollan 2005; Kato & Morishima 2002; Kuye & Sulaimon 2011; Shih et al. 2006; Zwick 2004). However, this finding is quite disturbing in view of the low levels of consulting with employees on both strategic and operational issues. Regarding the link between consultation and firm performance, prior research studies have indicated a positive relationship between employee consultation/involvement and firm performance (e.g. Gollan 2005; Kato & Morishima 2002; Kuye & Sulaimon 2011; Shih et al. 2006; Zwick 2004). O'Regan et al. (2005) argue that decentralised structures tend to bring about employee motivation and creativity. Their study found that leading firms tend to empower their staff particularly on important issues such as staff development and disciplinary matters. Kato and Morishima (2002) argue that employee participation or involvement both at the top level and at the grass root level, may enhance the productivity of a firm. Their results are in line with Zwick (2004) who indicates that team work; autonomous work groups and low levels of hierarchical arrangements provide organisations with a productivity advantage. Through formal or informal consultation, managers and employees expect to achieve organisational objectives such as effectiveness, productivity, product quality and organisational change (Sagie & Koslowsky 2000). Gollan (2005) argue that the sustainability of HPMP can only be achieved by recognising the needs of employees and implementing sustainable policies and practices through employee involvement and participation. Wager (1998) argues that firms with open communication styles and employee participation in decision making tend to adopt more HPMPs.

However in view of the results in this study that indicate minor levels of consultation of employees on both strategic and operational issues, it is clear that Pakistani SMEs are not taking advantage of the benefits of consultation.

Beyond the formal informal debate, more relevant to understanding perspectives on HPMP practices in SMEs, the impact of industry type on HPMP has also been examined as part of contingency research (Edwards et al. 2006)—latter is also a focus of this study. Regarding the two main sectors (manufacturing and services-based firms) in Pakistan economy, the survey findings indicate a greater use of consultation practices in services-based firms than in manufacturing firms. The results are in line with the study of Rana et al. (2007) of 650 manufacturing firms which found that about eighty two percent of SME owners are the operating head and make the major strategic decisions in their firms. Given the positive link between participative management practices and firm performance (as discussed above), services-based firms have shown rapid growth in the Pakistan economy. The contribution of the services sector to economic growth has increased to 53.3 percent in 201011 which is the highest contribution in the last two decades. The sector achieved a growth rate of 4.1 percent and has a share of 90 percent of the overall GDP growth rate (Economic Survey 2010-11).

6.2.4 To what extent do HR Sustainability Outcomes mediate the relationship between HPMP and SME Sustainability Outcomes?

The fourth research question examines the mediation effect of HR sustainability outcomes on the relationship between HPMP and SME economic sustainability outcomes (both financial and market-based sustainability outcomes). The HR sustainability outcomes include: employee commitment, employee turnover, job satisfaction, and skill development. This research question was explored by first looking at the relationship between HPMP and HR sustainability outcomes and then examining the relationship between HR sustainability outcomes and SME sustainability outcomes.

The survey findings indicate a partial mediation effect of HR sustainability outcomes on the relationship between HPMP and SME sustainability outcomes. The results are consistent with the work of Batt (2002) and Liao et al. (2009) that HPMP also

has an indirect effect on economic sustainability outcomes via HR sustainability outcomes. For example, Batt (2002) found a partial mediation effect of turnover (quit rate) on the relationship between HPMP and sales growth. Liao et al. (2009) reported a full mediation effect of skill development (human capital) and employee motivation (psychological empowerment) on the relationship between HPMP and individual performance.

In the present study, the results indicate a partial mediation effect of HR sustainability outcomes on the relationship between HPMP components (Recruitment, Selection, Training and development, Performance appraisal, Compensation, Consultation) and Financial sustainability outcomes and a partial mediation effect regarding the relationship between most of the HPMP components (Recruitment, Training and development, Performance appraisal, Compensation, Consultation) and Market-based sustainability outcomes in Pakistani SMEs.

Integral to the mediation analysis, was testing the relationship between HR sustainability outcomes and HPMP on the one hand and HR sustainability and economic sustainability on the other. This analysis showed a significant positive relationship with regard to both. Therefore, employee motivation, turnover, commitment, and skill development (HR sustainability outcomes) have been shown as key determinants of SME firm performance. Pakistani SMEs would therefore benefit significantly from efforts to enhance HR sustainability outcomes.

6.3 Implications for Practice and Policy

There are several potential implications flowing from this research both with regard to policy and practice.

6.3.1 Implications for SME owners/managers

The primary objective of this study was to enhance an understanding of the extent and nature of high performance management practices (HPMP) employed by Pakistani SMEs, as well as to develop a theoretical model of HPMP and SME economic sustainability outcomes.

HPMP is adopted to only a low to moderate level in Pakistani SMEs. Taken together with low employee consultation levels with respect to both strategic and operational

issues, a low presence of specialist HR managers in SMEs and the finding that only thirty six percent of SMEs use strategic plans to develop operational plans and drive day to day operations; a 'high performance' scenario is unlikely. Khawaja (2006) argue that most Pakistani SMEs are in a low growth trap dealing with traditional products and an inability to enter into the modern technological world. He further argues that most of the time they fail to absorb various shocks and eventually have to close their businesses. His study indicates that nineteen percent of SMEs are less than five years old and only four percent are able to survive beyond 25 years. However, he suggests that such SMEs could be supported by the provision of capital, finance, and marketing, trained human resources, quality management and the upgrade of technology.

An added understanding of current HPMP practices may also be useful in solving the problem that many small business owners may not even recognise their own failure to deal with HPMP issues.

Most small business owners need to be 'micro managers' during their initial (first three) years of their business development and continuously engage in everyday affairs of their businesses (Mazzarol 2003). As the business grows, the owner/managers may not be able to make all decisions and thus need to develop a team by hiring competent people to occupy the new positions and delegate authority (Mazzarol 2003; Smith 1992). However, Rutherford et al. (2003) found that as the firm grows, the HR issues move from recruitment to retaining and then to training. They suggest that SME owner/managers should be ready to make these changes along with the growth of a firm. They further recommend that if an SME is constantly achieving low growth, the owner/managers' main focus should be improving the recruitment and selection skills.

This research study provides evidence that the presence of HR manager is a key driver for the adoption of HPMP. In view of the fact that most SMEs do not have a designated person responsible for HR issues, Pakistani SMEs could benefit by investing in such a position. Even if a lack of resources prevent SMEs from appointing a designated HR manager with specialised skills in HR, they would benefit from identifying a suitable person from within organisation whose career can

be developed in the direction of HR related issues, and who can undergo HR related training.

The findings of this study also provide evidence that the use of strategic planning has an impact on the adoption of HPMP. Despite the fact most SMEs do not use strategic planning in their everyday operating activities, it would therefore be beneficial for Pakistani SMEs to apply strategic planning in their strategic and operating activities. SME owners/managers may get the maximum advantage of the use of strategic planning if they provide opportunities to employees in the planning process (setting objectives for the firm).

The findings also show that consultation practices have a positive and significant effect on the economic sustainability of SMEs. In view of the fact that the respondent firms tend not to consult their employees, SMEs owner/managers could enhance HR sustainability outcomes (employee commitment, employee turnover, job satisfaction, skill development) by providing opportunities to employees in decision making that may eventually increase the productivity of a firm.

The positive association between several HPMP components (Recruitment, Training and Development, Performance Appraisal, Compensation) and SME economic sustainability outcomes provide evidence that HPMP is an important indicator of firm performance. The fact that HPMP within Pakistani SMEs could be characterised as a bleak house scenario limits the tremendous potential of these HPMP components in practice.

There are several possible reasons (economic and cultural) for their management style (as discussed above). However, the survey findings of this research study urge SMEs to think about potential advantages of applying HPMP to enhance sustainability outcomes. Moreover, owners/managers should be aware about the likely benefits of adoption of HPMP. Such awareness can be created by arranging mass training programs for the SME owners/managers.

The significance of the finding that HR sustainability outcomes (employee commitment, employee turnover, job satisfaction, skill development) are partially

mediating the relationship between HPMP and economic sustainability outcomes lay in the fact that by employing HPMP in Pakistani SMEs significant economic gains could be achieved. SMEs with a highly skilled and motivated work force has a much greater probability of achieving sustainable competitive advantage (Wright et al. 1994). The mere prevalence of HPMP has shown to positively impact on economic sustainability outcomes. However, the next step for SME managers is to ensure that these HPMP are employed and managed effectively. The results indicated a very low prevalence of investment in management training which may be indicative of a mindset of SME managers that they believe they do not really need further training and development.

It is imperative that SME managers realise the significance of formal management training and development and to apply such training in order to shape employee attitudes and future expectations. They could benefit from changing their traditional mindsets and become involved in formal training programs that can equip them with the tools to utilise modern technology in the running of their businesses. As such, the pursuit of adoption of HPMP should not only fulfil the goal of gaining competitive advantage/firm success but rather to benefit (motivate and retain) their employees in a larger context. Trained and professional SME owners/managers tend to attract valuable human resource through formal recruitment and selection process, building their skills by providing training and motivating them by providing opportunities in decision making.

6.3.2 Implications for Policy

There are two main approaches to small business policy. These approaches are: the ‘competitive model of small business policy’; and the ‘coordinated approach to small business policy’ (Parker 2002). The competitive approach is characterised by market relations and focus on measures which use market incentives for motivating economic actors to engage in high risk activities. Entrepreneurship is promoted through market rewards which involve creation of opportunities for earning high profits through wage and tax incentives associated with high risk initiatives. The focus on market relations includes general deregulatory measures designed to obtain high market flexibility and enhance the business environment for SMEs with tax and administrative requirements reforms (Parker 2002). The competitive model is also

centred towards building the internal management skills of entrepreneurs which may act as a competitive advantage (Parker 2002).

In contrast, the coordinated approach put less emphasis on market incentives for motivating economic actors and promoting entrepreneurship. This approach instead focuses on government as an institution of economic governance that may affect the degree of cooperation among individual producers and also help to consolidate diverse interests towards the common goal of developing particular industries or regions. Moreover, this approach is also concerned with building relationships amongst small firms or with large firms and also to develop linkages with customers, suppliers, trade unions, research organisations, or vocational training institutes (Parker 2002).

Keeping in mind the two different approaches to small business policy, Pakistan fits within the coordinated approach as the Government of Pakistan (GoP) took several measures to develop the SME sector. The GoP established a Small and Medium Enterprise Development Authority (SMEDA) in October 1998 with the aim of developing the SME sector. The GoP has also established a SME bank to finance this sector. As per the directions of GoP, most commercial banks in the country have made specialised departments for facilitating the SME sector (Bhutta et al. 2008). The GoP established an interministerial Task Force in January 2004 with the help of SMEDA (Afaqi & Seth 2009). The Task Force comprised members both from public and private sectors. The main objective of the Task Force was to formulate policy for the SME sector. Four working committees were established to focus on four key areas impeding SME growth including: the business environment; access to finance and related services; human resource development, technology and marketing, industry information; SME definition, feedback, monitoring and evaluation mechanism. Finally, the first SME policy was formulated in 2007 (this policy is currently applicable to SME sector). The objective of this policy is ‘to provide short and medium to long term policy framework with an implementation mechanism for achieving higher economic growth based on SME led private sector development’ (Baig 2007, p. 218).

Despite the above mentioned measures taken by GoP, the SME sector in Pakistan suffers from a variety of shortcomings, which have confined its ability to adjust to the economic liberalisation measures introduced by the GoP and its capacity to take full advantage of the rapidly growing world markets. These shortcomings include, for example, a focus on low value added products, low level of productivity, absence of an effective business information infrastructure, lack of strategic planning, low levels of financial literacy, unskilled human resources and nonaggressive lending strategies by banks (Baig 2007; Bari et al. 2005; Khawaja 2006; Mustafa & Khan 2005; Rohra & Panhwar 2009). However, based on the findings of this study, several *implications for policy* could be recommended.

- 1) *Management Training*: Human resource development is a crucial element that affects the performance of SMEs (Pansiri & Temtime 2008; Temtime & Pansiri 2004). The findings indicate that SMEs are utilising very low levels of management training. It could be that they are not aware of the potential benefits of such training. It is therefore strongly recommended that the Pakistani government arrange mass training program through SMEDA for SME owners/managers so that they would better manage their organisations and particularly manage their employees through improved application of HPMP.
- 2) *Upgrading of Technology (internet access)*: It has been highlighted in the literature that Pakistani SMEs are facing the issue of low productivity. It could be that Pakistani SMEs are not utilising the updated technology in their firms (especially in the manufacturing sector). The finding of this study also indicate that only fifty eight percent of the sample firms have access to the internet and only thirty five percent of SMEs are using human resource information systems. This presents an alarming issue for Pakistani firms in the 21st century. Once again the government through SMEDA can encourage SME owners/managers with regard to the upgrade of technology. This could enhance the capability of SMEs to better draw on international developments within the business world, particularly in the SME sector.
- 3) *Exports/International Trade*: The study findings indicate that only 26 percent of SMEs are exporting their products to overseas. With the emergence of WTO,

Pakistani SMEs need to be more competitive in promoting their products in the international world. The survey findings (see SME demographics) indicate that only twenty six percent of SMEs are exporting their products and services. This may be due to the fact the SMEs do have the capability but do not have sufficient knowledge or awareness needed to compete internationally and take part in exporting their products. It is therefore suggested that the government of Pakistan promote awareness amongst Pakistani SMEs about exporting their products and services through the 'Export Promotion Bureau of Pakistan'.

- 4) Further to the issue of international trade, another implication for the Pakistani government is that the key to benefit from globalisation is to promote competitiveness of local regional SMEs and also to promote entrepreneurial activities within smaller regions in Pakistan. However, this objective can only be achieved through the strengthening of social, institutional, and entrepreneurial capital.
- 5) *Research and Development*: SMEs play a significant role in the economic development of Pakistan. SME's share represents 30% to GDP, 25 percent to manufacturing value added products and 80% to non agriculture employment (as discussed in Chapter 1). However, for the last number of years, these statistics remain constant and fail to illustrate the real picture of economic expansion or contraction in SME sector (Seth 2010). This may be due to the fact that the performance measurement is difficult since the sector operates informally. Moreover, there is lack of formal publications or surveys that can provide comprehensive and current information regarding productivity, total cost, value addition, and employment generation (p. 47). Moreover, there is a dearth of research on SMEs in Pakistan (Bhutta et al. 2007). Very few studies have been published in good quality refereed journals (e.g. Bhutta et al. 2008; Bhutta et al. 2007).
- 6) *Infrastructure*: Based on the data collection experience and related literature, the researcher of this study found that many SMEs are located either on the fringes of the city of Karachi or in dense areas downtown, where access to such SMEs is difficult (Afaqi & Seth 2009). Despite the presence of some industrial estates in

the city of Karachi, the conditions of roads and other facilities are very poor. Some of the manufacturing SMEs are operating in very old buildings which can be dangerous to employees and other stakeholders. It is therefore recommended that the government of Pakistan repair the roads of old industrial estates and also develop new estates to provide state of art infrastructure and facilities at one place.

- 7) *Lack of SME Database*: Once again based on the data collection experience, the researcher of this study found no particular database for SMEs either in the manufacturing or services-based sector. Moreover, some onsite (factory) addresses were not available while others were faded or invisible. Thus, it is very difficult for researchers to take appropriate random samples for their studies (the same problem faced by the researcher of this study). The development of a SME database is therefore of critical importance in achieving the objective of promoting research and development in this sector.

6.4 Contributions from this research

This research study contributes both to theory and practice. A summary of the contributions made by this research study is presented in Figure 6.2. These contributions are described and referenced with relevant sections, Tables and Figures. The contributions are also referenced to the literature presented in Chapter 2 and 3. The main contributions of the literature review to the HPMP literature lay in the delimitation of the definition of HPMP and its measurement. The main contributions of the empirical analysis lay in providing a profile of the extent and nature of HPMP in Pakistani SMEs; examining the relationship between contextual characteristics (firm, size, industry type, strategic planning, presence of HR manager) and the adoption of HPMP; analysing the relationship between HPMP and economic sustainability outcomes in SMEs, exploring the mediating effect of HR sustainability outcomes on the relationship between HPMP and economic sustainability outcomes in Pakistani SMEs (see Figure 6.2).

The study addressed the research gaps reported in the literature (see Chapter 3). For instance, the study contributes to the limited research conducted in the area of high performance management practices (HPMP) in SMEs. The study adds value to the

literature of HPMP by analysing the human resource aspect of SMEs within a developing country which is under researched. Most of the prior studies in this area are conducted in the developed world (e.g. Bae et al. 2011; De Kok & Hartog 2006; Huselid 1995; Rowden 2002; Shih et al. 2006; Way 2002a; Wiesner et al. 2007; Wood & de Menezes 2008).

This study has conducted one of the most thorough analyses of HPMP compared to other existing studies which measure their HPMP constructs with only a few individual variables. One hundred and sixteen HPMP variables were measured and eleven sustainability outcomes (including HR and economic sustainability outcomes). The hypothesis testing outcome showing a significant number of partially supported hypothesis is owing to the fact that a total of one hundred and twenty seven variables/items (116 variables HPMP variables, seven variables for economic sustainability outcomes and four variables for measuring HR sustainability outcomes) were used to answer the main research objective and four research questions of this study. In comparison, other studies on HPMP have used very few variables, for example, Huselid (1995) used thirteen variables; Wood and de Menezes (2008) used twenty three variables; Way (2002a) used forty seven variables; and Guthrie (2001) used twelve variables

Therefore, this study has gone beyond just examining the impact of HPMP on economic sustainability outcomes. It also addressed the gap of analysing the role of mediating variables on the relationship between HPMP and firm performance (Gerhart 2005; Katou & Budhwar 2007). Gerhart (2005) pointed out that without analysing the role of mediating/moderating variables, the relationship between HR practices and firm performance remain uncertain. Moreover, this research study contributes to theory by supporting the universalistic and configurational approaches used in this study.

This study provides support for the configurational perspective which hypothesise that certain HR practices (HPMP) work together to enhance firm performance (Delery & Doty 1996). Wiesner and Innes (2012) argue that SMEs could not possibly be capable of either considering or practically using HR practices as understood in a unidimensional manner—in other words SMEs simply do not have

the resources to use the wide range of HR practices employed in large organisations. Instead, best practice is far more likely to emerge in context and in limited clusters of HR practices.

The configurational perspective focuses on internally consistent configurations of HR practices, or employment systems that identify the relationship between HR practices and strategic configurations (Arthur 1994; Delery & Doty 1996; Fernando et al. 2005; Huselid & Becker 1996; Ichniowski et al. 1997). For SMEs, due to their smaller size and lack of resources, limited HR practices could be expected. For instance, in relation to selection practices, some SMEs might use more normative formal and informal practices along with one on one interviews or unstructured interviews while others focus on participatory evaluative practices such as work samples or assessment centres, and while a minority of SMEs might continue utilising external input such as consultants or other senior employees/managers in the final selection process. Thus, based on the configurational approach, different clusters of HR practices are equally effective which might contradict the idea of a single set of 'best practices'. The configurational approach is therefore in favour of using different clusters of HR practices within each HR domain/index.

The survey findings supported the configurational perspective since the impact of every separate HPMP component on economic sustainability has been analysed, but the combined impact of these components on economic sustainability has also been explored. Moreover, the survey results contribute to the configurational perspective by showing a partial mediation effect of HR Sustainability Outcomes (employee commitment, employee turnover, job satisfaction, skill development) on the relationship between HPMPs and SME Sustainability Outcomes.

Exploring High Performance Management Practices (HPMP) and their Impact Upon Sustainability of Small and Medium Enterprises (SMEs) in, Pakistan

Definition of HPMP

Coverage in the Literature: Thoroughly discussed (Section 3.2)

Contributions from this research study: Studied and analysed definition of HPMP based on prior studies (Appendix A)

Prevalence and Nature of HPMP in SMEs

Coverage in the Literature: Discussed studies on ‘HPMP in SMEs’ conducted in different countries (Section 3.3).

Contributions from this research study: Analysed how HPMP is measured in the literature (Section 3.2.2, Appendix A) Low to moderate level of adoption of HPMP in SMEs (Section 5.3 & 6.2.1, Table 5.3-9) Specific results provided.

Impact of Contextual Characteristics on the Prevalence of HPMP in SMEs

Coverage in the Literature: Prevalence of HPMP studied and discussed in relation to firm contextual characteristics including firm size, industry type, strategic planning, and presence of HR manager (Section 2.5).

Contributions from this research study: Specific results provided. Firm size and strategic planning have partial effect while presence of HR manager has significant effect on the prevalence of HPMP. Services-based SMEs have adopted HPMP to a significantly greater extent than Manufacturing SMEs (Section 5.5 & 6.2.2, Table 5.12).

Impact of Prevalence of HPMP and Sustainability Outcomes in SMEs

Coverage in the Literature: Thoroughly discussed research studies on relationship between HPMP and firm performance (Section 3.4)

Contributions from this research study: Specifically studied and analysed recent studies on the relationship between HPMP and firm performance (Appendix C & D). Provided support for the Configurational Perspective with positive significant relationships between certain components of HPMP and SME Economic Sustainability Outcomes (Section 5.7 & 6.2.3, Table 5.13-18, Figure 5.2-4).

Mediating effect of HR Sustainability Outcomes on the relationship between HPMP and SME Sustainability Outcomes

Coverage in the Literature: Briefly discussed (Section 3.5)

Contributions from this research study: Provided support for bridging the research gap with HR sustainability outcomes partially mediating the relationship between HPMP and SME sustainability outcomes (Section 5.8 & 6.2.4, Table 5.19-22, Figure 5.5-6).

Figure 6.2 Contributions from this research study

6.5 Limitations and Suggestions for Future Research

Like any other research, this study is not without its limitations. First, the data have been obtained from a single person in the form of owners/managers who rated their HPMP in their organisations (Gerhart et al. 2000). However, collecting data from owners/managers, managing directors or the chief executive officer (CEO) as the self reporting person is a common approach since CEOs are well informed about all strategic and operational activities within the organisation (Frost et al. 2002) Within the SME context it is specifically appropriate since the SMEs owner/manager is the key person who run most of the affairs of business and take most of the strategic decisions (Rana et al. 2007). Nevertheless , in order to enhance the internal validity of the research, an extension of this study to collect data from employees within the organisations may be beneficial (Shih et al. 2006).

This study has been conducted in the Pakistani context and the data for this research study was collected from SMEs in services-based and manufacturing firms in a single city (Karachi) within Pakistan. The reason for specifically limiting the scope of the study to this research context lay in the fact that major flooding in major parts of the country occurred during the time of data collection. This made part of the country inaccessible and put significant resource constraints (time and money) in terms of travelling on the researcher. Thus, caution should be applied for interpreting the generalisability of results. However, Karachi is the biggest industrial city of Pakistan. It contributes 25 percent to national GDP. It also shares 65 percent in national revenue such as federal and provincial taxes, customs and surcharges (CDGK 2011). Furthermore, the data were collected from 13 major industries (within the two major categories of manufacturing and services). Future research including other parts of Pakistan (rural and urban) would add significantly to the generalisability of the results within Pakistan. In addition, the transferability of the findings of the current study may not be transferable and applicable in other cultural contexts. However, since there has been such limited information of HPMP in Pakistan and other countries, the current study represents an important contribution.

This research study was conducted within a cultural context which is under researched, underdeveloped and also quite different to other Western cultures and nations. In order to enhance the external validity of this study, the results of this

study could be compared to similar studies in other cultures and countries. The external validity issue has been addressed to a certain extent by adapting the survey questionnaire from another study conducted in another country (Australia). The next step regarding future research is to compare the data collected in the current study with that of a similar study conducted in Australia. However, opportunities will also be sought to conduct this survey in other countries with similar cultures in the same region (Shih et al. 2006).

The survey in this study was conducted at a single point in time. In view of the significant difficulties experienced in Pakistan during the conduct of this study, there is the risk of potential distortion of the responses because respondents may have viewed their world and reality only in the light of whatever seemed important to them at that specific time. This limitation could be overcome by conducting longitudinal studies in the future (Barnes, 2002). Longitudinal data will also further clarify the causal relationships between HPMP and economic sustainability (Tsai 2006).

As mentioned in the previous section, this study provides one of the most thorough analyses of HPMP (individual variables, components and subcomponents) compared to other existing studies which measure their HPMP constructs with only a few individual variables. This may appear to be overly complex and unnecessary. However, after conducting a research review of the definitions and measurement of HPMP as part of the literature review, it became evident that all six components (recruitment, selection, training and development, performance appraisal, compensation and consultation) are critical to the in depth analysis of HPMP.

Finally, because this study focuses on exploring high performance management practices (HPMP) in small and medium size (SMEs) firms with 20-250 employees, firms with employee sizes below 20 and above 250 fall outside the scope of this study. Thus, the results and implications of the findings are restricted to SMEs within this size range only. Regardless this limitation, the study is still important since the SME sector is dominant in the Pakistani economy and out of 3.2 million businesses, the share of SMEs is 90 percent (PBS 2011).

6.6 Conclusion

According to the findings in this study, SMEs have a low to moderate affinity for the 'bright prospect' (Wiesner & McDonald 2001) and HPMP in the respondent SMEs could be classified as a bleak house scenario.

Within the Pakistani context, specific triggers of this lack of HPMP adoption, could be the lack of resources (Kaya 2006; Shih et al. 2006), current financial and economic problems (SBP 2010), a lack of awareness about the benefits of such practices (as discussed above) and also a lack of training, education, and entrepreneurial skills which are integral to the current characteristics of the respondent SMEs (HafizUllah et al. 2011).

However, it should be kept in mind that an alternative perspective has been offered by authors Bacon et al. (1996); Hill and Stewart (2000); and Wiesner and McDonald (2001) who assert that the notion of bleak house scenario is inaccurate for SMEs by arguing that each small organisation is unique in its composition and culture and thus not attracted by formality or standardisation. They further argue that the behaviour of small firms is directed by their internal needs evolved to gain maximum benefits from their operating and commercial activities. Moreover, Bacon et al. (1996) argue that the simple informal structure in small firms have an advantage over large firms owing to the lack of formal structures which provide more flexibility to employees in terms of communication and also in managing change.

According to some other authors, HRM in SMEs is neither bright nor bleak but instead is a mix of complex policies and practices with both degree of formality and informality (Harney & Dundon 2006; Wiesner & McDonald 2001). They assert that the nature of such practices is the result of their unique context from which they emerged. The study of Ram (1991) also supports this idea by indicating that HRM in small firms is 'complex, informal and often contradictory' rather than harmonious or autocratic (p. 601). Other studies also support this notion (Harney & Dundon 2006; Hill & Stewart 2000).

In view of this alternative perspective, the bleak house scenario evident from the findings may not be all negative since several initiatives to further develop and grow

SMEs in Pakistan have been initiated in recent years. For example, the Securities and Exchange Commission of Pakistan (SEC) introduced the Single Member Companies Rules in 2003 to encourage SMEs to register as a company in SEC; the establishment of the Intellectual Property Right Organisation, and the Technology Upgrading and Skill Development Centre (TUSDEC) in 2005; the President's ROZGAR (employment) Scheme in 2006 (promoting self employment of educated persons including women); the Shell Tameer Program (developing entrepreneurial skills among the youth); Entrepreneurship Development at Universities; the Pakistan Software Export Board (PSEB); the Askari College of Entrepreneurs (ACE); the National Productivity Organisation Pakistan (NPO); Initiatives for Women Entrepreneurship; the Pakistan Enterprise Competitiveness Support Fund (CSF); the Business Support Fund (BSF) (for enhancing competitiveness); and the Pakistan Initiative for Strategic Development and Competitiveness (PISDAC) (strengthening of public private partnerships) (Baig 2007).

These initiatives combined with the proposed recommendations outlined in section 6.3 above, have the potential to assist SMEs in transforming themselves to a more high performance and bright prospect scenario.

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Appendices

Appendix A: Definitions of HPMP and the main themes in these definitions

S.No	Study	Year	Definition of HPMP	Main themes in definitions			
				HR practices/ approach	Managerial practices/ (wider interpretation)	HR outcomes/HR sustainability outcomes	Firm performance/ competitive advantage
1	Huselid	1995	High performance work practices affect employee outcome (turnover, productivity) and financial performance	✓		✓	✓
2	Kling	1995	Specific practices such as training, alternative pay system and employee involvement are correlated with higher productivity	✓			✓
3	Wood and de Menezes	1998	High commitment management (HCM) is characterized by the use of such personnel practices as information dissemination, problemsolving groups, minimal status differences, job flexibility, and team working; and commitment on the part of employers to employees based on the conception of them as assets.	✓	✓		
4	Way	2002	HPWS consist of practices such as staffing, compensation, flexible job assignment, team work, training and communication expected to achieve low turnover and high labour productivity	✓		✓	✓
5	Batt	2002	High involvement HR practices allow a firm to build firmspecific human capital, which in turn influences organisational performance in two ways: <i>directly</i> , via its effect on employee performance, and <i>indirectly</i> , via employee attachment to the firm	✓		✓	✓

S.No	Study	Year	Definition of HPMP	Main themes in definitions			
				HR practices/ approach	Managerial practices/ (wider interpretation)	HR outcomes/HR sustainability outcomes	Firm performance/ competitive advantage
6	Harley	2002	HPWS is a set of practices such as performance related pay, training and teambased work when used in combination are said to be mutually reinforcing and to generate superior organisational performance	✓		✓	✓
7	Cunha & Cunha	2004	High performance work systems, which include training, incentive systems, high selectivity, flexible job assignments and performance management, in concert, contribute to improve employee and company performance, namely by increasing the level of productivity.	✓		✓	✓
8	Hartog & Verburg	2004	High performance work practices are defined 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. Such practices are likely to increase organisational performance.		✓	✓	✓
9	Gollan	2005	High involvement management is designed to improve employee relations and increase organisational performance and profitability through quality communication and consultation between management and employees.		✓	✓	✓

S.No	Study	Year	Definition of HPMP	Main themes in definitions			
				HR practices/ approach	Managerial practices/ (wider interpretation)	HR outcomes/HR sustainability outcomes	Firm performance/ competitive advantage
10	Bryson, Forth & Kirby	2005	High involvement management (HIM) represents the combination of task related practices, which aim to maximise employees' sense of involvement in their work, and human resource management practices that aim to maximise employee's commitment to the wider organisation.		✓	✓	✓
11	Chow	2005	A highperformance work system is defined as a system consisting of a set of complementary HR practices that can give a firm a competitive advantage. Or A system of practices that gives employees the skills, information, and motivation to help the company gain a competitive advantage over its competitors.	✓		✓	✓
12	Datta, Guthrie & Wright	2005	Highperformance or highinvolvement human resource systems, which are systems of human resource practices designed to enhance employees' skills, commitment, and productivity.	✓		✓	✓
13	Benson, Young & Lawler	2006	High involvement work practices are a specific set of human resource practices that focus on employee decisionmaking power, access to information, training, and incentives. These practices have the potential to increase productivity and organisational performance.	✓		✓	✓

S.No	Study	Year	Definition of HPMP	Main themes in definitions			
				HR practices/ approach	Managerial practices/ (wider interpretation)	HR outcomes/HR sustainability outcomes	Firm performance/ competitive advantage
14	De Kok & Den Hartog	2006	A high performance work system can be defined as a set of distinct but interrelated HRM practices that together select, develop, retain and motivate a workforce (1) that possesses superior abilities (2) that applies their abilities in their workrelated activities (3) whose workrelated activities result in these firms achieving superior intermediate indicators of firm performance and sustainable competitive advantage.	✓		✓	✓
15	Denton	2006	High performance work systems are those organisations that employ a fundamentally different approach to managing than the traditional piecemeal approach. These work systems sometimes go by other names like high involvement or high commitment organisations. The essential characterise of such organisations are: employment security, selective hiring of new personnel, use of selfmanaged teams and decentralization, and of decision making, high compensation that is contingent on organisational performance, extensive training of personnel, reduced status distinctions and barriers, including dress, office arrangements and wage differences across all levels and extensive sharing of financial and performance information within the organisation.	✓			

S.No	Study	Year	Definition of HPMP	Main themes in definitions			
				HR practices/ approach	Managerial practices/ (wider interpretation)	HR outcomes/HR sustainability outcomes	Firm performance/ competitive advantage
16	Shih, Chiang & Hsu	2006	HPWS refers to a set of HRM practices that can enhance firm performance that is an economically and statistically significant impact on employee turnover, productivity, or corporate financial performance	✓		✓	✓
17	Tsai	2006	HPWS are associated with a higher organisational performance than that achieved under a control system: for example, HPWS enhance workers' skills and competence by providing training and jobrotation practices; and skilled and knowledgeable employees are motivated and empowered by the decentralization of managerial decision making, the setting up of formal participation mechanisms, and the provision of proper rewards.	✓	✓	✓	✓
18	Zheng, Morrison & O'Neill	2006	High performance HRM practices such as performancebased pay, participatory decisionmaking, free market selection, and performance evaluation generates better HRM outcomes and, in turn, better HRM outcomes contribute positively to firm Performance	✓		✓	✓

S.No	Study	Year	Definition of HPMP	Main themes in definitions			
				HR practices/ approach	Managerial practices/ (wider interpretation)	HR outcomes/HR sustainability outcomes	Firm performance/ competitive advantage
19	Boxal & Macky	2007	HPWSs are systems of managerial practices that increase the empowerment of employees and enhance the skills and incentives that enable and motivate them to take advantage of this greater empowerment (wider than just HR practices)		✓	✓	
20	Connolly & McGing	2007	High performance work practices provides organisations with the necessary competitive edge				✓
21	Drummond & Stone	2007	High performance work system is defined as set of complementary work practices covering three broad areas or bundle of practices. (1) Selfdirected teams, quality circles and sharing of company information (2) recruitment process, performance appraisals and mentoring (3) reward and commitment practices, embracing financial rewards, family friendly policies, job rotation and flexible working.	✓			
22	BeltranMartin et al	2008	HPWS comprise practices aimed at enhancing the firm's human capital, under the premise that employee potential is not fully utilized and can be enhanced through the appropriate means	✓		✓	
23	LunaArocas & Camps	2008	HPMP are set of distinct but interrelated HR practices that, taken together, select, develop, retain and motivate a work force. These practices are also linked to firm performance.	✓		✓	✓

S.No	Study	Year	Definition of HPMP	Main themes in definitions			
				HR practices/ approach	Managerial practices/ (wider interpretation)	HR outcomes/HR sustainability outcomes	Firm performance/ competitive advantage
24	Hui et al.	2009	HPWS is a system of HR practices designed to enhance employees' competencies, motivation, and performance in providing highquality service to external customers	✓		✓	✓
25	Messersmith & Patel	2011	HPWS may be viewed as strong systems comprising internally coherent practices that send reinforcing messages and cues to employees which in turn affect unitlevel performance	✓		✓	✓
26	Lawler et al.	2011	HPWSs comprise three complementary principles to enhance workforce abilities; to enhance employee motivation; and to create avenues that allow workers to have a significant say in problemsolving or decisionmaking processes.			✓	
27	Ait Razouk	2011	HPWS are a source of better performances because it is set of practices which has an effect on employees' commitment and involvement; it is an internal resource able to produce a competitive advantage; and finally, because it constitutes a set of internally complementary practices.	✓		✓	✓

Source: Developed for this research

Appendix B: Frequency of individual HPMP in prior research studies from 2000 to 2011

S.No	HPMP	Frequency with which the term is used	Source
1.	Recruitment	51	Ahmad & Schroeder 2003; Bae & Lawler 2000; Barnard & Rodgers 2000; Bjorkman & Xiucheng 2002; Bosile, Paauwe & Jansen 2001; Brynjolfsson, Hitt, Yang, Baily & Hall 2002; Collins, Smith & Stevens 2001; GouldWilliams 2003; Guthrie 2001; Guthrie, Spell & Nyamori 2002; Harel, Tzafir & Baruch 2003; Huang 2000; Huang 2001; Khatri 2000; Lepak & Snell 2002; Michie & Sheehan 2003; Rogg et al 2001; Sheppeck & Militello 2000; Way 2002; Whitener 2001; Zheng 2001; Apospori et al 2008; AragonSanchez & SanchezMarin 2005; Barret & Mayson 2007; BeltranMartin et al 2008; Bryston, Forth & Kirby 2005; Chand & Katou 2007; Chang & Huang 2005; Chow, Huang, & Liu 2008; Chow 2005; Connolly & McGing 2007; Cunha & Cunha 2004; Datta, Guthrie & Wright 2005; De Kok & Den Hartog 2006; Drummond & Stone 2007; Fabi, Raymond & Lacoursiere 2009; Fleetwood & Hesketh 2008; Hartog & Verburg 2004; Katou & Budhwar 2007; Katou & Budhwar 2006; Lepak & Shaw 2008; Khandekar & Sharma 2005; Lytras & Ordonez de Pablos 2008; Nguyen & Bryant 2004; Rose & Kumar 2006; Shih, Chiang & Hsu 2006; Tsai 2006; Verburg, Hartog & Koopman 2007; Wood & de Menezes 2008; Wood, Holman & Stride 2006;
2.	Selection	51	Ahmad & Schroeder 2003; Bae & Lawler 2000; Barnard & Rodgers 2000; Bjorkman & Xiucheng 2002; Bosile, Paauwe & Jansen 2001; Brynjolfsson, Hitt, Yang, Baily & Hall 2002; Collins, Smith & Stevens 2001; GouldWilliams 2003; Guthrie 2001; Guthrie, Spell & Nyamori 2002; Harel, Tzafir & Baruch 2003; Huang 2000; Huang 2001; Khatri 2000; Lepak & Snell 2002; Michie & Sheehan 2003; Rogg et al 2001; Sheppeck & Militello 2000; Way 2002; Whitener 2001; Zheng 2001; AragonSanchez & SanchezMarin 2005; Baptiste 2008; Barret & Mayson 2007; BeltranMartin et al 2008; Boxal & Macky 2007; Chand & Katou 2007; Chang & Huang 2005; Chow, Huang, & Liu 2008; Chow 2005; Connolly & McGing 2007; Cunha & Cunha 2004; Datta, Guthrie & Wright 2005; De Kok & Den Hartog 2006; Denton 2006; Fleetwood & Hesketh 2008; Hartog & Verburg 2004; Jimenez & SanzValle 2008; Katou & Budhwar 2007; Katou & Budhwar 2006; Khandekar & Sharma 2005; Lepak & Shaw 2008; Lytras & Ordonez de Pablos 2008; Rose & Kumar 2006; Sels et al 2006; Tsafirir 2006; Tsai 2006; Verburg, Hartog & Koopman 2007; Wang & Zang 2005; Wood, Holman & Stride 2006; Zheng, O'Neill & Morrison 2009
3.	Compensation	71	Ahmad & Schroeder 2003; Agaarwala 2003; Allen, Schore & Griffeth 2003; Bae & Lawler 2000; Batt 2002; Batt, Colvin & Keefe 2002; Bjorkman & Xiucheng 2002; Black & Lynch 2001; Colvin, Batt & Katz 2001; Delery, Gupta, Shaw, Jenkins & Ganster 2000; Fey & Bjorkman 2000; Fey, Bjorkman & Pavlovskaya 2000; GouldWilliams 2003; Guthrie 2001; Guthrie, Spell & Nyamori 2002; Harel, Tzafir & Baruch 2003; Huang 2000; Huang 2001; Khatri 2000; Laursen 2001; Laursen & Foss 2003; Lepak & Snell 2002; Li 2003; Meyer & Smith 2000; Michie & Sheehan 2003; Miller & Lee 2001; Shah, Gupta & Delery 2002; Teo & Waters 2002; Way 2002; Whitener 2001; Zheng 2001; Akhtar, Ding & G.E 2008; AragonSanchez & SanchezMarin 2005; Bacon & Hoque 2005; Baptiste 2008; Barret & Mayson 2007; Benson, Young & Lawler 2006; BeltranMartin et al 2008; Boxal & Macky 2007; Bryston, Forth & Kirby 2005; Chand & Katou 2007; Chang & Huang 2005; Chow, Huang, & Liu 2008; Chow 2005; Cunha & Cunha 2004; Conway, & Monks 2009; Datta, Guthrie & Wright 2005; De Kok & Den Hartog 2006; Denton 2006; Drummond & Stone 2007; Fleetwood & Hesketh 2006; Fleetwood & Hesketh 2008; Hartog & Verburg 2004; Jimenez & SanzValle 2008; Katou & Budhwar 2007; Katou & Budhwar 2006; Khandekar & Sharma 2005; Lepak & Shaw 2008; Lytras & Ordonez de Pablos 2008; Rose & Kumar 2006; Sels et al 2006; Shih, Chiang & Hsu 2006; Subramony 2006; Tsafirir 2006; Tsai 2006; Verburg, Hartog & Koopman 2007; Wang & Zang 2005; Wood & de Menezes 2008; Zheng, Morrison & O'Neill 2006; Zheng, O'Neill & Morrison 2009; Ait Razouk 2011.

S.No	HPMP	Frequency with which the term is used	Source
4.	Training	69	Ahmad & Schroeder 2003; Agaarwala 2003; Batt, Colvin & Keefe 2002; Bjorkman & Xiucheng 2002; Bosile, Paauwe & Jansen 2001; Brynjolfsson, Hitt, Yang, Baily & Hall 2002; Collins, Smith & Stevens 2001; Das, Handfield, Calantone & Shosh 2000; Fey & Bjorkman 2000; Fey, Bjorkman & Pavlovskaya 2000; GouldWilliams 2003; Guthrie 2001; Guthrie, Spell & Nyamori 2002; Harel, Tzafir & Baruch 2003; Huang 2000; Huang 2001; Hunter & Lafkas 2003; Khatri 2000; Konard & Mangel 2000; Lepak & Snell 2002; Meyer & Smith 2000; Michie & Sheehan 2003; Miller & Lee 2001; Rogg et al 2001; Shah, Gupta & Delery 2002; Sheppeck & Militello 2000; Teo & Waters 2002; Way 2002; Whitener 2001; Zheng 2001; Akhtar, Ding & G.E 2008; Apospori et al 2008; AragonSanchez & SanchezMarin 2005; Baptiste 2008; Barret & Mayson 2007; BeltranMartin et al 2008; Benson, Young & Lawler 2006; Boxal & Macky 2007; Bryan 2006; Chand & Katou 2007; Chang & Huang 2005; Chow, Huang, & Liu 2008; Chow 2005; Connolly & McGing 2007; Conway, & Monks 2009; Datta, Guthrie & Wright 2005; De Kok & Den Hartog 2006; Denton 2006; Fabi, Raymond & Lacoursiere 2009; Hartog & Verburg 2004; Jimenez & SanzValle 2008; Katou & Budhwar 2007; Katou & Budhwar 2006; Lepak & Shaw 2008; Khandekar & Sharma 2005; Nguyen & Bryant 2004; O'Regan, Sims & Ghobadian 2005; Rose & Kumar 2006; Sels et al 2006; Shih, Chiang & Hsu 2006; Tsafir 2006; Tsai 2006; Verburg, Hartog & Koopman 2007; Wang & Zang 2005; Wood & de Menezes 2008; Wood, Holman & Stride 2006; Zheng, Morrison & O'Neill 2006; Zheng, O'Neill & Morrison 2009;
5.	Performance Appraisal	45	Agaarwala 2003; Bjorkman & Xiucheng 2002; Fey & Bjorkman 2000; Huang 2001; Hunter & Lafkas 2003; Khatri 2000; Lepak & Snell 2002; Meyer & Smith 2000; Rogg et al 2001; Sheppeck & Militello 2000; Whitener 2001; Zheng 2001; Akhtar, Ding & G.E 2008; Apospori et al 2008; AragonSanchez & SanchezMarin 2005; Bacon & Hoque 2005; Baptiste 2008; Barret & Mayson 2007; BeltranMartin et al 2008; Boxal & Macky 2007; Chow, Huang, & Liu 2008; Chow 2005; Conway, & Monks 2009; Connolly & McGing 2007; Datta, Guthrie & Wright 2005; De Kok & Den Hartog 2006; Denton 2006; Drummond & Stone 2007; Fabi, Raymond & Lacoursiere 2009; Fleetwood & Hesketh 2006; Hartog & Verburg 2004; Jimenez & SanzValle 2008; Katou & Budhwar 2007; Katou & Budhwar 2006; Khandekar & Sharma 2005; Lepak & Shaw 2008; Nguyen & Bryant 2004; Rose & Kumar 2006; Sels et al 2006; Verburg, Hartog & Koopman 2007; Wang & Zang 2005; Wood, Holman & Stride 2006; Wood & de Menezes 2008; Zheng, Morrison & O'Neill 2006; Zheng, O'Neill & Morrison 2009; Ait Razouk 2011
6.	Consultation	41	Ahmad & Schroeder 2003; Allen, Schore & Griffeth 2003; Appleyard & Brown 2001; Bae & Lawler 2000; Batt 2002; Black & Lynch 2001; Bosile, Paauwe & Jansen 2001; Das, Handfield, Calantone & Shosh 2000; Delery, Gupta, Shaw, Jenkins & Ganster 2000; Fey & Bjorkman 2000; Fey, Bjorkman & Pavlovskaya 2000; Guest & Pecci 2001; Guthrie 2001; Guthrie, Spell & Nyamori 2002; Harel, Tzafir & Baruch 2003; Khatri 2000; Laursen 2001; Laursen & Foss 2003; Mendelson 2000; Richard & Johnson 2001; Sheppeck & Militello 2000; Zheng 2001; Akhtar, Ding & G.E 2008; Baptiste 2008; Chow, Huang, & Liu 2008; Chow 2005; Connolly & McGing 2007; Conway, & Monks 2009; De Kok & Den Hartog 2006; Denton 2006; Fabi, Raymond & Lacoursiere 2009; Gollan 2005; Katou & Budhwar 2007; Katou & Budhwar 2006; Lepak & Shaw 2008; Sels et al 2006; Subramony 2006; Tsafir 2006; Zheng, Morrison & O'Neill 2006; Zheng, O'Neill & Morrison 2009;
7.	Employment security	16	Denton 2006; Fleetwood & Hesketh 2008; Shih, Chiang & Hsu 2006; Tsai 2006; Wood & de Menezes 2008; Ahmad & Schroeder 2003; Batt 2002; BayoMoriones & HuertaArribas 2002; Fey, Bjorkman & Pavlovskaya 2000; GouldWilliams 2003; Li 2003; Michie & Sheehan 2003; Akhtar, Ding & G.E 2008; Bryston, Forth & Kirby 2005; Chow, Huang, & Liu 2008; Conway, & Monks 2009
8	Sharing Information	17	Burton & O'Reilly 2000; Collins, Smith & Stevens 2001; Das, Handfield, Calantone & Shosh 2000; Fey & Bjorkman 2000; GouldWilliams 2003; Guthrie 2001; Guthrie, Spell & Nyamori 2002; Mendelson 2000; Michie & Sheehan 2003; Richard & Johnson 2001; Teo & Waters 2002; Way 2002; Denton 2006; Drummond & Stone 2007; Ahmad & Schroeder 2003; Bjorkman & Xiucheng 2002; Ait Razouk 2011
9	Growth opportunities	01	Allen, Schore & Griffeth 2003

S.No	HPMP	Frequency with which the term is used	Source
10	Skill development	08	Appleyard & Brown 2001; Agaarwala 2003; Batt 2002; Colvin, Batt & Katz 2001; Fey, Bjorkman& Pavlovskaya 2000; Li 2003; Michie & Sheehan 2003; Spell, C.S. 2001
11	Career planning & development	04	Agaarwala 2003; Fey, Bjorkman& Pavlovskaya 2000; Meyer & Smith 2000; Richard & Johnson 2001
12	Job design	07	Bae & Lawler 2000; Lepak & Snell 2002; Chand & Katou 2007; Chow, Huang, & Liu 2008; Conway, & Monks 2009; Jimenez & SanzValle 2008; Katou & Budhwar 2007;
13	Organisation change	01	Bacon & Blyton 2001
14	Team working	07	Bryston, Forth & Kirby 2005; Jimenez & SanzValle 2008; Tsai 2006; Bacon & Blyton 2001; Batt 2002; GouldWilliams 2003; McNabb & Whiffeld 2001
15	Union	14	Batt, Colvin & Keefe 2002; BayoMoriones & HuertaArribas 2002; Black & Lynch 2001; Colvin, Batt & Katz 2001; Delery, Gupta, Shaw, Jenkins & Ganster 2000; McNabb & Whiffeld 2001; Zheng 2001; Bacon & Hoque 2005; Katou & Budhwar 2007; Katou & Budhwar 2006; Tsafir 2006; Tsai 2006; Zheng, Morrison & O'Neill 2006; Zheng, O'Neill & Morrison 2009
16	Internal promotion	08	Barnard & Rodgers 2000; Bosile, Paauwe & Jansen 2001; Fey, Bjorkman& Pavlovskaya 2000; Guthrie 2001; Guthrie, Spell & Nyamori 2002; Baptiste 2008; Datta, Guthrie & Wright 2005; Hartog & Verburg 2004
17	Improvement groups/quality circle	11	BayoMoriones & HuertaArribas 2002; Hunter & Lafkas 2003; Laursen & Foss 2003; McNabb & Whiffeld 2001; Bacon & Hoque 2005; Bryston, Forth & Kirby 2005; Chand & Katou 2007; Drummond & Stone 2007; Fleetwood & Hesketh 2006; Lepak & Shaw 2008; Wood & de Menezes 2008
18	Empowerment/decentralization	15	Ahmad & Schroeder 2003; Bae & Lawler 2000; Bosile, Paauwe & Jansen 2001; Guest & Pecci 2001; Mendelson 2000; Richard & Johnson 2001; Sheppeck & Militello 2000; Boxal & Macky 2009; Connolly & McGing 2007; Hartog & Verburg 2004; Jimenez & SanzValle 2008; Lepak & Shaw 2008; O'Regan, Sims & Ghobadian 2005; Rose & Kumar 2006; Tsai 2006
19	Selfmanaged teams	02	Denton 2006; Mendelson 2000
20	Cross functional teams	03	Wood, Holman & Stride 2006; Das, Handfield, Calantone & Shosh 2000; Mendelson 2000
21	Formal planning	05	Bacon & Hoque 2005; Barret & Mayson 2007; Wood, Holman & Stride 2006; Huang 2000; Huang 2001
22	Grievance procedures	03	Chow 2005; Connolly & McGing 2007; Datta, Guthrie & Wright 2005
23	Health & Safety	03	Katou & Budhwar 2006; Katou & Budhwar 2007; Lepak & Shaw 2008
24	Job rotation	08	Datta, Guthrie & Wright 2005; De Kok & Den Hartog 2006; Drummond & Stone 2007; Fleetwood & Hesketh 2006; Lepak & Shaw 2008; BayoMoriones & HuertaArribas 2002; Laursen & Foss 2003; Mendelson 2000
25	HR planning	05	Bosile, Paauwe & Jansen 2001; Chand & Katou 2007; Harris & Ogbonna 2001; Khatri 2000; Richard & Johnson 2001

Source: Developed for this research

Appendix C: Research studies (2000-2011): The relationship between HPMP and sustainability outcomes in SMEs

S.No	Author(s)	Year	Level of analysis	Sample size	HPMP Indicator	Performance/sustainability measures	Main effect*
1	Rogg et al	2001	Small business firms	351	Employee attitude; Employee policies; Orientation of new employees; Hiring practices; Job descriptions; Formal Performance reviews; Training; Employee commitment; Cooperation/coordination	Customer satisfaction	Yes
2	Way	2002	Small businesses	446	Staffing; Groupbased performance pay; Pay level; Flexible job assignments; Teamwork; Training; communication	Turnover; productivity	Mixed
3	Nguyen & Bryant	2004	SMEs (Vietnam)	89	Hiring; Firing; Source of new employees; HR plan; Training; Job description; Performance appraisal;	Organisational performance (profit growth)	Yes
4	O'Regan, Sims & Ghobadian	2005	SMEs (Electronic & Engineering firms) UK	207	Job description; Employee training; Decision making; Communication ; Empowerment; Staff promotion; Disciplinary matters;	Profitability	Yes
5	AragonSanchez & SanchezMarin	2005	SMEs (Spanish)	1351	Recruitment & selection; Performance appraisal; Training; Promotion and career plans; Compensation system;	Performance	Yes

S.No	Author(s)	Year	Level of analysis	Sample size	HPMP Indicator	Performance/sustainability measures	Main effect*
6	Bacon & Hoque	2005	SMEs (UK)	2191	Personality and competency testing; Standard induction program; Twoway team briefings; Quality circles; Formal procedures for grievance handling; Performance related pay schemes; Formal strategic plan; Trade unions;	Adoption of HRM; Productivity	Mixed
7	Sels et al	2006	Small firms	416	Training; Selection; Compensation; Careers; Performance management; Participation;	Performance (voluntary turnover, labour productivity, Financial performance)	Moderate
8	Zheng, Morrison & O'Neill	2006	SMEs (Chinese)	74	Performancebased pay; Participatory decision making; Free market selection; Performance evaluation; Training & development; Role for trade unions;	Performance(increased production & sales, market competitiveness, expected growth)	Mixed
9	Bryan	2006	SME manufacturing firms (Wales)	114	Inhouse onjob training; External management training;	Growth	Mixed
10	De Kok & Den Hartog	2006	SMEs (Netherland)	909	Staffing; Performancebased pay; Pay level; Job rotation; Training; Participation;	Labour productivity; Innovation; Turnover;	Mixed
11	Barret & Mayson	2007	Small firms (Australia)	600	Formal recruitment & selection; Job description; Rewards for performance; Promotions; Trainings; Employee share plan; Formal planning practices;	Growth aspect	Yes

S.No	Author(s)	Year	Level of analysis	Sample size	HPMP Indicator	Performance/sustainability measures	Main effect*
12	Drummond & Stone	2007	SMEs	30	Self directed teams; Quality circles; Sharing information; Recruitment processes; Performance appraisals; Mentoring; Financial rewards; Family friendly policies; Job rotation; Flexible working;	Business performance (sales & employment growth)	Partial
13	Zheng, O'Neill & Morrison	2009	SMEs (Chinese)	74	Free market selection; Performancebased payment; Provision of social benefits; Training & development; Performance evaluation; Employee participation in decision making; Role of trade unions;	Performance (sales, market share & expected growth)	Yes
14	Fabi, Raymond & Lacoursiere	2009	Manufacturing Firms (Canadian)	176	Job description; Recruitment; Performance appraisal; Training; Information sharing (strategic, economic, & operational); Consultation; Profit sharing; Stock ownership;	Performance (operational, financial and growth)	Mixed
15	Abdelwahab Ait Razouk	2011	SMEs (French)	275	Appraisal Participation Sharing information Compensation Communication	Social climate Innovation Profitability	Yes

*Main effect: significant effect of independent variable (s) on dependent variable (s).

Source: Developed for this research

Appendix D: Research studies (2000-2011): The relationship between HPMP and sustainability outcomes

Number	Study	Year	Level of Analysis	Sample	HPMP Indicator	Performance Measure	Main Effect
1	Bae & Lawler	2000	Firm (Korean)	138	Extensive training; Empowerment; Selective staffing; Performancebased pay; Broad job design	Perceived performance	Yes
2	Barnard & Rodgers	2000	Firm (Singapore)	105	Internal staffing; Employee development; Employment stability	Successful implementation of HPWS	Mixed
3	Das, Handfield, Calantone & Shosh	2000	Manufacturing firms	290	Interdepartmental coordination; Cross functional teams; Delegation of authority; Quality planning and leadership; Quality training; Quality procedures; Bench marking; Customer orientation; Effective information sharing;	ROA, sales growth	Yes
4	Delery, Gupta, Shaw, Jenkins & Ganster	2000	Trucking Cos	379	Unionization; Pay and benefits; Participation in decision making;	Quit rate	Mixed
5	Fey, Bjorkman & Pavlovskaya	2000	Firms (Russia)	101	Individual performance based compensation; Meritbased promotion; Job security; Technical & nontechnical training; Career planning; Decentralized decision making; Internal promotion; Complaint resolution system; High salaries;	Performance (subjective)	Yes
6	Fey & Bjorkman	2000	Subsidiaries (in Russia)	101	Employee training; Assisting in career planning; Information sharing; Complaint resolution system; Attitude surveys; Performance appraisal; Performancebased pay;	Performance	Weak

					Team work; Decentralized decision making; Interdepartmental communication		
7	Huang	2000	Firms (Taiwan)	315	Planning; Staffing; Compensation; Appraisal; Training & development	Subjective firm performance	Yes
8	Khatri	2000	Firm (Singapore)	194	Recruitment & selection; Training & development; Performance appraisal; Employee Compensation; HR planning; Employee participation;	Performance	Modest
9	Konard & Mangel	2000	Firm	658(195 public)	Day care centres; Health care facilities; Maternity & paternity leave; Flexitime; Job sharing; Training;	Productivity	Weak
10	Mendelson	2000	ROVA	63	Selfmanaged teams; Cross functional teams; Decentralization of decision making; Information awareness; Sharing information; Job rotation;	ROS, ROVA, Growth	Yes
11	Meyer & Smith	2000	Individual	281	Performance appraisal; Benefits; Training; Career development; Incentive pay;	Employee commitment	Mixed
12	Shepbeck & Militello	2000	Review paper		Staffing; Training; Work design; Employee relation practices; Employee empowerment; Employee assistance; Diversity; Flexible benefits; Performance appraisal; Compensation;	Organisational performance	NA

13	Appleyard & Brown	2001	Semiconductor firms	23 fabs	Skill development; Participation in decision making; Employee collaboration	Productivity defects	Mixed
14	Bacon & Blyton	2001	Employees(Mfg firms)	401	Team working; Organisation change	Attitude to change; job satisfaction	No
15	Black & Lynch	2001	Private establishments	1621	Employee voice in decision making; Profit sharing system; Role of union; Bonuses/increments based on Performance	Productivity (CobbDouglas production function)	Yes
16	Bosile, Paauwe & Jansen	2001	Review paper		Recruitment and selection; HR planning; Rewards; Participation(consultation); Decentralization; Training; Opportunities for internal promotion; More autonomy; Formal procedures;		
17	Collins, Smith & Stevens	2001	High technology firms	78	Selective hiring; Employee training; Commitment building; Information sharing;	Sales growth	Mixed
18	Colvin, Batt & Katz	2001	Establishment(telecom)	242	Manager skills and pay; Unionization; Worker skills; Technology use; Teams; Incentive pay;	Manager pay	Yes
19	Guest & Pecci	2001	Members of IPA	54	Good treatment of employees; Empowerment; Employee rights and benefits; Employee responsibilities;	Productivity; Employee attitudes	Yes
20	Guthrie	2001	Firms	164	Internal promotions; Performancebased promotions; Skillbased pay; Groupbased pay; Employee stock ownership; Employee participatory programs; Information sharing; Attitude survey; Teams;	Productivity; employee retention	Yes

					Employee training		
21	Fynes & Voss	2001	Manufacturing plants(Ireland)	200	Quality communication; Quality improvement rewards; Quality leadership; Teamwork; Customer satisfaction;	Quality	Yes
22	Harris & Ogbonna	2001	Firms(UK)	342	Developing strategy; Future HR planning; Ensuring high level of motivation and commitment; Setting strategic objectives	Subjective performance(sales growth, market share)	Yes
23	Hitt, Bjerman, Shimizu & Kochhar	2001	Law firms	93(252 observations)	Human capital Qualification; Experience; Achievements Professional productivity;	Firm performance	Mixed
24	Koys	2001	Restaurant chain	28	Employee's organisational citizenship behaviour Conscientiousness; Altruism; Civic virtue; Sportsmanship; Courtesy;	Profitability	No
25	Laursen	2001	Firm(Danish)	726	Delegation of responsibility; Performancebased pay; Team production;	Innovation	Yes
26	Huang	2001	Firms (Taiwan)	315	Planning; Staffing; Compensation; Appraisal; Training & development	Subjective firm performance	Yes
27	McNabb & Whiffeld	2001	Establishment	688703	Flexible assignments; Team working; Quality circles; Briefing groups; Recognized union;	Subjective financial performance	Yes
28	Miller & Lee	2001	Firm (Korean)	129	Employee's well being; Fairness in compensation; Worker satisfaction; Profit sharing; Investment in training and education;	Firm performance	Weak
29	Richard & Johnson	2001	Banks	73	Employee participation and empowerment; Team work;	Productivity; turnover;	Mixed

					Workforce planning flexibility and deployment; Management and executive development; Succession and development planning; Work force productivity; Employee and manager communication		
30	Spell, C.S.	2001	Employees	139	Task variety; Developing employee skills; Support from employer;	Developmental activities	Limited
31	Whitener	2001	Credit unions	180 (1689 employees)	Selective staffing; Comprehensive training; Performance appraisal; Reward system (External & Internal rewards);	Org commitment	Yes
32	Brynjolfsson, Hitt, Yang, Baily & Hall	2002	Firm (large)	1216	Selfmanaged teams; Employee involvement groups; Diversity of job responsibilities; Degree of individual control; Team incentives; Employee training; Selective hiring;	market/book	Yes
33	Coyle Shapiro, Morrow, Richardson & Dunn	2002	Employee (Engineering)	141	Perception of profit sharing (capacity for individual contribution and organisational reciprocity)	Org commitment; Trust in management	Yes
34	Batt	2002	Service and sales establishment	270	Participation in decision making; Skill development; Employment security; Performance based pay; Team working	Sales growth; turnover	Yes
35	Batt, Colvin & Keefe	2002	Telecommunication firms	302	Employee voice (union, selfdirected teams); Training; Promotion from within company; Pay;	Quit rate	Yes
36	Bayo Moriones & Huerta Arribas	2002	Manufacturing plants	719	Workers plan and organize their own work; Work teams; Job rotation; Improvement groups; Suggestion system; Employment security; Employee union;	Incentives	Yes
37	Bjorkman & Xiucheng	2002	Firm (manufacturing) Chinese/western joint ventures	62	Selective hiring; Training for new & old employees;	Subjective assessment	Yes

			& subsidiaries		Merit based promotion; Regular performance appraisal; Bonuses/increments based on Performance; Information sharing; Job analysis; Attitude surveys	foreign parent's satisfaction	
38	Guthrie, Spell & Nyamori	2002	Firms(New Zealand)	137165	Internal promotions; Performancebased promotions; Skillbased pay; Groupbased pay; Employee participatory programs; Attitude survey; Teams; Employee training; Information sharing; Employee stock ownership;	Performance	Yes
39	Lepak & Snell	2002	Firm	148	Job design; Recruitment & selection; Training & development; Performance appraisal; Compensation;	HR configuration	Yes
40	Shah, Gupta & Delery	2002	Plant; firm (trucking)	141; 379	Turnover; Wages; Hiring cost; Training cost;	Productivity; financial performance	Yes
41	Teo & Waters	2002	White collar employees	109	Job training; Communication; Job redesign; Promotional opportunities; Employee involvement; Familyfriendly policies; Pay systems; Individualfocused stress interventions;	Stress	Yes
42	Agaarwala	2003	Firm (Indian)	7	Employee acquisition strategies; Employee retention strategies; Compensation and incentives; Benefit and services; Rewards and recognition; Technical training; Management development; Career planning and development practices; Performance appraisals; Potential development;	Org commitment	Yes

					Succession planning; Employee relations; Employee exit and separation management; Adopting responsibility for socially relevant issues		
43	Ahmad & Schroeder	2003	Manufacturing plants	107	Employment insecurity; Selective hiring; Use of teams and decentralization; Compensation contingent on performance; Extensive training; Status differences; Sharing information	Operational performance	Weak
44	Allen, Schore & Griffeth	2003	Employee(sales and insurance agents)	215 sales; 197 insurance agents	Participation in decision making; Fairness of rewards/recognition; Growth opportunities;	Voluntary turnover	Yes
45	GouldWilliams	2003	Local government employees (UK)	293	Employment Security; Selective hiring; Team working; Performance related pay; Training and development; Egalitarianism; Information sharing; Employee commitment;	Superior performance	yes
46	Harel, Tzafir & Baruch	2003	Firm (Israel)	102	Recruitment; Selection; Compensation; Participation; Internal labour market; Training;	Org effectiveness	Partial
47	Hunter & Lafkas	2003	Bank branches	303	Quality circles; Employee training; Employee compensation(wages);	Wages	Yes
48	Laursen & Foss	2003	Firm (Danish)	1884	Interdisciplinary work; groups; Quality circles; System for collection of employee proposals; Job rotation; Delegation of responsibility; Performance related pay	Innovation performance	Yes
41	Li	2003	MNEs(China)	296	Employee skill/education level; Long term employment;	Turnover, productivity,	Mixed

					High pay;	Profitability(ROA, sales)	
42	Michie & Sheehan	2003	Manufacturing and service sector firms (UK)	361	Compensation; Recruitment & selection; Team based work organisation; Employment security; Skills training; Communication procedures;	Innovation activities	Yes
43	Cunha & Cunha	2004	Firms (28 European countries)	9119	Staffing practices; Employee development; Compensation & benefits; Employee relations & communication;	Organisational Performance and Innovation performance	weak
44	Hartog & Verburg	2004	Firm (Netherland)	175	Strict selection; Training; Obligation to update skills; Possibilities for internal promotion; Management development; HRM strategy; Frequent performance evaluation; Team performance ; Pay for performance; Profit sharing; Information sharing; Autonomy; Job evaluation and task analysis;	Performance (comparison with other firms)	Yes
45	Bryston, Forth & Kirby	2005	Firms (UK)	2,191(Interviews)	Team working; Functional flexibility; Quality circles; Briefing groups; Information disclosure; Internal recruitment; Job security; Financial participation;	Performance (labour productivity & financial performance)	Mixed
46	Chang & Huang	2005	Firms (Taiwan)	235	Compensation; Staffing; Training & development; Employee communication; Equal opportunity; Flexible work schedule; Management development; HR manager; HR strategy;	Firm performance	Weak

47	Chow	2005	Firm (Hong Kong, Korea, Malaysia)	107	The flexibility of rules and practices; Hiring and recruitment policies; The level of training provided; Employee initiative and innovation; Employee involvement and participation; Performance management ; Promotion policy; Grievance procedures; Incentives; Performancebased pay;	Performance	Mixed
48	Datta, Guthrie & Wright	2005	Public sector firms(manufacturing)	132	Selfdirected teams; Intensive/extensive Recruitment process; Selection tests; Job rotation; Internal promotion; Cross training; Training in company related skill; Training in generic skills; Attitude survey; Performance appraisal and feedback; Compensation on group performance; Skill or knowledgebased pay; Formal grievance or complaint resolution system; Information sharing;	Labour productivity	Yes
49	Gollan	2005	Review paper		Employee consultation and involvement; Organisational change; Work and life policies; Career development programs; Organisational learning;	HR sustainability (corporate profitability, corporate survival, satisfaction of employee aspirations and needs)	Yes
50	Khandekar & Sharma	2005	Firm (Indian)	300	Staffing; Performance measurement; Training & development; Rewards; Career planning; Core competencies; Organisational learning; Empowerment; Organisational culture;	Organisational performance (Quality, customer satisfaction, new product development); sustainable competitive	Yes

						advantage	
51	Wang & Zang	2005	Local companies & joint ventures (China)	358(managers), 75 (companies)	Personnel selection & placement; Personnel training & development; Performance appraisal & management; Career development & promotion; Pay & bonus system management; Employee participation program; Quality control program; Management by objectives program; Team management; Corporate culture development	Firm performance (innovation, Entrepreneurship)	Yes
52	Becker & Huselid	2006	Review paper		Strategic human resource management	Firm performance	
53	Benson, Young & Lawler	2006	Firm (US)	1000	Decision making power; Access of information; Training ; Incentive rewards;	Financial performance(earning per share; ROE)	Weak
54	Denton	2006	Review paper		Employment security; Selective hiring; Self managed teams Decentralization of decision making; Performancebased compensation; Training; Reduced status distinction; Sharing information	Performance improvement	
55	Fleetwood & Hesketh	2006	Review paper (seeking philosophical approach towards HR practices and org performance)		Interdisciplinary working groups; Quality circles; planned job rotation; delegation of responsibility; Performancebased pay;	Performance	
56	Katou & Budhwar (with mediating model)	2006	Firm (Greek manufacturing)	178	Recruitment; Selection; Flexible work practices; Training; Careers Work design; Performance appraisal; Job evaluation; Compensation; Promotion; Incentives & benefits;	Performance (effectiveness; efficiency; innovation; quality)	Yes

					Participation & involvement; Communication; Health & Safety; Union (as control variable)		
57	Rose & Kumar	2006	Japanese MNCs (Malaysia)	42	Extensive training; Empowerment; Selective staffing; Performance evaluation; Performancebased pay	Performance	Mixed
58	Sels et al	2006	Small firms	416	Training; Selection; Compensation; Careers; Performance management; Participation;	Performance (voluntary turnover, labour productivity, Financial performance	Moderate
59	Shih, Chiang & Hsu	2006	Public listed companies (Taiwan)	208	Recruitment; Training; Information sharing; Employee involvement; Performance related motivation scheme; Job security;	Financial performance, and HR effectiveness (commitment, turnover & job satisfaction)	Yes
60	Subramony	2006	Review paper (why org adopt or reject HR practices)		Economic approach; Alignment approach; Decisionmaking approach; Diffusion approach;		
61	Tsafrir	2006	Firm (Israel) Two surveys	102; 104	Compensation; Participation; Training; Selective hiring; Internal labour market; Union (as a control variable)	Performance (in relation to competitors	Yes
62	Tsai	2006	Semiconductor firms (Taiwan)	1,129 employees (survey); 21 managers (interview method)	Recruitment & selection; Training & development; Reward & incentive compensation; Job security; Empowerment; Team working; Union (used as a control variable)	Financial performance (market share, growth in sales, profitability); Non financial performance quality of product, customer satisfaction, new	Yes

						product development)	
63	Wood, Holman & Stride	2006	Firm (UK) Call centres	145	Performance appraisal; Formal written plan; Systematic selection tests; Cross functional teams; Improvement teams; Internal recruitment; Trainings; Flexible work descriptions;	Performance (labour turnover, customer satisfaction)	Weak
64	Baptiste	2007	Firm (public sector) North England	100	Internal promotions; Performancebased pay; Training & development; Employee involvement in decision making;	Employee well being (Job satisfaction; Employee commitment); performance	Yes
65	Boxal & Macky	2007	Review paper		Technology; Work reorganisation; Employee selection and skill; Performance and commitment incentives; Management planning and measurement (performance); Management capability and support (training and development); More cooperative labour relations;	Organisational performance	
66	Chand & Katou	2007	Hotels (India)	439	Recruitment and selection; Man power planning; Job design; Training & development; Quality circles; Pay system;	Organisational performance	Yes
67	Connolly & McGing	2007	Hotels (Ireland)	71	Employee participation and empowerment; Recruitment and selection; Staff appraisal; Performance management; Grievance procedures; Staff training; Culture of diversity;	Competitive advantage	Weak
68	Harris, Cortvriend & Hyde	2007	Review paper		Comparison of different HR practices in different studies	Organisational performance (Health care)	
69	Katou & Budhwar	2007	Firm (Greek manufacturing)	178	Recruitment;	Performance	Strong

					<p>Selection; Flexible work practices; Training; Careers Work design; Performance appraisal; Job evaluation; Compensation; Promotion; Incentives & benefits; Participation & involvement; Communication; Health & Safety; Union (as control variable)</p>	(effectiveness; efficiency; innovation; quality)	
70	Verburg, Hartog & Koopman	2007	Individuals (HR executives)	175	<p>Recruitment & selection; Performance appraisal; Pay; Training, development; Taskfulmilment;</p>	Firm performance (innovation, turnover)	Mixed
71	Akhtar, Ding & G.E	2008	Firms (China)	465	<p>Training; Participation in decision making; Result oriented appraisals; Internal career opportunities; Employment security; Job description; Profit sharing;</p>	Financial performance	Mixed
72	Apospori et al	2008	Firms (21 European countries)	6705	<p>External and internal recruitment; Training; Performance management; communication</p>	Performance	Mixed
73	BeltranMartin et al	2008	Firm (Spanish)	226	<p>Selective staffing; Comprehensive training; Developmental performance appraisal; Equitable reward system</p>	Performance	Yes
74	Chau, Huang, & Liu	2008	Business firms (South China)	241	<p>Staffing; Training & development; Performance appraisal; Compensation; Job design; Promotion; Job security ;</p>	Performance(cost reduction, quality enhancement, innovation)	Moderate

					Information sharing; Participation in decision making		
75	Fleetwood & Hesketh	2008	Review paper (critical overview of HR performance relationship)		Incentive pay; Recruiting & selection; Team work; Employment security; Flexible job assignment; Communication; Labour relations;	Performance	
76	Jimenez & SanzValle	2008	Firm (Spanish)	173	Flexible job design and empowerment; Team working; Long-term and skill oriented staffing; Extensive and long term oriented training; Broad career opportunities; Behaviour based appraisal; Organic compensation system;	Innovation	Yes
77	Lepak & Shaw	2008	Review paper		Staffing; Quality circles; Job rotation; Team work; Training; Performance incentives; Health & safety; Employee involvement; Work family policies; Information sharing; Promotion from within; Participation & empowerment	Performance (financial, market & organisational)	
78	LunaArocas & Camps	2008	Firm (Spain)	198	Salary; Job enrichment; Job stability; Employee commitment (mediating variable); Job satisfaction (mediating variable)	Turnover intentions	Yes
79	Lytras & Ordonez de Pablos	2008	Manufacturing Firms (Spain)	72	HR recruitment and selection; Assessment; Rewards; compensation	Competitive advantage(sale growth, profit growth, industry leadership)	Yes
80	Wood & de Menezes	2008	Work places (British)	1900	Work enrichment; Team work; Quality circles;	Performance (labour productivity &	Mixed

					Suggestion schemes; Functional flexibility; Training; Team briefing; Information sharing Appraisal; Internal recruitment; Job security; Minimal status differences; Variable pay; Total quality management;	labour turnover)	
81	Boxal & Macky	2009	Review paper		Degree of Empowerment; Information sharing; Intrinsic and extrinsic rewards; Skill enhancement; Knowledge development; Intra and inter group collaboration; Interpersonal communication;	Organisational effectiveness (turnover & ROE)	
82	Conway, & Monks	2009	Financial services firms (Ireland)	435	Employee involvement; Training; Career development; Performance management; Job security; Rewards system; Job design;	Employee commitment; Intention to leave	Yes
83	Fabi, Raymond & Lacoursiere	2009	Manufacturing Firms (Canadian)	176	Job description; Recruitment; Performance appraisal; Training; Information sharing (strategic, economic, & operational); Consultation; Profit sharing; Stock ownership;	Performance (operational, financial and growth)	Mixed
84	Jing Liu	2011	Indigenous and foreign owned companies (Ireland)	132	Staffing and recruitment Training & Development Communication and participation Performance appraisal Remuneration	Labour productivity Workforce innovation	Yes

Appendix E: Survey Questionnaire and Cover letter



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Cover Letter for Survey Questionnaire

May, 2010

My name is Abdul Raziq and I am a senior Lecturer in the Faculty of Management Sciences at Balochistan University of Information Technology and Management Sciences (BUIITEMS) Quetta Pakistan. I am currently involved in research relating to High Performance Management Practices and Sustainability Outcomes in Small and Medium Enterprises in partial completion of the requirements for the Doctor of Philosophy program at the University of Southern Queensland Australia.

The research is important for SMEs as they play an important role in the economy of Pakistan. Your organisation has been selected because it fits the profile of SMEs that make an important contribution to the economic development of our country. The findings from this research have the potential to assist SME managers in designing superior policies for improving performance of their organisations. The study could also assist in the SME's survival rate and ultimately benefit the economy of Pakistan.

The questionnaire has been developed to minimize the amount of time for completion and to facilitate the summarization of findings. It should only take 2530 minutes to complete. A summary of the research findings will be sent to you by email or by post. The findings may also be published in academic journals and at conferences.

Your responses will be treated in the strictest confidence. You are not supposed to mention your name or your organisation's name on the questionnaire. No individual results will be referred to and only the aggregate findings will be published. If you have any query regarding the implementation of this study, you are welcome to contact the Manager, Human Resource Ethics Committee University of Southern Queensland, Toowoomba Australia 4350 via Email ethics@usq.edu.au or to A/Prof. Retha Wiesner (Principle Supervisor) on +61 74631 2590; email: wiesner@usq.edu.au.

Thank you for your valuable contribution to this research effort. While your participation is entirely voluntary, it is highly appreciated.

Kind Regards,

Abdul Raziq

PhD Candidate

School of Management & Marketing

Faculty of Business & Law

University of Southern Queensland Australia.

**HIGH PERFORMANCE MANAGEMENT PRACTICES & SMALL AND MEDIUM SIZED ENTERPRISES
(SMEs) SUSTAINABILITY:**

A PhD STUDY

This study is the **ONLY** Pakistani study which focuses on employee management and sustainability outcomes in SMEs. The study results will benefit your business and Pakistani SMEs in general, by providing new information on managing employees within the current volatile business environment. By participating in this study you will receive a range of tangible valuable benefits (please refer to the cover letter of this study).

A YOU AND YOUR ORGANISATION

A1 How many employees does your organisation have?

- Fewer than 10 1
- 1120 2
- 2150 3
- 51100 4
- 101-200 5
- 201250 6
- >250 7

A2 My organisation is an independently owned and operated business
Yes 1 No 2

A3 My workplace is a subsidiary/branch/department of a larger company
Yes 1 No 2

A4 How many different locations does your organisation operate in?

- One only 1
- 24 2
- 510 3
- 1120 4
- >20 5

A5 Which FBS industry category best describes your organisation's main operations? (Please tick one box only)

- 1) Manufacturing 1
- 2) Service 2

A6 What is the management level of your current work position? (Please tick the box that indicates the nearest equivalent)

- 1. Chief Executive Officer 1
- 2. Manager reporting to CEO 2
- 3. Middle manager 3
- 4. Supervisor 4
- 5. Other (please specify) 5

A7 Are you an owner (or part owner) of this company or a partner in this company?

- Yes 1 No 2

A8 Are you a working director of this company?

- Yes 1 No 2

A9 Is this organisation family owned? (That is, the family owns more than 50% of the shareholding).

- Yes 1 No 2

if 'No', go to question A11

A10 Are family members working directors in the firm?

- Yes 1 No 2

A11 Is this business unit part of a franchise operation?

- Yes 1 No 2

A12 In which sub sector does your organisation operate?

- | Manufacturing | Service |
|--|---------------------------------------|
| Furniture <input type="checkbox"/> 1 | Telecom <input type="checkbox"/> 7 |
| Textile <input type="checkbox"/> 2 | IT <input type="checkbox"/> 8 |
| Engineering <input type="checkbox"/> 3 | Consulting <input type="checkbox"/> 9 |
| Garment <input type="checkbox"/> 4 | Health <input type="checkbox"/> 10 |
| Leather goods <input type="checkbox"/> 5 | Education <input type="checkbox"/> 11 |
| Surgical <input type="checkbox"/> 6 | Hotel <input type="checkbox"/> 12 |
| | Media <input type="checkbox"/> 13 |

Other (Please specify)

A13 When was your organisation established?

- Less than 1 year ago 1
1 to 2 years ago 2
2 to 3 years ago 3
3 to 5 years ago 4
5 to 10 years ago 5
More than 10 years ago 6

A14 Internationalisation:

- Is this firm *willing* to embark on a strategy of internationalisation? Yes 1
No 2
Is this firm currently *following* a strategy of internationalisation? Yes 1
No 2

A15 Does your organisation export:

1. Do not export 1
2. Interstate/province 2
3. AsiaPacific 3
4. Europe 4
5. North America 5
6. Australia 6
7. South America 7
8. Other 8

If 'No' go to question A17

A16 How long have you exported your product or service?

- Less than 3 years 1
3 to 5 years 2
More than 5 years 3

A17 Does your organisation have a Human Resource Management Department?

- Yes 1 No 2

A18 Is there a manager in this organisation whose principal responsibility covers human resource management and who has one of the following terms in their title:

1. There is no specialist manager for human resources 1
2. Industrial Relations 2
3. Employee Relations 3
4. Human Resource Management 4
5. Personnel 5
6. Other (*please specify*) 6

A19 Do you access the internet from your business premises?

- Yes 1 No 2

A20 Does your business have a web site?

- Yes 1 No 2

A21 Does your organisation have a human resource information system (HRIS)?

- Yes 1 No 2

A22 How frequently does your business access the internet?

- Daily 1
Weekly 2
Monthly 3

A23 How long have you been employed in the organisation?

- Less than 1 year 1
More than 1 and less than 2 years 2
More than 2 and less than 3 years 3
More than 3 and less than 5 years 4
More than 5 years 5

A24 What is your highest level of formal education?

- Secondary school certificate 1
An undergraduate degree 2
Postgraduate diploma or certificate 3
Postgraduate degree 4
Other (*please specify*)

A25 Which is your age group?

- Under 30 years 1
31-45 years 2
46-55 years 3
56-65 years 4
More than 65 years 5

A26 Please indicate your gender:

- Male 1
Female 2

A27 where is your organization's current location?

- Quetta 1
Karachi 2
Lahore 3
Faisalabad 4
Sialkot 5
Hyderabad 6

SECTION B: BUSINESS STRATEGY

The objective of this section is to determine how much business planning, and what type of business strategy your business employs.

B1 Please tick the statement which describes your firm the best. This firm:

- Does not have a strategic plan 1
- Has a strategic plan, but it is not written down 2
- Has a written strategic written plan, but it is not used to develop operational plans 3
- Has a strategic plan that is used to develop operational plans and drive day to day operations 4

B2 How important are the following aspects to your target market?

Scale:(1= Very important; 2= moderately important; 3= not important)

- The price of your products/services 1 2 3
- The quality of your products/services 1 2 3
- Innovation in your products/services 1 2 3

SECTION C: HIGH PERFORMANCE MANAGEMENT PRACTICES

In this section we are interested in employee management practices. In each of the following questions please indicate the extent to which the following employee management practices have occurred in your organisation in the past 3 years.

C1 Use of Recruitment Processes and Methods

Extent to which these practices have been used in the past 3 years

	<i>Never</i>	<i>For some jobs</i>	<i>For all jobs</i>
1. Internal recruitment methods	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
2. External recruitment methods	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
3. Job analysis	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
4. Job analysis computer software	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
5. Written job description/specification	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
6. Role specification	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
7. Employee requisition forms	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
8. Advertising via bulletin board/newsletter	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
9. Internal database search for internal applicants	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
10. Newspaper advertising	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
11. Government employment agency	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
12. Private employment agency	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
13. Referrals by employees	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
14. Referrals from other sources	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
15. Walkins	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
16. Radio advertising	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
17. Television advertising	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
18. Internet recruitment	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
19. Direct mail	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
20. Advertising in magazines	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
21. Educational institutions' recruiting services	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
22. Professional associations	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
23. Recruitment consultants	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
24. Recruitment strategy specifically targeting older workers	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
25. Other (please specify)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

C2 Selection Processes and Practices

Extent to which these practices have been used in the past 3 years

	<i>Never</i>	<i>For some jobs</i>	<i>For all jobs</i>
1. Informal selection procedures	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
2. Formal selection procedures	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
3. Application forms	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
4. Oneonone interviews	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
5. Unstructured interviews (i.e a	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
6. Structured interviews	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
7. Panel Interviews	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
8. Behaviourally based interviews	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
9. Work samples	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
10. Written reference checks	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
11. Verbal (telephone) reference checks	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
12. Psychological tests	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
13. Assessment centre	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
14. Use consultant in selection process	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
15. Line manager makes selection decision	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
16. Other managers/employees have an input in the selection design	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
17. Other employees have an input in the final selection decision	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
18. External consultant have input in the final selection decision	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
19. Other (<i>please specify</i>)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

C3 Compensation Practices

Extent to which these practices have been used in the past 3 years

	<i>Never</i>	<i>For some jobs</i>	<i>For all jobs</i>
1. Use of job evaluation in setting pay levels	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
2. Pay levels based on awards(scale) classification	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
3. Pay based on performance	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
4. Market competitive wages	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
5. Pay based on acquired skills	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
6. Individual merit pay	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
7. Group/team incentive programs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
8. Incentive compensation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
9. Pay(based on performance of business unit)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
10. Incentive compensation pay(based on performance of company)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
11. Pay based on seniority	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
12. Profit sharing/gain sharing schemes	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
13. Individual incentive programs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
14. Bonus plan	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
15. Commission plan	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
16. Project team incentive plan	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
17. Salary packaging (with fixed benefits)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
18. Flexible salary packaging (with salary sacrificing)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
19. Benefits other than superannuation (e.g. life insurance, health insurance)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
20. Employees recognised in other ways than takehome pay or the compensation practices listed above (<i>please specify</i>)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
21. Other (<i>please specify</i>)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

C4 Training/Development Practices*Extent to which these practices have been used in the past 3 years*

	<i>Never</i>	<i>For some jobs</i>	<i>For all jobs</i>
1. Does your business provide any kind of training?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
<i>If 'Never' go to section C5</i>			
2. Conduct a formal training needs analysis	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
3. Conduct an informal training needs analysis	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
4. Does your business have a formal training budget?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
5. Does your organisation provide informal onthejob training	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
6. Does your organisation have formal individual development plans for its employees?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
7. Does your organisation have informal individual development plans for employees?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
8. Training of a vocation or technical nature (ie apprenticeships, training of young employees, retraining older employees, especially due to demands made by new technology)?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
9. Management & development training (ie leadership, supervisory skills, personal communication, graduate and postgraduate sponsorship)?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
10. Has your business introduced formal training where none previously existed?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
11. Has your business increased training where a program previously existed?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
12. Has your business introduced new career paths?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
13. Provision of informal mentoring (i.e guidance from senior to junior employee)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
14. Provision of formal mentoring	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
15. Does your business provide computerbased/aided instruction/training?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
16. Does your organisation evaluate the satisfaction of trainees regarding training programs?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
17. Does your organisation evaluate the results of training (i.e. return on investment)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
18. Does your organisation utilise web based learning?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
19. Management values all forms of learning (workrelated or not)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
20. Management values learning as long as it is related to performance	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
21. Does your business provide formal inhouse training provided by your own staff?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
22. Does your business provide formal inhouse training provided by an external consultant?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
23. Does your business provide external training (e.g. provided by a training body or institution)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
24. Other (<i>please specify</i>)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

C5 Performance Appraisal Practices (PA)

Extent to which these practices have been used in the past 3 years

	<i>Never</i>	<i>For some jobs</i>	<i>For all jobs</i>
1. Formal PA system	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
2. Informal PA	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
3. Management by objectives (goal setting with an input from employees)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
4. Performance is rated on a rating scale	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
5. Critical incidents (diary keeping of onthejob behaviour)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
6. Narrative essay (unstructured report on job performance)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
7. Ranking (ranks employees on job performance)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
8. Assessment centre	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
9. Balanced scorecard approach (measures employees' contribution to organisational vision and strategy)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
10. 360 degree appraisal system (feedback provided by multiple sources i.e. supervisors, subordinates, peers, customers)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
11. Does your organisation provide training to managers of performance appraisal?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
12. Does your organisation provide training to employees who receive performance appraisals?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
13. The PA system link individual performance to business units or company strategy	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
14. Is formal mentoring used as part of the PA system?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
15. Is informal mentoring used as part of the PA system?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
16. Do appraisees receive formal feedback on their PA	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
17. Are consultants used as part of the PA process?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
18. Other (please specify)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

Who conducts performance appraisals in your business?

- | | | | |
|-------------------------------------|----------------------------|----------------------------------|----------------------------|
| (a) Line manager | <input type="checkbox"/> 1 | (b) Employee self appraisals | <input type="checkbox"/> 2 |
| (c) Peer appraisals | <input type="checkbox"/> 3 | (d) Internal HR manager involved | <input type="checkbox"/> 4 |
| (e) External HR consultant involved | <input type="checkbox"/> 5 | (f) other (please specify) | <input type="checkbox"/> 6 |

C6 CONSULTATION

To what degree do you consult with employees in the decision to introduce the changes below? Please indicate which of these decisionmaking methods most closely applies to the introduction of the changes below.

	<i>Involves widespread involvement of employees in decisions</i>	<i>Involves consultation with employees with their possible limited involvement in goal setting</i>	<i>Managerial authority and direction is the main form of decisionmaking</i>	<i>Managers initiate and implement change</i>	<i>Does not apply</i>
1. Major organisational change issues	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2. Occupational health and safety	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3. Changes to job design and work organisation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
4. Quality and cost improvement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
5. Plant layout	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
6. Training and skills development	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
7. Reliable customer service and delivery	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
8. The performance of the firm	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
9. Corporate planning	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
10. Market performance	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
11. Employee amenities (i.e facilities)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
12. Major change decisions	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
13. Major policy decisions	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
14. Securing enterprise efficiency and productivity	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
15. Other (please specify)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

SECTION D: SUSTAINABILITY

This section relates to the financial performance of your firm. (Please note that all information is strictly confidential)

D1 How would you rate your firm’s financial standing over the last three years?

- 1. Resulted in a big loss 1
- 2. Resulted in a moderate loss 2
- 3. The firm broke even 3
- 4. Generated moderate profits 4
- 5. Generated big profits 5

D2 What was the firm’s most recent financial statement result (profitability)?

- 1. Under Rs100,000 1
- 2. Rs 100,000 – Rs 500,000 2
- 3. Rs 501,000 – Rs 999,000 3
- 4. Rs 1 Rs 5 million 4
- 5. Rs 5 million plus 5

D3 Indicate the extent to which the following indicators of firm performance have changed in the last three years:

	<i>Decreased</i>	<i>No change</i>	<i>Improved</i>
1. Employee commitment	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
2. Employee turnover	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
3. Job satisfaction	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
4. Skill development	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
5. Customer satisfaction (fulfilling customer needs compared to competitors)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
6. Quality of products and services (quality of the firms products/services compared to competitors)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
7. Annual revenues growth (ratio of annual income in the current year to last year)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
8. Return on sales (the ratio of net profit to net sales)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
9. Return on equity (ratio of net profit to total equity investment)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
10. Liquidity soundness (based on parameters such as the quick ratio and cash flow from operating activities)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
11. Market share change	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

Thank you VERY MUCH for your participation

Appendix F: Ethics Approval Certificate



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OFFICE OF RESEARCH AND HIGHER DEGREES
Ashley Steele
Ethics Officer
PHONE (07) 4631 2690 | FAX (07) 4631 1995
EMAIL steele@usq.edu.au

Wednesday, 24 March 2010

Abdul Raziq
Unit 138C Student Village
West Street
Toowoomba QLD 4350

Dear Abdul,

Thankyou for submitting your project below for human ethics clearance. The Chair of the USQ Fast Track Human Research Ethics Committee (FTHREC) recently reviewed your responses to the FTHREC's conditions placed upon the ethical approval for the below project. Your proposal meets the requirements of the *National Statement on Ethical Conduct in Human Research* and full ethics approval has been granted.

Project Title	Exploring High Performance Management Practices and their Impact upon Sustainability Outcomes in Small and Medium Size Enterprises in Pakistan
Approval no	H10REA037
Period of Approval	24/03/2010 – 24/03/2011
FTHREC Decision	Approved

The standard conditions of this approval are:

- conduct the project strictly in accordance with the proposal submitted and granted ethics approval, including any amendments made to the proposal required by the HREC;
- advise the HREC (email: ethics@usq.edu.au) immediately if any complaints or expressions of concern are raised, or any other issue in relation to the project which may warrant review of ethics approval of the project;
- make submission to the HREC for approval of any amendments, or modifications to the approved project before implementing such changes;
- in the event you require an extension of ethics approval for this project, please make written application in advance of the end-date of this approval;
- provide the HREC with a written "Annual Progress Report" for every year of approval. The first progress report is due 12 months after the start date of this approval (by **24/03/2011**);
- provide the HREC with a written "Final Report" when the project is complete;
- if the project is discontinued, advise the HREC in writing of the discontinuation.

For (c) to (f) proformas are available on the USQ ethics website: <http://www.usq.edu.au/research/ethicsbio/human>

Please note that failure to comply with the conditions of approval and the *National Statement on Ethical Conduct in Human Research* may result in withdrawal of approval for the project.

You may now commence your project. I wish you all the best for the conduct of the project

Yours sincerely

Ashley Steele
Ethics Officer
Office of Research and Higher Degrees

Appendix G: The nature of Recruitment practices (n = 331)

Factors	Practices / Items	Never (1) (%) (a)	For some jobs (2) (%) (b)	For all job s (3) (%) (c)	Total (%) (b + c)	Mean	95% Confidence Interval for mean		S.D	S.E
							Lower Bound	Upper Bound		
Normative	Job analysis	28.4	35.3	36.3	71.6	2.08	1.99	2.17	0.801	0.044
	Written job description/specifica tion	63.7	23	13.3	36.3	1.50	1.42	1.57	0.719	0.040
	Role specification	35.0	37.5	27.5	65.0	1.92	1.84	2.01	0.788	0.043
	Newspaper advertising	61.9	24.5	13.6	38.1	1.52	1.44	1.59	0.723	0.043
Niche	Internet recruitment	87.3	11.5	1.2	12.7	1.14	1.10	1.18	0.380	0.021
	Direct mail	79.8	18.1	2.1	20.2	1.22	1.17	1.27	0.465	0.026
Referrals	Referrals by employees	13.3	79.8	6.9	86.7	1.94	1.89	1.98	0.446	0.025
	Referral from other sources	21.5	74.6	3.9	78.5	1.82	1.77	1.88	0.473	0.026
Internal sources	Job analysis computer software	97	0.3	2.7	3.0	1.06	1.02	1.09	0.330	0.018
	Internal data base search for internal applicants	76.4	22.1	1.5	23.6	1.25	1.20	1.30	0.468	0.026
External sources	Advertising via bulletin board/news letter	90.6	8.5	0.9	9.4	1.10	1.07	1.14	0.333	0.018
	Recruitment consultants	97.3	2.7	0.0	2.7	1.03	1.01	1.04	0.163	0.009

Appendix H: The nature of Selection practices (n = 331)

Factors	Practices / Items	Never (1) (%) (a)	For some jobs (2) (%) (b)	For all jobs (3) (%) (c)	Total (%) (b + c)	Mean	95% Confidence Interval for mean		S.D	S.E
							Lower Bound	Upper Bound		
Normative Formal	Application forms	51.7	32.6	15.7	48.3	1.64	1.56	1.72	0.739	0.041
	Structured interviews	46.5	47.4	6.0	53.4	1.60	1.53	1.66	0.602	0.033
	Panel interviews	54.1	43.8	2.1	45.9	1.48	1.42	1.54	0.541	0.030
	Behaviourally based interviews	71.3	20.8	7.9	28.7	1.37	1.30	1.43	0.625	0.034
Informal	Oneone interviews	10.0	61.6	28.4	90.0	2.18	2.12	2.25	0.592	0.033
	Unstructured interviews	17.8	54.7	27.5	82.2	2.10	2.02	2.17	0.667	0.037
Participatory Evaluative	Work samples	48.9	36.0	15.1	51.1	1.66	1.58	1.74	0.726	0.040
	Written reference checks	75.8	20.8	3.3	24.1	1.27	1.22	1.33	0.516	0.028
	Verbal (telephone) reference checks	82.8	13.6	3.6	17.2	1.21	1.16	1.26	0.488	0.027
	Assessment centre	90.0	6.3	3.6	9.9	1.14	1.09	1.18	0.437	0.024
	Line manager makes selection decision	67.1	27.5	5.4	32.9	1.38	1.32	1.45	0.588	0.032
	Other managers/employe es have input in selection design	73.1	23.0	3.9	26.9	1.31	1.25	1.37	0.541	0.030
External input	Psychological tests	97.0	2.7	0.3	3.0	1.03	1.01	1.05	0.196	0.011
	Other employees have input in final selection decision	88.2	11.5	0.3	11.8	1.12	1.08	1.16	0.336	0.018
	External consultant have input in the final selection decision	98.8	0.9	0.3	1.2	1.02	1.00	1.03	0.145	0.008

Appendix I: The nature of Training and Development practices (n = 331)

Factors	Practices / Items	Never (1) (%) (a)	For some jobs (2) (%) (b)	For all jobs (3) (%) (c)	Total (%) (b + c)	Mean	95% Confidence Interval for mean		S.D	S.E
							Lower Bound	Upper Bound		
Niche	Training of a vocational or technical nature	76.1	18.7	5.1	23.8	1.29	1.23	1.35	0.556	0.031
	Provision of formal mentoring	88.5	10.6	0.9	11.5	1.12	1.09	1.16	0.356	0.020
	Provide computerbased/aided instruction/training	90.6	6.9	2.4	9.3	1.12	1.08	1.16	0.391	0.021
	Evaluate the satisfaction of trainees regarding training programs	84.9	7.6	7.6	15.2	1.23	1.16	1.29	0.572	0.031
	Evaluate the results of training (ROI)	85.2	8.2	6.6	14.8	1.21	1.16	1.27	0.550	0.030
	Utilise webbased learning	94.3	3.6	2.1	5.7	1.08	1.04	1.12	0.339	0.019
	Management values learning as long as it's related to performance	89.7	5.4	4.8	10.2	1.15	1.10	1.20	0.475	0.026
	Formal inhouse training provided by own staff	84.3	13.0	2.7	15.7	1.18	1.14	1.23	0.453	0.025
Informal	Does your business provide any kind of training?	34.7	64.7	0.6	65.3	1.66	1.61	1.71	0.487	0.027
	Conduct an informal training needs analysis	55.3	43.8	0.9	44.7	1.46	1.40	1.51	0.517	0.028
	Does your provide informal onthejob training	47.7	45.6	6.6	52.2	1.59	1.52	1.66	0.613	0.034
	Provision of informal mentoring	37.8	55.6	6.6	62.2	1.69	1.63	1.75	0.590	0.032
Formal	Conduct a formal training needs analysis	95.2	4.5	0.3	4.8	1.05	1.03	1.08	0.234	0.013
	Does your business have a formal training budget?	95.8	3.9	0.3	4.2	1.05	1.02	1.07	0.222	0.012
	Formal individual development plans for employees	94.3	5.7	0.0	5.7	1.06	1.03	1.08	0.233	0.013
Organisational development	Management and development training	90.9	9.1	0.0	9.1	1.09	1.06	1.12	0.288	0.016
	Introduced formal training where none previously existed	93.7	6.3	0.0	6.3	1.06	1.04	1.09	0.244	0.013
	Has your business increased training where a program previously existed	90.9	9.1	0.0	9.1	1.09	1.06	1.12	0.288	0.016
	Introduced new career paths	89.1	10.9	0.0	10.9	1.11	1.08	1.14	0.312	0.017

Appendix J: The nature of Performance Appraisal practices (n = 331)

Factors	Practices / Items	Never (1) (%) (a)	For some jobs (2) (%) (b)	For all jobs (3) (%) (c)	Total (%) (b + c)	Mean	95% Confidence Interval for mean		S.D	S.E
							Lower Bound	Upper Bound		
Systemic	360 degree appraisal	32.3	48.3	19.3	67.6	1.87	1.79	1.95	0.708	0.039
	PA system links individual performance to business unit or company strategy	82.5	9.1	8.5	17.6	1.26	1.19	1.32	0.602	0.033
	Formal mentoring is used as part of the PA system	91.2	6.9	1.8	8.7	1.11	1.07	1.14	0.362	0.020
	Informal mentoring is use as part of the PA system	48.9	45.6	5.4	51	1.56	1.50	1.63	0.596	0.033
	Do appraises receive formal feedback on their PA	85.5	6.9	7.6	14.5	1.22	1.16	1.28	0.569	0.031
Traditional	Performance is rated on a rating scale	81.6	15.1	3.3	18.4	1.22	1.16	1.27	0.487	0.027
	Critical incidents	77.0	22.1	0.9	23	1.24	1.19	1.29	0.448	0.025
	Narrative essay	58.3	38.4	3.3	41.7	1.45	1.39	1.51	0.561	0.031
	Ranking	62.2	32.3	5.4	37.7	1.43	1.37	1.50	0.596	0.033
Training	Provide training to managers who appraise performance	84.3	15.1	0.6	15.7	1.16	1.12	1.20	0.386	0.021
	Provide training to employees who receive PA	79.2	18.7	2.1	20.8	1.23	1.18	1.28	0.469	0.026
Contemporary	Management by objectives	55.9	44.1	0.0	44.1	1.44	1.39	1.49	0.497	0.027
	Assessment centre	92.4	3.9	3.6	7.5	1.11	1.07	1.16	0.415	0.023
	Balanced score card approach	95.2	3.6	1.2	4.8	1.06	1.03	1.09	0.285	0.016

Appendix K: The nature of Compensation practices (n = 331)

Factors	Practices / Items	Never (1) (%) (a)	For some jobs (2) (%) (b)	For all jobs (3) (%) (c)	Total (%) (b + c)	Mean	95% Confidence Interval for mean		S.D	S.E
							Lower Bound	Upper Bound		
Normative	Pay based on performance	0.6	30.2	69.2	99.4	2.69	2.63	2.74	0.478	0.026
	Market competitive wages	4.2	15.4	80.4	95.8	2.76	2.71	2.82	0.517	0.028
	Pay based on acquired skills	3.6	32	64.4	96.4	2.61	2.55	2.67	0.559	0.031
	Pay base on seniority	18.7	64.0	17.2	81.2	1.98	1.92	2.05	0.600	0.033
	Flexible salary packaging (with salary sacrificing)	31.4	38.1	30.5	68.6	1.99	1.91	2.08	0.788	0.043
Unit/teambased Incentives	Group/team incentive programs	68.9	30.8	0.3	31.1	1.31	1.26	1.37	0.471	0.026
	Incentive compensation	82.8	16.9	0.3	17.2	1.18	1.13	1.22	0.389	0.021
	Pay (based in performance of business unit)	94.0	4.8	1.2	6.0	1.07	1.04	1.11	0.303	0.017
	Commission plan	63.4	34.7	1.8	36.5	1.38	1.33	1.44	0.523	0.029
Companywide incentives	Incentive compensation pay	85.5	4.5	10.0	14.5	1.24	1.18	1.31	0.621	0.034
	Profit sharing/gain sharing schemes	91.5	2.7	5.7	8.4	1.14	1.09	1.19	0.487	0.027
	Bonus plan	52.6	23.6	23.9	47.5	1.71	1.62	1.80	0.827	0.045
Specific Incentives	Individual incentive program	91.5	8.2	0.3	8.5	1.09	1.06	1.12	0.294	0.016
	Project team incentive plan	90.3	9.7	0.0	9.7	1.10	1.06	1.13	0.296	0.016

Appendix L: The nature of Consultation (n = 331)

Factors	Practices / Items	Inclusion			Exclusion			Mean	95% Confidence Interval for mean		S.D	S.E
		Widespread consultation (1)	Consultation with employees with limited involvement (2)	Total (3)	Managerial authority and direction (3)	Managers initiate and implement change (4)	Total (%) (c + d)		Lower Bound	Upper Bound		
		(%) (a)	(%) (b)	(%) (a + b)	(%) (c)	(%) (d)						
Strategic	Consult: Major change issues	1.5	29.0	30.5	39.0	30.5	69.5	2.98	2.90	3.07	0.811	0.045
	The performance of the firm	6.6	20.2	26.9	41.1	32.0	73.1	2.98	2.89	3.08	0.889	0.049
	Corporate planning	0.9	31.1	32.0	38.1	29.9	69.0	2.97	2.88	3.06	0.805	0.044
	Major change decisions	0.0	31.1	31.1	40.2	28.7	68.9	2.98	2.89	3.06	0.774	0.043
	Major policy decisions	0.0	29.6	29.6	37.5	32.9	70.4	3.03	2.95	3.12	0.791	0.043
Operational	Consult: Occupational health and safety	1.8	29.6	31.4	35.0	33.5	68.5	3.00	2.91	3.09	0.840	0.046
	Consult: Changes to job design and work	1.2	29.6	35.0	35.0	33.5	68.5	2.99	2.90	3.09	0.863	0.047
	Quality and cost improvement	2.7	30.5	33.2	39.9	26.9	66.8	2.91	2.82	3.00	0.823	0.045
	Training and skills development	1.8	32.0	33.8	33.2	32.9	66.1	2.97	2.88	3.06	0.851	0.047
	Reliable customer service and delivery	10.9	32.9	43.8	31.1	25.1	56.2	2.70	2.60	2.81	0.964	0.053
	Market performance	1.2	31.1	32.3	39.6	28.1	67.7	2.95	2.86	3.03	0.800	0.044
	Employee amenities	1.2	28.4	29.6	40.2	30.2	70.2	2.99	2.91	3.08	0.798	0.044
	Securing enterprise efficiency and productivity	6.0	33.8	39.9	28.1	32.0	60.1	2.86	2.76	2.96	0.940	0.043