THE DETERMINANTS OF HRM FORMALITY AND ORGANISATIONAL PERFORMANCE IN SMEs IN PAKISTAN

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Abstract

Given the important role of SMEs in strengthening a country's economy, the HRM research in SME contexts carried out to date is scarce. The majority share of the literature concerning HRM practices has mainly focused on large organisations. Since SMEs differ from large organisations in multiple aspects (e.g., business strategy and resources), the findings of both are not comparable. Moreover, scant attention has been given to the HRM literature concerning Pakistani SMEs. Since SMEs are regarded as the back-bone of Pakistan's economy, improved understandings of the sector's approach to strategic planning and strategic human resource development and vital.

The purpose of this study is to unfold the determinants of HRM practices and their influence on organisational performance in Pakistani SMEs. Guided by institutional theory and RBV, the conceptual model posits significant associations between contextual factors (business sector, firm size, firm age, ownership type, business plan, exporting and provision of HRIS and HRM department/specialist) and HRM formality (including sub-components of recruitment, selection, training & development, performance appraisal, compensation & benefits). A significant positive and direct link between HRM formality and organisational performance is also proposed.

The research design is positivist and incorporates quantitative methods. Stratified sampling was used to include three major sectors of SMEs in Pakistan (services, manufacturing and trade). Primary data from 300 SME owners/managers were collected through a survey method using a structured questionnaire. Data were analysed using inferential methods such as analysis of variance and multiple regression.

Findings suggest that service SMEs employee more formal HRM practices than manufacturing and trade SMEs. In addition, manufacturing SMEs are found to be more formal than trade firms in terms of the adoption of HRM practices. Similarly, institutional contextual factors such as; firm age, ownership by a large organisation, business planning and provision of human resource information system and an HR department/specialist were found to be influential determinants of the adoption of HRM practices. However, firm size, ownership type (non-family owned) and the exporting characteristic of SMEs do not influence HRM formality. A positive and significant relationship was found between HRM formality and firm performance. The results also withstand for HRM-performance link when controlling for influential contextual factors of performance.

These findings extend the boundaries of prior literature concerning HRM practices in SMEs by addressing pertinent gaps from institutional and RBV perspectives. Firstly, most prior studies focus on manufacturing and service sectors and further HRM differences are revealed by including the trade sector in this study, . Secondly, this is the first study in the comparative HRM literature that looks at differences in HRM practices across sectors while controlling for the effect of age and size of the firm. Thirdly, the conceptual framework includes eight contextual factors and puts forward a robust model to investigate the determinants of HRM practices in SMEs. Lastly, this study examines the influence of HRM practices on SME performance while controlling for influential contextual factors, an approach that is not only rare in prior literature but is also unique in the context of Pakistan.

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1.1 INTRODUCTION

This chapter introduces the background to the research, problem statement and justification for carrying out HRM related research in the context of Pakistani SMEs. The chapter commences with a brief overview of the role of HRM practices in organisational success and influential contextual factors that shape those HRM practices. Next, the significance of SMEs towards economic growth is discussed followed by discussion of the major challenges that SMEs face in an increasingly competitive and uncertain macroeconomic environment. The problem statement reflects the notion of scarcity of HRM related research with regards to developing countries, such as Pakistan. Research questions are then proposed in line with the aims and objectives of this study. A brief overview of research methodology is presented followed by a breakdown of the structure of this thesis.

1.2 BACKGROUND TO THE RESEARCH AND JUSTIFICATION

Global interlinking of economies has resulted in an accelerated surge for superior organisational performance where firms are striving for increased competitiveness over their rivals amidst high economic uncertainty (Kuruvilla & Ranganathan, 2010). Other competitive pressures such as institutional changes, technological advances and deregulation are also tied to the growth and success of businesses today (Campbell, Coff, & Kryscynski, 2012; Wright & Haggerty, 2005). Until recently, traditional sources (e.g., capital, technology, economies of scale) have been central to the acquisition of competitive advantage but these resources are increasingly becoming imitable (Boxall & Purcell, 2003, Lin & Wu, 2013). Based on RBV theory (Barney, 1991), human assets can be a valuable source of sustained competitive advantage since such resources are often difficult to imitate due to specialization, scarcity and tacit knowledge (Campbell et al., 2012; Wright & McMahan, 2011). Thus, the policies and practices that govern human capital of an organisation, when aligned with overall business objectives, can create value for that organisation (Barney, 1991; Durgin, 2006; Scheel, Rigotti, & Mohr, 2014; Wright & McMahan, 1992). These practices normally include recruitment and selection, training and development, performance appraisal, compensation and benefits and employee relations (Wiesner & Innes, 2010). Sufficient empirical evidence is available to emphasize the importance of HRM in shaping employee attitudes and behaviours that lead to superior organisational gains (Guest, 1997; Paauwe & Boselie, 2008; Patterson, Rick, Wood, Carroll, Balain, & Booth, 2010). In addition, findings from a number of empirical studies (e.g., Chadwick, Way, Kerr, & Thacker, 2013; Koch & McGrath, 1996; Paul & Nealia, 2016; Sheehan, 2014) indicate that organisations with higher commitment towards best/formal HRM practices experience enhanced organisational performance.

Where adoption of formal HRM practices is tied to the ability of acquiring a sustained competitive advantage is widely accepted in HRM-performance literature (see Section 2.3.1), the institutional factors that shape those HRM practices have also been widely researched (e.g., Bacon & Hoque, 2005; Edwards & Ram, 2006; Harney & Dundon, 2006; Wood & Lane, 2012). Guided by an institutional perspective (DiMaggio & Powell, 1983), several studies have found contextual factors (e.g., business sector, size of the firm) directly related to the adoption of formal/best HRM practices. The last decade has observed an increasing trend towards applying an integrated approach (i.e., RBV and institutional theory) to comprehend HRM related issues in both small and large organisations (Sheehan, 2013; Subramony, 2009; Tzabbar, Tzafrir, & Baruch, 2017).

Although large businesses play a crucial role in the economic growth, the role of SMEs in stimulating and strengthening economic indicators of a country carries equal importance (Henry & Temtime, 2009; Kongolo, 2010). Inyang and Enouh (2009) and Umer (2012) see small firms as 'growth engines' that can make both social and economic contributions to the development of a country. The social gains include strengthening social ties in communities, providing employment for locals and stimulating indigenous technology and industry. That is why SMEs often represent more than 90 per cent of all businesses in a country (Tayebi, Razavi, & Zamani, 2011). For example, SMEs make up around 99.7% of all businesses in USA (BIS, 2012), 99% for China (Cunningham & Rowley, 2008) and 99.9% for the UK (BIS, 2012). Similarly, small and medium sized firms are responsible for providing up to 50% of total employment in Asia (Tambunan, 2011) and 59.1% and 49.6% in the UK and USA respectively (BIS, 2012). With regards to major challenges faced by SMEs, the recent global financial crisis has resulted in increased unemployment. According to recent statistics (ILO, 2014), 202 million people worldwide were out of jobs in 2013 whereas, the trends suggest a further increase, rising to 218 million by 2018. Therefore, an increasing emphasis has been observed by governments and local institutions to not only promote but facilitate entrepreneurship (Ortmans, 2014).

An entrepreneurial orientation is critical to the firm's growth in today's economy, as the current trend towards knowledge-intensive industries means that competitiveness increasingly depends on the management of the people within the firms. Values, attitudes, organisational culture and commitment to employee welfare have become increasingly important aspects for organisations that need to sustain competitive advantage in this ever changing economic climate. Altinay (2008) suggests that HRM theory and practice can contribute to understanding issues faced by entrepreneurial firms. Schuler (1986) and Sheehan (2014) suggest that HRM related policies may influence corporate entrepreneurship and a consistent approach towards HRM sophistication can improve a firm's ability to gain and sustain competitive advantage. Similarly, others (e.g., Barrett and Mayson, 2007; Smallbone, Deakins, Battisti, & Kitching, 2012) imply that effective implementation of HRM practices are not only crucial for SMEs' survival but have a considerable impact on resource acquisition and growth.

Given the important role of SMEs in strengthening a country's economy, the research carried out to date depicts a poor state with regards to HRM in SMEs (Botero & Litchfield, 2013; Harney & Nolan, 2013). An overwhelming share of literature concerning HRM practices has primarily focused on large organisations while the strength of empirical evidence in SMEs

context is quite weak (Botero & Litchfield, 2013; Nguyen & Bryant, 2004; Paul & Nealia, 2016; Uhlaner, & Thurik, 2006; Wiesner, McDonald, & Banham, 2007). Although there is an emerging interest in exploring HRM practices in SMEs, influencing contextual factors and their effect on organisational sustainable outcomes, most of the studies have been conducted in western contexts (Bae, Chuma, Kato, Kim, & Ohashi, 2011; Budhwar & Debrah, 2009; Ramdani, Mellahi, Guermat, & Kechad, 2014). Since large organisations differ from SMEs in multiple aspects (e.g., business strategies, influence of institutional factors and availability of resources), HRM practices are often not comparable to the SME context (Sheehan, 2014; Storey, 2002; Wiesner & Innes, 2010). Moreover, the literature lacks perspectives from SMEs from developing and transitional economies since it is difficult to find quality empirical work conducted in developing countries (Budhwar & Singh, 2007; Chaudhry, 2013) such as Pakistan (Khilji, 2001; Mansoor & Matthew, 2015; Rana, Khan, & Asad, 2007; Shih, Chiang, & Hsu, 2006).

The context of this empirical research is the SME sector in the province of Punjab, Pakistan. Strategically located in south Asia, Pakistan is a Commonwealth member state and one of the most influential members of the South Asian Association for Regional Cooperation (SAARC). The historical association with the British colonial system makes it receptive to British management structures in its organisations and institutions. Occupying a strategic geography, Pakistan borders with Iran, Afghanistan, India and most importantly China. The country has a total area of 796,095 sq km with an estimated population of 182.1 million which makes it the sixth most populous country in the world and second most populous among Islamic countries (World Bank, 2013). The total labour force is 54.9 million, out of which, 51.9 million are employed (Government of Pakistan, 2013). Although historically Pakistan is considered as an agrarian country, due to the substantial growth in industrial sector the agriculture sector has experienced a decline of labour force in the last decade (from 46 per cent in 1999 to 43.7 per cent in 2013). Currently, the manufacturing and services industrial sectors hold an estimated 54.7 per cent of the country's labour force.

Moreover, Pakistan is the 27th largest economy in the world in terms of purchasing power. Regardless of some ups and downs during the first decade of 21st century amidst political discontinuation and financial crisis of 2008-2009, the economy of Pakistan gradually started to recover in late 2012 (GDP grew from 3.70% in 2012 to 4.14% in 2013) and continues to accelerate (the GDP grew at 4.7% in 2016 and 5.28 per cent in 2017) potentially galvanised by robust growth in manufacturing and services sectors (Pakistan Economic Survey, 2017). Moreover, the unemployment rate deflated marginally from 6% in 2015 to 5.8% in 2016.

Like developed countries, SMEs play a distinctive role in the growth and prosperity of developing nations in terms of employment creation and income generation (Khalique, Isa, & Nassir, 2011). The economy of Pakistan is also a direct reflection of its SME sector (Afraz, Hussain, & Khan, 2014) since it represents more than 90 per cent of the total established businesses whereas 97 per cent of these SMEs employ less than 10 workers (PBS, 2016). According to the most recent statistics available for SMEs (SMEDA, 2007), their contribution towards employment is around 80 per cent and 25 per cent towards exports. In terms of industrial segregation, 53 per cent are wholesale, retail, restaurants and hotels, 22 per cent are community, social and personal services and 20 per cent are associated with manufacturing. The SME sector contributed over 30 per cent to national GDP and 25 per cent in export earnings. Moreover, the province of Punjab (the largest in terms of population) represents more than 65 per cent of total SMEs in Pakistan (SMEDA, 2007).

Regardless of their economic significance, the SME sector in Pakistan faces a variety of shortcomings which limit its ability to fully contribute towards national economic progression. These include, for instance, lack of business information infrastructures and strategic planning, limited financial literacy and most importantly the lack of a strategic approach towards human resource development (Khawaja, 2006; Mustafa & Khan, 2005; Rohra & Panhwar, 2009; SBP, 2010). Moreover, the failure rate of SMEs in Pakistan is around 90 per cent whereas, lack of training, institutional pressures and informal management practices are considered as key determinants of their failure (Ullah, Shah, Hassan, & Zaman, 2011). In addition, the paradigm shift from traditional economies to knowledge-based economies suggest that the ability of firms to not only survive, but compete in national and foreign markets is increasingly dependent on human capital and innovation (Gardner, Verma, & Payne, 2006; Huang & Wu, 2010).

Human resource systems in Pakistani firms are going through a developing phase. A number of firms in Pakistan have renamed their administration departments to HR but due to the scarcity of HRM related research, it is rather complex to anticipate this change (Khan, Miah, & Manzoor, 2014; Muhammad, Nadeem, & Ashfaq, 2011; Yasmin, 2008). Informal people management practices are common across the majority of organisations that lack a systematic approach towards managing human capital. Consequently, low motivation and high employee turnover are some of the common challenges faced by these firms (Ali, 2013; Khilji, 2001; Yasmin, 2008). Furthermore Pakistani firms are characterised by lack of formal HR policy and informal selection and training practices (Memon, Rohra, & Lal, 2010). Such practices

limit the ability of organisations (SMEs in particular) to compete in national and foreign markets (Akhtar, Raees, & Salaria, 2011).

Pakistan, as a developing country, has been underexplored with regards to organisational management research (Saher & Mayrhofer, 2014; Syed & Ozbilgin, 2015) and the case for HRM related research is even weaker (Ali, 2013; Yasmin, 2008). Implementation of formal HRM structures in Pakistani firms is in its preliminary stage (Khan, Miah, & Manzoor, 2014) that urgently requires academic research in order to unfold the status and effectiveness of these practices in strategic terms (Mansoor & Matthew, 2015). The available literature predominantly addresses HR related issues in macro organisations and little is known about small to medium sized firms in Pakistan (Budhwar & Singh, 2007, Mansoor & Mathew, 2015; Saher & Mayrhofer, 2014; Yasmin, 2008). In addition, HRM related research in Pakistani SMEs is almost non-existent when reviewing high quality refereed journals (Bhutta, Rana, & Asad, 2007; Chaudhry, 2013).

Moreover, Pakistan is an interesting country to explore people management practices for two primary reasons. In the first place, the national culture is characterised by collectivism and high power distance that influence workplace practices resulting in nepotism, centralised decision making and debasement (Islam, 2004, Mansoor & Mathews, 2015). These tendencies can greatly influence the adoption and efficacy of best workplace practices. Secondly, low employee productivity leading to poor organisational performance has been confirmed as one of the major reasons for stagnant economic growth in Pakistan (World Bank, 2013). Since SMEs are considered as the backbone of Pakistani economy (Afraz et al., 2014; Hussain, Ahmad, Haq, Nazir, Imran, & Islam, 2015) and acknowledging the limited HRM related research in the SME context (Chaudhry, 2013), studying the role of formal HRM practices in organisational success and contextual factors that shape those HRM practices is a worthwhile endeavour.

Lastly, prior research in similar contexts (influence of contextual factors on HRM practices within SMEs) not only exhibits mixed results (see Chapter 2) but is mostly conducted in western contexts (e.g., De Kok & Uhlaner, 2001; Newman & Sheikh, 2014; Urbano & Yordanova, 2008) and its findings might not be applicable to the Pakistani context. In addition, only one empirical study (Raziq, 2012) has investigated the role of contextual factors in shaping high performance management practices in the context of Pakistani SMEs to date. However, the said study not only investigates a minimal number of contextual factors (as compared to this investigation) but more importantly lacks generalisability since the study

focuses on SMEs from only one city (i.e., Karachi in Sindh province) that represents approximately 12 percent (Afaqi & Seth 2009; PBS, 2011) of the whole SMEs in Pakistan.

1.3 RESEARCH OBJECTIVES AND QUESTIONS

Considering the scarce literature on HRM in Pakistan (SMEs in particular) and the important role of SMEs in the economic growth and development of Pakistan, this empirical study aims at exploring determinants (contextual factors) of best HRM practices (HRM formality) and the influence of these best practices on organisational performance. The study also aims at unfolding the differences between three important SME sectors of Punjab, Pakistan (i.e., services, manufacturing and trade) in terms of overall HRM formality and individual HRM practices/functions (e.g., performance appraisal).

The research questions formulated in line with aims and objectives of this study are outlined as follows;

1. Are there any differences of HRM formality (recruitment and selection, training and development, performance appraisal, compensation and benefits) between services, manufacturing and trade sectors of Pakistani SMEs?

2. Which of the contextual factors (determinants) have significant influences on HRM formality (adoption of HRM practices) within Pakistani SMEs?

3. Does HRM formality influence the performance of SMEs in Pakistan?

The aim of this study is to add value to the HRM related literature in a Pakistani context and is one of the first attempts to explore the influence of contextual factors on HRM practices and further, the relationship with organisational performance in SMEs in the Punjab, the most populous province with more than 65 per cent of SMEs in Pakistan. The study also aims at contributing to both the theory (RBV and institutional perspective) and practice (informing SME owners/managers and government to revise/improve policies governing people in firms). This empirical study also aims to provide opportunities for further research in this domain such as providing rich explanations for the influence of contextual factors in shaping HRM related policies and practices in SMEs and exploring other institutional pressures that influence HRM take-up in firms. Moreover, due to the limited scope and diversified objectives, this study investigates a direct relationship between HRM practices and firm performance. However, emerging scholars can invest efforts into the exploration of

mediating/underlying mechanism of this relationship (e.g., job satisfaction, employee commitment) in the Pakistani (Punjab) context.

1.4 BRIEF OVERVIEW OF METHODOLOGY

To explore the research questions formulated in line with the aims and objectives of this study, a research design has been employed that embraces a positivist paradigm. This view suggests the application of methods of the natural sciences to study a social reality (Bryman & Bell, 2007). Moreover, to comprehend the reality, the use of scientific methods such as experiments or surveys is common for data collection. Since this empirical investigation aims at exploring influential contextual factors of HRM practices and its relationship with firm performance by testing existing theories (RBV and institutional theory), the research approach reflects a deductive perspective. Moreover, the study incorporates a quantitative methodology involving analysis of primary data collected through a survey method. A stratified sampling technique is used in order to include three major business sectors of small to medium sized enterprises. A structured questionnaire was used to collect data from SME owner/managers. The reliability and validity of the instrument is tested (e.g., factor analysis, inter-item correlations). The data are analysed using SPSS (version 20.0) that involves application of various statistical tools such as analysis of variance (ANOVA), analysis of co-variance (ANCOVA), multivariate analysis of variance (MANOVA) and ordinary least square (OLS) multiple regression.

1.5 STRUCTURE OF THE THESIS

This thesis is divided into six chapters. Each chapter starts with a brief introduction of the topics covered and ends with a short summary. A brief outline of each chapter is provided below;

The first chapter includes a general background to this study including the problem statement and justification for carrying out HRM related research in SME in Pakistan. The chapter highlights the critical role of SMEs in the economic progression of developed and developing countries and also draws attention to the role of formal HRM practices in achieving sustainable organisational outcomes. Objectives of this study, leading to the research questions are then presented, followed by a brief introduction to the research methodology.

The second chapter presents a detailed review of the existing literature concerning HRM practices in SMEs. This includes definitions of SMEs, theoretical perspectives underpinning

this study, definitions of HRM formality and nature of HRM practices in SMEs. Further, the chapter also presents a review of studies around influential determinants (contextual factors) of HRM formality in SMEs in line with the first and second research questions. The meaning and scope of organisational performance is then discussed, followed by a brief review of studies related to HRM-performance link.

Chapter 3 highlights the significance of carrying out HRM related research in the context of Pakistani SMEs. This chapter includes an overview of Pakistan, its economy, the SME sector and its contribution to economic growth. The chapter also presents a brief review of HRM related research in Pakistan, followed by the proposed conceptual model that is guided by two theoretical perspectives (i.e., RBV and institutional theory). Hypotheses pertaining to each research question are formulated in light of literature review carried out in Chapter 2.

Chapter 4 commences with a brief overview of the background to the research methodology. Two of the widely accepted schools of thought related to research philosophy are briefly discussed, along with justification for choosing an appropriate philosophy for this study. A detailed discussion of research design and methods is provided that includes looking at available research methods (qualitative vs. quantitative), research strategy, sampling design and procedures. Next, the reliability and validity methods chosen for the selected instrument and a brief discussion on data analysis tools and techniques are presented. Finally, this chapter presents ethical constraints and their resolution associated with this empirical study and limitations of the methodology.

Chapter 5 presents results of data analysis using statistical tools. First, descriptive statistics of key characteristics pertaining to respondents and organisations (SMEs) are presented. Next, the validity of the instrument is authenticated using factor analysis and dimensions of constructs are reduced as per results. The three research questions are investigated using inferential statistics and results are presented. Hypotheses related to the first research question (RQ1) are tested using analysis of variance. For the second and third research questions (RQ2 & RQ3), the associations among variables hypothesized in line with these research questions are tested using OLS regression analysis.

The last chapter (Chapter 6) presents the findings and further explains key contributions of this empirical research, together with recommendations for future research and a general conclusion.

1.6 SUMMARY

This chapter provided an overview of the background to this research study that included discussion on the role of HRM practices in attaining a sustained competitive advantage for firms in this ever increasing competitive environment and influence of contextual factors that shape those HRM systems. The chapter also highlighted the significant role and contribution of SMEs towards economic growth and prosperity of both, developed and developing countries. Limited literature concerning HRM in SMEs within the Pakistani context suggests an urgent need to explore in this domain. As a result of this problem statement, the objectives of this study, leading to three research questions were proposed. A brief overview of research methodology informed that this study reflects positivism paradigm and follows a deductive approach with quantitative methodology. The structure of this thesis is divided into six chapters and a brief outline of topics covered under each chapter is presented in section 1.5.

Chapter 2: HRM formality, determinants and organisational performance in SMEs

2.1 INTRODUCTION

To derive appropriate hypotheses in line with the research objectives, an extensive review of the literature is presented in this chapter which commences with a definition of SMEs, followed by a brief discussion and acknowledgment of differences between large and small firms based on their varying organisational characteristics. Next, the theoretical perspectives supporting this study are discussed that include the resource-based view (RBV) and institutional theory (IT). Definitions of HRM formality and an overview of the nature of HRM practices (recruitment & selection, training & development, performance appraisal and compensation) in SMEs are then discussed. A detailed review of empirical studies around the influence of contextual factors on HRM practices is presented next, followed by a critical review of meaning and measurement of organisational performance and its link with HRM practices.

2.2 SMEs DEFINED

Small and medium sized companies do not carry a universal definition as a result of the differing socio-economic conditions between countries. Various indexes are customarily used to characterise SMEs, e.g., the number of employees, capital invested, total volume of sales, amount of assets, industrial sector and production capacity. The number of employees, however, is the most commonly used index for defining SMEs across different countries (Cunningham & Rowley 2008; Hardier, 2004). Interestingly however, there is no agreement on the number of employees that designates an SME. For example, in France an SME is defined as a firm employing less than 500 employees whereas Germany classifies an SME as having no more than 100 employees. Similarly, the SME definition based on number of employees also varies within countries by business sector, volume of sales and capital investment. For instance in Japan, construction, manufacturing and transportation firms employing less than 300 employees or having a capital investment of less than 100 million Yen are classified as SMEs. On the other hand, firms associated with wholesale businesses are categorized as SMEs provided that the employment strength is less than 100. Similarly in the retail sector, a firm is regarded as an SME if it has employed less than 50 workers or has invested a capital less than 10 million Yen (Cunningham & Rowley, 2008).

Pakistani SMEs also lack a uniform definition (Mustafa & Khan, 2005; Rana et al., 2007). The influential government bodies (SMEDA, SME Bank and State Bank of Pakistan) associated with SMEs in Pakistan define SMEs differently based on employment strength, volume of net sales and total productive assets. For instance, SMEDA recognises a firm as an SME if either it has less than 250 employees or has a total productive assets of up to 40 million PKR. The SME bank uses the criterion of productive assets only and classifies a firm as an SME with total productive assets of up to 100 million PKR. Similarly, SBP (State Bank of Pakistan) defines an SME as a firm with less than 250 employees in the manufacturing sector whereas a firm with less than 50 employees and net sales of less than 300 million PKR is classified as an SME within services and trade sector (SMEDA, 2007).

Summarizing the definitions of SMEs within the Pakistani context, this study defines an SME as an organisation employing between 20 and 250 employees. The rationale for choosing 20 employees as the minimum in terms of employment size is that this study focuses on five HRM practices/functions and firms with more than 20 employees are expected to have a supporting organisational structure (Wiesner et al., 2007).

2.2.1 How SMEs are different from large organisations

SMEs have specific attributes that distinguish them from large organisations and that can change crosswise over various nations and cultures. These distinctive characteristics include a lack of economies of scale, types of products offered, integration of technology, management style and utilisation of internal resources (Moore & Manring, 2009; Smallbone et al., 2012). SMEs tend to have a flatter structure and a more command and control environment unlike larger firms that exhibit more hierarchical structures. Similarly, Bacon, Ackers, Storey, and Coates (1996) suggested that SMEs are more direct and informal in terms of communication and employees tend to have greater flexibility compared to large organisations. They further added that small businesses are more open to change because of informal approaches when compared to formal bureaucratic approaches incorporated by large firms. Moreover, SMEs are more adaptable in terms of executing strategies since they lack the opportunities for economies of scale. As a result, SMEs can more easily switch to new products and customers in contrast with larger firms (see also Price, Rae, & Cini, 2013).

Moreover, SMEs also significantly differ from large organisations in terms of HRM policies and practices (Edwards & Ram, 2009; Kaya, 2006; Qiao, Wang, & Wei, 2015). Cardon and Stevens (2004) argued that small businesses often find it difficult to incorporate and maintain an HR department or specialist primarily because of financial barriers. Kaya (2006) further added that owners/managers running small businesses perceive HRM related costs as an unwanted financial burden and tend to deviate gradually from this perception with the growth of the business. Since large organisations tend to be richer in resources, they are able to incorporate, exercise and maintain HRM policies and practices to a much greater extent compared to small businesses (Chow, 2005). For instance, several authors (Georgiadis & Pitelis, 2016; Kitching & Marlow, 2013; Sheehan, 2013; Wickramasinghe & Perera, 2012) argue that large organisations are more formalised than small firms in terms of HRM planning, resource intensive hiring and training. Similarly, others (Cunningham & Rowley, 2010; Kotey & Sale, 2005; Wager, 1998) see smaller firms following less formal approaches to employee performance appraisal and rewards management systems as compared to their larger counterparts.

Considering the differences between small and large businesses, Kuan and Chau (2001) argued that the findings of studies from large organisations might not be applicable to small businesses (see also Storey, 2002; Wiesner & Innes, 2010).

2.2.2 SMEs: homogeneous or heterogeneous

The extant literature concerning HRM in SMEs has largely treated all SMEs as a homogeneous group while ignoring significant differences such as product type, industry sector, or entrepreneurial orientation. (Culkin & Smit, 2000; Gilman & Edwards, 2008). For instance, SMEs from a particular industrial sector might differ from those in a different sector in terms of the product market and the skills level (new institutionalism, i.e., SMEs differ from sector to sector but within one industrial sector they display the characteristics of a homogeneous group) (Tsai, 2010). Similarly, SMEs from within an industrial sector might differ on the basis of customer base and type, management style, market competition, organisational culture and structure etc. (e.g., Cardon & Stevens, 2004; Culkin & Smith, 2000). As empirical evidence recognizing SMEs as highly heterogeneous in orientation started to surface in late 1990s, the European Commission (2018) revamped its definition for SMEs (initially proposed in 1996 and treating firms with up to 250 employees as a SME) in 2002 to make it economically fair, legal and applicable. The new definition further categorized the SMEs (micro, small and medium) by modifying the ceilings in terms of the number of employees (micro <10, small < 50 and medium <250) and also added financial thresholds in addition to the firm size (micro <= €2m, small <= €10m and medium <= €50m).

The literature holds divergent views concerning the orientation of SMEs (homogeneous or heterogeneous) in terms of the adoption of HRM practices. For example, the new institutionalism advocates that SMEs from the same industry are likely to have similar HR policies and practices owing to their comparable structure, culture and output (Jackson & Schuler 1995; Paauwe & Boselie 2003; Schuler & Jackson 2005; Tsai, 2010). Conversely, others view SMEs from even the same industry as highly heterogeneous and complex (Baron & Hannan, 2002; Culkin & Smith, 2000; Gilman & Edwards, 2008; Harney & Dundon, 2006). They argue that SMEs associated with an industrial sector might exhibit varying approach towards HR policies and practices owing to dissimilar internal and external settings (e.g., legislation, labour market, product type, type of customers, resource dependency, culture, level of employee skills). Harney and Dundon (2006) argued that size class is the most influential factor that interacts with both internal and external settings (open systems theory) to shape distinctive HR systems in SMEs (see also Budhwar & Debrah, 2001). Owing to sparse empirical evidence and the complex nature of institutional settings in which SMEs operate, further comparative HRM research is necessary among different sectors (e.g., manufacturing, service, trade) and within sectors (e.g., based on different employee skills and product).

2.3 THEORETICAL PERSPECTIVES UNDERPINNING THIS STUDY

This empirical research focuses on HRM practices within SMEs (contextual factors and relationship with firm performance) and is guided by two relevant theoretical perspectives, namely the resource-based view (RBV) and institutional theory (IT).

2.3.1 The resource-based view (RBV)

Although various theories have been used to comprehend the relationship between HRM and performance related outcomes (Barney, 1991), the resource-based view (RBV) stands prominent (Campbell, Coff, & Kryscynski, 2012; Colbert, 2004; Delery, 1998; Wang & Barney, 2006; Wright, Dunford, & Snell, 2001). RBV suggests that the internal resources of a firm can lead to the sustained competitive advantage (Barney, 1991; Wernerfelt, 1984). The notion that a firm's internal resources can be source of competitive advantage was a departure from previous theories of strategic management that emphasised external factors such as competitors and industry type (Porter, 1985). Barney (1991) elaborated on internal resources by classifying them into three broad categories: organisational capital resources (e.g., planning, controlling), physical capital resources (e.g., equipment, technology) and human capital resources (e.g., training, judgment). He further described the sustained competitive advantage as a value creating business strategy that not only market competitors lack but find it difficult to imitate. Thus according to RBV, in order to gain sustained competitive advantage, a firm's internal resources should exhibit heterogeneity and imperfect mobility.

Although traditional sources leading to sustained competitive advantage (e.g., economies of scale, technology) create value for the firm, these resources are progressively becoming easy to mirror (Becker & Gerhart 1996; Boxall & Purcell, 2003). Provided that it is the case, human resources developed internally could be an important source of sustained competitive advantage (Barney, 1991; Lado & Wilson, 1994; Lin & Wu, 2013; Scheel, Rigotti, & Mohr, 2014; Wright & McMahan, 1992). Contention exists in the literature regarding the aspects of human resources that are not imitable and can actually create sustained competitive advantage for the firm. Wright, McMahan, and McWilliams (1994) proposed that it is the knowledge, skills and abilities of human capital that lead to sustained competitive advantage. Furthermore, Lado and Wilson (1994) argued that HR practices integrated strategically into an overall HR system can be unique and make the basis for acquiring sustained competitive advantage.

After Barney (1991) solidified the RBV perspective, it has been widely used by researchers to describe and explain relationships between HRM practices and organisational success (Barney, Ketchen, & Wright, 2011; Chadwick, Way, Kerr, & Thacker, 2013; Huselid, 1995; Hatch & Dyer, 2004; Koch & McGrath, 1996; Lin & Wu, 2012; Progoulaki & Theotokas, 2010; Richard & Johnson, 2001; Sheehan, 2014; Wright, Barrows, & Hartmann, 1999). For example, Koch and McGrath (1996) investigated 319 organisations and proposed that HRM practices, such as recruitment, selection and HR planning are positively associated with firm performance. They further argued that investment in human capital would develop a pool of talent that is difficult to imitate and such HRM practices are positively related to labour productivity. Similarly, Wright et al. (1999) investigated 190 US petro-chemical refineries and found a positive link between HRM practices and financial performance. Hatch and Dyer (2004) drawing upon RBV found that HRM practices such as selection and training resulted in enhanced organisational learning which, in turn, was positively associated with firm performance. Drawing upon the work of Lado and Wilson (1994), Progoulaki and Theotokas (2010) examined 91 Greek shipping companies to suggest that firms that have integrated bundles of HRM practices into an effective HR system are more secure from competitors and such HR systems can create competitive advantage.

In a nutshell, the RBV theory in an HRM context suggests that effective HRM policies and practices prompt the development of a skilled and motivated workforce that can lead to achieving and sustaining a competitive advantage. This results in higher organisational gains in terms of labour productivity and low labour turnover that translates into enhanced financial performance and higher stock prices.

Although RBV has been applied to HRM studies, it has been critiqued (Bratton & Gold, 1999; Kraaijenbrink, Spender, & Groen, 2010; Nanda, 1996; Oliver, 1997; Paauwe & Boselie, 2003; Priem & Butler, 2001). Nanda (1996) for example, highlighted that the definitions of ‘resource’ in RBV are vague and sometimes tautological, as they are characterised as firm strengths and these strengths are then referred to as strategy resources. Similarly, capability is characterised as core competence and competence is then defined as capability. Furthermore, Bratton and Gold (1999) argued that RBV theory appears to exaggerate the internal resources of the firm to gain competitive advantage while ignoring the influence of some crucial external factors. Similarly, Oliver (1997) scrutinised the RBV model by arguing that it usually ignores the social settings (e.g., regulatory pressures, institutions) inside which the rationales for resource selection are ingrained. This view coincides with Paauwe and Boselie (2003) who also contended that RBV ignores the need to

focus on responding to variable organisational environments. They further suggested that RBV is less of a help in understanding circumstances where specific organisational resources will create a sustained competitive advantage. Kraaijenbrink et al. (2010) further imply that RBV adheres to an inappropriately limited neo-classical economic rationality. They presented three issues associated with RBV application namely its excessive emphasis on the ownership of individual resources, its lack of emphasis on the significance of bundling resources and the human interaction in creating value. For these reasons, they suggested that RBV lacks the ability to adequately grasp the concept of competitive advantage. On the other hand, Becker, Huselid, and Ulrich (2001) suggested that the use of efficient high performance HRM systems can facilitate to overcome these principal issues that can result in achieving sustained competitive advantage. Similarly, while addressing the concerns of Wright et al. (1994), Becker and Gerhart (1996) proposed that HRM systems in successful firms are difficult to replicate by competitors mainly for two reasons. First, casual ambiguity regarding how HRM contributes to competitive advantage makes it difficult for competitors to imitate those strategies. Second, since HR systems mature over time, individual HRM practices in an HR system evolve over time to become formal practices and those formal practices reflect philosophies, culture and management inputs that are very organisation specific. Such HR systems are difficult to imitate (Barney, 2001) and can result in sustained competitive advantage.

By and large, the core of the criticism of RBV in HRM research is that it tends to neglect the importance of cultural and institutional factors that shape HRM practices in organisations (Newman & Sheikh, 2014; Oliver, 1997; Paauwe, 1996; Paauwe & Boselie, 2003; Priem & Butler, 2001). Therefore, several scholars have looked to institutional theory to fully understand the role of institutional settings (contextual factors) that shape/influence HRM practices in organisations (Harney & Dundon, 2006; Oliver, 1997; Paauwe & Boselie, 2003; Rao, 1994; Storey, Saridakis, Sen-Gupta, Edwards, & Blackburn, 2010; Wright & McMahan, 1992).

2.3.2 Institutional theory (IT)

One of the crucial characteristics of SMEs is that they are immensely sensitive to variable external forces (Harney & Nolan, 2014; Hill & Stewart, 2000; Siu, 2000; Storey, 1994; Storey & Westhead, 1996). A common understanding exists in the literature with regards to organisational behaviour that ‘institutions matter’ (Kaufman, 2011). These institutions are the source of legitimisation, incentives for, as well as constraints on, organisational activities

(Meyer & Rowan, 1977). The roots of institutional theory can be traced back to the 19th century (Scott, 1995), where it was closely associated with neo-classical economic theory (Hodgson, 2004), ecology theory and resource-dependency theory (Greenwood, Oliver, Sahlin, & Suddaby, 2008). However, it gained popularity in organisational behaviour in the late 1970s when various US-based sociologists (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Zucker, 1977) advocated new-institutionalism. Where old institutionalism focuses on the distinctive characteristics of individual firms, the new institutionalism advocates similarity in practices across different organisations and focuses on the organisational structures that are built through cognitive processes that enact legitimacy around established ideas (Scott, 2008).

Institutional theory (in an HRM context) initially proposed by DiMaggio and Powell (1983) embraces the view that HRM policies and practices are greatly influenced by institutional factors. The most significant underlying assumption for studying the role of institutions is that organisations are acutely embedded in the broader institutional context (Powell, 1988) and hence, the organisational policies and practices are either an explicit reflection of, or response to the structures and rules constructed into their larger environment (Paauwe & Boselie, 2003). These structures and rules in organisations gain legitimacy through social constructions of reality (Wright & McMahan, 1992). Moreover, Jackson and Schuler (1995) clarified that organisations usually refer to their socially-constructed environment for acknowledgement of their performance. These assumptions propose that the behaviour of individuals and organisations are orchestrated by certain decisions that are the result of meeting social and institutional demands. Thus, the major implication of institutional theory for HRM research suggests that not all HRM practices in a firm are the product of rational strategic decision making (Wright & McMahan, 1992). Many of them might have been adopted as a result of social construction processes where these practices are largely influenced by contextual factors (Jackson & Schuler, 1995).

Institutional factors influence HR systems with three different types of mechanisms (forces) namely; coercive, mimetic and normative isomorphism. The coercive mechanism results from political influence such as trade unions and government institutions that affect HR systems at national and industry levels with varying intensity. The mimetic mechanism is associated with standard responses to uncertainty where firms imitate the HRM practices of competitors operating in similar environments. Finally, the normative mechanism refers to professionalism and focuses on the influence of professional agencies, networks and job

experiences in the adoption of HRM practices (DiMaggio & Powell, 1983; Farndale & Paauwe, 2007; Paauwe & Boselie, 2003).

The influence of institutional factors in shaping HRM systems and practices within organisations has been studied widely (e.g., Bacon & Hoque, 2005; Boselie, Paauwe, & Richardson, 2003; Chandler & McEvoy, 2000; Edwards & Ram, 2006; Newman & Sheikh, 2014; Ram, 2000; Wood & Lane, 2012). For example, Ram (2000) and Wu, Bacon, and Hoque (2014) found that variation in the adoption of training practices among different firms was associated with sector differences. Similarly, Chandler and McEvoy (2000) studied 66 firms to suggest that production strategy among manufacturing firms was an important determinant for adoption of certain HRM practices. Boselie et al. (2003) surveyed 132 HR managers and found that the effect of HRM was curtailed in firms operating in highly institutionalized business sectors (e.g., hospitals) as opposed to less institutionalised sectors (e.g., hotels) where the effect was profound. The findings from this empirical research further suggested that firms with low institutionalisation exhibited greater flexibility with regards to the choice of HRM practices when compared to highly institutionalised firms. In another study, Bacon and Hoque (2005) examined the influence of internal and external institutional factors in shaping HRM systems and practices by surveying 2191 firms noting that trade unions, a skilled work force and the customer base are important influential factors in the adoption of HRM practices. Finally, Edwards and Ram (2006) examined the application of institutional frameworks in 123 small firms and concluded that by and large, the survival of small firms depends upon the dynamic use of their resources and ability to respond to variable economic conditions and regulations.

In summary, it appears that theory and empirical evidence both justify the application of institutional frameworks to HRM research. Institutional theory can reveal insights with regards to the impact of contextual factors on the adoption of HRM practices and HRM decision making.

2.3.3 RBV and Institutional theory: an integrated approach

The literature on the application of RBV in HRM research suggests that the differences in organisational performance could be related to heterogeneous HRM practices, which coincides with the aims of this research study. RBV is based upon the notion of ‘economic rationality’ and proposes organisational gains through added values inculcated via exclusive HRM systems. On the other hand, institutional theory advocates the homogeneity of firms resulting from external forces. It supports the notion that certain institutional factors shape

HRM decision making within organisations such as social or culture influences, pressure of trade unions and regulatory bodies, competition and association/business with professional organisations. This empirical study also aims at exploring differences in the adoption of HRM practices within SMEs based on the contextual characteristics of those SMEs.

Several authors (e.g., Oliver, 1997; Paauwe & Boselie, 2003; Storey et al., 2010; Subramony, 2009) have suggested an integrated approach (RBV and institutional theory) towards comprehending HRM issues in organisations. For instance, Paauwe and Boselie (2003) contended that in order to understand the successful gains of organisations through HRM systems (RBV), it is imperative to integrate institutional theory which can always help in determining the nature and characteristics of those HRM systems in different contextual settings. Similarly, Oliver (1997) and Combs, Liu, Hall, and Ketchen (2006) implied that the right fit between contextual factors and HRM practices can lead to enhanced firm performance. Further, Wood (1999) and Sheehan (2014) suggested that human resources can lead to competitive advantage if aligned with environmental factors. The proponents of the integrated framework argue that where RBV in HRM provides valuable insights by addressing the differentiation among firms on the basis of unique resources, institutionalism focuses on 'isomorphism' that explains the similarities in structures and processes between firms operating in similar environment. Therefore, this empirical study incorporates an integrated approach not only to investigate HRM practices as being a useful resource for organisational gains but also to explore the influence of contextual factors that shape those HRM practices.

2.4 HRM IN SMEs

This section discusses the definitions of HRM formality and the nature of overall HRM practices (formality) in SMEs including underlying HRM functions namely; (1) recruitment and (2) selection, (3) training & development, (4) performance appraisal and (5) compensation & benefits.

2.4.1 Defining HRM formality

Researchers have mostly looked at the relationships between individual HR practices and organisational performance, while recent empirical work reflects the use of 'bundles' or 'configurations' of HR practices and their influence on sustainable organisational outcomes (De Kok & Hartog, 2006; Drummond & Stone, 2007). These bundles or systems have appeared in the literature with different names but represent a similar underlying philosophy

(Evans & Davis, 2005; Wiesner et al., 2007), namely high involvement practices (Bryson, Forth, & Kirby, 2005; Guthrie, Spell, & Nyamori, 2002), high performance work systems (Chow, 2005; De Kok & Hartog, 2006; Murphy, Dipietro, & Murrmann, 2007; Qiao et al., 2015), high performance work practices (Bae, Chuma, Kato, Kim, & Ohashi, 2011; Huselid, 1995; Karatepe, 2013; Zhang & Li, 2009), sophisticated HRM practices (Golhar & Deshpande, 1997; Hornsby & Kuratko, 1990) and HRM formality (Anneleen, 2017; Barrett & Mayson, 2007; De Kok & Uhlaner, 2001; Heneman & Berkley, 1999; Lai, Saridakis, & Johnstone, 2016; Nguyen & Bryant, 2004; Storey et al., 2010). Bundles of HR practices/functions studied in this empirical research are referred to as 'HRM formality'. Several authors (e.g., De Kok & Hartog, 2006; Huselid, 1995; Ichniowski, Shaw, & Prennushi, 1993; Marchington & Wilkinson, 2005) have argued that bundles or systems of specific HR practices have a profound effect on firm performance than isolated involvement.

Literature suggests that there is no specific definition of HRM formality. However, De Kok and Uhlaner (2001) defined formality as the extent to which a rule or procedure is written down, how regularly a procedure is applied within the organisation and the extent to which an employer assures that an activity should take place. According to Nguyen and Bryant (2004, p. 601), HRM formality can be defined as: "The extent to which HRM practices are documented, systemized, and institutionalized". They further described it as a firm that adopts formal HRM practices that includes provision of an HRM specialist, written policies for recruitment and dismissals, professional means of selection, documented HRM planning, training and development of employees, maintaining job descriptions and conducting regular performance appraisals. Barrett and Mayson (2007) further added that HRM formality is defined as the extent to which HRM procedures and practices are written down and exercised on a regular basis.

Although, the concept of a bundle of HRM practices or an HRM system has been applied to several studies (discussed earlier), there is no consensus on the number of constituting or underlying functions that measure those bundles of practices. However, a majority of the studies investigating HRM bundles in SMEs have suggested a framework comprising six HRM functions/practices namely; recruitment, selection, training and development, performance appraisal, compensation and benefits and employee relations (Cassell, Nadin, Gray, & Clegg, 2002; De Kok & Uhlaner, 2001; Hornsby & Kuratko, 1990; Jameson, 2000; Kotey & Slade, 2005; Nolan, 2002; Wiesner et al., 2007; Wong, Marshall, & Alderman, 1997).

2.4.2 HRM in SMEs: formal versus informal

Considerable differences of opinion exist regarding the nature of HRM practices in SMEs. For instance, some researchers suggest that employment relationships in SMEs are more cordial and harmonious than in larger firms. The reason being, the smallness of SMEs naturally offers easy and open communication due to the flatter hierarchy, greater flexibility and limited conflicts (Prouska & Kapsali, 2011; Richbell, Szerb, & Vitai, 2010; Wilkinson, 1999). On the other hand, some scholars argue that SMEs reflect a 'bleak house' prospect where flexibility is more connected to uncertainty, authoritative communication and expression of conflicts through individual means (Cully, 1998). Several empirical studies (Bacon et al., 1996; Harney & Dundon, 2006; Ram & Holliday, 1993; Storey, 2004; Storey et al., 2010) have looked into these contradictions and concluded that employee management within SMEs tends to be rather informal, ad hoc, contextual and complex than simply being cordial or coercive.

Empirical evidence suggests that the case of SMEs in terms of HRM formality is quite different from larger firms since such practices are not as developed as in larger firms and are less structured (Hornsby & Kuratko, 2003; Kerr & McDougall, 1999; Kitching & Marlow, 2013; Marlow & Patton, 1993; Qiao et al., 2015; Storey et al., 2010; Wilkinson, 1999). Wilkinson (1999) suggested that employment relations in SMEs are characterised by informality and that formal control systems and communication strategies are almost non-existent. He further argued that the rules and procedures within SMEs are outdated in an environment where managers and owners have to make quick decisions in response to changing external environments. Many researchers (Gray & Mabey, 2005; Hill & Stewart, 2000; Sheehan, 2013; Storey, 1994) have argued that this informal approach towards HRM practices reflects the key characteristics of SMEs themselves, such as flexibility, external uncertainty and innovation. Other studies (Kinnie, Purcell, Hutchinson, Terry, Collinson, & Scarborough, 1999; Marlow, 2002; Smallbone et al., 2012) relate the informal nature of HRM practices in SMEs with time and resource limitations and owner identification.

Although, the literature predominantly treats HRM practices within SMEs as being informal, the dynamics of these informal practices have also been discussed (Bacon & Hoque, 2005; Bae & Yu, 2005; Harney & Dundon, 2006; Kitching & Marlow, 2013; Ram et al., 2001). For example, Bae and Yu (2005) surveyed 464 SMEs in South Korea to suggest that small businesses require a certain level of HRM formalisation to achieve operational excellence, but it might restrict the innovation within them. Similarly, from studying HRM practices

within UK SMEs, Bacon and Hoque (2005) proposed that informal HRM practices are widely spread but not ubiquitous. Kotey and Slade (2005) investigated 371 Australian small firms (<100 workers) to conclude that a majority exhibited an informal approach towards HRM formality while a handful of SMEs progressively adopted formal HRM practices with growth.

The next section explains the nature (formal/informal) of underlying HRM practices of HRM formality within SMEs.

2.4.2.1 Recruitment and selection

Mathis and Jackson (2010) see human capital as the most vital resource and argue that other resources greatly depend on how effectively it is utilized. Since SMEs are often labour intensive (Chadwick et al., 2013; Patel & Conklin, 2012; Schmitz, 1995), effective recruitment and selection methods are inevitable (Kristof-Brown, Zimmerman, & Johnson, 2005). Resourceful humans who fit well within the organisational culture and themselves can lead the organisation towards higher ends of productivity (Chatman & Caldwell, 1991; Groβler & Zock, 2010; Kristof-Brown et al., 2005, Sheridan, 1992). Moreover, Rynes and Gerhart (1990) and Gamage (2014), expanding on the RBV perspective, suggested that the ability of an organisation to recruit and retain skilful staff is a source of competitive advantage. Similarly, Henry and Temtime (2009) argue that ability of an organisation to achieve its goals greatly depends upon the people it hires. Therefore, effective management of HRM, and particularly recruitment and selection practices has become one of the primary challenges for SMEs in today's competitive environment (Atkinson & Storey, 1994; Calder, 2012; Deshpande & Golhar, 1994).

Bratton and Gold (2007) view recruitment and selection as an interrelated process where recruitment serves the purpose of gathering available and capable applicants for a position in an organisation while selection involves deploying suitable instruments/methods to choose the most appropriate and suitable person for the job, taking into consideration, job requirements, management objectives and legal requirements.

Despite its importance, the literature suggests that SMEs tend to utilise more informal means for recruitment and selection that are usually on a sporadic and ad-hoc basis (Beardwell, Claydon, & Holden, 2004; Carroll, Marchington, Earnshaw, & Taylor, 1999; Hanić, Pržulj, & Lazarević-Moravčević, 2016; Wiesner et al., 2007). Marlow and Patton (1993) found that recruitment in small firms is extensively through informal channels that included employee

referrals as a major source, even in the case of medium sized enterprises. Similarly, Carroll et al. (1999) emphasised that knowing the individual beforehand (referral) is important to the recruitment process in small firms and further proposed that informal methods of hiring remain predominant as the firm size grow. Kotey and Sheridan (2004) added that referrals (word of mouth) are still considered to be the favourite recruitment method in small firms. Moreover, Beardwell et al. (2004) argued that small to medium sized firms are less likely to utilize resource intensive recruitment methods effectively such as advertising, promotional events, graduate hiring, radio and television. They further suggested that SMEs incorporating informal methods of recruitment and selection (e.g. employee referrals and direct applicants) are actually limiting their options in terms of generating pool of potential candidates (see also Gamage, 2014).

Multiple selection techniques are considered most effective in a firm's human capital management system. Golhar and Deshpande (1997) reported that in both large and small firms, one-to-one interviews remain the most favourable selection technique, with larger firms more likely to use multiple selection criteria (e.g., written tests, panel interviews). Similarly, Barber, Wesson, Roberson, and Taylor (1999) proposed that larger SMEs tend to use more formal and up-to-date selection methods than their smaller counter parts to make hiring decisions more effective (see also Kotey & Slade, 2005).

2.4.2.2 Training and development

After recruitment and selection, training & development is the second most investigated proposition with regards to HRM practices within SMEs, predominantly in those businesses where employee roles and responsibilities are not precisely described and are open to change (Carlson, Upton, & Seaman, 2006; Kotey & Folker, 2007). Blanchard, Thacker and Ram (2012) view training and development as a set of integrated processes in which organisational and employee needs are analysed and responded to, in a systematic, logical and strategic manner. The core objective of training and development is to ensure that employees are equipped with the skills and competencies that are aligned with organisational goals (Bruhn & Zia, 2013; Naismith, 2007) for success (Chan, 2009).

Unlike large firms, there is not much evidence available that training programmes in SMEs lead directly to better firm performance (Coetzer, 2006; Hill, 2004; Storey & Westhead, 1994). Exceptions, of course, argue that the effective learning processes in small firms are crucial to the organisational gains and success (Chand & Katou, 2007; Cope, 2003;

Georgiadis & Pitelis, 2016; Johnson & Gubbins, 1992; Thang, Quang, & Buyens, 2010). Similarly, Paul and Nealia (2016) suggested that structured training and development practcies in small firms can result in increased organisational performance by generating well-trained and skilled employees.

Empirical evidence suggests that training and development in SMEs tends to be informal (Duberley & Walley, 1995; Hoque & Bacon, 2006; Jones, Beynon, Kotey & Slade, 2005; Pickernell, & Packham, 2013; Nolan, 2002), and mostly occurs on the job with little or no arrangement for management development (Kotey & Slade, 2005; Marlow & Patton 1993; Storey, 1994; Szamosi, Duxbury, & Higgins, 2010). Moreover, SMEs seldom undertake formal training needs analysis including absence of any formal or systematic approach towards training provisions (Bartram, 2005; MacMohan & Murphy, 1999). In contrast, Hornsby and Kuratko (1990) reported the use of a variety of training methods in small firms with on-the-job training exercised more often. Timmons (1999) suggested that in case of small businesses, owners/managers directly supervise on-the-job training of the employees, effectively transferring the firm's culture and experience to employees. Johnson and Devins (2008) reasoned the informal nature of training and development within SMEs and suggested that the nature of work and lack of resources make it difficult to plan and exercise structured training, particularly off-site training (see also Keep, 2006).

Hamburg and Hall (2012) explored the diversification of training programs exercised in SMEs according to which informal methods were found convenient and cost effective by managers/owners particularly for training new employees. The study further implied that the most popular training methods found to be widely spread across SMEs were on-the-job training and just-in-time training (self-involved learning with minimal or no supervision). On the other hand, Chan (2009) argued that even though a majority of SMEs have an informal approach towards employee training and development, small firms from certain business areas have shown an increasing trend towards standard training programs such as housekeeping, language skills, interpersonal skills (e.g., communication, team working) and legally required training. However, these training programmes were not able to cater enough opportunities (e.g., promotions or career advancement) as they were restricted to basic business operations.

The scant literature on training and development practices in SMEs lacks comparative perspectives in terms of institutional settings (e.g., business sector, firm size). However, the available literature suggests that the type (formal or informal), level and value of training and

development within SMEs vary from sector to sector (Psychogios, Szamosi, Prouska, & Brewster, 2016; Ram et al., 2001; Storey & Westhead, 1994). In addition to sector differences, firm size, nature of control, attitudes of owners/managers and business strategy have also been acknowledged as influential determinants in shaping training and development practices within SMEs (Gamage & Sadoi, 2008).

2.4.2.3 Performance appraisal

Performance appraisal is commonly understood as a process that involves a systematic evaluation method for comparing individual's performance against organisational objectives and providing feedback for professional improvement or growth (Banfield & Kay, 2008; Kocianová, 2010), since this, together with the reward system makes the ground for effective employee performance management in an organisation (Lussier & Hendon, 2012; Snell & Bohlander, 2012).

There is ample literature available on performance appraisal, employee assessment and review & management in large organisations (Bretz, Milkovich & Read, 1992; Georgiadis & Pitelis, 2012; Krausz, 2006). However, little evidence is available on performance management practices in SMEs (Bartram, 2005) and the available literature concedes a lack of formal and structured performance management systems (Bartram, 2005; Cassell et al., 2002; Hudson, Smart & Bourne, 2001). Cardon and Stevens (2004) explored HRM practices in UK SMEs and proposed that even though around half of the respondent SMEs were utilizing some form of appraisals, generally, formal and structured systems were rare. They further argued that in the majority of the SMEs, appraisals were restricted to only senior management, while standard procedures for performance reviews were occasional.

According to Hudson et al. (2001) SMEs are conveniently inclined towards simple and basic appraisal mechanisms that mostly lack alignment of organisational goals with the individual, which is the key driving force for effective performance management systems in successful organisations (Aguinis, 2011). Kotey and Sale (2005) also highlighted the absence of systematic and formal appraisal methods in SMEs and related it to the lack of managerial ability and skills to carry out effective performance reviews. They further suggested that owners/managers of such firms perceive formal systems as time consuming.

Empirical evidence suggests that the influence of institutional factors in shaping the nature and effectiveness of performance appraisal systems in SMEs is profound. Jackson and Schuler (1992) reported that industrial sector is a key determinant that influences the

adoption of formal/standard performance management systems. Their findings implied that service firms tend to exercise formal appraisal methods to a greater extent than manufacturing sector firms. Similarly, Othman (1999) in a comparative study involving manufacturing and service sector SMEs found service firms following more formal appraisal systems than manufacturing. The study further implied that the service firms had considerable emphasis on formal appraisals since the information assisted these firms to improve employee training and reward.

Prior empirical research suggests a positive relationship between formal appraisal systems and organisational performance (e.g., Bartel, 2004; Collings, Demirbag, Mellahi, & Tatoglu, 2010; Paul & Nealia, 2016). For instance, Akhtar et al. (2008) linked result-oriented appraisals to financial and non-financial firm performance. Similarly, Collings et al. (2010) also view competitive appraisal systems as positively associated with employee and firm performance.

2.4.2.3 Compensation and benefits

Structured and favourable compensation and benefits practices tend not only to create but hold the interest of employees in an organisation (Day, Holladay, Johnson, & Barron, 2014; De Gieter & Hofmans, 2015; Katou & Budhwar, 2007). Several authors (e.g., Carlson et al., 2006; Delery & Doty, 1996; Karatepe, 2013; Sheehan, 2014; Tzafrir, 2006) have argued that in order to retain skilled and talented workforce, SMEs must design and implement formal systems of compensation and benefits since these potentially lead to sustained competitive advantage. Bae et al. (2011) reported that firms offering profit and stock sharing to their skilled employees can result in enhanced motivation and job satisfaction, which in turn positively influences the decision making process. Similarly, Way (2002) reported superior labour related outcomes as a result of group-based incentives. Moreover, Lazear (2000) found that labour productivity is positively associated with the incentive-based compensation systems (e.g., performance bonuses, piece rates rather than hourly). Also, Carlson et al. (2006) studied 168 SMEs in the USA and reported enhanced organisational performance as a result of cash-based incentives for extraordinary performers. Various other empirical studies (e.g., Odunlade, 2012; Popkin, 2005; Vidal-Salazar, Ferrón-Vilchez, & Cordón-Pozo, 2012) suggest a profound positive effect of formal compensation practices on financial and non-financial performance.

As with other HRM functions, small and medium sized firms tend to practice informal compensation and benefits practices (Anneleen, 2017, Cunningham & Rowley, 2010; Wapshott & Mallett, 2015). SMEs by and large, lack the use of formal job evaluation procedures and as a result, pay structures are normally unfair and uncompetitive (Cunningham & Rowley, 2010; Gilman, Edward, Ram, & Arrowsmith, 2002). Ensley, Pearson and Sardeshmukh (2007) further confirmed that compensation policies and procedures within SMEs reflect a lack of transparency which causes dispersion of unfair compensation (see also Tonoyan, Strohmejer, Habib, & Perlitz, 2010). Similarly, Cassell et al. (2002) reported that managing incentives tends to be the least priority for SMEs that certainly changes with firm growth. In contrast, Forth, Bewley, and Bryson (2006) argued that compensation levels are lower in SMEs despite a considerable higher rate of satisfaction than in larger firms.

HRM literature (e.g., Duberley, Johnson, Cassell, & Close, 2000; Rea, Alexandros, & Yllka, 2016) suggests that in spite of having some basic practices (fixed salary, payslips, wired transfers, etc.), small businesses lack the use of a comprehensive suite of compensation practices (e.g., pensions, company shares). Even with the presence of basic compensation practices, pay levels for example, are often influenced by the 'prejudice' of owners/managers and external pressures (Dundon, Grugulis, & Wilkinson, 1999; Tonoyan, Strohmejer, Habib, & Perlitz, 2010). In addition, pay levels in SMEs are often based on owner/manager's 'gut instinct' rather than formal and objective performance benchmarking (Gilman et al., 2002).

On the other hand, benefits are designed to improve the quality of working and personal lives of employees (Milkovich, Newman, & Milkovich, 2005). These can include employee pension plans, health insurance, maternity/paternity leaves, paid annual leaves and sick pay etc. Organisations normally incorporate some or all of these benefits to help attract potential candidates, retain the current work force and improve employee performance (Bohlander, Snell, & Sherman, 2001). Evidence suggests (Cunningham & Rowley, 2010; Gomez-Mejia, Balkin, & Cardy, 2001) that added-benefits along with the standard monetary compensation over time also encourage employees to stay longer with their organisations. Unlike larger firms, small to medium sized organisations are less likely to offer such benefits to their employees (Forth et al., 2006) as they usually cannot absorb the additional costs (Ram and Edwards, 2003). However, according to Chan (2009), the most common incentives provided by SMEs to employees include trips and incentives based service points. These limitations in providing competitive incentives often result in high staff turnover (Graham & Murray, 2002; Vidal-Salazar et al., 2012). Although, SMEs are increasingly influenced by market pressures,

those that are able to offer such benefits comparatively create stronger employee commitment and superior employee performance (Day et al., 2014; Ram & Edwards, 2003).

2.5 DETERMINANTS (CONTEXTUAL FACTORS) OF HRM PRACTICES (FORMALITY) IN SMEs

Empirical research regarding HRM in small and medium sized firms reveals a great diversity of HRM practices with firm size, firm age, organisational culture and external institutions being key determinants of their adoption (Cassell et al., 2002; Hornsby & Kuratko, 1990; Kotey & Folker, 2007; Little, 1986; Marlow, 1998; Mellahi, Demirbag, Collings, Tatoglu, & Hughes, 2013; Newman & Sheikh, 2014; Wager, 1998). HRM policy and presence of an HR/Personnel department are also influential factors responsible for variation in HRM formalisation (Hoque & Bacon, 2006; Kok, Uhlaner, & Thurik, 2003; Wright, Boudreau, Pace, Sartain, McKinnon, & Antoine, 2011). Other organisational contextual variables such as organisational strategy, ownership type and HR planning are also found to be influential in shaping HRM bundles/systems within SMEs (De Kok & Uhlaner 2001; Harney & Nolan, 2013; Kotey & Slade, 2005; Wiesner et al., 2007). Kok at al. (2003) indicated that organisations with a strategic business plan and growth strategy tend to adopt more formal HRM practices and are more likely to develop an HR/Personnel department. Similarly, other studies (De Kok & Uhlaner, 2001; Erickson & Jocoby, 2003; Leung, 2003; Mellahi et al., 2013) suggest that since SMEs lack internal skills and expertise to run an HRM programme effectively, external networking and interaction with larger organisations may well become an important source of knowledge gain.

Moreover, the willingness of the owner/manager plays a crucial role in determining the direction of HRM practices in small firms (Rhee, Zhao, & Kim, 2014). For example, Wager (1998) and Newman and Sheikh (2014) explained that characteristics of owner/manager (e.g., decision making style, education) also influence the performance of their HR functions. Nevertheless, external factors such as economic and political conditions, legal regulations and business sector also play an important role in the adoption of formal HRM practices (Urbano & Yordanova, 2008).

The next part of the literature review discusses the key influential determinants of HRM practices within SMEs. Given the scope and objectives of this study, the contextual factors (determinants) of HRM formality (adoption of formal HRM practices) to be investigated

include business sector, firm size, firm age, ownership type, existence of business plan, exporting, provision of HRIS and HRM department/specialist.

2.5.1 Business sector

Characteristics of different industrial sectors might influence the adoption of HRM activities in various ways (Chow, 1995; Datta, Guthrie, & Wright, 2005; Jiang, 2009; Marlow, 1998; Psychogios et al., 2016; Terpstra & Rozell, 1993). For instance, Deshpande and Golhar (1994) and Jiang (2009) suggested that adoption of HRM activities within different sectors of SMEs is usually need based. For example, service firms need to be more accommodating, generous and sensitive towards human needs and therefore are more dependent on skills and abilities of their human capital. Similarly, Harney and Dundon (2006) argue that adoption of some HRM practices are a result of the labour market conditions in that particular industry. For example, SMEs in a specific industry with a readily available supply of labour would be less likely to invest in recruitment and selection compared to SMEs operating in sectors with skills shortages.

Moreover, the orientation of HRM practices in SMEs among different sectors is usually based on distinctive characteristics of those sectors. For example, manufacturing firms largely produce tangible products, while services industries provide intangible outputs (Lewis, Goodman, Fandt & Michlitsch, 2007). Moreover, in manufacturing firms, customers are not engaged in the production process, whereas, the involvement of customers (direct or indirect) in the production of services is inevitable since they are consumed simultaneously (Lewis, Goodman, Fandt, & Michlitsch, 2007; Yavas & Yasin, 1994). This leads to the proposition (Jiang, 2009) that operations management in manufacturing firms tends to be product oriented whereas in the case of services it is proportionally inclined towards people. Hence, HRM practices in service sector firms tend to be more centred on people as compared to manufacturing or trade sector firms (Jiang, 2009). Contrary to this, Deshpande & Golhar (1994) suggested that the industrial sector might explain the differences in HRM practices among medium sized firms, but in the case of small/family owned businesses, the differences ought to be insignificant. In addition, Guest, Michie, Conway, and Sheehan (2003) also found no difference between HRM practices and firm performance in a comparative analysis of manufacturing and services firms. However, Jackson and Schuler (1992) found that training provision in services SMEs is comparatively more formal than manufacturing firms. They further observed that service sector employees usually require more diversified work based skills and knowledge compared to any other sector.

2.5.2 Firm size

Firm size has been extensively discussed in literature as a key determinant of formal HRM practices in SMEs (e.g., Cunningham & Rowley, 2007; Hornsby & Kuratko, 2003; Kitching & Marlow, 2013; Kotey & Slade, 2005; Wiesner et al., 2007; Wright et al., 2011). When firms grow, they hire people to expedite their operations and service delivery that adds new layers to the organisational hierarchy, resulting in increased responsibilities for managers. The increase in firm size also requires a certain level of standardisation, specialisation and formalisation which leads to a natural adoption of sophisticated HRM practices (Daft, 1998; Nooteboom, 1993).

Kok et al. (2003) highlighted three key points in investigating firm size and HRM formalisation in SMEs. First, the increase in the size of the firm warrants certain adjustments such as decentralization and information flow between employees and across departments. Second, the financial resources required for absorbing the cost of formal HRM practices in SMEs which usually favours mature or growing firms and lastly, the institutional pressures such as legislation and regulations that are associated with size class.

According to Schuler (1995), organisations tend to follow more formal HRM practices as a result of expansion because their growth puts them under pressure to gain legitimacy in order to counter challenges of labour relations. Empirical evidence suggests that firm size not only exhibits a positive relationship with organisational performance (e.g., Derely & Doty, 1996; Huselid, 1995) but also influences the adoption or formality of HRM practices in small to medium sized enterprises (Hornsby & Kuratko, 1990; Kitching & Marlow, 2013; Kok et al., 2003; Little, 1986; Nguyen & Bryant, 2004; Wagar, 1998). Similarly, Wiesner et al. (2007) investigated potential determinants of HPMP (high performance management practices) in 1435 Australian SMEs and found that size of the firm has a profound effect on the adoption of sophisticated HRM practices (see also Hanić et al., 2016; Wu et al., 2014)

In contrast, Urbano and Yordanova (2008) investigated influential determinants of HRM formality and confirmed no relationship between firm size and the adoption of formal HRM practices.

2.5.3 Firm age

Small firms are renowned for their short life cycles and comparatively high failure rates (Cowling, Liu, & Ledger, 2012). A short lifecycle hence might explain the low take-up of HRM practices (Storey, Saridakis, Sen-Gupta, Edwards, & Blackburn, 2010; Storey &

Westhead, 1997). Evans (1987) and Edwards & Ram (2009) implied that age of the enterprise significantly determines variability in its operational and management activities. It is also widely acknowledged that new ventures encounter a range of challenges, both internal and external, and as they grow and mature, the realisation of the role that systematic and formalised management practices play in countering these challenges becomes inevitable (Rutherford, Buller, & McMullen, 2003).

Empirical research (e.g., Barrett & Mayson, 2007; Faems, Sels, De Winne, & Maes, 2005; Gondo & Amis, 2013; Storey et al., 2010; Wager, 1998) confirms a positive relationship between firm age and HRM formality which indicates that businesses in operation for longer periods of time have more formal HRM systems than those with a shorter operational history. The rationale reflects the notion that with time, firms are able to acquire more resources that results in adopting systematic and formalised management practices and control systems to utilise those resources effectively.

2.5.4 Firm ownership (family versus non-family owned)

Type of ownership (family owned or non-family owned) also influences the adoption of formal HRM practices in SMEs (Anneleen, 2017; Cardon & Stevens, 2004; De Kok & Uhlaner, 2001; Forth et al., 2006; Pittino & Visintin, 2013). Family ownership constitutes the view that the selection of the CEO is not directly and completely determined by the skills and abilities required to run the firm and thus the management of family owned businesses are less likely to adapt and implement effective management practices including HRM (De Kok & Uhlaner, 2001; Pittino & Visintin, 2013). The rationale for this is associated with the intention of family owned businesses to maintain sufficient, if not entire, control of the organisation (Bacon et al., 1996; Blais & Toulouse, 1990). Reid and Adams (2001) argued that small family owned firms are always under pressure due to the competitive market and external challenges. As a result, family owned firms are compelled to exercise management practices that are in immediate interest.

Literature reveals that due to scarce resources, family businesses find it difficult and demanding to attract and retain skilled manpower with formal and effective HRM practices (Cardon & Stevens, 2004; Heneman & Berkley, 1999; Reid & Adams, 2001; Sieger, Bernhard, & Frey, 2011). According to Matlay (1999), the perceptions of the owner in family firms with regards to the benefits and effectiveness of HRM greatly influences the adoption of formal HRM practices.

Family owned small firms are less likely to adopt formal HRM practices (Anneleen, 2017; Cruz, Larraza Kintana, Garcés Galdeano, & Berrone, 2014) because of their preference for utilizing personal networks (Ram & Edwards, 2003), for instance, in the case of recruitment and selection. Reid and Adams (2001) argued that although non-managerial positions are predominantly filled using some formal recruitment methods (e.g., newspapers) in both family and non-family owned SMEs, a considerable number of family SMEs fill their managerial positions internally. In addition, they reported more informal approach towards selection and training practices in family SMEs as compared to non-family owned SMEs (see also Spranger, Colarelli, Dimotakis, Jacob, & Arvey, 2012). Similarly, family SMEs are less likely to provide more training (Kotey & Folker, 2007) and opportunities for development (Cruz et al., 2014) for their employees as compared to their non-family owned counterparts. In addition to training and development, family SMEs are also more likely to follow unfair and uncompetitive compensation practices than non-family firms (Chua, Chrisman, & Bergiel, 2009; Ensley et al., 2007).

2.5.5 Ownership by a larger organisation

Ownership of small and medium sized enterprises by a larger parent company also influences the adoption of formal HRM practices (Mellahi et al., 2013). For instance, subsidiaries or spinoffs of parent organisation might benefit from the parent's resources in terms of formalizing their recruitment & selection and training processes (Aldrich & Auster, 1986; Bacon et al., 1996). Furthermore, firms owned by parent companies invest significantly in formalizing their HRM practices as compared to sole or independent organisations, notably in the case of employee training (Bacon et al., 1996; Loan-Clarke, Boocock, Smith, & Whittaker, 1999). Similarly, Wong et al. (1997) and Wu et al. (2014) suggested that companies which are part of larger organisations provide more support and training to their employees by reducing the transaction-costs associated with building effecting HRM systems.

Arthur and Hendry (1992) argue that larger companies investing in smaller and growing firms can heavily influence their HRM set up. This means that most multi-nationals operating in developing countries may influence the personnel management of their regional branches through transfer of managerial and technical knowledge (Mellahi et al., 2013; Tayeb, 1998).

2.5.6 Business plans

SMEs with a business plan could be viewed as firms with relatively long term planning with regards to growth (Sels, De Winne, Delmotte, Maes, Faems, & Forrier, 2006; Wiesner & Millet, 2012). These small to medium sized organisations usually acknowledge the role of formal HRM practices in building a competent and skilled employee base (Lengnick-Hall & Lengnick-Hall, 1988). Bracker and Pearson (1986) in a detailed study, found that the lack of planning or inability to plan may result in a firm's failure, while planning business processes that are not only well designed but are implemented effectively can contribute to the organisational success. Kok et al. (2003) argued that SMEs having structured strategic plans that are long term and well written are more likely to adopt formal HRM practices. Similarly Thakur (1998) and Wiesner and Millet (2012) suggested that growth-strategy oriented SMEs are more likely to recognise the perceived value of HRM and thus are more likely to develop formal HRM systems.

2.5.7 Exporting

Growth oriented companies that export can follow more formal HRM practices (De Kok & Uhlaner, 2001; Lengnick-Hall, 1988). Thakur (1999) suggested that firms with the aim of new venture growth tend to exhibit more professional approach towards the adoption of best HRM practices. Similarly, Matthews and Scott (1995) said that firms seeking to grow usually look for new opportunities in foreign markets to introduce their products or services. International customers may require existence of certain formal HRM practices (e.g., fair wages, regular trainings) within a supplier (exporting firm) to achieve the status of 'good supplier'. Customers may also assist their suppliers to develop formal HRM systems through knowledge transfer (Beaumont, Hunter, & Sinclair, 1996; Kinnie et al., 1999).

2.5.8 Human resource information systems (HRIS)

Empirical evidence suggests a strong positive link between an organisation's ICT integration across a range of activities and performance related outcomes (Chaffey & Wood, 2005; Fisher & Kenny, 2000; Grant, 1996; Sadiq, Ikhlaq, & Mujtaba, 2012; Tarafdar & Gordon, 2007). User friendly orientation of IT based solutions for effective communication and knowledge management has created an emerging demand for integrating such technology-based services into work processes (Bardhan, Krishnan, & Lin, 2007).

The use of information and communication technology in HRM has increased dramatically because of its ability to manage HR related functions effectively within organisations (Bamel

Kumar, Sahay, & Thite, 2014; Chapman & Webster, 2003). These systems, commonly known as HRIS (human resource information systems), play a key role in shaping HR functions that are best aligned with organisational goals and business strategies (Barney & Wright, 1998; Broderick & Boudreau, 1992; Gueutal, 2003; Sadiq et al., 2012). According to Aggarwal and Kapoor (2012) and Beadles, Lowery, and Johns (2005), the use of human resource information systems allows HR functions to be more formal, systematic and strategic, which in turn (Beckers & Bsat, 2002) can lead to increased competitiveness.

2.5.9 HRM departments/specialists

The presence of an HRM department (predominantly understood that an HR professional is present) within an organisation might be associated with enhanced relevant knowledge of formal HRM practices (Wiesner & Innes, 2010; Wright et al., 2011; Wu et al., 2014). According to Schuler and Jackson (1997), an HR department is built around a group of people responsible for managing employees as effectively as possible, for the welfare of not only workers but the organisation (strategic view) and society as well. Since small and medium sized enterprises normally face the challenge of scarce resources due to financial constraints, mostly if not all, fail to implement an organised structure/unit for managing employees in form of an HR department or HR specialist (Cardon & Steven, 2004). Unlike larger organisations, HRM departments in SMEs tend to follow a 'Pick and choose' contingency approach rather than a coherent strategy based approach. The employee management practices are adopted based on a number of characteristics pertaining to SMEs and the surrounding business climate that might include actions of competitors, Government and industry regulations, etc. (Cassell et al., 2002).

According to Kok et al. (2003), employing an HR specialist in a firm is a key determinant of formal HRM practices since the specialist might realize the importance of an HRM department for effective implementation of HRM policies and practices. Based on RBV perspective, Barney (1991) draws attention towards the importance of organisational capital resources such as formal structures, controlling and coordinating systems for effective functioning of the firms, which provides an impeccable rationale for the influence of HRM department or specialist in shaping formal HRM practices (De Kok & Uhlaner 2001; Little, 1986). Similarly, Boxall and Purcell (2008) and Chadwick et al. (2013) proposed that informal approach of SMEs towards HRM practices may be associated with the lack of an HR specialist. However, it is quite evident from the available studies (e.g., Cully, 1998; Forth et al., 2006; Messersmith & Guthrie, 2010; Saridakis, Torres, & Johnstone, 2013; Wapshott

& Mallett, 2015) that HR specialists are less prevalent in small to medium sized organisations.

2.6 HRM AND ORGANISATIONAL PERFORMANCE

This section discusses the definition of organisational performance and various indicators used in HRM-performance literature to measure it. The nature of the HRM-performance link is critically reviewed including a discussion of some of the prior studies in this domain and methodological concerns that have surfaced. Finally, a detailed review of the HRM-performance link in SMEs is presented.

2.6.1 Organisational performance

The notion of organisational performance surrounds the idea of an organisation that strives to achieve a shared purpose through voluntary cooperation of its productive assets (Barney, 2002). According to Holbeche (2001) and Farnham (2010), value creation is the most vital criterion of organisational performance and human capital is a key resource for creating superior value for an organisation. They further suggest that the use of efficient HRM systems help managing employees effectively that results in enhanced individual and organisational performance (De Kok & Hartog, 2006; Lado & Wilson, 1994; Wright & McMahan, 1992).

Prieto and Revilla (2006) see organisational performance as a multidimensional and complex phenomenon that constitutes both qualitative and quantitative aspects (Ostroff & Bowen, 2000). Since, an organisation holds interests of various stakeholders; the interpretation of organisational performance becomes divergent and complex. Investors might see enhanced performance in terms of increased returns on capital invested, superior dividends and recognition of the abilities and skills of management to drive the business further. For employees, the performance might be related to job satisfaction, organisational support, competitive compensation and an employee empowered culture. On the other hand, customers evaluate organisational performance in terms of competitive prices, superior service quality and rapid delivery.

Neely, Adams, & Kennerley (2002) and Hubbard (2009) suggested that there are two main perspectives commonly embedded in prior empirical research to evaluate organisational performance, i.e., shareholders and stakeholders. The shareholder perspective encompasses the optimisation of working processes to yield superior gains for shareholders and is measured by financial performance indicators such as increased sales, enhanced profits and

superior returns on equity and assets. Besides, the stakeholder context follows a holistic approach to embrace numerous stakeholders' interests, namely investors, employees, customers, suppliers, regulators, etc. Kaplan and David (2004) proposed an approach (balanced scorecard) that takes into account both perspectives and includes measurement of both financial (sales, profits and return on capital) and non-financial (employers, customers, suppliers and regulators) performance indicators. Similarly, Cocca and Alberti (2010) suggested eight dimensions to measure the overall organisational performance, namely effectiveness, efficiency, productivity, work life, product quality, profitability, organisational learning and innovation.

In an HRM-performance relation context, Dyer and Reeves (1995) proposed four effective measures to evaluate organisational performance, namely (1) HR outcomes such as turnover, absenteeism and individual performance, (2) organisation level outcomes such as productivity, product quality and services, (3) financial level outcomes such as return on assets, profitability, sales volume and return on capital, (4) stock market based performance such as stock value or dividends. Likewise, Paauwe and Richardson (1997) suggested two indicators to assess organisational performance; financial outcomes (e.g., productivity, market share and profitability) and non-financial outcomes (absenteeism, employee turnover, employee motivation and satisfaction) (Derely & Shaw, 2001). In addition, Delaney and Huselid (1996) assessed perceived firm performance using subjective (non-financial) performance self-report variables such as perceived market share, profitibity, sales, product quality, customer satisfaction, service delivery, addition of new products and ability to attract and retain employees.

Financial measures are considered as 'hard' and quantifiable and thus, form the rationale for their extensive usage in determining firm performance in prior empirical studies (Boselie & Paauwe, 2000). Boselie at al. (2005) reviewed the literature concerning HRM-performance link and found that around half of the 104 empirical studies included financial indicators in their assessment of organisational performance. However, these 'hard' financial numbers lack a holistic assessment of performance since they are affected by certain 'soft' aspects (non-financial). Empirical evidence (e.g., Boselie & Paauwe, 2000; Bowen & Ostroff, 2004) insists that non-financial factors such as culture, working environment, employee well-being and job satisfaction are considered to be immensely important in explaining overall organisational success.

Recent studies (e.g., Garcia-Morales et al., 2011; Wiesner & Inness, 2012) have incorporated the use of scales for assessing organisational performance of firms relative to their major competitors. These scales include questions on a range of different subjective and objective performance criteria (e.g., Paauwe, 2004; Shih et al., 2006). For instance, Shih et al. (2006) incorporated both subjective and objective measures and found them highly correlated. Similarly, other studies (Kumar, Aaker, & Day, 1999; Alegre & Chiva, 2008; Andrea, 2010) have also established that subjective measures could be used in situations where obtaining objective data tends to be difficult primarily because of high correlation and concurrent validity. In addition, Way (2002) said that because of commercial sensitivity, small private firms are usually reluctant to share financial data that justifies the use of subjective measures for assessing firm performance. Boyd et al. (1993) and Garg, Walters, and Priem (2003) also confirmed that the use of self-reporting subjective measures is a common practice in empirical research to measure organisational performance.

2.6.2 HRM-performance link

Research concerning the HRM-performance link has expanded over the last two decades (Paauwe, Guest & Wright, 2013). Considering the extensive empirical evidence regarding HRM-performance link both in large businesses (Paauwe et al., 2013) and in small and medium sized firms (e.g., Allen et al., 2013; Michie & Sheehan, 2008; Sheehan, 2014) suggests that the bundles of HRM practices are positively associated with labour productivity and firm profitability (Nguyen & Bryant, 2004; Paauwe et al., 2013; Sels et al., 2006; Zhou, Hong & Liu, 2013). This certainly supports the universalistic perspective that 'best practices' tend to contribute towards increased firm performance regardless of the context (Huselid, 1995; Tzabbar et al., 2017). Similar findings (e.g., Arthur, 1994; Chuang & Liao, 2010; Combs et al., 2006; MacDuffie, 1995; Youndt et al., 1996) also view bundles of HRM practices as more influential than isolated practices in terms of explaining HRM-performance link in organisations.

Given that most of the empirical evidence suggests a positive relationship between HRM and firm performance, understanding the nature or intermediate mechanism through which both are related is still an ongoing debate (Guest, 2011; Wright and Gardner, 2003). As a result, the HRM literature has called for an increased attention towards comprehending the role of intermediate variables that link HRM and performance (Becker & Huselid, 2006; Jiang Takeuchi, & Lepak, 2013; Paauwe, 2009). Various studies have tried to delve into this so-called 'black box' to unravel the underlying mechanism through which HRM is related to

performance (Gerhart, 2005; Jiang et al., 2013). Several conceptual frameworks based on different theoretical stances have emerged as a result of this ongoing quest (Boselie, Dietz, & Boon, 2005) such as a contingent framework (role of contingent factors (e.g., business strategies) in HRM-performance relationship) proposed by Schuler and Jackson (1987), AMO theory (i.e., HRM is related to performance through employees' ability, motivation and opportunity to participate) proposed by Appelbaum, Bailey, Berg, and Kalleberg (2000) and Guest's (1997) model (HRM influences performance through HRM and behaviour related outcomes). Although these frameworks present a variety of variables that mediate the HRM-performance link, empirical evidence suggests that findings can vary across contexts as a result of differing institutional factors (Zheng, Morrison, & O'Neill, 2006). Two of the most recent frameworks ('*Contextually based HR theory*' proposed by Paauwe (2004) and *'The contextual perspective'* posited by Martin-Alcazar, Romero-Fernandez, & Sanchez-Gardey (2005) consider the role of institutional factors in explaining the HRM-performance link and are built upon multiple theoretical stances e.g., contingency theory, RBV and institutional theory.

As the research concerning an HRM-performance link has matured, several concerns relating to methodological approaches have started to surface (Lengnick-Hall, Lengnick-Hall, Andrade, & Drake, 2009). For example, Wall and Wood's (2005) review of studies highlights some pertinent issues with the measurement of HR practices such as reliability and single respondent bias. Gerhart, Wright, Mahan, and Snell (2000) and Wright et al. (2005) also highlighted the potential issue of single respondent bias where data regarding both HR practices and organisational performance are collected from a single person, e.g., HR managers. Further, Gerhart (2005) and Wright & Nishii (2007) argue that since HRM practices influence firm performance through employees, it is imperative to measure the actual HRM practices experienced by employees. Other studies (e.g., Guest, 2002; Kehoe & Wright, 2013; Purcell & Hutchinson, 2007) have also highlighted the need to bring in the employees' experience or accounts of perceived HRM practices into the HRM-performance equation since, they considerably differ from intended or implemented HR practices (Den Hartog, Boon, Verburg, & Croon, 2013; Liao, Toya, Lepak, & Hong, 2009;).

Similarly, Batt (2002) notes a lack of explanation on mediating mechanisms between HR systems and performance. He further highlighted that most of the research related to the HRM-performance link has been conducted in manufacturing settings that might not be applicable to other contexts. Moreover, empirical research examining HRM and performance links are predominantly cross-sectional in nature (Wall & Wood, 2005), keeping in view that

HR practices might take time actually to assert their influence on organisational performance (Vanhala & Tuomi, 2006). However, there are few exceptions (e.g., Hailey, Ferndale, & Truss, 2005; Sheehan, 2014; Vanhala & Tuomi, 2006) that followed a longitudinal approach to infer causation.

In addition to these criticisms concerning relationships between HRM practices and organisational performance, Hesketh and Fleetwood (2006) advocated a methodological approach based on in-depth interviews and case studies to unfold the underlying mechanisms through which HRM related practices influence organisational performance. They argue that although the literature regarding the HRM-performance link is predominantly empirical in nature, the positivistic approach commonly employed is under-theorized with limited explanation as to 'how' HR practices influence performance. They further argue that researchers, investigating in this domain, are presenting increased empirical work believing that a conclusive theory will emerge as a result that will carry more explanatory power (Fleetwood & Hesketh, 2008). Extensive reviews of the literature suggest that fewer studies (e.g., Harney & Jordan, 2008; Monks, Kelly, Conway, Flood, Truss, & Hannon, 2013) have been conducted to explore the HRM-performance relationship using qualitative approaches. For example, Monks et al. (2013) stated that a qualitative approach to study HRM-performance link enabled them to unfold the 'how' question rather than 'how many' [boxes]. Moreover, current research in this domain assumes that organisations are characterised by 'closed' systems and tends to ignore the role of crucial factors that shape HR systems (Hesketh & Fleetwood, 2006). That is why Hesketh and Fleetwood (2006) suggest critical realism as an imperative approach to investigate the effect of HR in 'open' systems since it can provide a thick explanation. Boxall, Ang, & Timothy (2011) further added that HR practices are not easily transferable across sectors and hence HRM-performance related studies need to be context oriented.

Although a brief critique regarding the 'black box' (the intermediate mechanism through which HR practices effect performance) is discussed above, this empirical study directly investigates the relationship between HRM practices (HRM formality) and subjective measures of firm performance. The rationale for this is twofold. Firstly, the scope of the study is limited since there are other research objectives to be achieved. Secondly, a number of studies (e.g., Datta et al., 2005; Evans & Davis, 2005; Guthrie, 2001; Huselid, 1995; Nguyen & Bryant, 2004) have explored the direct relationship between HR practices and performance related outcomes (both financial and non-financial) although a majority of the studies has been conducted on large organisations. Moreover, the majority of the empirical work has

been conducted in western contexts (Budhwar & Debrah, 2009; Guest et al., 2003; Ramdani, Mellahi, Guermat, & Kechad, 2014) and there is a dearth of literature with regards to the exploration of the HRM-performance link in transitional economies and developing countries (Budhwar & Singh, 2007; Chaudhry, 2013).

2.6.3 HRM-performance link in SMEs

Although the HRM-performance link has been extensively investigated within large organisations (Paauwe et al., 2013), the last two decades have witnessed an increasing interest in exploring HRM-performance related associations in SMEs. In common with large organisations, most studies conducted within SMEs suggest a positive link between the use of formal HRM practices and firm performance (Drummond & Stone, 2007; Lai et al., 2016; O'Regan, Sims, & Ghobadian, 2005; Paul & Nealia, 2016; Rhee et al., 2014; Rowden, 2002; Sheehan, 2014; Teo, Le Clerc, & Galang, 2011; Way, 2002). Where a majority of the studies have investigated the use of 'best practices' (bundles of HR practices) and their influence on firm performance (e.g., Katou, 2012; Sels et al., 2006; Teo et al., 2011; Way, 2002), others have also looked into the association between individual HRM practices/functions (e.g., training and development) and firm performance (De Gieter & Hofmans, 2015; Jones, Beynon, Pickernell, & Packham, 2013; Paul & Nealia, 2016; Storey, 2004). Some of the studies involving the use of bundles of HRM practices and their influence on firm performance are reviewed next.

Kaman, McCarthy, Gulbro, and Tucker (2001) studied the influence of high commitment HR practices on firm performance (non-financial measures) in 283 US-based small firms to reveal that such practices were associated with greater employee retention and lower absenteeism. Similarly, Rogg, Schmidt, Shull, and Schmitt (2001) investigated 351 small firms to learn the effects of best HRM practices on customer satisfaction related firm performance and found them positively correlated. Likewise, Way (2002) investigated 446 SMEs in the USA to unfold the effect of formalised HRM systems on employee turnover and labour productivity. The practices/functions of HRM systems included recruitment and selection, training, teamwork, communication, compensation and flexible working structures. The findings suggested mixed results since formalised HRM systems were found to be associated with lower turnover but there was no causation with regards to labour productivity. Further, Nguyen and Bryant (2004) based on their study of Vietnamese SMEs, also found bundle of best HR practices to be positively associated with firm performance (growth profits).

De Kok and Den Hartog (2006) re-tested the framework proposed by Way (2002) to study the effect of HRM systems on labour productivity using a sample of around 900 Dutch small and medium sized firms. The findings suggested a positive but moderate effect of HRM systems on labour productivity. A quantitative study involving Belgian small firms conducted by Faems et al. (2005) assessed the role of HR practices (selection, training, compensation, performance appraisal, and career management) in achieving organisational success. Firm performance was measured through subjective assessment of various financial and non-financial aspects of the firm. The empirical evidence suggested a moderate contribution of best HR practices in achieving superior organisational level performance. The findings also suggested that although extensive use of formal HRM practices was positively related to profitability, it certainly resulted in increased cost for introducing sophisticated HRM practices/functions and thus, counterbalanced the increased profit margins. Similarly, various empirical studies (Barrett & Mayson, 2007; Razouk, 2011; Teo et al., 2011; Zheng at al., 2006) insist the positive role of best HRM practices in achieving superior firm performance in SMEs.

Examining the most recent studies exploring HRM-performance link in SMEs also underlines the positive role of formal/best HRM practices in achieving organisational success. For example, Katou (2012) studied 197 Greek SMEs to explore the effect of HRM practices on firm performance. The findings suggest that best HRM practices are shaped by business strategies that in turn add value to the firm through HRM related outcomes (e.g., absenteeism, turnover). The study supports a 'contingency perspective' and confirms the role of business strategies and other contextual factors (e.g., industry type, firm size) in shaping HRM systems in SMEs that in turn, positively influence organisational performance directly and indirectly (through HRM outcomes). Similarly, Sheehan's (2014) empirical investigation of small and medium sized British firms also confirms a significant and longitudinal relationship between HRM formality and organisational performance. This extensively cited study in the literature looks at HRM-performance link while controlling for reverse causality, an approach that has been under-researched in the HRM-performance link literature.

2.7 SUMMARY

After defining SMEs for the purposes of this study, this chapter presented a detailed review of the literature related to the use of bundles of HRM practices and underlying HR functions (recruitment, selection, training & development, performance appraisal, compensation & benefits) in SMEs. An in-depth review of theoretical perspectives underpinning this study was presented according to which an integrated approach involving two philosophical stances (i.e., RBV and institutional theory) was rationalised. The nature of HRM formality and its underlying HR practices/functions were discussed. In light of institutional theory, various contextual factors that shape HRM systems in organisations were identified. In line with the objectives of this study, the link between HRM practices and organisational performance was critically explored.

Chapter 3 Pakistani SMEs, conceptual framework and derivation of hypotheses

3.1 INTRODUCTION

This chapter highlights the importance of conducting HRM related research in Pakistan and proposes a conceptual framework that is guided by RBV and institutional theory. The chapter commences with an overview of Pakistan as a potential research area that includes a discussion on SMEs in Pakistan and their role and contribution to economic growth. The next section reviews the available literature related to HRM practices in Pakistani firms and the justification for conducting HRM research in Pakistan. Next, the conceptual model is presented that includes variables of interest derived from an extensive review of the literature (see Chapter 2). Hypotheses pertaining to each of the research questions are then formulated along with justifications for their inclusion.

3.2 OVERVIEW OF PAKISTAN, ITS ECONOMY AND SMEs

A close analysis of the key milestones achieved by Asian countries depicts that they produce more goods and services than North America and the European Union which is likely to accelerate in the coming years (Asia-Pacific Development Bank, 2015; The Economist, 2012). Furthermore, they attract a considerable amount of foreign direct investment (FDI). For example, China had beaten America in terms of securing maximum FDI intake during 2003 and continuing to do so (Rowley & Warner, 2005). Most recent figures (IMF, 2015) suggest that Asia continues to strive for more robust economic growth amid high uncertainty. Despite all the above predictions, growing and transitional economies within Asia still have got a long way before they are labelled as developed nations (e.g. professionalism, formalism and rationalisation among management systems and practices).

Strategically located in South Asia, Pakistan has a long eastern border with India and north eastern border with China. Iran borders the south west of the country while Afghanistan shares a long western and some of the northern border. With 1,064 km Arabian Sea coastline on the southern boundary, the country has a total area of 796,095 sq km (nearly 19 times the size of Holland). Given the current global political scenario, Pakistan is considered as an important country in the South Asian region with an estimated population of 182.1 million ranking 6th in the world (Pakistan Gov, 2014).

Labelled as the world's 27th largest economy in terms of purchasing power (PBS, 2016), Pakistan's economy has witnessed various ups and downs in the past (CIA, 2013). After de-colonisation from Britain in 1947, Pakistan's economy enjoyed steady growth for consecutive four decades amid marshal laws. However, the growth rate slowed down during the late 1990s due to political unrest and mismanagement of macroeconomic policies. As a result of some good governance (e.g., raising development expenditure), the poverty level declined by 10% during 2001-2007 resulting in inflated purchasing power (CIA, 2013). The economic turmoil causing the global recession during 2008-2009, coupled with the security situation of the country (War on terror) also influenced Pakistan's economy that resulted in depreciated economic indicators. For example, the inflation rate increased from 7.7% in 2007 to 20.8% in 2008 and recovered marginally (14.2%) in 2009 (CIA, 2013). However, the economy started to show some promising signs in late 2012 amid macroeconomic stability and political continuation. The GDP growth rate accelerated from 3.70 per cent in 2012 to 4.14 per cent in 2013 (Pakistan Economic Survey, 2014). The manufacturing and service sectors contributed

the most to the economic recovery as a result of structural reforms indicted by the government as part of its 'economic recovery plan 2013' (CIA, 2013).

According to the most recent statistics (Asian Development Bank, 2017), Pakistan's economy has been accelerating since 2013. Its GDP grew at 4.7% in 2016 and 5.28 per cent in 2017, potentially driven by robust growth in manufacturing and services industry and it is estimated to edge up to 5.5% by 2018. The manufacturing output of the country has increased by 5.06 per cent (March 2017), as compared to the last year (4.6%). The service industry recorded a staggering growth rate of 5.98 per cent in 2017, surpassing its set target of 5.70 per cent. Wholesale and trade sectors also exhibited a positive growth rate which grew at an impressive rate of 6.82 per cent (Pakistan Economic Survey, 2017). Moreover, the country has seen improved security situation for the last couple of years that has resulted in increased foreign direct investment. The unemployment rate deflated marginally from 6% in 2015 to 5.8% in 2016. However, the inflation rate has gone up from 2.9% in 2015 to 3.4% in 2016 while interest rates are stable at 5.75% (Asian Development Bank, 2017).

According to the most recent statistics available (Economic Survey, 2011), Pakistan's labour force is 54.9 million, out of which, 42.4 million are male and 12.4 million are female. A total of 51.9 million people are employed, out of which 45 per cent are employed in agriculture, 13.2% in manufacturing, 16.3% in wholesale and trade sectors whereas, employment in services sector accounts for 11.2%. Moreover, the literacy rate (as of 2010-2011) stands at 57.7%.

SMEs are recognised as one of the key drivers of growth and prosperity, especially in developing and transitional economies (Khalique et al., 2011). In Pakistan there are 3.2 million businesses out of which, small and medium sized enterprises represent around 90% (PBS, 2011). Moreover, 97 per cent of SMEs are employing less than 10 workers. On average, the contribution of SMEs towards employment is around 80%, while 25% towards exports. With regards to industrial sectors, 53% are wholesale, retail, restaurants and hotels, 22 per cent are community, social and personal services and 20% are associated with manufacturing (SMEDA, 2007). According to PBS (2011), SMEs contributed over 30% to GDP, 25% in export earnings besides sharing 28% in manufacturing value addition. Moreover, they serve a significant portion of the services and manufacturing sectors comprising approximately 583,329 Manufacturing and 600,000 Service sector units (PBS, 2011). In terms of individual contributions of major industrial sectors to the national GDP, the services sector added 17% to the GDP, manufacturing 30% whereas, the contribution of

trade and hotel sectors to the national GDP accounts for 53% (SMEDA, 2007). Moreover, 65% of small and medium enterprises are located in the province of Punjab with nearly 1.9 million of them in operation (Government of Pakistan, 2005; SMEDA, 2007).

Noticing the positive role and contribution of SMEs to the GDP, employment opportunities and poverty alleviation, the government of Pakistan took an initiative in 1998 by establishing SMEDA (Small and Medium Enterprises Development Authority), an institution responsible for facilitating venture start-ups and policy making for the growth and development of the SME sector in Pakistan. On directive of SMEDA, the government of Pakistan also established an SME bank to cater the financial needs of new and emerging small businesses. In addition, most commercial banks in Pakistan have established individual departments that are dedicated to providing financial assistance to start-ups.

With regards to industrial classification of all economic activities (including large businesses) in Pakistan, it is divided into three sectors namely agriculture, industry and services. The agriculture sector includes activities such as crops, cotton ginning and forestry. The industrial sector mainly includes manufacturing, mining, energy production and construction. The services sector is the largest in terms of GDP contribution (56.3 per cent in 2017) and consists of economic activities such as government facilities, information & communication, transportation, hotels and trade, financial institutions and markets and education. (Ministry of Finance, 2017; PBS, 2010). However, the SME sector in Pakistan lacks a comprehensive industrial classification of economic activities but the research and ground surveys published on behalf of the SMEDA (Small and Medium Enterprises Development Authority) acknowledge four industrial sectors namely agriculture & forestry, manufacturing, services, and trade (Afaqi, Jahangir, & Saeed, 2009; Raziq, 2012; SMEDA Punjab Publications, 2018). The economic activities within these sectors are presented in Table 3.1.

Table 3.1

SMEs: composition of economic activities by sector

Sector	Economic activities
Agriculture & Forestry	• Perennial crops • Non-perennial crops • Plant propagation • Logging • Support services to forestry • Non-wood forestry products
Manufacturing	• Food products and processing (e.g., meat, fruit and vegetables, rice, dairy, beverages, sweets) • Textiles • Wearing apparel • Leather and related products • Chemicals • Furniture • Electricals (e.g., electrical fittings, fans, gas appliances) • Power looms • Sports goods • Ceramics • Surgical & pharmaceutical • Small machinery (e.g., printing, dying, pumps, mechanical valves)
Services	• Telecom • IT • Consulting • Health • Education • Restaurants • Media • Finance & insurance • Real estate • Public administration • Arts, entertainment & recreation
Trade	• Distributors & wholesalers • Motor vehicles sale and parts • Import & export companies • Retail stores (food and non-food)

3.2.1 Why study HRM: Asian context

The literature depicts a scarcity of HRM research in Asian contexts (see for example, Budhwar & Debrah, 2009), with the exceptions of China and Japan. It is vital now to investigate relevant HRM systems for the region that will not only help highlight challenges faced by organisations in terms of adopting and implementing HRM systems but will also contribute towards developing appropriate policies and practices for effective HRM implementation (Budhwar & Debrah, 2009; Jackson & Schuler, 1995; Nankervis, 2016; Schuler, Budhwar, & Florkowski, 2002). Meyer (2006) asserts that in view of the challenges facing Asian businesses, Asian researchers should strive to explore context-specific issues. In his view, management research in Asian contexts should aim at making relevant and major contributions, for instance by explaining context-specific variables and effects, and by drawing on traditional Asian thought and culture in developing new theories (see also Connell & Stanton, 2014).

Moreover, the present research predominantly focuses on exploring issues related to HRM in Asia from a Western perspective (El Kahal, 2001; Narula, 2006). It is continuously stressed in literature (Budhwar & Debrah, 2009; Budhwar, Varma, & Patel, 2016; Meyer, 2006) that management research needs to be context specific. The Asian region (developing countries such as Pakistan, India etc.) is considered suitable for outsourcing of operations and services by multinational companies that result in increased employment opportunities. Given this increase in the employment base, there is an urgent need to study current and suggest potential HRM systems in order to fully exploit the human capital as a major resource for organisational success.

3.3 HRM IN PAKISTAN

In the case of Pakistan, understanding HRM theory and practice is a complex task. A considerable number of SMEs (predominantly in the services sector) have restructured their personnel departments to human resource divisions but due to scarcity of research in this domain, it is difficult to anticipate or comprehend this change (Khan et al., 2014). Moreover, due to conventional cultural barriers and a lack of HRM champions, many organisations introduced HRM functions in instalments. Despite having realised the significance of human resource development (structured training and compensation in particular) in larger organisations, small to medium firms in Pakistan still suffer from informal HRM practices (Khilji, 2001).

Khilji (1999) studied HRM practices in Pakistani firms finding that HRM policies in organisations are made in isolation with no input from employees. Furthermore, employee management practices within firms are not usually in line with the written HRM policies. Qureshi (1995) argued that in Pakistani firms, recruitment and selection decisions are often guided by the social status of candidates. HRM practices are considered an expensive exercise and hence are limited only to bare a minimum. The study also highlighted informal performance appraisal practices guided by poorly written policies, for instance, in the majority of cases, employee feedback to management is considered worthless and promotions are not related to employee performance but nepotism. Khilji (2001) also characterised HRM practices in Pakistani firms as 'bureaucratic' with implementation gaps (e.g., lacking an HR specialist), an elite culture and power distance. Similarly, Ali (2013) also confirmed the informal nature of HRM practices in Pakistan and argues that the culture of 'favouritism' adversely effects the implementation of best HRM practices.

Khilji (2003) further argues that HRM systems in Pakistani firms lack a systematic and integrated approach and as a result experience a lack of employee commitment, de-motivated labour and increased turnover. However, Yasmin (2008) contested that although a majority of public sector firms in Pakistan are inclined towards informal HRM practices resulting in low employee motivation and commitment, private firms are starting to realise the potential of best HRM practices as a valuable resource for organisational gains. She further claimed that these private firms have started to encourage and extend the role of employees in decision making and team working. While unfolding the failures of HRM systems in Pakistani businesses, Khilji and Wang (2006) studied the effectiveness of HRM systems and concluded that although private firms have started to implant HRM departments and HR specialists but due to a lack of training and commitment, there exists a considerable gap between 'intended' and 'implemented' HRM practices.

Referring to the most recent empirical work available in this domain, the evidence suggests that although formal HRM practices are found to be crucial for organisational success (Bashir & Khattak, 2008; Naz, Aftab, & Awais, 2016) the nature of HRM practices within Pakistani SMEs is predominantly informal (Memon et al., 2010). Similarly, Shahzad, Bashir, and Ramay (2008) investigated the performance appraisal systems and compensation practices of Pakistani firms and found them highly informal. They further suggested that Pakistani firms lack a systematic approach towards performance evaluations and should revise their compensation practices that are employee centred. Moreover, Afzal, Khan, and Ali (2009) found lack of grievance procedures and unfair dismissals as common practices in Pakistani

firms and suggested that firms should ensure job-security for achieving superior employee performance.

Although, in recent years, private sector SMEs have started to acknowledge the potential benefits associated with formal HRM systems and practices, very few are exploiting them in strategic terms (Muhammad et al., 2011). Khilji and Wang (2006), while reiterating the important role of HRM in Pakistani firms, stressed that the best HRM practices of firms can contribute towards achieving sustained competitive advantage and that this is the only way forward.

3.3.1 Why study HRM: Pakistani context

A number of studies (e.g., De Kok et al., 2003; Marlow, 2000; Wiesner et al., 2007; Zheng, Neill, & Morrison, 2009) relating to the determinants of best HRM practices and their influence on organisational outcomes have been conducted in different countries (mostly developed economies) that exhibit mixed results. Considering the differences in culture and socio-economic factors that influence businesses, the results of similar studies conducted in developed economies are not applicable to the developing parts of the world (Leung, 2012). Literature (e.g., Budhwar et al., 2016; Heneman et al., 2000; Klien & Delery, 2012) suggests a growing emphasis on conducting HRM related research in developing countries that are context specific.

The introduction of formal HRM practices in Pakistani SMEs is a recent phenomenon (Khan et al., 2014) that urgently requires research in order to examine the status and effectiveness of these practices in strategic terms (Mansoor & Matthew, 2015). The available research in this domain has predominantly focused on large organisations (Khilji, 2004; Yasmin, 2008) and the SME sector has been largely ignored. Keeping in mind the importance of SMEs to the economic development of Pakistan (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 practices of SMEs in Pakistan.

3.4 CONCEPTUAL FRAMEWORK

The proposed conceptual model (illustrated in Figure 3.1) represents the theoretical variables of interest that are derived from the extensive literature review of HRM practices (see Chapter 2). The conceptual framework is guided by an integrated philosophical approach that is based on two imperative theoretical stances, i.e., RBV and institutional theory (discussed in Section 2.3).

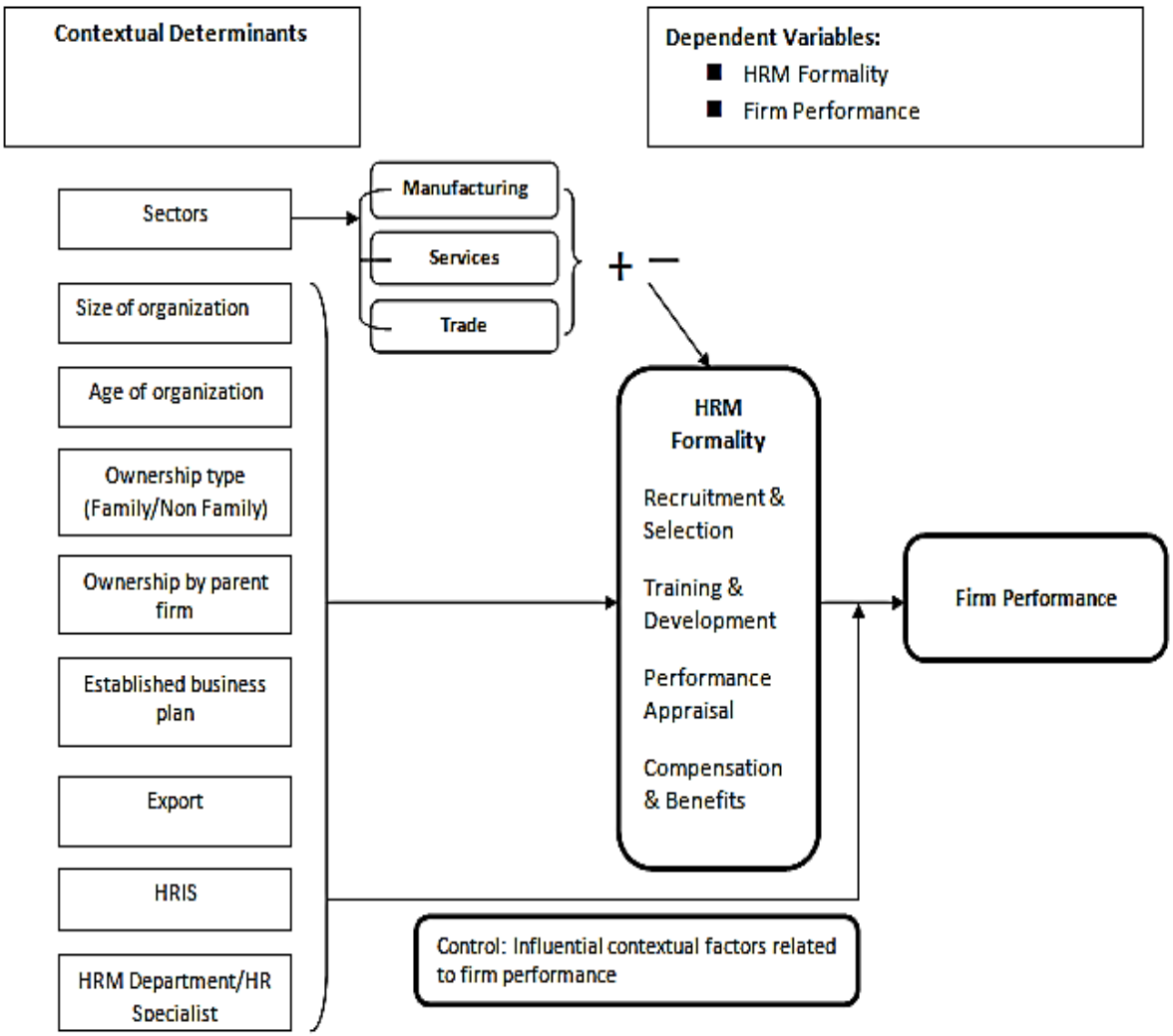

Figure 3.1. Conceptual model for this empirical investigation

In light of extensive literature review concerning HRM in SMEs, the proposed conceptual framework (Figure 3.1) aspires to address some pertinent gaps in literature. First, scant attention has been given to the comparative HRM literature in SMEs in terms of sector differences (Bacon & Hoque, 2005; Dickmann, Doherty, Mills, & Brewster, 2008; Edwards & Ram, 2006; Psychogios et al., 2016). In addition, the available literature lacks perspectives from trading sector SMEs since all of the comparative studies have mainly focused on exploring differences in HRM practices in relation to only two sectors i.e., manufacturing and services. Given the imperative role of trading SMEs in terms of contribution to the national GDP and employment creation (World Trade Organisation, 2016), this study aims to extend the boundaries of comparative HRM literature pertaining to sector differences by incorporating trade sector SMEs to the comparison in addition to manufacturing and services sector SMEs.

Second, the comparative HRM literature to date does not take into account the influential effect of some contextual control variables (e.g., age of the firm) concerning differences in HRM practices among different SME sectors. Given the influential role of certain organisational contextual variables understood from prior HRM related studies (Roxas, Battisti, & Deakins, 2013), this study is likely to strengthen the comparative HRM literature within the realm of institutional perspective by incorporating the age and size of the firm as control variables while exploring differences in HRM practices among manufacturing, services and trade sector SMEs.

Third, there is a dearth of literature concerning the role of organisational contextual characteristics as influential determinants of HRM practices in SMEs (Newman & Sheikh, 2014; Wu et al., 2014). These few studies have investigated a maximum number of six contextual factors (e.g., size of the firm, ownership type) in terms of their influence on the adoption of HRM practices in SMEs (e.g., De Kok et al., 2006; Newman & Sheikh, 2014; Urbano & Yordanova, 2008). However, this study includes investigation of eight contextual factors (firm size, firm age, ownership type family/non-family, ownership by parent firm, established a business plan, exporting characteristic, provision of HRIS and an HR specialist/department) hence, posing a more robust conceptual model (Figure 3.1) to comprehend the relationship between organisational contextual factors and the adoption of HRM practices in SMEs.

Lastly, this empirical study aims to explore the relationship between HRM practices and firm performance (RBV perspective) while controlling for organisational contextual factors to learn the effect of HRM practices on firm performance in a controlled model, an approach that is under-researched in SHRM literature.

The next section discusses the application of RBV and institutional perspectives to the proposed conceptual model (Figure 3.1) to achieve research objectives.

The RBV perspective encourages organisations to identify and efficiently use critical resources (such as human resources) that can gain them with competitive advantage helping in value creation (Barney, 1991; Wright & McMahan, 1992). The rationale for acquiring a sustained competitive advantage is embedded in the uniqueness of a value creation strategy that is difficult for competitors to imitate. Since interrelated HRM practices that model HRM systems (Progoulaki & Theotokas, 2010) are unique or organisation specific (Gondo & Amis, 2013), they become difficult to be transferrable (Delery & Shaw, 2001). Also, ‘the black box’ debate rationalises the difficulty of competitors to imitate the HRM systems since the

underlying mechanism through which the HRM systems are related to organisational performance is still not solidified (Messersmith, Patel, Lepak, & Gould-Williams, 2011; Patel & Cardon, 2010). Moreover, to achieve and sustain a competitive advantage, the HRM practices must be able to create value for the organisation. For instance, training programs that are specific to the departmental/organisational goals may result in the creation of more skilled and knowledgeable workforce who can contribute towards superior individual and organisational level performance (Scheel et al., 2014). Similarly, re-designing jobs might shift some responsibilities from managers to supervisors resulting in decreased labour costs. Moreover, designing jobs that motivate employees could also result in enhanced employee commitment leading to superior organisational performance (see Section 2.5).

Performance management of employees is also seen as an impetrative and integral part of effective HRM systems that contributes to the employee effectiveness and overall firm performance in turn (Chadwick et al., 2013; Patel & Conklin, 2012). Subramony, Krause, Norton, and Burns (2008) argue that performance-based remuneration can be induced to enhance organisational performance through increased employee productivity. A number of studies posit empirical support for this line of argument, suggesting that best HRM practices can result in enhanced employee performance, reduced labour turnover (Carlson et al., 2006; Messersmith & Guthrie, 2010; Patel & Conklin, 2012) and increased financial performance (Razouk, 2011; Sels et al., 2006; Sheehan, 2014). Thus, human resources can be regarded as a value creation resource that can assist in acquiring sustained competitive advantage for superior organisational gains (Barney & Wright, 1998; Campbell et al., 2012). In light of RBV theory, the proposed conceptual model (see Figure 3.1) suggests that increased HRM formality is directly related to enhanced financial (perceived market share, profits, sales) and non-financial (product quality, customer satisfaction, service delivery, addition of new products and the ability to attract and retain employees) performance in SMEs.

On the other hand, the institutional perspective (DiMaggio & Powell, 1983) advocates a substantial influence of contextual factors on HRM policies and practices of organisations (Harney & Dundon, 2006; Paauwe & Boselie, 2003; Wood & Lane, 2012). These contextual factors such as industry, firm size, organisational structure, strategic orientation and association with larger firms, can explain the variance in the adoption of HRM practices in organisations. Colbert (2004) suggested that choices, intentions and behaviours that govern organisational processes may influence the development of HRM practices over time, if not suddenly. The influence of such institutional factors can be magnified for SMEs as compared to larger businesses due to resource poverty and limited experience (Cardon & Stevens, 2004;

Smallbone et al., 2012; Wu et al., 2014). A number of studies (Bacon & Hoque, 2005; Boselie et al., 2003; Chandler & McEvoy, 2000; Edwards & Ram, 2006, Newman & Sheikh, 2014; Storey et al., 2010) have found contextual factors directly related to the adoption of HRM systems and individual HR practices (see Section 2.3). For example, industry (Harney & Dundon, 2006; Jiang, 2009), size of the firm (De Grip & Sieben, 2009; De Kok et al., 2006; Kotey & Folker, 2007; Wu et al., 2014), age of the firm (De Kok & Uhlaner, 2001; Kotey & Slade, 2005; Barrett & Mayson, 2007, Storey et al., 2010), business plan (Kok et al., 2003), ownership type (De Kok et al., 2006; Kotey & Folker, 2007; Newman & Sheikh, 2014), subsidiary of a parent firm (Bacon & Hoque, 2005; Mellahi et al., 2013, Newman & Sheikh, 2014; Tayeb, 1998; Urbano & Yordanova, 2008; Wu et al., 2014), exporting (De Kok & Uhlaner, 2001; Lengnick-Hall, 1988; Martin-Tapia et al., 2009), availability of HRIS (Aggarwal & Kapoor, 2012, Beadles et al., 2005) and HRM department/specialist (Boxall & Purcell, 2008; Chadwick et al., 2013; Hoque & Bacon, 2006) have been characterised as influential determinants of HRM practices within SMEs. In light of these findings, it is justifiable to propose that contextual factors (business sector, size of the firm, age of the firm, family/non-family owned, ownership by parent company, existence of business plan, exporting, availability of HRIS and HRM department/specialist) are likely to shape HRM practices within Pakistani SMEs. The proposed conceptual model posits the direct influence of such contextual factors on HRM practices adopted by SMEs in Pakistan. The selection of variables representing contextual factors is based on an extensive review of the literature (see Chapter 2).

Focusing on both RBV and institutional theory provides an opportunity to not only investigate the performance implications of human assets in SMEs but to also unfold the underlying mechanism through which, bundles of HRM practices governing human capital are shaped.

Moreover, the conceptual framework represents the use of HRM practices established in manufacturing, services and trading sector SMEs, rather than the decision making regarding human resources. The justification is derived from Cassell et al. (2002), who emphasize the diverse ways in which SMEs may be exercising their HRM practices, and are less likely to be formalised and strategic in nature as compared to their larger counterparts. Hence, a focus on specific and traditional HRM practices can be an effective way of primary investigation in small firms. Kok and Uhlaner (2001) further supported the argument and implied that since SMEs, due to their size, lack the strategic aspect of their HRM practices, investigating specific HRM practices is more appropriate in the SMEs context. Cardon and Stevens (2004)

also highlighted the importance of focusing on specific HRM practices to gauge the overall HRM formality within SMEs, especially in developing countries, since the traditional HR approach is uniformly understood among practitioners. In light of these arguments, the construct of HRM formality is associated in this study with five traditional HRM practices/functions namely: (i) recruitment and (ii) selection, (iii) training and development, (iv) performance appraisal and (v) compensation and benefits.

The construct of firm performance represents the overall subjective measure of organisational performance that constitutes a range of questions relating to the subjective financial and non-financial aspects relative to their competitors. As discussed in section 2.6.1, obtaining subjective measures of organisational performance is a common practice in HRM-performance related literature (Boselie & Paauwe, 2000; Bowen & Ostroff, 2004; Wiesner & Inness, 2012), primarily because of its ease of use, concurrent validity, high correlation with objective measures (Alegre & Chiva, 2008; Andrea, 2010; Shih et al., 2006) and commercial sensitivity of private firms to disclose financial data (Garg et al., 2003; Way, 2002). In line with prior studies (e.g., Delaney & Huselid, 1996, Wiesner & Inness, 2012), this construct is measured using subjective performance self-report variables such as perceived market share, profits, sales, product quality, customer satisfaction, service delivery, addition of new products and ability to attract and retain employees.

3.5 DERIVATION OF HYPOTHESES

This section presents hypotheses related to the research questions formulated to achieve the objectives of this empirical investigation.

RQ1: *Are there any differences of HRM formality (recruitment and selection, training and development, performance appraisal, compensation and benefits) between services, manufacturing and trade sectors of Pakistani SMEs?*

There is an increasing emphasis in the literature on conducting comparative HRM research that can unfold the broader understanding of HRM compared to the mainstream approaches in HRM related research (e.g., Brewster, 1999; Dickmann et al., 2008). In light of the institutional perspective in HRM, it has been widely reported that SMEs might exhibit different approaches towards employee management based on the type of industrial sector they represent (Datta et al., 2005; Jiang, 2009; Psychogios et al., 2016). Given the different nature of outputs produced by SMEs from different sectors, there are likely to be differences among SMEs in terms of HRM formality that have been already established in number of

prior studies (e.g., Jiang, 2009; Wu et al., 2014). Since, there is no empirical evidence to account for Pakistani SMEs in terms of differences in HRM practices of SMEs relevant to their industrial sectors; the following hypotheses are proposed;

$H1_a$: Services firms are more formal than manufacturing in terms of overall HRM formality.

$H1_b$: Services firms are more formal than trade firms in terms of overall HRM formality.

$H1_c$: Manufacturing firms are more formal than trade firms in terms of overall HRM formality.

$H1_d$: Services firms are more formal than manufacturing in terms of individual HRM practices/functions.

$H1_e$: Services firms are more formal than trade firms in terms of individual HRM practices/functions.

$H1_f$: Manufacturing firms are more formal than trade firms in terms of individual HRM practices/functions.

The role of institutional factors in shaping organisational activities was discussed in Chapter 2, which includes factors such as firm culture, firm resources and more importantly organisational characteristics (Kamaruddeen, 2011). Among these characteristics, firm age, firm size and industrial sector have been extensively acknowledged as the most influential in organisational behaviour related studies (Roxas et al., 2013). Moreover, firm age and firm size have been widely incorporated as control variables in numerous HRM related empirical studies (Boselie & Wiele, 2002; Brewster et al., 2008; Guthrie, 2001; Sheehan, 2014) and hence, are worth controlling to unfold the substantive impact of the industrial sector on HRM practices in Pakistani SMEs.

$H1_g$: Services firms are more formal than manufacturing firms in terms of overall HRM formality when controlled for age and size of the firm.

$H1_h$: Services firms are more formal than trade firms in terms of overall HRM formality when controlled for age and size of the firm.

$H1_i$: Manufacturing firms are more formal than trade firms in terms of overall HRM formality when controlled for age and size of the firm.

RQ2: *Which contextual factors (determinants) have significant influences on HRM formality (adoption of HRM practices) within Pakistani SMEs?*

The informal approach towards HRM practices within small firms has largely been associated with organisational characteristics (e.g., smallness of the firm) and lack of financial resources (Hornsby & Kuratko; 2003; Kok et al., 2003). As firms grow, financial resources multiply, enabling firms to capitalise on the opportunity of formalising their approach towards employee management practices (Chow, 2005; Klaas et al., 2000). A number of empirical studies have posited mixed results with regards to the firm size as an influential determinant of formal HRM practices (e.g., Cunningham and Rowley, 2007; Golhar & Deshpande, 1997; Hornsby and Kotey and Slade, 2005; Kuratko, 2003; Newman & Sheikh, 2014; Wiesner et al., 2007; Wu et al., 2014) and to unfurl the relationship between firm size and both overall HRM formality and underlying HRM practices/functions within Pakistani SMEs, the following hypotheses are proposed;

$H2_a$: Firm size is positively related with overall HRM formality.

$H2_b$: Firm size is positively related with individual HRM practices/functions.

In SMEs, the short lifecycle might explain the low take-up of formal HRM practices (Storey & Westhead, 1997). Prior research (e.g., Faems et al., 2005; Storey et al., 2010; Wager, 1998) confirms that the age of the firm can substantially influence the nature of HRM practices. For instance, Daft (1998) established that firms at the initial stage of their life cycle are more likely to follow an informal approach towards HRM practices but tend to correct the course with time. Similarly, Mayson (2007) implied that firms at the growing stage are able to multiply their resources that can facilitate the positive change in terms of acquiring more sophisticated HRM practices (recruitment and selection in particular). The lack of empirical evidence for such association (age of the firm as determinant of formal HRM practices) in case of Pakistani SMEs requires immediate attention and thus, the following hypotheses are formulated.

$H2_c$: Firm age is positively related with overall HRM formality.

$H2_d$: Firm age is positively related with individual HRM practices/functions.

Type of ownership (family/non-family owned) is also considered as an imperative contextual factor that might explain the nature of HRM practices within SMEs (Anneleen, 2017; Cardon & Stevens, 2004; De Kok & Uhlaner, 2001; Forth et al., 2006). The lack of skills based

selection criteria for management positions in family-owned SMEs (De Kok & Uhlaner, 2001) coupled with external challenges (e.g., market competition) (Bacon et al., 1996; Blais & Toulouse, 1990) may result in the adoption of informal people management practices (Reid & Adams, 2001). Moreover, due to limited resources, small family businesses find it challenging to attract and retain skilled labour (Cardon & Stevens, 2004; Reid & Adams, 2001). Owing to the common view and acknowledgment in the literature that family-owned SMEs follow an informal approach towards the adoption and implementation of HRM practices (e.g., Ensley et al., 2007; Kotey & Folker, 2007; Pittino & Visintin, 2013; Ram & Edwards, 2003; Reid & Adams, 2001), the following hypotheses are proposed;

$H2_e$: Non-family owned firms have more formal HRM practices.

$H2_f$: Non-family owned firms have more formal individual HRM practices/functions.

Literature suggests that being owned by a larger parent company is also positively related to the adoption of best HRM practices in SMEs (Aldrich & Auster, 1986; Bacon et al. 1996; Kok & Uhlaner, 2001; Wu et al., 2014). Small and medium sized firms benefit from the established resources of their parent companies as compared to sole/independent establishments (Arthur & Hendry, 1992; Loan-Clarke et al., 1999; Mellahi et al., 2013). There are numerous multi-national subsidiaries (especially in services and manufacturing sectors) operating in Pakistan (Muhammad et al., 2011; Tayeb, 1998), which suggest that testing the following hypotheses can unfold valuable information with regards to the role of parent companies in shaping formal HRM practices within their subsidiaries.

$H2_g$: Firms with ownership by a larger organisation have more formal HRM practices.

$H2_h$: Firms with ownership by a larger organisation have more formal individual HRM practices/functions**.**

SMEs that are growth-oriented mostly have been found to follow a strategic approach towards managing processes and people (Kok & Uhlaner, 2001; Sels et al., 2006; Wiesner & Millet, 2012). Kok et al. (2003) argued that SMEs having structured business plans that are long term and well written are more likely to adopt formal HRM practices. Similarly Thakur (1998) and Wiesner & Millet (2012) argue that SMEs following a strategic approach towards planning and coordinating business activities are more likely to recognise the perceived value of HRM and thus are more likely to develop formal HRM systems. The influence of the presence of a business plan as a key determinant (contextual factor) of formal HRM practices within Pakistani SMEs can be understood by testing following hypotheses:

$H2_i$: Firms with a business plan have more formal HRM practices.

$H2_j$: Firms with a business plan have more formal individual HRM practices/functions.

Literature suggests that growth-oriented firms that are associated with exporting products and services might exhibit a more formal approach towards HRM practces than their non-exporting counterparts (De Kok & Uhlaner, 2001; Lengnick-Hall, 1988). Matthews and Scott (1995) are also convinced that companies looking to tap into foreign markets would naturally take initiatives to formalize their people management practices (e.g., fair wages, compensating overtime, health & safety) in order to achieve the status of 'good supplier' and customers may also assist their suppliers to develop formal HRM systems through knowledge transfer (Beaumont et al., 1996; Kinnie et al., 1999). To comprehend the influence of exporting as an imperative characteristic of SMEs in determining the nature of HRM practices within Pakistani SMEs, the following hypotheses are formulated:

$H2_k$: Firms that export have more formal HRM practices.

$H2_l$: Firms that export have more formal individual HRM practices/functions**.**

ICT integration into the business functions (e.g., marketing, financial management, people management) can be a valuable resource to achieve operational excellence that can result in achieving superior organisational performance (Bamel et al., 2014; Chaffey & Wood, 2005; Fisher & Kenny, 2000; Tarafdar & Gordon, 2007). Similarly, the use of IT in exercising HR related functions (HRIS) can play a central role in shaping HRM practices that can add value to the attainment of organisational objectives (Aggarwal & Kapoor, 2012; Barney & Wright, 1998; Broderick & Boudreau, 1992; Gueutal, 2003; Sadiq et al., 2012). To estimate the influence of HRIS in shaping more formal HRM practices within Pakistani SMEs the following hypotheses are suggested:

$H2_m$: Firms using human resource information system (HRIS) have more formal HRM practices.

$H2_n$: Firms using human resource information system (HRIS) have more formal individual HRM practices/functions.

It is widely understood that the presence of an HR specialist or the existence of an HRM department can be a valuable resource that a firm can capitalize on to achieve superior employee performance. The HRM department within a firm is viewed as an imperative unit

with higher level of relevant knowledge and skills for introducing and exercising effective HRM policies and practices (Cassell et al., 2002; Chadwick et al., 2013). De Kok et al. (2003) also indicated that the presence of a HR champion within SMEs is directly related to systematic, structured and sophisticated people management practices. As, several studies (Aldrich & Auster, 1986; Diaz de Cerio, 2001; Hoque & Bacon, 2006; Kok & Uhlaner 2001; Singh & Vohra, 2009; Wiesner & Innes, 2010; Wu et al., 2014) have found presence of a HR specialist/HRM department as a key influential factor for shaping best HRM practices, the following hypotheses are proposed;

$H2_o$: Firms with an HRM department or HR specialist have more formal HRM practices.

$H2_p$: Firms with an HRM department or HR specialist have more formal individual HRM practices/functions.

RQ3: Does HRM formality influence the performance of SMEs in Pakistan?

Several studies (Barney, 1991; Ferris et al., 1999; Guthrie, 2001; Paauwe et al., 2013; Paul & Nealia, 2016; Sels et al., 2006; Sheehan, 2014; Wernerfelt, 1984; Zhou et al., 2013) have investigated the impact of HRM practices on firm performance and a majority supports the RBV perspective (Barney, 1991) that best HRM practices can be a valuable resource to attain sustained competitive advantage. Growing firms usually face numerous challenges that affect their business processes and activities, in particular, the effective and efficient utilisation of available resources in order to achieve organisational goals. Since HRM is considered as a key resource of the firm, many SMEs with a traditional and informal approach towards HRM practices are unable to fully exploit their potential in terms of achieving organisational objectives. For instance, Guest et al., (2003) argue that effective employee management is positively related with organisational ability to gain competitive advantage, which in result has a profound positive effect on organisational performance. Way (2002) also found that effective employee management through formal HRM systems can have positive effect on SMEs' performance. A number of studies (e.g., Allen et al., 2013; Guthrie, 2001; Huselid, 1995; Nguyen and Bryant, 2004; Rhee et al., 2014; Sheehan, 2014; Teo et al., 2011; Welbourne & Andrews, 1996) concerning HRM-performance link in SMEs, have identified a positive link between the adoption of formal HRM practices and firm performance but a lack of empirical evidence for Pakistani SMEs (Punjab province) suggests testing the following hypothesis:

$H3_a$: More formal HRM practices (HRM formality) are positively associated with firm performance.

Literature suggests that contextual factors can have a profound effect on activities and processes of an organisation (Johns, 2001) including organisational performance (Daniel, Shay, & Yehuda, 2017; Paul & Nealia, 2016). To estimate the relationship between HRM formality and firm performance while controlling for contextual factors (e.g., firm age, HRIS, ownership type) significantly related to firm performance, the following hypothesis is suggested.

$H3_b$: More formal HRM practices are positively associated with firm performance when controlled for influential determinants.

3.6 SUMMARY

This chapter presented an overview of the Pakistani context as a potential research area for conducting HRM related research and the conceptual model and the hypotheses formulated in line with the aim and objectives of this study. An overview of the available literature related to HRM practices within Pakistani firms was presented, followed by a brief justification for carrying out HRM related research in Pakistan. The conceptual model was presented that included variables of interest derived from literature. The hypotheses related to each research question were formulated.

Chapter 4 Research design and methodology

4.1 INTRODUCTION

This chapter describes the research methodology and design for addressing problem statements (RQ1, RQ2 and RQ3). The chapter commences with a brief acknowledgment of concepts encompassing research methodology in the social sciences and proposes a suitable research philosophy for the present empirical study. It justifies the research approach, looking at available research methods (quantitative vs. qualitative) and gives a detailed account of research strategy and design, sampling design and procedure. Reliability and validity methods selected for the survey are highlighted followed by a discussion of data analysis methods and techniques. Finally, this chapter considers ethical constraints and their resolution associated with this study and the limitations of the proposed research design.

4.2 BACKGROUD TO RESEARCH METHODOLOGY

The prime objectives of a research are to validate new or existing facts and reaffirm the results of research taken to date. It is to discover answers to questions through the application of logical techniques and methods. The fundamental aim of research is to ascertain an undiscovered truth with logical reasoning. In spite of the fact that every research study would have its own particular objectives but broadly they could be categorised into the following;

- Getting familiar with a phenomenon or getting an incipient insight into it (also referred to as 'exploratory' or 'formulated' research).
- To predict precisely and accurately the attributes of a specific individual, situation or a group (also known as 'descriptive' research').
- Determining the frequency of a phenomenon or its association with something (commonly known as 'diagnostic' research).
- Testing a hypothesis of a causal relationship among variables (hypothesis-testing research). (Kothari, 2004)

Collis and Hussey (2003) argued that research methodology entails the whole research process. The research process could be viewed as a set of linked multi-stage procedures that is required to consummate a research project. Similarly, Saunders, Lewis, and Thornhill (2003) explained methodology as the theory of how a research project ought to be attempted, including the theoretical and philosophical postulations on which research is based and their implications for the methods adopted. They viewed the stages of the research process as layers of an onion that includes justifying the research paradigm (philosophy), research approach, research strategy, time horizon and finally the data collection methods to be deployed. In a research process, a paradigm exhibits the philosophy of knowledge whereas a methodology refers to practicalities of how we come to know (Trochim & Donnelly, 1998).

The following sections discuss the research paradigm and methodology in detail and provide justifications/rationale for choosing an appropriate philosophy and methods for this study.

4.3 RESEARCH PHILOSOPHY

Every research study is usually supported by philosophical suppositions that form the basis for adopting various paradigms, methodologies and research techniques in a quest for unfolding social phenomena which remains the same for exploring organisational phenomena as well (Burrell & Morgan, 1979). The research can be sorted by objectives, procedures,

rationale and outcome (Cody & Kenney, 2006; Hussey & Hussey, 1997). The philosophy of research is more concerned with the acquisition and development of knowledge and the nature of it (Saunders, Lewis, & Thornhill, 2007). It establishes how a researcher perceives and then plans to undertake his/her research. With a clear mind-set, s/he devises a clear and concise strategy to undergo the research activities (Punch, 2009; Sekaran, 2003). Easterby-Smith, Thorpe, and Jackson (2002) and Saunders et al. (2003) stressed that there are two important paradigms (philosophies) that determine the direction and process of a research in social sciences: Positivism and Interpretivism. These two paradigms are generally associated with quantitative and qualitative research respectively and the distinction is based on the underlying assumptions upon which the choices for research methods or tools are made (Husen, 1999).

Referring to adoptability and application, the positivist school of thought is the oldest paradigm (Oates, 2006) that advocates the logic and rationality with empirical observation (Partington, 2002). The proponents of positivism believe in the application of the methods of natural sciences to the investigation of social reality and beyond (Bryman & Bell, 2007). The methods applied to uncover social and organisational phenomena are based on scientific procedures that are deployed to test and retest theory (Maylor & Blackmon, 2005).

The interpretivism paradigm, on the other hand, accentuates understanding individual perspectives and insights into people and surrounding phenomena. This is mainly because this school of thought believes that social phenomena, as they happen, are an outcome of human interactions (Remenyi, Williams, Money, & Swartz, 2003). Hence, it is deluding to appreciate that human actions can be narrowed down to quantifiable regularities and it is more legitimate to look into the meanings and perceptions of people and societies who are source of these actions (see also Cresswell, 1994; Orlikowski & Baroudi, 1991) .

Literature reveals that although the interpretivist approach has been convincing in terms of generating reliable knowledge in the field of organisational behaviour (Andrews & Delahaye, 2000; Bacon & Blyton, 2000), positivist approaches seem to be dominant especially for exploring linkages between HRM and performance (Boselie et al., 2005; Collins & Smith, 2006; Legge, 2005; Levin & Cross, 2004; Storey et al., 2010; Watson, 2004). There are certain phenomena that are beyond the control of humans and should be measured as an existing reality or universal truth which is independent of agents' perceptions or understandings (Guest, 1997). For example, understanding the bundle of HRM practices within an organisation is a straightforward task of measuring if those practices exist using an

established theory/framework. Moreover, the external factors influencing adoption of HRM practices or performance of an organisation can only be measured objectively rather than comprehending through an individual's perceptions. A significant number of studies have seen the linkages between HRM and performance (based on RBV theory) through the positivistic paradigm (Allen et al., 2013; Barney & Wright, 1998; Karami, Analoui, & Cusworth, 2004; Katou & Budhwar, 2006; Ismail, Omar, & Bidmeshgipour, 2010; Sheehan, 2014).

However, the opponents of positivistic approaches argue that behaviour is an outcome of an individual's interactions and perceptions which in turn influence organisational performance (Kehoe & Wright, 2013; Pacanowsky & O'Donnell-Trujillo, 1983). As a consequence, positivist approaches sometimes cannot measure the dynamic social context that individuals react to and experience (Farr & Levy, 2006). Similarly, Watson (2004) argued that HRM researchers following positivist approaches represent the manager's point of view and tend to ignore the critical social context that is shaped by employees at the receiving end. He further recommended that as opposed to attempting to create solutions for bundle of HRM practices, researchers can examine how these practices are shaped within an organisation. The opponents insist that if a study is to be generalised for a population, inductive approaches might not be feasible. Moreover, inductive methods following the Interpretivism paradigm could be applied in HRM research to understand certain areas of interest where the perceptions of those at the receiving end co-creates or shapes the phenomena/subject under investigation, e.g., employee relations or the influence of culture. Adding to the debate on the choice of paradigm, mixed methods research following a realism paradigm has been utilised in several HRM studies (Bae & Lawler, 2000; Chand & Katou, 2007; Collings et al., 2010; Delaney & Huselid, 1996; Guthrie, 2001; Katou & Budhwar, 2006; Lee, Lee, & Wu, 2010). The proponents of realism characterise this school of thought as the most suitable for conducting research in behavioural sciences since it involves inductive and deductive approaches at the same time (Hesketh & Fleetwood, 2006; Johnson & Onwuegbuzie, 2004). Analysing rich descriptions of complex phenomena through qualitative study can assist the quantitative part of the research by building a more suitable conceptual model to be tested (Jick, 1979; Rossman & Wilson, 1985). Moreover, Sechrest and Sidana (1995) proposed that this methodological pluralism can assist in verifying the validity of constructs by controlling any possible errors in the underlying measures.

The main goal of this study is to explore the relationships between HRM practices and their contextual determinants and further investigate if these practices influence organisational

performance. Another objective is to explore differences in terms of HRM formality among three major industrial sectors of SMEs. This empirical research is designed to produce specifics as they exist (e.g., investigating bundles of HRM practices, influence of contextual determinants on HRM practices) rather than generalise/propose theories. Hence, considering the overview of research philosophies and keeping in mind the research aims and scope of this study, a positivist approach is more suitable as this study would incorporate statistical analysis for hypothesis testing and try to achieve generalizable conclusions (Malhotra & Birks, 2000). Moreover, because of the structured and organised nature of this study, it can provide suggestions for future strategies which would be objective and statistically reliable (Sood, 2007).

4.4 RESEARCH APPROACH

The literature suggests that there are two approaches for investigating social phenomena namely – 'inductive' and 'deductive' (Saunders et al., 2007). Inductive research refers to generation of new theory as a result of analysed data, whereas, deductive approach is concerned with testing an existing theory (Trochim & Donnelly, 2007). The deductive approach usually initiates from deduction of a hypothesis relating to an existing theory where a hypothesis is tested by deploying highly structured analysis. In light of the outcomes, the existing theory may be modified if necessary (Robson, 2002). Gill and Johnson (2010) are also of the same view that a highly structured methodology is used to ensure testing of theories encompassing quantitative methods. Where deductive research embraces theory testing, the inductive approach facilitates building theories. Researchers following a deductive approach tend to incorporate quantitative methods for generalizing results and findings, whilst the inductive approach is more concerned with qualitative techniques (Gill & Johnson, 2010). Moreover, a deductive approach depends upon working on general theories/ideas to conclude a particular situation and is associated with a positivist paradigm, whereas, an inductive methodology investigates a particular idea to sum up the situation according to the topic of research and is associated with an interpretivism school of thought (Crowther & Lancaster, 2009).

Patrington (2002) suggested that the choice of a suitable research approach solely depends upon the aims and objectives of the research study. Keeping in view the nature and objectives of this research study and research philosophy, a deductive approach is more suitable and entirely in keeping with most previous research in the field.

4.5 RESEARCH METHODS: QUANTITATIVE VS QUALITATIVE

In a research process, the methodology deployed must be in line with the specific topic of interest (Krauss, 2005). Similarly Creswell (2003) insisted that researchers have the opportunity and freedom to choose appropriate research methods and techniques that best address their needs. There are three noteworthy methods that are usually embraced by a researcher: quantitative, qualitative and mixed methods.

Quantitative methods often rely on the quantification of attitudes, opinions and beliefs. This strategy primarily aims at deducing hypotheses from a conceptual framework and then testing those hypotheses using statistical tools (Teddlie & Tashakkori, 2009). This type of method generates measurable information which is gathered using large scale surveys that incorporate structured questionnaires (Carr & Griffin, 2010). Moreover, quantitative research methods are imperative when research objectives require an understanding of certain factors that influence an outcome (Creswell & Clark, 2007) and are best suited for exploring characteristics attached with an observed phenomenon or investigating possible relationships among multiple phenomena (measured variables) using standardized instruments (Cresswell, 2009; Ghauri & Gronhaug 2005; Leedy & Ormrod, 2010; Partington, 2002)

Despite the fact that quantitative research methods reside in positivist camp, the role and application of qualitative methods are additionally critical for upholding quantitative results (Cresswell, 2009). Exercising qualitative techniques can sometimes unfold unobserved discrepancy in data and help uncover obscure variables (Kelle, 2006). This methodology involves collecting open-ended data, from which a researcher develops themes in relation to research objectives (Creswell, 2009). Qualitative methods use inductive reasoning that entails uncovering patterns and themes in data (Patton, 2002; Teddlie & Tashakkori, 2009). It helps interpreting a certain phenomenon usually without involving statistical analysis (Zikmund, Babin, Carr, & Griffin, 2010). The vital data collection methods relating to qualitative approach are through observations, in-depth interviews and focus group (Creswell, 2009). The major strengths of utilizing qualitative techniques are exploring a phenomenon where little is known about it and investigating complex situations that are remote to more disciplined and controlled approach (Gillham, 2000). Moreover, qualitative methodology can be exercised using a mix of techniques or strategies to provide an expansive comprehension of social circumstances (Ticehurst & Veal, 2000). The opponents of the qualitative camp argue that this methodology lacks objectivism in establishing an understanding of social

circumstances and the reliability and validity of results would always be at risk (Denzin & Lincoln, 2005).

On the other hand, there is a steady increase in the number of researchers in social sciences who are inclined towards 'triangulation' (mixed methods research) which is a mix of various methods. The triangulation camp believes that both methods concentrate on the two unique features of the same issue (Dooley, 2002; Greene & Caracelli, 2003; Krauss, 2005; Ramsay, 1998; Thurmond, 2001; Williamson, 2006). Moreover, it can be useful for providing rich information and open new avenues of thinking by engaging multiple perspectives at the same time (Maxwell & Loomis, 2003).

While there is handful of proponents of triangulation, others discourage this strategy contending that quantitative and qualitative methods cannot and ought not to be mixed. Contrast in underpinning philosophies are the main reasons for incompatibility between both (Denzin & Lincoln, 2005; Howe, 2004). Other shortfalls of this approach include being expensive, time intensive and difficult in terms of learning and exercising different methods at the same time (Johnson & Onwuegbuzie, 2004).

In light of the review of different research methods and the requirements of this empirical research, a quantitative approach would be more appropriate because:

- Data collection methods following quantitative approach are relatively less time consuming and are more cost effective.
- It enables investigation of a large target audience within a short period of time.
- Testing and validating existing theories.
- Standardized data is collected from all participants via same questionnaire.
- Ensures strong validity and reliability of information gathered.
- Enables testing of relationships between variables that are measured through highly standardized constructs.
- Investigation of cause-and-effect relationships while eliminating confounding influence of some variables.

(Johnson & Onwuegbuzie, 2004)

4.6 RESEARCH DESIGN AND STRATEGY

An appropriate research design is crucial for establishing the deployment of most suitable data collection methods, type of data to be collected, sampling procedures, time horizon, data analysis and allocation of resources for conducting the field work (Babbie, 2011; Hair, Anderson, Babin, & Black, 2010) for succeeding research objectives (Churchill & Iacobucci, 2004). Based on the purpose of research objectives, the literature suggests three common types of a research design: exploratory, descriptive and causal (Babbie 2011; Churchill & Brown, 2007; Zikmund et al., 2010).

Exploratory research is often followed to gain initial insights into an issue which gives rise to further questions to be explored by more extensive research (Marlow, 2005). This type of research is conducted to unfold a relatively new phenomenon which facilitates opening new avenues for further research (Cooper & Schindler, 2001) and resides in the interpretivism paradigm. On the other hand, descriptive research attempts to discover reality as it exists normally so as to retrieve an overview of a situation (Baker, 2003; Mertens, 2009; Monette, Sullivan, & Dejong, 2011). Moreover, it aims at representing a clear picture of the attributes that constitute situation, social setting or a relationship (Salkind, 2000). The majority of researchers associate descriptive study with quantitative data collection methods where inquiry is made with a larger sample (mostly through surveys) and findings are reported using frequency distributions, graphs, tables and scatter plots etc. (Adler & Clark, 2008; Marlow, 2005; Rubin & Babbie, 2010).

Dissimilar to descriptive research, which concentrates on how things are, the objective of causal research (also known as explanatory research) is to provide answers as to why things tend to be the way they are (Adler & Clark, 2008; Babbie, 2013). Hence, causal research expands on the exploratory and descriptive purposes and surpasses the depth of knowledge. A common view within literature suggests that causal research aims at exploring cause-and-effect relationships between subjects (variables) and tend to be highly structured and organised (Babbie, 2011; Sarantakos, 2005). It includes the application of quantitative methods and results are usually generalizable (Adler & Clark, 2008).

The present empirical study will employ an explanatory/causal design based on the requirements of research objectives. This type of research has been considered suitable since there are clearly defined variables measured through a highly structured survey from a sizeable sample where the results can be generalised. Also, statistical analysis of the data will

unfold the nature of relationships between different variables with validity and reliability of results.

Another important aspect of an appropriate research design is its time dimension. Research can be of two types in terms of time-dimension namely cross-sectional and longitudinal. Cross-sectional studies represent a 'snapshot' of a population at a single point of time, while longitudinal studies incorporate interacting with subjects repeatedly over a period of time to track changes (Cohen, Manion, & Morrison, 2005; Cooper & Schindler, 2010). Settling for either type is influenced by certain factors, such as the researcher's time availability, research questions, financial resources and practicality (Bryman & Bell, 2007; Lee & Lings, 2008; Remenyi et al., 2003). The proponents of longitudinal studies argue that researchers are always in a better position to identify patterns by tracking changes in the characteristics of the subjects so as to make outcomes highly confirmatory and conclusive (Cohen at el., 2005). However, longitudinal studies can be time consuming and expensive and the risk of sample mortality is severe as during the process, subjects might dropout or the level of co-operation at a later stage of the study might be compromised (Cohen et al., 2005). Time and budget limitations while directing longitudinal studies provide opportunities for adopting a cross-sectional design and a cross-sectional design is suitable for present research study since it serves the purpose of providing a detailed picture of attributes measuring HRM practices and performance of organisations under investigation at single point in time. Moreover, with a cross-sectional design, the risk of sample mortality is overcome.

The most significant and crucial element of designing an appropriate research plan is deciding upon a suitable research strategy followed by the most appropriate data collection instrument. The literature proposes a variety of research strategies namely surveys, experiments, case studies, grounded theory, ethnography, content analysis and action research (Creswell, 2003; Sekaran, 2003). For the purpose of this study, a survey strategy (through a questionnaire) is suitable since this study is following a deductive approach with quantitative analysis and aims to gather data form a sizeable sample of a target population for generalising the findings (Bryman & Bell, 2007; Collis & Hussey, 2003). A survey based approach additionally permits a level of control over the research process and it is easier to embrace (Sekaran & Bougie, 2010). Moreover, it allows gathering a standardised form of data (through a highly structured questionnaire) that helps towards drawing conclusive results by incorporating statistical inferential techniques (Saunders et al., 2009).

A survey is a prevalent strategy for gathering data in research studies in the positivist paradigm (Babbie, 2011; Zikmund et al., 2010). It is a popular method used in explanatory research designs that produces numeric characterisation of trends, attitudes or perceptions by investigating a sample of a target population (Babbie, 1999; Zikmund et al., 2010). Using survey method in organisational studies, a sizeable sample from the target population can be focused to unfold relationships that are common over different organisations and results can be generalised for the population (Babbie, 2011). However, this approach can only provide estimates for the whole population and not precise relationships. The major downfall of survey methods concerns response biases from participants (deliberate or unintentional) (Bell, 1996).

Keeping in view the requirements and objectives of present study, two survey methods were used for data collection namely internet/web survey and door-to-door (personal visits to organisations). The rationale for choosing an internet or a web survey is threefold;

- SME owners and managers like to strengthen their networking by participating in a web survey (Suarez-Balcazar & Taylor-Ritzler, 2009).
- The process of data collection becomes highly flexible and interactive (Taylor, 2000).
- This approach is cost effective and the data collected are readily available for analysis (Coupe, Traugott, & Lamias, 2001; Stanton & Rogelberg, 2001).

Representation of those SMEs from the target population that are not tech-savvy is crucial to the success of this research study. Hence, in addition to web survey strategy, the researcher collected data by personally visiting SMEs (especially representing trade cluster) and self-administering the process where possible. One of the major strengths of a face-to- face survey approach is that the researcher is in control of the process. The researcher can record an accurate account of the answers from respondents and sometimes can intervene in case the respondent is unable to understand a question.

4.7 SAMPLING DESIGN AND PROCEDURE

In order to choose an appropriate sampling frame and further a sample size, it is imperative to comprehend the theory of sampling methods. Fink (1995) suggested that exercising the correct sampling method enables the researcher to manage the data collection process efficiently in terms of cost, speed and accuracy. The two standard sampling methods widely used in the research are: probability sampling and non-probability sampling. Probability

sampling is sometimes also referred to as 'Random Sampling' while the following as 'Non-random Sampling' (Bryman & Bell 2003; Henry, 1990). Probability sampling is employed to reduce any sample selection bias where each sampling unit in the population has an equivalent chance of representation (Henry, 1990; Saunders, Lewis, & Thornhill, 2003). The major strength of this approach is that the findings drawn from a sample using this method ensure the reliability of generalising those findings for the whole population (Frey, Botan, & Kreps, 2000). Non-probability sampling on the other hand, includes selection of specific units or cases that meets certain criteria reflecting unique research objectives (Tashakkori & Teddlie, 2003). A potential advantage of this method includes convenience in terms of assembling a sample that is cost effective and time saving (Fink, 1995, Saunders et al., 2003). Newman (2003) insisted that the choice of either method is primarily dependent upon the research design and method. Quantitative researchers would normally select a highly representative sample from a much larger population in order to generalise the findings accurately and thus, would prefer to employ a probability sampling method. In contrast, qualitative researchers tend to pay less attention to the sample representativeness but focus on how the selected cases can comprehend social processes for deeper understanding (Curtis, Gesler, Smith, & Washburn, 2000; Onwuegbuzie & Leech, 2007).

The primary course of action in developing a sampling scheme is to identify the target population. The target population of this research study is based on SMEs employing 21-250 workers and representing three business sectors (services, manufacturing and trade) from the 'Punjab', the largest province of Pakistan. The manufacturing sector mostly represented businesses such as: textiles, automotive parts, leather, garments, furniture and pharmaceuticals, while the services domain mostly included IT companies, telecoms, health, educational establishments, media and consulting firms. The trading sector predominantly included retail stores and wholesale, import and export companies and showrooms. The rationale for selecting the Punjab province was because of its economic contribution to the GDP of the country and the industrial development during the past two decades (Pakistan Economic Survey, 2010). In addition to this, the Punjab region represents 65% of the total SMEs (2.89 million) in Pakistan (SMEDA, 2007).

The population of this study was based on the economic census of Pakistan carried out in 2006-2007. This source was the only and most recent available within Pakistan for identifying the total number of SMEs. Moreover, the census provides no explicit information about the numbers of SMEs in relevant industrial sub-sectors. According to the source, there are a total number of 2.89 million micro and small to medium sized establishments within

Pakistan with Punjab representing 65% (1.87 million) of the total. Around 98% of the total numbers of SMEs from Punjab are operating at a micro level employing less than 10 workers (SMEDA, 2007). Complying with the definition of SMEs by SMEDA (21-250 employees), the total number of SMEs in Punjab is 37570 (this figure includes a sizeable number that are non-operational or employing between 10 and 20 workers).

The next step was to identify a list of sampling units that would make the sampling frame representing the population. Unfortunately, SMEDA does not provide comprehensive information about established entities in terms of their contact details. A second option identified was to gain registered companies' details from 'Punjab small industries corporation', 'Pakistan Bureau of Statistics' and the company law division of the 'Securities and Exchange Commission of Pakistan'. A potential drawback of these sources was that the repetition of businesses could have occurred. Finally, the researcher settled for the most reliable and updated database (Jamal's Yellow Pages) comprising a comprehensive list and contact details of businesses in Punjab Pakistan. The main sources of information of this business directory were 'Securities and Exchange commission of Pakistan', 'Small and medium enterprise development Authority' and Chamber & Commerce authorities from regional cities within Punjab Pakistan. This resource facilitated the search of companies within Punjab according to employment sizes (approximate estimation) and a list of all possible sampling units was extracted. A total number of 8,461 SMEs with 21–250 employees were further filtered to narrow them down in terms of having contact information (telephone number or email). As a result, a sampling frame of 6,583 units was obtained.

After establishing an adequate sampling frame, the next step was to determine an appropriate sample size. According to Malhotra (1999) the selection of a suitable sample size is dependent upon certain influential factors such as financial resources, access to the sampling units and the data analysis techniques and methods. This research study involves statistical analysis which is highly sensitive to sample size (Tabachnick & Fidell, 2001). A general rule of thumb states that a sample size of 300 is said to be suitable for studies involving statistical inference whereas a sample size of 500 further increases the reliability and validity of outcomes (Comrey & Lee 1992; Tabachnick & Fidell 2001). Considering studies conducted in similar areas of HRM, Urbano and Yordanova (2008) explored determinants of the adoption of HRM practices in Spanish SMEs following a quantitative approach where a total number of 164 SMEs were investigated through a survey method. Similarly, a Dutch study (Huub et al., 2006) investigated determinants and the effectiveness of e-HRM systems with a sample size of 277 respondent organisations. Other quantitative studies (Bacon & Hoque,

2005; Guthrie, 2001; Kotey & Slade, 2005) of HRM practices in SMEs included sample sizes ranging between 250 and 400.

Keeping in view the low response rate of web/internet surveys (Hewson, Yule, Laurent, & Vogel, 2003; Ranchhod & Zhou 2001; Zikmund et al., 2010), financial limitations, time constraints and the possibility of multiple and invalid responses (Hewson et al., 2003; McDaniel & Gates 2002; Ranchhod & Zhou 2001), it was decided initially to select a sample size of 750 randomly from the sampling frame. At this stage, the researcher was aiming for at least 360 valid responses to be included into the final analysis.

In line with the research objectives, it was imperative to have just about an equal representation from three major sectors (Manufacturing, Services and Trade) of SMEs. A stratified probability sampling scheme was applied to create three strata (Manufacturing, Services and Trade) where each stratum/group was allocated 250 units randomly from the sampling frame, making a total sample size of 750. These organisations were contacted initially over the telephone to invite them to participate in the study. 27 organisations could not be reached (primarily because of incorrect phone number listing and non-functional organisations) for which, similar number of organisations have been contacted from the available sampling frame. These organisations were firstly confirmed of their employment size and sector in order to fulfil the requirements of this study. Around 31 organisations appeared to have employees either below or above the specified range, which resulted in extracting a similar number of organisations from the sampling frame with specified criteria to be included in initial sample.

Following from above, 61 manufacturing firms agreed to take part in the survey via internet/web and 52 firms agreed to a personal visit by the researcher to fill out the questionnaire. Hence, a total number of 113 questionnaires were collected and reviewed for validity that resulted in compiling 103 valid responses. Similarly, 76 Services firms fulfilling the criteria agreed to participate in the online web survey followed by 39 further SMEs from services sector by arranging a personal visit to the organisation. In total, 115 responses were collected and sorted for validity of answers that resulted in securing 108 valid responses. Lastly, 52 business entities from the trade sector participated in an online web survey and a further 53 trade companies agreed to a face to face survey. The total number of responses collected for trade sector was 105 out of which 96 were valid.

As a result of the data collection process, the researcher gathered 307 valid responses (103 manufacturing, 108 services and 96 trade). An equal representation of all three sectors was

imperative in terms of achieving research objectives (comparison of three sectors with respect to formality of HRM practices) and because of the time and budget constraints, the researcher decided to limit each sector to 100 responses. To enable this, four trade organisations fulfilling the criteria were further selected from the initial sample and their valid responses were included to make the representation of all three sectors even.

4.8 QUESTIONNAIRE DESIGN AND DEVELOPMENT

4.8.1 Operationalization of variables

A crucial step in the questionnaire design and development is to operationalise the variables under investigation included in conceptual framework (see Chapter 3). The following section explains the source and measurement level of underlying items from which these variables/constructs are measured.

4.8.1.1 Determinants (contextual factors)

One of the research objectives is to unfold the relationships between contextual determinants and the level of HRM formality. The literature (see Chapter 2) highlights certain influential factors that might predict variability in the adoption of HRM practices in SMEs. These factors or determinants are; size of the organisation, age of the organisation, industry sector, ownership type, ownership by a larger/parent firm, existence of a business plan, internationalisation (exporting), presence of HRIS and finally presence of an HR department or specialist. All of the variables characterised as determinants/contextual factors have been incorporated in somewhat similar studies (e.g., Kok & Uhlaner, 2001; Storey et al., 2010; Wiesner et al., 2007; Wu et al., 2014) as a single question item where the size and age of the firm are measured at a continuous level (ratio) while remaining items are measured at categorical level (nominal). The contextual factors/variables for this study are constructed in a similar fashion where age and size of the firm are recorded as ratio numbers while remaining variables are measured at dichotomous level (Yes/No) except industry sector which is a three level categorical variable.

4.8.1.2 HRM formality construct and underlying variables

The HRM formality variable is treated as a composite variable that is measured by adding the scores of its underlying developed constructs of individual HRM functions/practices namely; Recruitment, Selection, Training and Development, Performance Appraisal and

Compensation & Benefits. The rationale for choosing these five HRM functions/practices to measure the overall HRM practices of an organisation (HRM Formality) is twofold: firstly, a number of studies (e.g., Bartram, 2005; Kok & Uhlaner, 2001; Urbano & Yordanova, 2008; Wiesner et al., 2007) have incorporated similar numbers of functions/practices to assess the overall formality of HRM practices, and secondly, the application of HRM practices/bundles in Pakistani SMEs is in its preliminary stages and the acknowledgment of sustainable organisational gains through effective HRM practices is going through an evolutionary process (Yasmin, 2008). In addition, the selected framework of underlying HRM functions to assess overall adoption of HRM practices coincide with the bundle of practices surveyed in literature specifically for studies exploring HRM practices in SMEs (Cassell et al., 2002; Hornsby & Kuratko, 1990; Jameson, 2000; Kotey and Slade, 2005; Nolan, 2002; Storey et al., 2010; Wong et al., 1997).

The primary source of underlying items for each construct within HRM formality variable is from Wiesner et al. (2007). The source instrument consisted of a wide range of HRM practices relating to recruitment and selection, training and development, performance appraisal systems, compensation and employee relations. Since the instrument was designed keeping in view the size of the firm (SMEs), the majority of the underlying items were equally suitable to be utilized for creating HRM practices constructs for this empirical study. However, the finalised instrument was subject to a stringent scrutiny during the phase of pilot study for making concepts (constructs) truly representative of its underlying items. To manage the slippage in terms of making sure that the included items accurately measure the concept, the researcher referred to some renowned studies (Barrett & Mayson, 2007; Bohlander & Snell, 2009; Connolly & Connolly, 2005; Kelly, 2008; Kok & Uhlaner, 2001; Lake, 2008; Nhuan, 2001) for including any relevant items pertaining to the use of HRM practices in addition to the instrument of Wiesner at al. (2007). The constructs of recruitment, selection, training & development, performance appraisal, compensation and benefits in mentioned studies included items that were measured at 3, 5 or 7 point interval (Likert-type) scale.

For this study, the underlying components of HRM formality (e.g., recruitment, compensation & benefits) are measured on a 5 point Likert-type scale. For recruitment construct, the Likert-type scale (frequency based) ask respondents to choose from a scale of 1 to 5 (1 Never, 2 Rare, 3 Sometimes, 4 Most of the time, 5 Always) to determine the extent of use of recruitment practices in their respective organisations. For remaining constructs of selection, training and development, performance appraisal and compensation & benefits, the

underlying items are also measured using a 5 point Likert-type scale (1 Strongly disagree, 2 Disagree, 3 Neutral, 4 Agree, 5 Strongly agree) that constitutes recording agreement level in response to HR practices. The details of individual items included in constructs are provided in section 4.8.2.3.

4.8.1.3 Organisational performance construct

The final construct included in the conceptual framework refers to subjective organisational performance of SMEs. Although, there is some opposition in the literature to using subjective measures for assessing organisational performance potentially because of common method bias, still it is commonly used as a way of measuring overall performance of an organisation (Chuang & Liao, 2010; Delaney & Huselid, 1996). Following an in-depth review of the literature, multiple studies (De Kok & den Hartog, 2006; Delaney & Huselid, 1996; Nhuan, 2001; Storey, 2002; Way, 2002) measured subjective organisational performance in SMEs. The items included for assessing subjective performance were measured on a 5 point Likert-type interval scale where respondents were to choose one option on a scale of 1 to 5 (1 Very poor, 2 Poor, 3 Average, 4 Good, 5 Very good) to compare the firm's performance with regards to their competitors on a series of subjective financial and non-financial aspects. A detailed account of individual aspects/items measuring organisational performance is provided next section 4.8.2.4.

4.8.2 Survey development

The survey questionnaire (see Appendix A) consisted of a covering letter explaining the purpose of the study and four sections enabling the collection of required data. The intended measurement of different constructs (reflected in the conceptual framework) and underlying items were developed from the literature. The contents of the survey are discussed below.

4.8.2.1 Covering letter

The covering page of the instrument was carefully designed to establish the purpose of this study. This introductory section explained the importance of the study and stressed on the fact that the success of this research was entirely dependent on the provision of honest and fair information. The researcher took the responsibility for ensuring the anonymity of respondents and confidentiality of the information provided. The concluding remarks included a reminder that this questionnaire is supposed to be filled in by the HR/personnel manager, owner or a senior manager.

4.8.2.2 Section A

This section included questions relating to the demographic characteristics of respondents and their organisation (see Table 4.1).

Table 4.1

Measurement items of section A

Construct	Items (labels)	Measurement level
Demographic variables	**Size of the organisation (no. of employees)**	ratio
	Age of the organisation (no. of years)	ratio
	Industry sector	Nominal
	Ownership type	Nominal
	Involvement of owner in decision making	Ordinal
	Ownership by a larger organisation	Nominal
	Existence of a business plan	Nominal
	How effective the business plan is?	Ordinal
	Does the organisation export?	Nominal
	No. of years in export	Ordinal
	Use of IT (ICT integration)	Ordinal
	HRIS (Human resource information system)	Nominal
	HR Department or specialist	Nominal
	HRM Planning	Nominal
	Management level of the respondent	Ordinal
	Highest level of education	Ordinal
	Age group	Ordinal
	Gender	Nominal

Section A, along with demographic data, also included questions on size of the firm, firm age, sector, ownership type, ownership by a larger organisation, existence of a business plan, whether exporting, presence of HRIS and an HR department/specialist. These variables are regarded as contextual factors of SMEs.

4.8.2.3 Section B

This section includes five constructs that relate to the use of HRM practices in organisations. The first construct represents the recruitment methods (8 underlying items) exercised by an organisation followed by candidate selection practices (15 underlying items), training and development (13 items), performance appraisal (11 items) and compensation and benefits

arrangements (12 items). Each of the five constructs has numerous underlying items that are measured using a 5 point Likert-type scale (see Table 4.2). The scores from these five constructs measuring individual HR functions for each organisation were then added by creating a composite variable/construct (HRM_Formality) that represents the overall HRM formality score for an organisation.

Table 4.2

Description of measurement constructs and underlying items of section B

Construct		Items	Scale	Source
Recruitment	R1	Print Media (e.g. Newspapers, Magazines)	5 point Likert type **1 Never** **2 Rare** **3 Sometimes** **4 Most of the time** **5 Always**	(Wiesner et al., 2007) (Bohlander & Snell, 2009) (Barrett & Mayson, 2007)
	R2	Company website		
	R3	Third Party recruitment Website (e.g. Rozee.pk)		
	R4	Educational Establishments (including job fairs)		
	R5	Use of social media (e.g. LinkedIn)		
	R6	Walk-ins		
	R7	Referrals (Employee/Family friends)		
	R8	Employment agencies		
Selection	S1	Job descriptions are used during recruitment and selection process.	5 point Likert type **1 Strongly disagree** **2 Disagree** **3 Neutral** **4 Agree** **5 Strongly agree**	(De Kok & Uhlaner, 2001) (Wiesner et al., 2007) (Kelly, 2008) (Armstrong , 2009) `
	S2	The selection of prospective candidates is a step-by-step process.		
	S3	Company uses application pro forma for screening purposes.		
	S4	Organisation uses well defined criteria for selection process.		
	S5	Number of years of experience is used as a basis for hiring employees as one of the selection criteria.		
	S6	Capabilities and skills of employees are used as basis for hiring employees.		
	S7	Company conducts tests to ascertain candidates' skills and capabilities where applicable.		
	S8	Qualifications of applicants are used as one of the selection criteria.		
	S9	Preliminary/initial interviews are conducted for vacant positions.		
	S10	Second interviews are conducted for shortlisted candidates.		
	S11	Reference checks/employment history checks are conducted where necessary.		
	S12	Adequate and relevant information about the organisation and job is provided to the candidate at the time of selection. (Realistic job preview)		
	S13	Selection of a candidate is strictly based on his/her merit.		
	S14	Employment contract is provided to the successful candidate.		
	S15	New employees are hired on probation period.		

Construct		Items	Scale	Source
Training and Development	TD1	The business has a formal training budget.	5 point Likert type **1 Strongly disagree** **2 Disagree** **3 Neutral** **4 Agree** **5 Strongly agree**	(Kok & Uhlaner, 2001) (Dessler, 2002) (Wiesner et al., 2007) (Lake, 2008)
	TD2	The company conducts training on regular basis.		
	TD3	Company follows a formal/systematic way of identifying training needs. (e.g. reviewing problem areas, job analysis, performance appraisal)		
	TD4	The company arranges orientation / induction sessions for new employees to get them familiar with the working environment.		
	TD5	The company conducts on-the-job training for the new employees.		
	TD6	The company conducts on-the-job training for the current employees.		
	TD7	Mentoring and coaching methods are used for on-the-job training of employees.		
	TD8	The company facilitates and conducts training of vocation or technical nature (i.e. apprenticeships, re-training current/older employees demands).		
	TD9	The business have management & development training (i.e. leadership, supervisory skills, personal communication, graduate and postgraduate sponsorship)?		
	TD10	Off-the-job training is arranged and conducted by the company management for employees where necessary. (e.g. training sessions on how to efficiently surpass targets)		
	TD11	The company has increased training where a program previously existed.		
	TD12	Effectiveness of training is measured by pre and post-test evaluation.		
	TD13	Training can be linked to performance and productivity.		
Performance Appraisal	PA1	The company conducts performance appraisal of all employees.	5 point Likert type **1 Strongly disagree** **2 Disagree** **3 Neutral** **4 Agree** **5 Strongly agree**	(Kok & Uhlaner, 2001) (Wiesner et al., 2007) (Kelly, 2008)
	PA2	The company conducts performance appraisal on regular basis.		
	PA3	Company uses job descriptions to translate job requirements into levels of acceptable and unacceptable performance.		
	PA4	The appraisal system includes individual evaluation methods. (e.g. essay evaluation, checklists, rating scales based on performance, rating scales based on behaviours)		
	PA5	The appraisal system includes MBO method where management sets individual objectives with employees'		
	PA6	The appraisal system includes multiple-person evaluation methods. (e.g. paired comparison)		
	PA7	The company provides an opportunity for employees to evaluate their managers and their peers. (360 degree method)		
	PA8	Organisation provides feedback to employees after performance appraisal.		
	PA9	The feedback provided constructively addresses weak and strong areas.		
	PA10	The company uses performance appraisal for employee attainment/achievement. (e.g. Career development, wage increment, promotion)		
	PA11	The company uses performance appraisal for highlighting employee training and development needs.		

Construct		Items	Scale	Source
Compensation and Benefits	CB1	The company has a formal/systematic way of rewarding/compensating its employees.	5 point Likert type **1 Strongly disagree** **2 Disagree** **3 Neutral** **4 Agree** **5 Strongly agree**	(Connolly & Connolly, 2005) (Wiesner et al., 2007) (Kelly, 2008) (Bohlander and Snell, 2009)
	CB2	The Company follows Government policy on wage standards.		
	CB3	The company conducts job evaluation (a systematic way of determining the relative worth of a job in relation to other jobs in the organisation) and uses this for setting pay levels for most of the jobs.		
	CB4	Pay levels are determined based on employee performance.		
	CB5	Company takes into account the acquired skills of the employees when deciding pay levels.		
	CB6	Company values seniority when assessing pay levels.		
	CB7	Company offers individual/group incentive programs. (e.g. bonus pay, profit sharing, vacation incentives)		
	CB8	Company offers discretionary benefits to its employees. (e.g. Paid holidays, health and insurance)		
	CB9	Company offers employee services as additional benefits. (e.g. relocation allowances, child care, subsidized food/cafeteria, financial help (loans))		
	CB10	The company properly acknowledges and adequately compensates overtime.		
	CB11	Company is offering market competitive wages to its employees.		
	CB12	Jobs are grouped into well-defined pay grades.		

4.8.2.4 Section C

This section was designed to collect data with regards to the organisational performance of SMEs. Managers/owners were asked to rate their firm's performance on total of 11 items using a five point Likert-type scale (1 Very poor, 2 Poor, 3 Average, 4 Good, 5 Very good) that represented the subjective (financial and non-financial) performance of their organisation. The organisational performance construct was operationalised by adding the scores of 11 underlying items (see Table 4.3).

Table 4.3

Description of measurement constructs and underlying items of section C

Construct	Items		Scale	Source
Organisational Performance	OP1	Quality of Products or services	5 point Likert type **1 Very poor** **2 Poor** **3 Average** **4 Good** **5 Very good**	(Delaney & Huselid, 1996) (Nhuan, 2001) (Storey, 2002) (De Kok & den Hartog, 2006)
	OP2	Development/addition of new products or services		
	OP3	Ability to attract employees		
	OP4	Ability to retain employees		
	OP5	Productivity of employees		
	OP6	Skills level of employees		
	OP7	Satisfied customers/clients		
	OP8	The speed of customer order handling and processing		
	OP9	Sales turnover		
	OP10	Profitability		
	OP11	Market share		

4.8.2.5 Section D

This section asked respondents for their contact information including Position/title, complete postal address, telephone contact numbers and an electronic mail contact address. This section was designed so that respondents could be reached afterwards in case of missing data.

4.8.3 Pre-testing and pilot study

The survey was pre-tested in two ways. Firstly, the questionnaire was shared with industry and knowledge experts for their feedback on the design and contents of the questionnaire. For this, two SMEDA (small and medium enterprises development authority) managers were invited to comment on the validity of the contents in terms of how relevant they were to the Pakistani context. The researcher also invited two senior professors (faculty members at

Lahore University of Management Sciences) from the relevant field of study in order to comment on the overall design and contents of the questionnaire. The instrument was partially modified in light of the feedback from said experts to make it more suitable and relevant to the Pakistani context.

The second approach was to pilot a selection of respondents by personally administering the questionnaire. The researcher arranged 18 personal visits with SME owners/managers (representing all three business sectors) with instructions provided beforehand. The questionnaire took 18 to 22 minutes for completion and some valuable feedback was obtained in relation to the appropriateness of the questions, wording and format, layout and finally the sequencing of the questions. The survey instrument was accordingly revised as a result of this pilot survey.

4.8.4 Reliability of the survey

Reliability refers to the consistency of underlying items or questions to measure a construct without any bias (Leedy & Ormrod 2010; Sekaran & Bougie, 2009). It helps in measuring the extent to which a scale would exhibit consistent results that are free from error, if measurements are repeated (Hair et al., 1995; Malhotra, 1999; Zikmund et al., 2010). This study involves the application of internal consistency method to check the reliability of the constructs to ensure that the underlying items are measuring the same construct (De Vaus, 2002; Hair et al., 2010). The widely accepted measure to determine internal consistency is Cronbach's coefficient alpha 'α' that ranges between 0 and 1 (Hair et al., 2010; Maizura, Masilamani, & Aris, 2009). A higher value of 'α' represents greater scale reliability. As a rule of thumb, a value above 0.7 is deemed to be satisfactory to establish the reliability of a scale (Hair et al., 1998; De Vaus, 2002). The internal consistency test using Cronbach's coefficient alpha measure for the constructs of instrument used in this study (recruitment, selection, training & development, performance appraisal, compensation &benefits, HRM formality and organisational performance) exhibits satisfactory results i.e., all values above 0.7 (see Table 4.4).

Table 4.4

Reliability of constructs

Construct	***α***
Recruitment	.822
Selection	.954
Training_Development	.929
Performance_Appraisal	.940
Compensation_Benefits	.912
HRM_Formality	.910
Organizational_Performance	.952

4.8.5 Validity

Validity refers to the extent to which the underlying items of a scale accurately measure or represent the concept of interest (Hair et al., 2003). Furthermore, it is the ability of an instrument to measure the intentional constructs accurately (Leedy & Ormrod, 2010; Zikmund et al., 2010). Significant validity measures that ought to be considered by social sciences researchers are content or face validity and construct validity (Malhotra, 1999; Zikmund et al., 2010).

4.8.5.1 Content validity

Content or face validity alludes to how adequately the construct analysed has been depicted in the form of underlying items (Babbie, 2011). Dissimilar to other sorts of validity measures, content validity evaluation is based on qualitative aspects (Babbie, 2011; Yang, Wang, & Su, 2006). In order to achieve the content validity, items can be produced from various sources incorporating consultation with field experts, targeted respondents and a comprehensive review of the literature. Revisiting the research objectives and questions quite often is a good strategy to ensure that the created items genuinely reflect the topic of interest under investigation (Leedy & Ormrod, 2010; Malhotra, 2008). For the purpose of this research study, content validity has been carried out by ensuring an exhaustive review of the literature surrounding research objectives and by pre-testing and pilot studying the questionnaire (Sekaran & Bougie, 2010).

4.8.5.2 Construct validity

Construct validity is utilized to quantify how well the scores obtained from the deployed instrument correlate with the concepts and theories around which the instrument is built (Sekaran & Bougie, 2010). The most common method to achieve construct validity of an instrument is factor analysis.

Factor analysis is a dimension reduction technique to reduce an expansive number of related variables/factors to more reasonable and manageable number before the data could be analysed in depth (Pallant, 2011). It is conducted to highlight factors that might exhibit a pattern of correlations amongst observed variables that accounts for most of the variation observed in a much larger number of manifest variables (Allen & Bennett, 2010).

This study incorporates principal factor analysis (PFA), an exploratory dimension reduction technique that is able to produce reduced number of linear combinations of the original variables. Unlike PCA (Principal Component Analysis), it takes into account shared variance in variables in order to transform original variables into smaller set of linear combinations (Tabachnick & Fidell, 2007). Since, variables measured in this study stem from other studies in the literature but are going to be investigated in a newer context (SMEs in Pakistan), it was imperative to explore the parsimonious representation of observed correlations between variables (items) by latent factors. Moreover, PCA is a better choice if simply an empirical summary (confirmation) of the data is required by the researcher, whereas, PFA is more suited to a theoretical solution uncontaminated by novel and error variability (Tabachnick & Fidell, 2007) and hence, is best suited to the present scenario.

The application of factor analysis requires some important steps to be considered in order to achieve dimension reduction effectively. These steps (explained below) are carefully followed in the dimension reduction technique (PFA) used for the purpose of this study.

The far most important step refers to the assessment of data in terms of its suitability for factor analysis (Pallant, 2011). There are two fundamental issues pertaining to this; the sample size and the relationships strength amongst variables (Pallant, 2011; Tabachnick & Fidell, 2007). Tabachnick and Fidell (2007) suggested that a sample size of 150 ought to be adequate if factors extracted have high loadings and are distinctive in nature (see also Hutcheson & Sofroniou, 1999). According to Norusis (2005), a thumb rule of 300 cases is more than sufficient to run factor analysis provided that the extracted factors have medium to

high loadings. This assumption is satisfied for conducting PFA since the numbers of cases for the present study are 300 with medium to high loadings (see Section 5.3.1).

The second important issue refers to the strength of inter item correlations. Tabachnick and Fidell (2007) recommended that if the majority of the coefficients in the correlation matrix reflect a value of > 3, then factor analysis could be deemed as an appropriate tool. Pallant (2011) likewise prescribed the utilisation of factor analysis suitable if two important measures of the Kaiser-Meyer-Olkin (KMO) test of sampling adequacy (Kaiser, 1970) and Bartlett's test of sphericity (Bartlett, 1954) are met. A general rule of thumb suggests that if KMO value is > .6 and the Bartlett's test of sphericity turns out to be significant at $p < .05$, the utilization of factor analysis could be carried out (Tabachnick & Fidell, 2007).

The second important concern that should be addressed refers to determining the number of underlying factors to retain for further analysis (Malhotra et al., 2001; Pallant 2011; Tabachnick and Fidell, 2007). The most common and widely used criterion for retaining underlying factors is the Kaiser's Criterion (commonly known as 'eigenvalue rule'). Kaiser (1970) suggested a thumb rule for retaining factors with eigenvalues greater than 1. There is contention in the literature that eigenvalues reflect the total amount of variance exhibited by that factor and an eigenvalue of 1.0 or more represents a significant amount of variance (Field, 2009). It is additionally suggested that the factors extracted should account for at least 60% of the variance (Malhotra et al., 2001).

Once the number of underlying factors is decided to retain for further analysis, the following step requires interpreting those factors and the method used for this purpose is called "rotation" (Pallant, 2011). Rotation of factors incorporates 'rotating' the axis within a multidimensional space that facilitates reduction in the number of variables with high loadings, improving their interpretability (Field, 2009; Pallant, 2011). There are two most common and widely used methods utilized to achieve 'rotation' of factors; orthogonal and oblique rotation (Pallant, 2011). 'Varimax rotation' is the widely accepted and the most common orthogonal method which endeavours to reduce number of variables with high loadings on each factor that are normally uncorrelated. On the other hand, 'direct oblimin' (primarily used in PFA) is the most common procedure within oblique rotation that attempts to reduce number of variables but results in producing correlated factors (Tabachnick and Fidell, 2007; Pallant 2011). The PFA carried out to reduce dimensions of constructs for this study incorporates 'direct oblimin' rotation to produce correlated factors in line with the objectives.

The results of factor analysis carried out to establish construct validity are discussed in the next chapter (Chapter 5).

4.9 DATA ANALYSIS

This section looks at the tools and techniques considered for analysing data. The primary objective of this study is to identify any differences between three major sectors of SMEs in terms of HRM formality followed by looking at how contextual variables influence the overall HRM practices (HRM formality) and in turn how HRM formality influences performance of SMEs. Given the nature of analysis to be conducted, SPSS V20 was used for both descriptive and inferential statistical analysis. Raw data were prepared before any analysis was carried out.

4.9.1 Data entry and preparation

This process entailed coding data into the statistical package, screening data for errors and missing values, identifying any outliers and satisfying the assumption of normality of data for multivariate analysis (Fowler, 2009; Hair et al., 2006). The raw data were collected using a survey method where an SME represented a unit of analysis. The data was coded into SPSS and organised in a way where each row represented a case (individual SME) and column represented an individual item/variable (Manning & Munro, 2007).

The data were entered into SPSS and carefully screened. This was achieved by inspecting the data for any values falling out of range (Manning and Munro, 2007). The second most important step was to check for any missing values. Hair et al. (2006) argued that a researcher must be able to address the issue of missing values since it can influence the overall findings in terms of generalisation. The most common way of dealing with missing data is to ignore the cases provided that these cases are few in numbers and are evenly distributed among the data set (Tabachnick & Fidell, 2007). The data for this study posited hardly any missing values as a result of stringent screening.

The next step in terms of preparing data was to identify univariate, bivariate and multivariate outliers (Hair et al., 2006). Outliers refer to the data that are significantly distant from other observations in the overall data set (Hair et al., 2006). The univariate outlier detection consists of assessing distributions of observations for any single continuous variable and highlighting any observations that are quite distant from others (too high and too low values). Bivariate outlier detection refers to the assessment of pairs of variables jointly to highlight any high or low points. Both of these are achieved using scatter plots produced by SPSS to

detect any potential influential points. The multivariate outlier assessment is carried out for more than two variables mainly prior to a multivariate analysis. The third type of detection might become a bit complex when analysing visually through scatter plots, hence a researcher can rely on a simple test of Mahalanobis D2 to measure how distant each observation is from the mean value of overall observations (Hair et al., 2006). For this study, all of the univariate, bivariate and multivariate outliers were detected and dropped from the statistical analysis as part of satisfying assumptions for each statistical method, as detailed in the next chapter. The final step in data preparation prior to the main analysis is to make sure that the data is normally distributed. Normality of data is an important assumption in some multivariate analytical procedures but some of the statistical multivariate analyses (parametric) are robust towards a non-normal distribution of the data (Eye & Bogat 2004; Hair et al., 2006). Normality can be assessed either visually through graphical representation of the data (e.g. box plots and histograms) or by exploring descriptive properties of the data set (skewness and kurtosis). For this study, the univariate normality of all the continuous variables (Size of the organisation, Age of the organisation, Recruitment, Selection, Training and Development, Performance Appraisal, Compensation and Benefits, HRM Formality and Organisational Performance) was assessed by exploring descriptive statistics and the measures of skewness and kurtosis were satisfactory (i.e., between +2 and -2) (Field, 2009; Garson, 2012).

4.9.2 Descriptive statistics

For this study, the descriptive statistical tools provided in SPSS were utilized to gain an insight into demographic characteristics of SMEs and managers/owners (Sekaran, 2003). To explore the demographic characteristics of SMEs, all variables were analysed and reported. Furthermore, some variables were analysed to report demographic characteristics of individual SME owners/managers in terms of their gender, age, level of education etc. (Sekaran & Bougie 2010). These statistics are presented and discussed in the next chapter.

4.9.3 Inferential statistics

For this study, the variables of interest (including composite variables) are measured on continuous scales, hence parametric testing was chosen to test hypotheses. Although, some of the variables are measured on a nominal scale, some parametric tests are still effective provided that their nature of dependency is established (e.g. nominal variables can be entered into a regression model provided that these variables are ‘independent’). The two extensively used parametric tests incorporated in the present study to test hypotheses are discussed below.

4.9.3.1 ANOVA/MANOVA/ANCOVA

ANOVA or analysis of variance is a statistical procedure to compare the means of two or more than two groups (independent variables) on a single dependent variable. MANOVA could be seen as an extension of ANOVA where significance of variances for multiple groups of population could be investigated on more than one dependent variable (Gravetter & Wallnau, 1985; Howell, 2007). Furthermore, MANOVA is designed to look at multiple dependent variables while considering the effects of correlations among these dependent variables that also make the basis for using this statistical procedure in a multi-dependent variables scenario rather than conducting several separate ANOVA tests for each dependent variable to conclude any differences (Bray & Maxwell, 1982; Huberty & Morris, 1989; Tonidandel & LeBreton, 2013). The statistical procedure for comparing means of three groups (services, manufacturing and trade) on the dependent variables (e.g., HRM formality, selection) was carried out by fulfilling the following assumptions:

- ✓ Dependent variable is measured at continuous level.
- ✓ Independent variables are categorical in nature.
- ✓ Independence of observations is established
- ✓ Highlighting and omitting outliers (Both univariate and multivariate in case of MANOVA).
- ✓ Approximate normal distributions of dependent variable/s scores on each independent variable (group).
- ✓ Checking for homogeneity of variances.
- ✓ Linear relationship is observed between each pair of dependent variables for each category of independent variable (MANOVA only).
- ✓ Establishing the homogeneity of variance-covariance matrices (MANOVA only).
- ✓ Ensuring no multicollinearity among dependent variables in case of MANOVA, i.e. ensuring the correlations between dependent variables are not too high (should be less than 0.9).

(Green & Salkind, 2003; Leech & Barrett, 2005)

Analysis of variance procedure can also be used to investigate the differences in means while controlling for a third variable (control or confounding variable). The procedure is an extension of ANOVA and generally known as ANCOVA (analysis of co-variance). Where ANOVA investigates differences in means of multiple groups, ANCOVA strives for providing insight into differences in adjusted means, i.e., adjusted for covariate (Leech & Barrett, 2005). To investigate the significant differences among three business sectors

(services, manufacturing and trade) on HRM formality (dependent variable) while controlling for the effect of age and size of the firm (co-variates), the ANCOVA procedure was run.

Two additional assumptions that were satisfied for conducting an ANCOVA (in addition to the above) are highlighted as follows:

- ✓ The controlling variable should exhibit a linear relationship with dependent variable at each category/group.
- ✓ Ensuring homogeneity of regression slops, i.e. no interaction between the confounding variable and the independent variable (groups).

(Leech & Barrett, 2005)

4.9.3.2 Multiple regression analysis

Linear regression is a statistical procedure to understand how the changes in an independent variable (also known as predictor) would influence a dependent variable. This helps in measuring the extent (relative predictive significance) to which changes in a dependent variable are caused by an independent variable (Tabachnick & Fidell, 2007). Multiple regression (also referred to as Multiple Linear Regression) is an extension of simple linear regression that facilitates to measure the relationship between one or more than one predictors X_0, X_1 …., X_n and a dependent variable Y (Pallant, 2011). Regression models are widely used in social sciences research to determine and measure the extent of relationships between variables of interest (Echambadi & Hess, 2007; Fitzsimons, 2008; Judd & Kenny, 2010). The increase in exercising this tool is attributed by the fact that the conceptual models within social sciences research are becoming more complex. To understand the dependency of a given variable, it is imperative that it could be regressed on multiple independent variables simultaneously. In spite of the popularity of regression models in social sciences research, researchers need to pay attention towards certain petulant issues before exercising this tool. There are some stringent assumptions that need to be taken care of by a researcher in order to use multiple regression models effectively (Osborne & Waters, 2002; Green & Salkind, 2003; Hoyt, Leierer, & Millington, 2006; Keith, 2006; Stevens, 2009) which are strictly followed in this study and are described as follows:

- ✓ There should only be one dependent variable in the model that is measured on a continuous level.
- ✓ There could be multiple independent variables measured at either continuous or categorical level.

- ✓ There should be linear relationship between dependent variable and independent variables.
- ✓ Establishing independence of observations (i.e. independence of residuals). This could be measured using Durbin Watson's statistical tool in SPSS.
- ✓ The data should not exhibit 'Multicollinearity' (occurs when two or more predictors are highly correlated which could lead towards creating difficulty in understanding the extent of dependency based on contribution).
- ✓ Data should exhibit 'Homoscedasticity' (the variances along the line of fit should stay similar all the way). This can be observed using graphical plotting provision in SPSS by drawing studentized residuals against unstandardized predicted values.
- ✓ Detecting and dealing with any possible outliers.
- ✓ Establishing that the error terms (residuals) are approximately normally distributed. Studentized residuals can be plotted using a histogram to check the distribution.

The above assumptions were satisfied (see Chapter 5) in order to exercise linear and multiple regressions to answer two of the research questions (RQ2 & RQ3). For RQ2, multiple regression analysis is used to unfold the influence of contextual factors (firm size, firm age, ownership type, business planning, exporting and provision of HRIS and HRM department/specialist) as predictors on the HRM formality (HRM_Formality composite variable) and then further on the individual HR underlying functions of HRM formality (i.e., recruitment, selection, training & development, performance appraisal and compensation & benefits). For RQ3, a linear regression is used to estimate the effect of HRM formality (as predictor) on the organisational performance (Organisational_Performance). Extension of RQ3 also required estimating the effect of HRM formality on organisational performance while controlling for the contextual factors related to firm performance. For this, organisational performance is firstly regressed on contextual factors (firm size, firm age, ownership type, business planning, exporting and provision of HRIS and HRM department/specialist) to highlight influential predictors of performance. These influential contextual factors related to firm performance are then controlled in the HRM-performance link using multiple regression analysis.

4.10 ETHICAL CONSIDERATIONS

Ethics (moral principles) in research refers to the conduct of a researcher in relation to protecting rights of those who become the research subject (Creswell, 2003; Saunders et al., 2007). Following moral obligations in conducting research ultimately favours researchers to

ensure that the results and outcomes are truly representative of perceived data and relevant conditions (McPhail, 2000). Sekaran and Bougie (2009) proposed that a researcher must conduct research in good faith, keeping in mind not only the objectives of the study (self-interest) but the rights of the organisation (subject-interest) as well. Although, there are many guidelines prescribed for ensuring ethical standards in survey research, the most recent and valid is proposed by Zikmund et al. (2010). His work highlighted four core ethical issues relating to survey research namely: informed consent, right to withdraw, confidentiality and anonymity of respondent and finally a subject's right to privacy of information.

For this study, the researcher has ensured that the guidelines for meeting ethical standards of survey research are followed. The issues addressed in a bid to ensure the moral obligations are discussed below:

- The first and most important is to ensure the consent of the subjects to participate in the study. The participants for this study were contacted via telephone and email to explain the purpose of the study and then securing their will to fully participate in the study either through self-administration process or by filling out online questionnaire (web survey).
- Respondents were informed prior to the data collection process that they were free to withdraw from the process at any stage by simply asking the researcher and they were not required to present a reason for this.
- Confidentiality and anonymity of the respondent refers to ensuring that the personal demographic data of the subject is not disclosed to third party without the consent of that subject. The covering letter for the questionnaire explicitly highlighted that the demographic information provided by the respondents would not be disclosed or published and it is the researcher's responsibility to ensure the anonymity and confidentiality of the data provided.
- Right to privacy of information advocates that the information provided by the respondent would be dealt with confidentiality. The researcher ensured this by not only mentioning in the covering letter but also by explaining (in case of self-administered questionnaire) in person prior to data collection process that the information provided would be kept confidential and the researcher would use the information to present aggregate findings without identifying/highlighting any individual/organisation. To comply with this provision, the researcher strictly ensured that the collected data was only accessible by the supervisor in addition to himself.

Furthermore, the data collection, coding and analysis were personally undertaken by the researcher to ensure the confidentiality of data.

- The researcher provided contact details in the covering letter of the questionnaire to encourage participants to contact in case of any query.

4.11 LIMITATIONS

The research design exhibits certain limitations that might influence the outcomes of this research. The first limitation refers to the sampling bias that may have occurred due to sampling method used. The stratified random sampling design does not guarantee that the sample is entirely representative of the target population (Sekaran, 2003). The unavailability of a comprehensive business directory for SMEs in Pakistan and the absence of explicit information on SME statistics based on sector division might have created a sample bias in terms of extracting a most suitable sampling frame. Moreover, under-coverage bias may have occurred due to an overwhelming number of respondents being male (72.3 %). One reason for this is that the workplaces in Pakistan are increasingly dominated by males due to the national culture that discourages working women. In terms of sample size, the researcher was aiming for at least 360 valid responses from three industrial sectors but in a struggle to ensure an equal representation from each sector and the high cost involved in surveying firms that were geographically dispersed, the researcher settled for 300 valid responses.

Limitations with regards to the survey method used include social desirability bias that may have occurred due to respondents trying to portray a positive image of the organisation either deliberately or unintentionally (Zikmund et al., 2010). Secondly, extremity bias may have occurred where respondents consistently select high or low options throughout the questionnaire (Zikmund et al., 2010). However, the researcher thoroughly screened the questionnaires to highlight any extremity bias and exclude such cases.

The construct developed to measure organisational performance for the present study might have created a bias due to its subjective nature. However, the issue is discussed and addressed in the literature review (see Chapter 2). Moreover, single respondent bias may have influenced the survey since both of the sections, measuring HRM formality and underlying constructs and organisational subjective performance are reported by the same respondent (Katou & Budhwar, 2007). However, the procedure is common across a number of similar studies (e.g. Chang & Chen 2002; Collings et al., 2010; Guthrie et al., 2002; Urbano & Yordanova, 2008).

Moreover, the first research question (RQ1) requires unfolding differences among three SME sectors (manufacturing services and trade) in terms of the adoption of HRM practices. Since two divergent stances exist in the literature with regards to the orientation of SMEs (i.e., homogenous vs heterogeneous) when it comes to the adoption of HRM practices (see section 2.2.2), this study assumes the perspective of homogeneity in SMEs when looking at differences among business sectors (Jackson & Schuler 1995; Paauwe & Boselie 2003; Schuler & Jackson 2005; Tsai, 2010). Advocates of heterogeneity consider that SMEs from even a single industrial sector might exhibit varying tendencies to adopt HRM practices owing to certain institutional factors such as: product type, owner's characteristics, and culture. (Baron & Hannan, 2002; Culkin & Smith, 2000; Gilman & Edwards, 2008). Since most of these factors are related to the size and age of the firm (Budhwar & Debrah, 2001; Harney & Dundon, 2006), this study examines HRM differences among three business sectors while controlling for the effect of size and age of the firm, thereby reducing the implications that might arise due to the heterogeneity of SMEs.

Lastly, the economic data regarding SMEs in Pakistan presented in Section 3.2 is around a decade old since it is the most recent available from the Pakistan Bureau of Statistics. Given the changing economic situation, the unavailability of recent economic data regarding SMEs in Pakistan presents limitation for potential researchers and policy makers. However, the most recent contributions of overall economic activities from different industrial sectors (manufacturing, trade and services) to national GDP looks promising when compared with similar data from 2008. The manufacturing sector's contribution stands at 20.8 per cent during financial year 2017 as compared to 18 per cent in 2008. The contribution from the trade sector is around 19 per cent (FY 2017) as compared to 18.7 per cent in 2008. Similarly, services sector share is 45 per cent in GDP during FY2017 as compared to 42.6 per cent in 2008. Moreover, the economy of Pakistan has shown a steady momentum in the last decade as the GDP growth reached 5.28 per cent during financial year 2016-17, the highest in the last 10 years (Ministry of Finance, 2017; PBS, 2017). This progress entails valuable economic contributions from industrial sectors (manufacturing, services and trade) that include economic activities of small and medium sized businesses as well. Since the nature of people management in Pakistani organisations (regardless of firm size) remains largely ad-hoc and informal, there is an acute need for HRM related research from government, professional bodies and educational establishments in order to enable the economic activities progress further (Muhammad, 2015).

4.12 SUMMARY

This chapter covered different aspects of the research methodology including the rationale for choosing appropriate dimensions and approach in methodology to achieve research objectives. This incorporates the decisions in relation to adopting a suitable research philosophy, approach, design and strategy, sampling design and procedure, data collection methods, data analysis techniques and finally the issues in conducting a survey research.

To sum up, this research follows a positivistic paradigm with a deductive approach where established theories are tested in a new context. The research uses a cross-sectional approach with quantitative methodology involving analysis of primary data collected through a survey method. Stratified sampling is used in order to include three major sectors of SMEs. A structured questionnaire was presented to respondents. Statistical methods used to test hypotheses were then discussed with their underlying assumptions followed by ethical constraints and limitations of the proposed research methodology.

Chapter 5 Results

5.1 INTRODUCTION

This chapter presents an analysis of data and commences with the descriptive statistics covering the key characteristics of the SMEs and their respondents, followed by measures of central tendency and spread. Univariate normalisation of continuous variables is then tested followed by factor analysis for dimension reduction. Inferential statistics are then used to investigate hypotheses. The first research question (RQ1) looks at sector differences among SMEs based on their level of HRM Formality (adopted HRM practices) and is explored using analysis of Variance. The second research question (RQ2) investigates possible relationships between contextual variables and HRM formality (including individual HRM practices variables, e.g., performance appraisal). Finally, the third research question (RQ3) is explored by testing hypotheses in relation to determining how HRM formality influences organisational performance of SMEs using multiple regression analysis.

5.2 DESCRIPTIVE ANALYSIS

This section reports on the key characteristics of organisations (SMEs) and the respondents (owners/managers).

5.2.1 Key characteristics of organisations (SMEs)

The respondent organisations consisted of three equal size (100 each) strata namely: manufacturing, services and trade. The geographical dispersion of the respondents was limited to the province of Punjab that accounts for more than 65% of the SMEs operating in Pakistan (SMEDA, 2007). The sample consisted of SMEs representing various industrial cities of Punjab to overcome any geographical bias (see Table 5.1).

Table 5.1

Geographical dispersion of respondent organisations in Punjab

City	*Frequency (N=300)*	*%*
Total	300	100.0
Lahore	102	34.0
Faisalabad	35	11.7
Multan	30	10.0
Rawalpindi	29	9.7
Islamabad	26	8.7
Sialkot	24	8.0
Gujranwala	23	7.7
Sahiwal	19	6.3
Sargodha	12	4.0

Table 5.1 shows the number of respondent organisations from each industrial city of Punjab province. The highest representation was from Lahore city and accounted for 34% (102 in total) of the sample. Being the capital of Punjab and hub for trade, Lahore is a vibrant cosmopolitan city that accounts for more than 40% of the total SMEs operating in Punjab. The second highest representation was from Faisalabad that accounted for nearly 12%. Faisalabad is the second strongest trading hub in Punjab with its vibrant textile industry and is also known as 'Manchester of Pakistan'. However, Sargodha which is home to small industries accounted for only 4% of the total representation.

Other key characteristics of organisations (SMEs) analysed included size of organisation, business sector, ownership type, involvement of owner in decision making, ownership by a larger firm, existence of a business plan, altered practices according to business plan, does the

organisation export, no. of years exporting, use of IT, existence of HRIS, existence of HR department or manager and HRM planning (see Table 5.2).

Table 5.2

Key organisational characteristics of SMEs

Organisational Characteristics	Response Categories	*Frequency (N=300)*	*%*
[a] Size of organisation	20-50	80	26.6
	51-100	94	31.4
	101-250	126	42.0
Sector	Manufacturing	100	33.3
	Services	100	33.3
	Trade	100	33.3
Ownership type (Family-owned)	Yes	138	46.0
	No	162	54.0
Family Decision Making (*n*=138)	Hardly ever	8	5.8
	Occasionally	19	13.8
	Sometimes	30	21.7
	Frequently	40	29.0
	Almost always	41	29.7
Ownership by a larger/Parent Firm	Yes	112	37.3
	No	188	62.7
Established a business Plan	Yes	206	68.7
	No	94	31.3
Altered practices according to business plan (*n*=206)	Not at all	17	8.3
	Very little	40	19.4
	Moderately	44	21.4
	Fairy well	68	33.0
	Comprehensively	37	18.0
Exporting	Yes	139	46.3
	No	161	53.7
Exporting years (*n*=139)	Less than 2 years	16	11.5
	2-5 years	36	25.9
	More than 5 years	87	62.6
Use of IT	Very low	24	8.0
	Low	39	13.0
(ICT integration into work processes)	Moderate	75	25.0
	High	84	28.0
	Very high	78	26.0
HRIS (Human resource information system)	Yes	162	54
	no	138	46
HRM Department/Manager	Yes	148	49.3
	no	152	50.7
HRM Planning	Yes	185	61.7
	No	115	38.3

Note. [a] Size of organisation is primarily a continuous variable and the response categories are created only to understand the dispersion of SMEs in relation to firm size.

Firms with 20 to 50 employees accounted for nearly 26.6% whereas, firms with an employee size of 51 to 100 represented 31.4% and the SMEs between 101 and 250 employees accounted for 42% of the overall representation. In line with the objectives of this research study, a stratified probability sampling was used which required an equal representation of SMEs from three business sectors (Manufacturing, Services and Trade). Hence, the sample represented an equal strength in terms of number of SMEs from these three major sectors.

From the sample of 300 organisations, 138 (46%) were family owned, out of which only 5.8 per cent reported that the family had little influence on the organisation with regards to decision making (de-centralised), 13.8 per cent reported occasional involvement, 21.7 per cent reported involvement only sometimes and nearly 60 per cent reported frequent involvement in decision making. Moreover, 68.7 per cent agreed to have established a business plan, 37.3 per cent were associated with a larger/parent organisation and 46.3 per cent were exporting with majority of SMEs (62.6%) associated with exporting for more than five years. With regards to provision of HRIS (Human resource information system) and HRM department/specialist, 162 SMEs (54%) agreed upon existence of HRIS and 148 (49.3%) confirmed the presence of an HRM department or specialist.

5.2.2 Key characteristics of respondents (owners/managers)

The demographic information of respondents was analysed to understand some key characteristics of those respondents. Table 5.3 illustrates these key characteristics according to which 29% of the respondents were either the owners or the CEOs of the firm. However, the majority of the respondents (39.3%) were senior managers whereas middle managers and supervisors accounted for 25% and 6.7% respectively. With regards to education level of respondents, 120 (40%) had a bachelor's degree, 99 (33%) were holding a masters level qualification while 40 (13.3%) were diploma holders. Distribution of data with regards to age of respondents suggests that majority (135, 45%) of respondents were under the age of 30, 87 respondents (29%) were between the age of 30 and 40, 60 respondents (20%) were between the age of 40 and 50 and lastly a total number of 18 respondents (6%) were above 50 years old. Since the questionnaires were predominantly filled by owners/CEOs or people in key positions in organisations, it is worth noting that 74% of the overall respondents were aged under 40.

Table 5.3

Key characteristics of respondents

Characteristics of Respondents	Response Categories	*Frequency (N=300)*	*%*
Management Level	CEO/Owner	87	29.0
	Senior manager	118	39.3
	Middle manager	75	25.0
	Supervisor	20	6.7
Formal Education	Primary	4	1.3
	Secondary	34	11.3
	Diploma	40	13.3
	Bachelors	120	40.0
	Masters	99	33.0
	Other	3	1.0
Age	Under 30	135	45.0
	30-40	87	29.0
	40-50	60	20.0
	Above 50	18	6.0
Gender	Male	217	72.3
	Female	83	27.7

Lastly, the gender wise distribution of data for respondents indicates that an overwhelming majority of respondents (217, 72.3%) were male, with 83 female respondents (27.7%).

5.2.3 Key characteristics of organisations based on sector division

One of the research objectives for this empirical study is to investigate differences among three business sectors of SMEs on HRM practices/functions. Hence, it is imperative to comprehend the differing organisational characteristics of SMEs on the basis of their business sector orientation. Table 5.4 exhibits some key organisational characteristics of SMEs based on sector division according to which, the majority of trade SMEs (62%) were family owned whereas, majority of services SMEs (74%) were non-family owned. Moreover, the majority of the services and manufacturing SMEs reported that they had established a business plan (83 and 71 respectively) as opposed to trading firms (52). With regards to exporting, manufacturing sector SMEs reported highest representation (70%) among three sectors. Also, the highest representation in terms of existence of HRIS and HRM department/specialist among three sectors was associated with services sector SMEs.

Table 5.4

Characteristics of organisations based on sector division

Organisational Characteristics	Response Categories	Manufacturing		Services		Trade	
		Frequency (n=100)	*%*	*Frequency (n=100)*	*%*	*Frequency (n=100)*	*%*
Ownership type (Family-owned)	Yes	42	42.0	26	26.0	62	62.0
	No	58	58.0	74	74.0	38	38.0
Ownership by a larger/Parent firm	Yes	34	34.0	55	55.0	23	23.0
	No	66	66.0	45	45.0	77	77.0
Established a business plan	Yes	71	71.0	83	83.0	52	52.0
	No	29	29.0	17	17.0	48	48.0
Exporting	Yes	70	70.0	33	33.0	36	36.0
	No	30	30.0	67	67.0	64	64.0
Use of IT	Very low	3	3.0	3	3.0	18	18.0
(ICT integration into work processes)	Low	11	11.0	5	5.0	23	23.0
	Moderate	28	28.0	16	16.0	31	31.0
	High	42	42.0	24	24.0	18	18.0
	Very high	16	16.0	52	52.0	10	10.0
HRIS	Yes	50	50.0	67	67.0	32	32.0
	No	50	50.0	33	33.0	68	68.0
HRM Department	Yes	43	43.0	66	66.0	35	35.0
Manager	No	57	57.0	34	34.0	65	65.0
HRM Planning	Yes	72	72.0	77	77.0	36	36.0
	No	28	28.0	23	23.0	64	64.0

Lastly, with regards to HRM planning, manufacturing and services firms reported the highest inclination (72% and 77% respectively) compared to trading firms that accounted for only 36 per cent.

5.2.4 Key characteristics of respondents based on sector division

An analysis of key characteristics of respondents (owners/managers) on the basis of differing business sectors is presented in Table 5.5.

Table 5.5

Characteristics of respondents based on sector division

Respondents Characteristics	Response Categories	Manufacturing		Services		Trade	
		Frequency (n=100)	*%*	*Frequency (n=100)*	*%*	*Frequency (n=100)*	*%*
Management Level	CEO/Owner	26	26.0	23	23.0	38	38.0
	Senior manager	47	47.0	40	40.0	31	31.0
	Middle manager	20	20.0	35	35.0	20	20.0
	Supervisor	7	7.0	2	2.0	11	11.0
Formal Education	Primary	1	1.0	3	3.0	0	0.0
	Secondary	10	10.0	0	0.0	24	24.0
	Diploma	16	16.0	2	2.0	22	22.0
	Bachelors	37	37.0	34	34.0	28	28.0
	Masters	35	35.0	60	60.0	25	25.0
	Other	1	1.0	1	1.0	1	1.0
Age	Under 30	41	41.0	54	54.0	40	40.0
	30-40	33	33.0	31	31.0	23	23.0
	40-50	18	18.0	11	11.0	31	31.0
	Above 50	8	8.0	4	4.0	6	6.0
Gender	Male	68	68.0	67	67.0	82	82.0
	Female	32	32.0	33	33.0	18	18.0

With regards to the management level of respondents, trade sector SMEs reported highest representation (38%) where a respondent was CEO/owner followed by manufacturing (26%) and services (23%) sector SMEs. An overwhelming majority of respondents from services sector SMEs (60%) had master's level qualification as compared to manufacturing (35%) and trading (25%) sector SMEs. Moreover, service firms had the most respondents under the age of 30 (54%), followed by manufacturing (41%) and trading (40%) firms. Also, most respondents were men particularly in the trade sector.

5.2.5 Measures of central tendency and spread

A descriptive analysis of underlying items of constructs (recruitment, selection, training and development, performance appraisal, compensation and benefits and organisational performance) is provided in Appendix B. Items included in these constructs were measured using Likert-type scale ranging from 1 to 5. For recruitment, the highest mean score (M = 3.9, SD = 0.96) was associated with recruitment through employee referrals whereas, recruitment through educational establishments (including job fairs) reported the lowest mean score (M = 2.5, SD = 1.30). The highest mean score (M = 3.9, SD = 0.85) for selection was reported by item inquiring respondents about conducting initial interviews for vacant positions whereas, the lowest mean score (M = 3.1, SD = 1.21) was associated with conducting tests to ascertain skills and capabilities of candidates. With regards to training and development, the question item on provision of a formal training budget reported the lowest mean score of 3.0 (SD = 1.19) while the highest mean score (M = 3.8, SD = 0.91) was associated with on-the-job training of new employees. The highest mean score (M = 3.7, SD = 1.00) from underlying items representing performance appraisal was reported by the question item on use of performance appraisal for employee attainment/achievement (e.g., career development) whereas, the lowest mean score (M = 2.8, SD = 1.25) was related to provision of employee evaluation using 360 degree method. Similarly, for compensation and benefits variable, the highest mean score (M = 3.8, SD = 0.87) was related to underlying item on assessment of pay levels with regards to seniority while use of job evaluation for setting pay levels indicated the lowest mean score (M = 3.1, SD = 1.16). Lastly, with regards to organisational performance, the highest mean score (M = 3.9, SD = 0.93) was associated with satisfied customers/clients whereas the lowest mean score (M = 3.2, SD = 1.20) was reported by item inquiring the health of market share.

5.3 DATA PREPARATION

This section presents results of factor analysis to establish construct validity, univariate data normality tests and analysis of standardised residuals of data (variables) to detect any extreme values (outliers).

5.3.1 Factor analysis

It was imperative to validate the instrument in terms of how accurately the underlying items measure the concepts that would be further investigated. Data screening in light of the underlying assumptions explained previously (see Section 4.8.6.2) was carried out to make sure of its suitability for exploratory factor analysis (EFA) using SPSS version 20. The sample of 300 was explored using Principal Axis Factoring. The KMO value of .97 and Bartlett's test of Sphericity significance ($p < .05$) indicated that the data were highly suitable for exercising factor analysis. The procedure was carried out using 'oblique rotation' and 'Kaiser's Criterion' in order to identify the accurate number of factors (i.e., eigenvalue > 1) to retain with possibility of these factors being correlated. Pallant (2011) suggested that the most suitable approach to identify the number of items to retain within an extracted factor is by investigating the 'pattern matrix' which is an integral part of the factor analysis output. The factor loadings in 'pattern matrix' exhibit the strength of correlation of that variable with the extracted factor. Tabachnick and Fidell (2007) proposed that the minimum strength of correlation for an item should be '.32' in order to be retained in that construct. Items loading below this threshold coupled with those loading on more than one factors (cross-loaders) could be deleted from further analysis suggesting that those items do not measure the construct.

Factor analysis (see Table 5.6) presented a structure comprising eight factors based on 'Kaiser's Criterion'. Two factors had either less than three item loadings or exhibited cross-loadings based on which these two factors were discarded from further analysis (Costello & Osborne, 2005; Tabachnick & Fidell, 2007).

Table 5.6

Pattern Matrix [a] representing factor loadings

	Pattern Matrix [a]							
Items	1	2	3	4	5	6	7	8
R1								.431
R2		-.423						
R3		-.329						
R4		-.611						
R5		-.536						
R6								
R7								.531
R8		-.560						
S1							-.576	
S2							-.574	
S3							-.553	
S4							-.562	
S5							-.660	
S6							-.793	
S7							-.500	
S8							-.668	
S9							-.532	
S10							-.348	
S11							-.354	
S12							-.499	
S13							-.525	
S14							-.399	
S15							-.436	
TD1					.385			
TD2					.420			
TD3					.362			
TD4								
TD5					.362			.303
TD6								
TD7								
TD8					.479			
TD9		-.310			.381			
TD10					.438			
TD11					.494			
TD12					.434			
TD13					.448			
PA1	.353							
PA2	.530							
PA3	.353							
PA4	.610							
PA5	.565					-.357		
PA6	.547							
PA7	.452							
PA8	.643							
PA9	.762							
PA10	.632							
PA11	.409							
CB1						-.407		
CB2						-.435		
CB3						-.474		
CB4				.400				
CB5					.375	-.370		
CB6				.455				
CB7						-.615		
CB8						-.605		
CB9		-.302						
CB10						-.591		
CB11						-.470		
CB12						-.452		
OP1			-.629					
OP2			-.591					
OP3			-.607					
OP4			-.743					
OP5			-.691					
OP6			-.675					
OP7			-.730					
OP8			-.638					
OP9			-.601					
OP10			-.619					
OP11			-.602					

Note. Extraction Method: Principal Axis Factoring, Rotation Method: Oblimin with Kaiser Normalization
Factor loading < .3 are suppressed
[a] Rotation Converged in 27 iterations

The items with loadings of less than .3 were dropped by the procedure which is represented by blank cells corresponding to those items on all of the components. In addition, cross-loading items were also dropped in order to make a construct truly representative of its underlying items. As a result of this, 12 items were discarded from further analysis. The scores for the underlying items of each retained factor were then added to make composite variables. The explanation of each retained factor with its underlying finalised items is exhibited in Table 5.7.

Table 5.7

Retained factors with finalised underlying items

Construct No.	Construct Name	Underlying Items
2	Recruitment	R2, R3, R4, R5, R8
7	Selection	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12,S13,S14,S15
5	Training and Development	TD1, TD2, TD3, TD8, TD10, TD11, TD12, TD13
1	Performance Appraisal	PA1, PA2, PA3, PA4, PA6, PA7, PA8, PA9, PA10, PA11
6	Compensation & Benefits	CB1, CB2, CB3, CB7, CB8, CB10, CB11, CB12
3	Organisational Performance	OP1,OP2,OP3,OP4,OP5,OP6,OP7,OP8,OP9,OP10,OP11

The correlations among retained factors were mostly above .3 (see Table 5.8) that suggested the formation of a new composite variable (HRM_Formality) with underlying factors representing HRM practices (Recruitment, Selection, Training and Development, Performance Appraisal and Compensation & Benefits).

Table 5.8

Correlations of finalised factors

Factor Correlation Matrix						
Factors	1	2	3	5	6	7
1	1					
2	-.421	1				
3	-.621	.341	1			
5	.503	-.079	-.518	1		
6	-.468	.189	.470	-.401	1	
7	-.588	.312	.545	-.458	.504	1

Hence, the finalised variables that were carried forward for further investigation (in addition to single item variables representing determinants/contextual factors) consisted of Recruitment, Selection, Training_Development, Performance_Appraisal, Compensation_Benefits, overall HRM Formality (Composite variable comprising of five HRM practices/functions) and Organisational_Performance.

5.3.2 Data normality

Univariate data normality of all the continuous variables (Size of the organisation, Age of the organisation, Recruitment, Selection, Training and Development, Performance Appraisal, Compensation and Benefits, HRM Formality and Organisational Performance) was assessed by exploring descriptive statistics and the measures for skewness and kurtosis are presented in Table 5.9.

Table 5.9

Measures of skewness and kurtosis for variables

Variables	Skewness	*SE*	Kurtosis	*SE*
Size_Organisation	.616	.141	-.869	.281
Established_years	.445	.141	-.914	.281
Recruitment	-.101	.141	-.828	.281
Selection	-.517	.141	-.645	.281
Training_Development	-.526	.141	-.654	.281
Performance_Appraisal	-.586	.141	-.501	.281
Compensation_Benefits	-.352	.141	-.882	.281
HRM_Formality	-.591	.141	-.540	.281
Organisational_Performance	-.443	.141	-.868	.281

Note. $N = 300$. *SE*: Standard error.

All of the continuous variables are approximately normally distributed since all of the kurtosis and skewness values for each variable were well inside the range of ± 2 (Field, 2000; Garson, 2012; SPSS Handbook, 2010).

5.3.3 Univariate outliers

An analysis of standardised residuals (*Z*-scores) of the data set was carried out to identify any extreme points. The maximum and minimum values of the *Z*-scores for each variable are reported in Table 5.10.

Table 5.10

Minimum and maximum values of Z-scores calculated for variables

Variables	*Z-scores (N=300)*	
	Min	*Max*
Size_Organisation	-1.24	2.04
Established_years	-1.49	2.27
Recruitment	-1.79	2.20
Selection	-2.47	1.58
Training_Development	-2.29	1.95
Performance_Appraisal	-2.72	1.74
Compensation_Benefits	-2.10	1.76
HRM_Formality	-2.44	1.55
Organisational_Performance	-2.26	1.50

The minimum and maximum values of standardised residuals for each variable were between the range of -3.29 and 3.29 confirming the absence of any extreme values in data set (Tabachnick & Fidell, 2007).

5.4 EXPLORING RESEARCH QUESTIONS: HYPOTHESES TESTING

This section presents analysis of data (variables) using inferential statistics to test hypotheses included in the research questions.

5.4.1 RQ1: Differences among SME sectors on HRM formality

The first research question (RQ1) includes testing hypotheses to explore differences among three business sectors (manufacturing, services and trade) in terms of overall HRM formality and underlying HRM practices/functions (recruitment, selection, training and development, performance appraisal and compensation & benefits). Table 5.11 provides a list of hypotheses to be tested and the inferential methods used.

Table 5.11

Inferential methods used to test hypotheses for RQ1

Hypotheses	Variables	Inferential method
$H1_a$: Services firms are more formal than manufacturing firms in terms of overall HRM formality. **$H1_b$:** Services firms are more formal than trade firms in terms of overall HRM formality. **$H1_c$:** Manufacturing firms are more formal than trade firms in terms of overall HRM formality.	**Independent** ✓ Manufacturing ✓ Services ✓ Trade **Dependent** ✓ HRM_Formality	ANOVA
$H1_d$: Services firms are more formal than manufacturing firms in terms of individual HRM practices/functions. **$H1_e$:** Services firms are more formal than trade firms in terms of individual HRM practices/functions. **$H1_f$:** Manufacturing firms are more formal than trade firms in terms of individual HRM practices/functions.	**Independent** ✓ Manufacturing ✓ Services ✓ Trade **Dependent** ✓ Recruitment ✓ Selection ✓ Training_Development ✓ Performance_Appraisal ✓ Compensation_Benefits	MANOVA
$H1_g$: Services firms are more formal than manufacturing firms in terms of overall HRM formality when controlled for age and size of the firm. **$H1_h$:** Services firms are more formal than trade firms in terms of overall HRM formality when controlled for age and size of the firm. **$H1_i$:** Manufacturing firms are more formal than trade firms in terms of overall HRM formality when controlled for age and size of the firm.	**Independent** ✓ Manufacturing ✓ Services ✓ Trade **Dependent** ✓ HRM_Formality **Control** ✓ Size_Organisation ✓ Established_years	ANCOVA

5.4.1.1 Differences among SME sectors on overall HRM formality

The differences among three business sectors of SMEs in terms of overall HRM formality were explored using the analysis of variance (ANOVA). The underlying assumptions for carrying out ANOVA were tested that firstly included detection of any significant outliers in each of the group (independent variables) using a boxplot. There were no outliers (see Appendix D) for data points greater than 1.5 box-lengths from the edge of the box except for only a single data point in services group that was very close to 1.5 box-lengths. Provided that the difference was not considerable, this case was included in the main analysis. The second assumption required to explore the homogeneity of variances i.e., the population variances of the dependent variable (HRM_Formality) should be equal for each group of the independent variable (SME sectors). The homogeneity of variances was assessed using Levene's test of equality of variances according to which, this assumption was violated since the test was statistically significant ($p < .001$). To explore the differences between groups, a modified version of ANOVA (Welch analysis of variance) was used. Provided that the test (Robust tests of Equality of Means) turned out to be significant, Welch's $F(2, 188.42) = 56.0$, $p < .001$, pair wise comparisons could be investigated using Games-Howell post-hoc analysis (Laerd Statistics, 2015; Lix & Keselman, 1996).

Table 5.12

Multiple comparisons of groups on HRM formality using Games-Howell Post-hoc tests

(I) Sector	(J) Sector	Mean Difference (I – J)	*SE*	*Sig.*	95% CI	
					Lower Bound	Upper Bound
Manufacturing (*M* = 153.75)	Services	-22.2*	4.22	.000	-32.2	-12.2
	Trade	20.6*	4.96	.000	8.87	32.3
Services (*M* = 175.96)	Manufacturing	22.2*	4.22	.000	12.2	32.2
	Trade	42.8*	4.14	.000	33.0	52.6
Trade (*M* = 133.15)	Manufacturing	-20.6*	4.96	.000	-32.3	-8.87
	Services	-42.8*	4.14	.000	-52.6	-33.0

Note. Dependent variable: HRM_Formality. *SE* = Standard Error. CI = Confidence interval
*$p < 0.05$

Games-Howell post-hoc analysis for comparisons of groups (sectors) on HRM_Formality scores revealed that the increase in mean scores from trade to manufacturing (20.6, 95% CI [8.87, 32.3]) was statistically significant ($p < .001$). Similarly, there was an increase in the mean scores from manufacturing to services (22.2, 95% CI [12.2, 32.2]) and the increased difference in means was significant at $p < .001$. Therefore, we can accept the hypotheses

($H1_a$, $H1_b$, $H1_c$) suggesting that services SMEs are more formal in terms of overall HRM practices (HRM_Formality) than manufacturing and trade sector SMEs, and also manufacturing SMEs have adopted more formalised HRM practices than trade sector SMEs.

5.4.1.2 Differences among SME Sectors on individual HRM practices/functions

Multivariate analysis of variance (MANOVA) was conducted to investigate any possible differences among SME sectors in terms of individual HRM practices/functions (recruitment, selection, training & development, performance appraisal and compensation & benefits). The underlying assumptions for MANOVA were tested before the main analysis. Univariate outliers for each dependent variable on three groups were checked by inspecting *Z*-scores distribution (see Table 5.13) that confirmed the absence of any extreme points since the minimum and maximum values of standardised residuals for each dependent variable (HRM practices/functions) on three groups (sectors) were well inside the range of $\pm$ 3.29 (Tabachnick & Fidell, 2007).

Table 5.13

Z-scores of dependent variables on different groups

	Manufacturing		Services		Trade	
Dependent Variables	*Max*	*Min*	*Max*	*Min*	*Max*	*Min*
Recruitment	2.00	-1.80	2.20	-1.40	1.60	-1.80
Selection	1.34	-2.47	1.58	-1.74	1.58	-2.39
Training_Development	1.54	-2.31	1.96	-1.20	1.26	-2.31
Performance_Appraisal	1.27	-2.27	1.74	-1.24	1.50	-2.73
Compensation_Benefits	1.76	-2.10	1.76	--1.80	1.61	-2.10

The detection of multivariate outliers was carried out by inspecting the measure of Mahalanobis distance, a procedure that can highlight any unusual combination of values on the dependent variables. The scores created by the test are organised in a descending order to visually investigate the maximum value which is compared against chi-square (χ^2) distribution with degrees of freedom equal to the number of dependent variables and an alpha level of .001 (i.e., $p < .001$). The cases breaching the cut-off value (based on the number of dependent variables) can then be discarded from the main analysis (Rencher & Christensen, 2012; Laerd Statistics, 2015). The Mahalanobis distance measure for present data set highlighted only one case (MD = 21.75) that was breaching the critical value (MD = 20.52 for five dependent variables) that was dropped from the procedure.

Next, multicollinearity of dependent variables and linearity of each pair of dependent variables for each group were checked. The dependent variables should be moderately

correlated with each other (i.e., *r* between .30 and .90) otherwise there might not be any multivariate effect (Brace, Kemp & Snelgar, 2006). The correlations between dependent variables for MANOVA analysis were between .30 and .90 (see Appendix C) confirming the suitability of multivariate analysis. Also, a linear relationship between dependent variables (recruitment, selection, training & development, performance appraisal and compensation & benefits) in each group (manufacturing, services and trade) was obvious as assessed by scatter plot (see Appendix E). A further assumption of MANOVA requires checking for equality of variance-covariance matrices using Box's test for equality of covariance matrices. This assumption was violated since the test was statistically significant ($p < .001$). Provided that the sample sizes for each of the group were equal, this assumption is less of a problem for multivariate tests (Huberty & Olejnik, 2006; Laerd Statistics, 2015).

The multivariate test suggested that difference existed between groups on set of dependent variables that was statistically significant, $F(10, 586) = 18.82$, $p < .001$; Pillai's $v = 0.31$, partial $\eta^2 = 0.16$. Multiple comparisons of groups on each of the dependent variable were then investigated using Games-Howell post-hoc tests to unfold where exactly differences existed (See Table 5.14), according to which there were mean scores increase from trade to manufacturing and manufacturing to services group on all five dependent variables that were statistically significant ($p < .05$). Therefore, the hypotheses ($H1_d$, $H1_e$ and $H1_f$) suggesting that services sector SMEs are more formal than manufacturing and trade SMEs in terms of individual HRM practices/functions and manufacturing SMEs are more formalised than trade firms with regards to the adoption of individual HRM practices/functions were accepted.

Table 5.14

Multiple comparisons of groups on HRM practices/functions using Games-Howell Post-hoc

Dependent Variable	(I) Sector	(J) Sector	Mean Difference (I – J)	*SE*	*Sig.*	95% CI	
						Lower Bound	Upper Bound
Recruitment	Manufacturing (*M* = 13.40)	Services	-3.51*	.630	.000	-5.00*	-2.02
		Trade	1.72*	.688	.035	.10*	3.35
	Services (*M* = 16.91)	Manufacturing	3.51*	.630	.000	2.02*	5.00
		Trade	5.23*	.596	.000	3.82*	6.64
	Trade (*M* = 11.68)	Manufacturing	-1.72*	.688	.035	-3.35*	-.10
		Services	-5.23*	.596	.000	-6.64*	-3.82
Selection	Manufacturing (*M* = 54.37)	Services	-4.90*	1.47	.003	-8.37*	-1.43
		Trade	7.58*	1.69	.000	3.57*	11.59
	Services (*M* = 59.27)	Manufacturing	4.90*	1.47	.003	1.43*	8.37
		Trade	12.48*	1.59	.000	8.72*	16.24
	Trade (*M* = 46.79)	Manufacturing	-7.58*	1.69	.000	-11.59*	-3.57
		Services	-12.48*	1.59	.000	-16.24*	-8.72
Training & Development	Manufacturing (*M* = 25.73)	Services	-4.32*	.892	.000	-6.43*	-2.21
		Trade	4.01*	1.01	.000	1.62*	6.40
	Services (*M* = 30.05)	Manufacturing	4.32*	.892	.000	2.21*	6.43
		Trade	8.33*	.811	.000	6.41*	10.25
	Trade (*M* = 21.72)	Manufacturing	-4.01*	1.01	.000	-6.40*	-1.62
		Services	-8.33*	.811	.000	-10.25*	-6.41
Performance Appraisal	Manufacturing (*M* = 33.43)	Services	-5.92*	1.03	.000	-8.36*	-3.47
		Trade	4.61*	1.19	.000	1.81*	7.42
	Services (*M* = 39.35)	Manufacturing	5.92*	1.03	.000	3.47*	8.36
		Trade	10.53*	1.01	.000	8.15*	12.91
	Trade (*M* = 28.82)	Manufacturing	-4.61*	1.17	.000	-7.42*	-1.81
		Services	-10.53*	1.01	.000	-12.91*	-8.15
Compensation & Benefits	Manufacturing (*M* = 27.01)	Services	-3.36*	.887	.001	-5.46*	-1.26
		Trade	2.82*	.943	.009	.59*	5.05
	Services (*M* = 30.37)	Manufacturing	3.36*	.887	.001	1.26*	5.46
		Trade	6.18*	.825	.000	4.23*	8.13
	Trade (*M* = 24.19)	Manufacturing	-2.82*	.943	.009	-5.05*	-.59
		Services	-6.18*	.825	.000	-8.13*	-4.23

Note. Dependent variable: Recruitment, Selection, Training_Development, Performance_Appraisal, Compensation_Benefits.
SE = Standard Error. CI = Confidence interval
*$p < 0.05$

5.4.1.3 Differences among SME sectors on overall HRM formality (covariate: size & age)

HRM formality differences among the three SME sectors while controlling for the effect of age and size of the firms were explored by conducting ANCOVA (analysis of co-variance). For firm size (covariate), the two most stringent assumptions were firstly tested that required observing a linear relationship of co-variant (size) with HRM formality among each sector and confirming no interaction between the covariate and the independent variable (sectors). There was a linear relationship between size of the firm (Size_Organisation) and overall HRM_Formality for each SME sector as assessed by the scatter plot. To investigate homogeneity of regression slopes (statistically testing the interaction between covariate and independent variable), a 'Tests of Between-Subjects Effects' table (produced via GLM univariate procedure) indicated that the interaction term was statistically significant, $F(2, 94) = 3.59$, $p = .029$. Since the assumption of homogeneity of regression slopes was violated, ANCOVA could not be conducted to explore HRM formality differences among SME sectors while controlling for size of the organisation (Huitema, 2011; Weisberg, 2014).

For age of the firm (Established_years) as covariate, there was a linear relationship between the covariate (age) and overall HRM_Formality for each SME sector as assessed by the scatter plot. Also, there was homogeneity of regression slopes as the interaction term between covariate and independent variable (groups) was not statistically significant, $F(2, 294) = 1.31$, $p = .273$. Provided that the results for these two stringent assumptions were satisfactory, further assumptions were tested before carrying out ANCOVA to investigate any differences among sectors while controlling for the effect of age of the firm.

Standardized residuals for the interventions and for the overall model were normally distributed as assessed by Shapiro-Wilk's test ($p > .05$). There was Homoscedasticity, as assessed by visual inspection of scatter plot (standardized residuals plotted against the predicted values) presented in Appendix F. Moreover, no outliers were detected in the data, as assessed by inspection of standardized residuals (no values greater than ± 3 *SD*). After adjustment for age of the firm (Established_years), there was a statistically significant difference between SME sectors on overall HRM_Formality scores, $F(2, 296) = 47.20$, $p < .001$, partial $\eta^2 = .242$. Pair-wise group comparisons using post-hoc analysis was performed with Bonferroni adjustment (see Table 5.15) according to which, increase in mean scores from trade to manufacturing (13.3, 95% CI [3.02, 23.6]) was statistically significant ($p = .006$). Similarly, there was an increase in the mean scores from manufacturing to services (26.3, 95% CI [16.2, 36.4]) and the increased difference in means was significant at $p < .001$.

Table 5.15

Post-hoc analysis with Bonferroni adjustment for multiple comparisons of groups

(I) Sector	(J) Sector	Mean Difference (I – J)	*SE*	*Sig.*[b]	95% CI [b]	
					Lower Bound	Upper Bound
Manufacturing (*M* = 153.75)	Services	-26.3*	4.18	.000	-36.4	-16.2
	Trade	13.3*	4.27	.006	3.02	23.6
Services (*M* = 175.96)	Manufacturing	26.3*	4.18	.000	16.2	36.4
	Trade	39.6*	4.17	.000	29.6	49.6
Trade (*M* = 133.15)	Manufacturing	-13.3*	4.27	.006	-23.6	-3.02
	Services	-39.6*	4.17	.000	-49.6	-29.6

Note. Dependent variable: HRM_Formality. Covariate: Established_years. *SE* = Standard Error. CI = Confidence interval
b. Adjustment for multiple comparisons: Bonferroni.
*$p < 0.05$

To conclude, after controlling for the age of the firm, services sector SMEs are more formal than manufacturing and trade sector SMEs and manufacturing sector SMEs are more formal than trade sector SMEs in terms of overall HRM formality that supported our related hypotheses ($H1_g$, $H1_h$, $H1_i$).

5.4.2 RQ2: Influential determinants (contextual factors) of HRM formality

The second research question (RQ2) includes testing hypotheses to explore influential determinants of overall HRM formality and individual HRM practices/functions in SMEs. For this, the HRM_Formality variable and individual HRM practices variables (Recruitment, Selection, Training_Development, Performance_Appraisal, Compensation_Benefits) were regressed on contextual organisational factors to explore possible relationships. Table 5.16 provides list of hypotheses related to RQ2 along with inferential methods used to test those hypotheses.

Table 5.16

Inferential methods used to test hypotheses for RQ2

Hypotheses	Variables	Inferential method
$H2_a$: Firm size is positively related with overall HRM formality. **$H2_c$:** Firm age is positively related with overall HRM formality. **$H2_e$:** Non-family owned firms have more formal HRM practices. **$H2_g$:** Firms with ownership by a larger organisation have more formal HRM practices. **$H2_i$:** Firms with a business plan have more formal HRM practices. **$H2_k$:** Firms that export have more formal HRM practices. **$H2_m$:** Firms using human resource information system have more formal HRM practices. **$H2_o$:** Firms with an HRM department or HR specialist have more formal HRM practices.	**Independent** ✓ Size_Organisation ✓ Established_years ✓ Famliy_owned ✓ Ownership_by_parent_firm ✓ Established_business_plan ✓ Exporting ✓ HRIS ✓ HRM_dep **Dependent** ✓ HRM_Formality	Multiple Regression
$H2_b$: Firm size is positively related with individual HRM practices/functions **$H2_d$:** Firm age is positively related with individual HRM practices/functions. **$H2_f$:** Non-family owned firms have more formal individual HRM practices/functions. **$H2_h$:** Firms with ownership by a larger organisation have more formal individual HRM practices/functions**.** **$H2_j$:** Firms with a business plan have more formal individual HRM practices/functions. **$H2_l$:** Firms that export have more formal individual HRM practices/functions**.** **$H2_n$:** Firms using human resource information system have more formal individual HRM practices/functions. **$H2_p$:** Firms with an HRM department or HR specialist have more formal individual HRM practices/functions. .	**Independent** ✓ Size_Organisation ✓ Established_years ✓ Famliy_owned ✓ Ownership_by_parent_firm ✓ Established_business_plan ✓ Exporting ✓ HRIS ✓ HRM_dep **Dependent** ✓ Recruitment ✓ Selection ✓ Training_Development ✓ Performance_Appraisal ✓ Compensation_Benefits	Multiple Regression

5.4.2.1 Influential determinants of overall HRM formality

To explore the influential determinants of overall HRM formality within SMEs, multiple regression analysis was run to predict HRM_Formality from contextual factors (Size_Organisation, Established_years, Famliy_owned, Ownership_by_parent_firm, Established_business_plan, Exporting, HRIS and HRM_dep). There was linearity as assessed by partial regression plots (see Appendix G). There was independence of observations (residuals) as assessed by a Durbin-Watson statistic of 2.12. There was Homoscedasticity as assessed by the visual inspection of scatter plot for studentized residuals versus unstandardized predicted values since the residuals were forming a horizontal band and evenly spread (See Appendix G). The tolerance values reported as part of the regression analysis were greater than 0.1 for each independent variable that confirmed the absence of multicollinearity. There was only one deleted studentized residual (Case no. 22) that reported greater than ± 3 standard deviations and was excluded from further analysis. Moreover, no leverage values greater than 0.2 and values for Cook's distance above 1 were reported. Lastly, the error terms were normally distributed (see Appendix G). The overall regression model suggested that 51.6 per cent of the variability in HRM_Formality is explained by contextual factors which was statistically significant, $F(8, 290) = 40.65$, $p < .001$, adj. $R^2 = .516$. Five variables added significantly to the prediction, $p < 0.05$. Regression coefficients and standard errors are reported in Table 5.17.

Table 5.17

Multiple regression analysis summary: HRM_Formality

Variable	*B*	SE_B	β	*t*	*Sig.*
Intercept	109.8	4.26		25.8	.000
Size_Organisation	.037	.027	.072	1.37	.171
Established_years	.517	.145	.166	3.57	**.000**
Famliy_owned	-5.54	3.17	-.077	-1.75	.081
Ownership_by_parent_firm	11.19	3.45	.152	3.24	**.001**
Established_business_plan	21.74	3.51	.283	6.19	**.000**
Exporting	4.41	2.98	.062	1.48	.141
HRIS	7.09	3.05	.099	2.33	**.021**
HRM_dep	18.53	3.79	.260	4.89	**.000**

$R^2 = .529$. Adjusted $R^2 = .516$

Note. B = Unstandardized regression coefficient. SE_B = Standard error of coefficient. β = Standardized coefficient. **p* < 0.05

To conclude, HRM formality was predicted by Established_years, Ownership_by_parent_firm, Established_business_plan, HRIS and HRM_dep. Hence, $H2_c$, $H2_g$, $H2_i$, $H2_m$ and $H2_o$ are supported.

5.4.2.1 Influential determinants of individual HRM practices/functions

To investigate the relationship between contextual factors (determinants) and individual HRM practices/functions, each dependent variable (Recruitment, Selection, Training_Development, Performance_Appraisal, Compensation_Benefits) was regressed on contextual factors. For recruitment, the underlying assumptions for running multiple regression analysis were assessed. There was linearity as assessed by the partial regression plots (see Appendix H). There was independence of residuals as assessed by Durbin-Watson test (1.98). The error variances were approximately equal along the line of best fit as assessed by the visual inspection of scatter plot (see Appendix H). There was no multicollinearity since the tolerance values for independent variables were greater than 0.1. There were no studentized deleted residuals greater than ± 3 *SD*, no leverage values greater than 0.2, and values for Cook's distance above 1. The regression model statistically significantly predicted Recruitment, $F(8, 291) = 24.05$, $p < .001$, adj. $R^2 = .381$. Ownership_by_parent_firm, established_business_plan, HRIS and HRM_dep added statistically significantly to prediction, $p < 0.05$. Regression coefficients and standard errors are reported in Table 5.18.

Table 5.18

Multiple regression analysis summary: Recruitment

Variable	*B*	SE_B	β	*t*	*Sig.*
Intercept	9.40	.671		14.05	.000
Size_Organisation	.003	.004	.041	.703	.483
Established_years	.020	.023	.046	.873	.383
Famliy_owned	-.583	.499	-.058	-1.17	.243
Ownership_by_parent_firm	2.09	.545	.203	3.83	**.000**
Established_business_plan	1.74	.554	.162	3.15	**.002**
Exporting	-.200	.470	-.020	-.425	.671
HRIS	1.65	.481	.165	3.42	**.001**
HRM_dep	2.88	.595	.290	4.85	**.000**

$R^2 = .398$. Adjusted $R^2 = .381$

Note. *B* = Unstandardized regression coefficient. SE_B = Standard error of coefficient. β = Standardized coefficient. $*p < 0.05$

For Selection, the assumptions for multiple regression analysis were firstly investigated according to which, there was a linear relationship of independent variables collectively with

dependent variable (Selection) as assessed by partial regression plots (see Appendix I). There were only two deleted studentized residuals (Case nos. 22 and 107) that reported greater than ±3 standard deviations. There was independence of residuals as assessed by Durbin-Watson statistic of 1.98. There was Homoscedasticity as assessed by the visual inspection of scatter plot for studentized residuals versus unstandardized predicted values (see Appendix I). Moreover, no leverage values greater than 0.2 and values for Cook's distance above 1 were reported. The overall regression model suggested that 44.6 per cent of the variability in Selection is explained by contextual factors which was statistically significant, $F(8, 289) = 30.92$, $p < .001$, adj. $R^2 = .446$. Established_years, Ownership_by_parent_firm, established_business_plan and HRM_dep significantly predicted the outcome variable (Selection). Regression coefficients and standard errors are reported in Table 5.19.

Table 5.19

Multiple regression analysis summary: Selection

Variable	*B*	SE_B	β	*t*	*Sig.*
Intercept	38.69	1.54		25.07	.000
Size_Organisation	.011	.010	.061	1.08	.281
Established_years	.158	.053	.150	2.99	**.003**
Famliy_owned	-.906	1.15	-.037	-.787	.432
Ownership_by_parent_firm	3.24	1.25	.130	2.59	**.010**
Established_business_plan	7.88	1.27	.303	6.19	**.000**
Exporting	2.04	1.08	.084	1.89	.060
HRIS	2.03	1.11	.084	1.83	.069
HRM_dep	5.68	1.38	.235	4.13	**.000**

$R^2 = .461$. Adjusted $R^2 = .446$

Note. *B* = Unstandardized regression coefficient. SE_B = Standard error of coefficient. β = Standardized coefficient. *$p < 0.05$

To investigate the influential determinants of training and development practices, the Training_Development variable was regressed on contextual factors. There was linearity as assessed by the partial regression plots (see Appendix J). There was independence of residuals as assessed by Durbin-Watson test (2.07). There was no evidence of multicollinearity as assessed by tolerance values. The residuals were evenly spread along the line of best fit (see Appendix J). There were no studentized deleted residuals greater than ±3 standard deviations, no leverage values greater than 0.2 and values for Cook's distance above 1. The assumption for normality of residuals was met (see Appendix J). The model statistically significantly predicted Training_Development, $F(8, 291) = 34.86$, $p < .001$, adj. $R^2 = .475$.

Established_years, Famliy_owned, Ownership_by_parent_firm, established_business_plan and HRM_dep were statistically significant predictors of Training_Development. Regression coefficients and standard errors are reported in Table 5.20.

Table 5.20

Multiple regression analysis summary: Training_Development

Variable	*B*	SE_B	β	*t*	*Sig.*
Intercept	17.69	.901		19.65	.000
Size_Organisation	.008	.006	.075	1.38	.168
Established_years	.086	.031	.136	2.82	**.005**
Famliy_owned	-1.41	.670	-.097	-2.11	**.036**
Ownership_by_parent_firm	2.27	.731	.151	3.09	**.002**
Established_business_plan	3.81	.743	.244	5.13	**.000**
Exporting	.823	.631	.057	1.30	.193
HRIS	.845	.645	.058	1.31	.191
HRM_dep	4.17	.798	.288	5.23	**.000**

R^2 = .489. Adjusted R^2 = .475

Note. B = Unstandardized regression coefficient. SE_B = Standard error of coefficient. β = Standardized coefficient.*$p < 0.05$

Similarly for performance appraisal practices, there was a linear relationship of independent variables collectively with dependent variable (Performance_Appraisal) as assessed by partial regression plots (see Appendix K). There was independence of residuals as assessed by a Durbin-Watson statistic of 2.05. There was no evidence of multicollinearity, as assessed by tolerance values greater than 0.1. There were no studentized deleted residuals greater than ± 3 standard deviations, no leverage values greater than 0.2 and values for Cook's distance above 1. The assumption for normality of residuals was met (see Appendix K).According to the model, 41.4 per cent of the variability in Performance_Appraisal is explained by contextual factors which was statistically significant $F(8, 291) = 27.37$, $p < .001$, adj. $R^2 = .414$. Regression coefficients and standard errors are reported in Table 5.21.

According to the regression analysis, Established_years, established_business_plan and HRM_dep were statistically significant predictors of Performance_Appraisal, i.e. $p < 0.05$.

Table 5.21

Multiple regression analysis summary: Performance_Appraisal

Variable	*B*	SE_B	β	*t*	*Sig.*
Intercept	24.39	1.14		21.34	.000
Size_Organisation	.008	.007	.064	1.12	.266
Established_years	.088	.039	.116	2.27	**.024**
Famliy_owned	-1.42	.850	-.081	-1.67	.097
Ownership_by_parent_firm	1.77	.928	.098	1.91	.058
Established_business_plan	4.94	.943	.263	5.24	**.000**
Exporting	.861	.801	.049	1.07	.284
HRIS	1.61	.818	.092	1.97	.052
HRM_dep	4.74	1.01	.272	4.68	**.000**

R^2 = .429. Adjusted R^2 = .414

Note. B = Unstandardized regression coefficient. SE_B = Standard error of coefficient. β = Standardized coefficient. *p < 0.05

Lastly, to investigate the influential determinants of compensation and benefits practices within SMEs, Compensation_Benefits variable was regressed on contextual factors. There was a linear relationship of independent variables collectively with dependent variable as assessed by partial regression plots (see Appendix L). There was only one deleted studentized residual (Case no. 3) that reported greater than ±3 standard deviations. There was independence of residuals as assessed by Durbin-Watson statistic of 2.11. There was Homoscedasticity (see Appendix L) and absence of any multicollinearity as assessed by tolerance values greater than 0.1. The overall regression model statistically significantly predicted outcome variable, $F(8, 290) = 22.31$, $p < .001$, adj. $R^2 = .364$. Established_years, Ownership_by_parent_firm, established_business_plan and HRM_dep were statistically significant predictors of Compensation_Benefits (see Table 5.22).

Table 5.22

Multiple regression analysis summary: Compensation_Benefits

Variable	*B*	SE_B	β	*t*	*Sig.*
Intercept	19.91	.915		21.76	.000
Size_Organisation	.006	.006	.060	1.01	.311
Established_years	.163	.031	.278	5.24	**.000**
Famliy_owned	-1.00	.682	-.075	-1.47	.143
Ownership_by_parent_firm	1.94	.744	.140	2.61	**.010**
Established_business_plan	2.93	.760	.203	3.86	**.000**
Exporting	.192	.641	.014	.299	.765
HRIS	.556	.655	.041	.848	.397
HRM_dep	2.19	.810	.164	2.71	**.007**

R^2 = .381. Adjusted R^2 = .364

Note. B = Unstandardized regression coefficient. SE_B = Standard error of coefficient. β = Standardized coefficient.* p < 0.05

5.4.3 RQ3: HRM formality and organisational performance: Exploring relationship in SMEs

The third research question (RQ3) includes testing hypotheses to explore relationship between HRM formality and organisational performance within SMEs. Firstly, Organisational_Performance was regressed on HRM_Formality, followed by investigating the relationship again while controlling for influential determinants. Hypotheses related to RQ3 and inferential methods used to test those hypotheses are provided in Table 5.23.

Table 5.23

Inferential methods used to test hypotheses for RQ3

Hypotheses	Variables	Inferential method
$H3_a$: More formal HRM practices (HRM formality) are positively associated with firm performance.	**Independent** ✓ HRM_Formality **Dependent** ✓ Organisational_Performance	Linear Regression
$H3_b$: More formal HRM practices are positively associated with firm performance when controlled for influential determinants.	**Independent** ✓ HRM_Formality **Dependent** ✓ Organisational_Performance **Control** ✓ Related contextual factors of Organisational_Performance	Multiple Regression

5.4.3.1 Relationship between HRM formality and organisational performance

To investigate the relationship between HRM formality and organisational performance within Pakistani SMEs, Linear regression was run to predict Organisational_Performance from HRM_Formality. The underlying assumptions for carrying out linear regression were tested, according to which, there was linear relationship between HRM_Formality and Organisational_Performance (see Appendix M). There was total number of four deleted studentized residuals (Case no. 30, 35, 49 and 240) that reported greater than ± 3 standard deviations. There was independence of residuals as assessed by a Durbin-Watson statistic of 2.06. There was Homoscedasticity as assessed by the scatter plot (see Appendix M) that presented approximately equal variances along the line of best fit.

According to the linear regression model, HRM_Formality statistically significantly predicted Organisational_Performance, $F(1, 294) = 1005.39$, $p < .001$, adj. $R^2 = .773$. Thus, the hypothesis ($H3_a$) suggesting positive association between more formal HRM practices and organisational performance is accepted. Regression coefficient and standard error are reported in Table 5.24.

Table 5.24

Linear regression analysis summary: Organisational_Performance

Variable	*B*	SE_B	β	*t*	*Sig.*
Intercept	4.44	1.15		3.86	.000
HRM_Formality	.230	.007	.880	31.70	**.000**

$R^2 = .774$. Adjusted $R^2 = .773$

Note. B = Unstandardized regression coefficient. SE_B = Standard error of coefficient. β = Standardized coefficient. *$p < 0.05$

5.4.3.2 Relationship between HRM formality and organisational performance when controlling for influential determinants

To explore the relationship between HRM formality and organisational performance with influential determinants as covariates, it was imperative to find out that which contextual factors were related to organisational performance. For this, Organisational_Performance was regressed on contextual factors using multiple regression analysis. All of the underlying assumptions were satisfied and the model statistically significantly predicted the outcome variable (Organisational_Performance), $F(8, 291) = 28.83$, $p < .001$, adj. $R^2 = .427$. Established_years (Age of the firm), established_business_plan and HRM_dep added significantly to the prediction, $p < 0.05$.

After the identification of control variables (related contextual factors of Organisational_Performance, i.e. Established_years, established_business_plan and HRM_dep), Organisational_Performance was regressed on HRM_Formality while controlling for these covariates. There was a linear relationship of independent variables collectively with dependent variable as assessed by partial regression plots (see Appendix N). There were only four deleted studentized residuals (Case no. 30, 35, 49 and 240) that reported greater than ± 3 standard deviations. There was independence of residuals as assessed by Durbin-Watson statistic of 2.03. There was Homoscedasticity (see Appendix N) and absence of multicollinearity as assessed by tolerance values greater than 0.1. Moreover, residuals were normally distributed as assessed by visual inspection of P – P plot for standardized residuals.

The overall model statistically significantly predicted the outcome variable, $F(4, 291) = 267.88$, $p < .001$, adj. $R^2 = .783$. HRM_Formality statistically significantly added to the prediction, $p < 0.05$. Regression coefficients and standard errors are reported in Table 5.25.

Table 5.25

Multiple regression analysis summary: Organisational_Performance

Variable	*B*	SE_B	β	*t*	*Sig.*
Intercept	5.54	1.23		4.51	.000
Established_years	.077	.024	.094	3.19	**.002**
Established_business_plan	-.084	.645	-.004	-.130	.897
HRM_dep	1.53	.627	.081	2.43	**.016**
HRM_Formality	.210	.010	.801	21.32	**.000**

$R^2 = .786$. Adjusted $R^2 = .783$

Note. *B* = Unstandardized regression coefficient. SE_B = Standard error of coefficient. β = Standardized coefficient. *$p < 0.05$

Since, the association between HRM_Formality and Organisational_Performance, while controlling for influential determinants was statistically significant and positive; we can accept our related hypothesis ($H3_b$).

The results also reveal that Established_years and HRM_dep were significant predictors of Organisational_Performance whereas; Established_business_plan did not correlate with Organisational_Performance in controlled model. This suggests that HRM_Formality strongly mediates relationship between Established_business_plan and Organisational_Performance while partially mediating for Established_years and HRM_dep.

5.4.4 Summary of hypotheses

A summary of tested hypotheses and their outcomes is presented in Table 5.26.

Table 5.26

Summary of hypotheses

RQ	Hypotheses	Outcome
1	$H1_a$: Services firms are more formal than manufacturing in terms of overall HRM formality.	Accepted
	$H1_b$: Services firms are more formal than trade firms in terms of overall HRM formality.	Accepted
	$H1_c$: Manufacturing firms are more formal than trade firms in terms of overall HRM formality.	Accepted
	$H1_d$: Services firms are more formal than manufacturing in terms of individual HRM practices/functions.	Accepted
	$H1_e$: Services firms are more formal than trade firms in terms of individual HRM practices/functions.	Accepted
	$H1_f$: Manufacturing firms are more formal than trade firms in terms of individual HRM practices/functions	Accepted
	$H1_g$: Services firms are more formal than manufacturing in terms of overall HRM formality when controlled for age and size of the firm.	Accepted for Age of the firm
	$H1_h$: Services firms are more formal than trade firms in terms of overall HRM formality when controlled for age and size of the firm.	Accepted for Age of the firm
	$H1_i$: Manufacturing firms are more formal than trade in terms of overall HRM formality when controlled for age and size of the firm.	Accepted for Age of the firm
2	$H2_a$: Firm size is positively related with overall HRM formality.	Rejected
	$H2_c$: Firm age is positively related with overall HRM formality.	Accepted
	$H2_e$: Non-family owned firms have more formal HRM practices.	Rejected
	$H2_g$: Firms with ownership by a larger organisation have more formal HRM practices.	Accepted
	$H2_i$: Firms with a business plan have more formal HRM practices.	Accepted
	$H2_k$: Firms that export have more formal HRM practices.	Rejected
	$H2_m$: Firms using human resource information system have more formal HRM practices.	Accepted
	$H2_o$: Firms with an HRM department or HRM specialist have more formal HRM practices.	Accepted
	$H2_b$: Firm size is positively related with individual HRM practices/functions	Rejected
	$H2_d$: Firm age is positively related with individual HRM practices.	Accepted for Selection, Training_Development, Performance_Appraisal, Compensation_Benefits
	$H2_f$: Non-family owned firms have more formal individual HRM practices/functions.	Accepted for Training_Development
	$H2_h$: Firms with ownership by a larger organisation have more formal individual HRM practices/functions.	Accepted for Recruitment, Selection, Training_Development, Compensation_Benefits
	$H2_j$: Firms with a business plan have more formal individual HRM practices/functions.	Accepted
	$H2_l$: Firms that export have more formal individual HRM practices/functions.	Rejected
	$H2_n$: Firms using human resource information system have more formal individual HRM practices/functions.	Accepted for Recruitment
	$H2_p$: Firms with an HRM department or HRM specialist have more formal individual HRM practices/functions.	Accepted
3	$H3_a$: More formal HRM practices (HRM formality) are positively associated with firm performance.	Accepted
	$H3_b$: More formal HRM practices are positively associated with firm performance when controlled for influential determinants.	Accepted

5.5 SUMMARY

This chapter presented the results related to the three research questions formulated for this empirical study. In the first part, a descriptive analysis pertaining to demographic characteristics of SMEs and owners/managers was presented. To test hypotheses related to our research questions, the data preparation was carried out that included exploratory factor analysis for dimension reduction, checking for univariate data normality and outliers. For RQ1, the differences among the three sectors of SMEs in terms of overall HRM formality and individual HRM practices/functions were investigated according to which services sector SMEs were found to be more formalised than manufacturing and trade sector SMEs and manufacturing SMEs were found to be more formalised than trade sector SMEs in terms of both overall HRM formality and individual HRM practices/functions. The same was found true for comparison of SME sectors on overall HRM formality when controlling for age of the firms. For RQ2, the influential determinants (contextual factors) of HRM formality were explored using multiple regression analysis. Results suggested that firm age, association with larger organisations, the existence of a business plan, provisions of HRIS and an HRM department/specialist were positively related to HRM formality. The third research question (RQ3) required exploring relationship between HRM formality and organisational performance (sustainability). Results indicated that more formal HRM practices adopted by SMEs were positively associated with firm performance. A summary review of hypotheses testing concluded the chapter.

Chapter 6 Discussion and Conclusions

6.1 INTRODUCTION

This chapter discusses the key findings derived from results and gives the general conclusions of the study. The chapter commences with a discussion of findings in relation to the three research questions and integrates these findings into the relevant HRM literature. Next, general conclusions are presented that include contributions of this study (both to theory and practice) and recommendations for further research. The chapter ends with a brief concluding summary.

6.2 DISCUSSION OF KEY FINDINGS

This section is divided into three sub-sections and discusses results relating to the key research questions.

6.2.1 Differences among SME sectors on HRM formality

The first research question (RQ1) included testing hypotheses in relation to exploring differences among the three business sectors (services, manufacturing and trade) in terms of overall HRM practices (HRM formality) and their underlying components (recruitment, selection, training and development, performance appraisal and compensation & benefits). There is scant literature and hence increasing emphasis on conducting comparative HRM research (Dickmann et al., 2008; Wu et al., 2014) that includes unfolding differences in people management practices relative to SME sectors (Jiang, 2009; Psychogios et al., 2016).

The results in relation to RQ1 suggest that service sector SMEs have adopted more formal HRM practices (HRM formality) than manufacturing and trade sector SMEs in Pakistan. These findings corroborate other empirical studies (Chow, 1995; Datta et al., 2005; Jiang, 2009; Marlow, 1998; Psychogios et al., 2016; Terpstra & Rozell, 1993) that found that industrial sector is an influential determinant of best HRM practices in firms. One explanation for this relates to the distinctive characteristics of industrial sectors in which SMEs operate. For instance, services firms are associated with intangible outputs and the involvement of customers in the production of services is direct since they are consumed simultaneously (Lewis et al., 2007). Hence, operations management in manufacturing and trade firms tends to be product oriented whereas in case of services sector firms, it is more centered on people (Jiang, 2009). Similarly, the need for more skilled people in service sectors compared to other sectors means an increased focus on employee satisfaction in order to experience low turnover (Harney & Dundon, 2006). In contrast, however, Guest et al. (2003) and Deshpande & Golhar (1994) found no differences in the HRM practices of manufacturing and services sector firms.

Results for RQ1 also suggest that manufacturing sector SMEs employ more formal HRM practices than trade sector SMEs. The empirical evidence concerning differences in HRM practices among manufacturing and trade sector SMEs is non-existent. Hence, these findings can be regarded as highly valuable in terms of contribution to the comparative HRM literature. The possible explanations can refer to the varying characteristics of both sectors (Wu et al., 2014; Jiang, 2009) such as lack of semi-skilled manpower in manufacturing , a

high level of workforce attrition in the trade sector (Almas, 2014) and technological advancements in manufacturing (Tiwari & Saxena, 2012).

The results also imply that services sector SMEs in Pakistan have adopted more formal individual HRM practices (recruitment, selection, training & development, performance appraisal, compensation & benefits) than manufacturing and trade. Moreover, manufacturing firms are found to be more formal than trade sector SMEs in terms of adoption of individual HRM practices. The literature concerning comparative HRM in SMEs reinforces the notion that differences in individual HRM practices (e.g., performance appraisal) among SMEs are explained by distinctions based on industrial sector (Raziq, 2011). For instance, Jackson and Schuler (1992) found that employees in service industries experience more formal and systematic appraisal systems and as a result, formal compensation practices are a direct reflection of the evaluations of these appraisals. They further pointed out that customers play a central role in appraisal systems in service sector firms as compared to firms from other sectors (see also Othman, 1999). Similarly, Bartman and Lindley (1995) and Raziq (2011) also found more formal recruitment and selection practices in services sector small firms than in manufacturing. They argue that service-based firms are more dependent on a skilled workforce than manufacturing or trade (see also Jackson & Schuler, 1992). With regards to training and development, Duberley and Walley (1995) found service sector firms following more formal training procedures than manufacturing while some authors have concluded otherwise (cf. Kaman et al., 2001).

Lastly, firm age and firm size have been widely incorporated as control variables in numerous HRM related empirical studies (Boselie & Wiele, 2002; Brewster et al., 2008; Guthrie, 2001; Sheehan, 2014). The comparative HRM analysis based on different industrial sectors of SMEs for this study also included age and size of the firm as control variables to unfold the influence of such variables on industrial differences. Due to certain statistical assumptions being violated for size of the firm as control variable in this comparative analysis, no conclusions have been drawn as a result. However, for age of the firm as a co-variate, results show that service-based firms have adopted more formal HRM practices (HRM formality) in comparison with manufacturing and trade sector firms. Also, manufacturing firms followed more formal HRM practices than trade firms. These findings add distinctive value to the comparative HRM literature since no study has investigated comparisons among SME sectors in terms of HRM formality while controlling for the effect of age of the firm to date. This certainly suggests a highly influential role of industrial sector

in shaping HRM practices in SMEs (Datta et al., 2005; Jiang, 2009; Psychogios et al., 2016; Wu et al., 2014).

Hence, the greater reliance of service sector SMEs on more formal HRM practices in comparison with manufacturing and trade firms is reflected in the economic performance of Pakistan. The growth in the services sector has been more than any other sector (e.g., commodity producing sectors) that has mainly facilitated an economic shift from commodity producing to services sectors (Pakistan Economic Survey, 2017).

6.2.2 Influential determinants (contextual factors) of HRM formality

The second research question (RQ2) investigates the prevalence of HRM formality and its underlying components (recruitment, selection, training and development, performance appraisal and compensation & benefits) in SMEs relevant to their organisational characteristics (contextual factors) such as firm size, firm age, ownership type, existence of business plan, exporting, provision of HRIS and HRM department/specialist.

In relation to RQ2, the hypotheses ($H2_a$, $H2_b$) suggesting that size of the firm is an influential determinant of HRM formality and its underlying individual HRM practices are not supported. The literature also posits a divergent stance on this particular topic. For example, several authors (e.g., Wiesner et al., 2007; Wright et al., 2011; Wu et al., 2014) have found that size of the firm is an influential determinant of sophisticated HRM practices while some (e.g., Urbano & Yordanova, 2008) have concluded otherwise. Similarly, in prior studies, size of the firm has been seen as highly influential in shaping some individual HRM practices. For instance, Newman and Sheikh (2014) found that larger SMEs are more likely to practice best recruitment and selection practices. On the other hand, they did not find size of the firm as an influential determinant of formal training and development practices in SMEs. One justification for this is that training and development is largely linked to the organisational culture, financial resources and business strategy (Noe, Hollenbeck, Gerhart, & Wright, 2007). Similarly, Bayo-Morione and Merino-Diaz de Cerio (2001) found that although overall HRM practices in Spanish manufacturing firms are influenced by size, there was no effect on some individual HRM components such as compensation practices.

In Pakistani SMEs, the results show that size of the firm is not an influential determinant of formal HRM practices. The larger SMEs in Pakistan are mostly associated with manufacturing where workforce attrition is high due to the lesser need for hiring and retaining skilled workers (Raziq, 2011).

For age of the firm, the results imply that SMEs experience increased HRM formality with growing age. Moreover, the associations of age with individual HRM practices are also found to be positive except for recruitment practices. These results are in line with findings of prior studies (Barrett & Mayson, 2007; Faems et al., 2005; Gondo & Amis, 2013; Storey et al., 2010; Wager, 1998) that confirm adoption of more formal HRM practices for businesses with a longer operational history except very few studies that conclude otherwise (cf. De Kok & Uhlaner, 2001). Given the short life cycle and comparatively high failure rate of small firms (Cowling et al., 2012), new ventures and those with shorter operational history are likely to encounter diversified challenges as they grow and mature (Edwards & Ram, 2009). Hence, the realisation of the role that formal people management practices play to counter such challenges becomes inevitable (Rutherford et al., 2003). Moreover, as firms mature, they are able to acquire more resources and this result in adopting systematic and formalized management practices and control systems to effectively utilise those resources (Storey et al., 2010).

The literature establishing the role of firm age in shaping individual HRM practices is quite scarce. Hence, these findings are quite valuable and indicate that SMEs in Pakistan are likely to reflect increased HRM formality as they get older by employing more formal and systematic individual HRM practices such as selection, training and development, performance appraisal, and compensation and benefits. However, these firms may adopt informal means of recruitment (Lazarević-Moravčević, 2016; Wiesner et al., 2007).

With regards to ownership type (i.e., family owned vs. non-family owned), the hypothesis ($H2_e$) suggesting adoption of more formal HRM practices by non-family owned SMEs is rejected. Moreover, ownership type of SMEs does not influence individual HRM practices except training and development. These findings contradict with a relatively uniform stance in HRM related literature that regards ownership type (non-family owned) as an influential determinant of best HRM practices in SMEs (e.g., Anneleen, 2017; Cardon & Stevens, 2004; De Kok & Uhlaner, 2001; Forth et al., 2006; Pittino & Visintin, 2013). However, these results are in line with Newman & Sheikh (2014) who also found no association between ownership type and best HRM practices in Chinese SMEs. Since it is widely accepted that family owned firms are more likely to maintain the control of the firm (western contexts), conventional barriers (e.g., lack of workplace ethics, elite culture and power distance) in Pakistan equally influence family owned and non-family owned SMEs (Ali, 2013; Khilji, 2001). However, where ownership type does not influence most of the individual HRM practices of SMEs in Pakistan, non-family owned SMEs are more likely to offer formal and

structured training and development opportunities to their employees as noted elsewhere (Cruz et al., 2014; Kotey & Folker, 2007).

Next, SMEs owned by a larger organisation are found to be more formalised in terms of overall HRM formality and underlying components of recruitment, selection, training and development and compensation practices. However, the results do not support the hypothesis related to such an association with performance appraisal practices. Several studies (Aldrich & Auster, 1986; Bacon et al. 1996; De Kok & Uhlaner, 2001; Newman & Sheikh, 2014; Wu et al., 2014) have found SMEs following more sophisticated HRM practices that are owned by larger firms as compared to sole/independent SMEs. The findings support the notion that such SMEs are able to benefit from the established resources of their parent companies (Mellahi et al., 2013). There are number of SMEs in Pakistan that are owned by multinational companies (Muhammad et al., 2011; Tayeb, 1998) and these SMEs are usually at an advantage in terms of experiencing reduced transaction and development costs associated with best HRM practices (Bacon et al., 1996; Wu et al., 2014) and hence are more formalised.

Hypotheses ($H2_i$, $H2_j$) in relation to RQ2 suggesting increased HRM formality including individual HRM practices (i.e., recruitment, selection, training and development, performance appraisal and compensation and benefits) in Pakistani SMEs with a business plan were supported and corroborate prior empirical findings (e.g., Kok & Uhlaner, 2001; Sels et al., 2006; Wiesner et al., 2007; Wiesner & Millet, 2012). Kok et al. (2003) argued that growth oriented SMEs with well-written and structured business plan are more likely to adopt and exercise formal HRM practices. Hence, Pakistani SMEs following a strategic approach towards planning and co-ordinating their organisational activities are more likely to perceive the value of systematic and formal HRM systems and thus, are more likely to incorporate and develop formal HRM systems and practices (Wiesner & Millet, 2012).

With regards to the exporting characteristics of SMEs, hypotheses ($H2_k$, $H2_l$) related to their influence on the adoption of formal HRM practices including underlying components are rejected. However, literature predominantly suggests that exporting characteristics of SMEs are an influential determinant of overall formal HRM practices (e.g., Barrett & Mayson, 2007; De Kok & Uhlaner, 2001; Lengnick-Hall, 1988), some have found it non-influential in terms of individual HRM practices such as selection (Newman & Sheikh, 2014), training and development and compensation practices (Kok et al., 2003). One explanation for these findings draws on the notion that a majority of exporting SMEs in Pakistan are associated

with manufacturing (Raziq, 2011) and the HRM related literature concerning Pakistani manufacturing businesses suggests an informal approach towards people management practices (Memon et al., 2010; Yasmin, 2008).

Hypothesis ($H2_m$, $H2_n$) for RQ2 suggesting that the use of HRIS (human resource information systems) in SMEs positively influences overall HRM formality is accepted. However, no association is found for underlying individual HRM practices except for recruitment. The use of HRIS in SMEs as an influential determinant of overall HRM formality is also supported by numerous studies (Aggarwal & Kapoor, 2012; Barney & Wright, 1998; Broderick & Boudreau, 1992; Gueutal, 2003; Sadiq et al., 2012). Hence, SMEs in Pakistan that integrate technology to exercise their HR related functions (e.g. HR planning, selection, performance appraisal) experience increased overall HRM formality (Bamel et al., 2014).

Lastly, hypotheses ($H2_o$, $H2_p$) investigating the positive role of an HRM department or specialist in shaping formal HRM practices and its underlying functions (recruitment, selection, training & development, performance appraisal and compensation & benefits) are clearly supported. These results fit with prior empirical findings that link the availability of an HRM department/specialist in shaping best HRM practices including underlying individual HR functions (Aldrich & Auster, 1986; Diaz de Cerio, 2001; Hoque & Bacon, 2006; Kok & Uhlaner 2001; Singh & Vohra, 2009; Wiesner & Innes, 2010; Wu et al., 2014). The possible explanations are that the HRM department within a firm is viewed as an important unit with a higher level of relevant knowledge and skills for introducing and exercising effective HRM policies and practices (Cassell et al., 2002; Chadwick et al., 2013). De Kok et al. (2003) also indicated that the presence of an HR champion within SMEs is directly related to systematic, structured and sophisticated people management practices. However, literature indicates that HR specialists or departments are less prevalent in SMEs (Messersmith & Guthrie, 2010; Saridakis et al., 2013; Wapshott & Mallett, 2015) but those who capitalise on this valuable resource are more likely to experience increased HRM formality (Cardon & Stevens, 2004; Wu et al., 2014).

6.2.3 The relationship between HRM formality and organisational performance

The third research question (RQ3) explores the relationship between overall HRM formality and organisational performance in SMEs. The relationship is further examined by controlling contextual factors of SMEs directly related to the organisational performance.

The first hypothesis ($H3_a$) proposing that more formal HRM practices are positively associated with firm performance is clearly supported and embraces the RBV perspective that suggests superior organisational performance for firms that are able to capitalise on best HRM practices as a valuable resource (Barney, 1991). These findings further support the (almost) uniform stance in HRM-performance literature that formal HRM practices are positively associated with financial and non-financial performance (Drummond & Stone, 2007; Kaman et al., 2001; Katou, 2012; Lai et al., 2016; Nguyen & Bryant, 2004; Paul & Nealia, 2016; Sels et al., 2006; Sheehan, 2014; Teo et al., 2011; Way, 2002; Zhou et al., 2013). Since growing firms face diversified challenges, the most influential is the effective and efficient utilisation of available resources. Based on an RBV perspective, people are regarded as the most valuable resource of the firm to achieve organisational objectives leading to enhanced financial and non-financial performance. In the case of Pakistan, a majority of SMEs tend to follow informal approaches towards systematic and structured HRM systems (Ali, 2013; Memon et al., 2010), yet those who are successful in managing their workforce through formal HRM systems experience superior organisational performance (Bashir & Khattak, 2008; Naz et al., 2016; Raziq, 2011).

The second hypothesis ($H3_b$) in relation to RQ3 required re-testing the relationship between HRM formality and organisational performance while controlling for contextual factors related to the organisational performance. The first part of the analysis established that firm age, business planning and the availability of an HRM department/specialist are influential contextual factors for increased organisational performance. Later, these contextual factors were added as co-variates to re-estimate the relationship between HRM formality and firm performance. The results, again, indicated a positive association between HRM formality and firm performance. These findings certainly support the 'universalistic' perspective that best HRM practices tend to contribute towards enhanced firm performance regardless of the context (Guthrie et al., 2002; Huselid, 1995; Tzabbar et al., 2017). Results also indicate that the relationship between the availability of business planning and organisational performance is strongly mediated by HRM formality. This means that SMEs in Pakistan can implement

their strategic choices through the effective and efficient utilisation of their human resource that can lead to superior organisational gains (Schuler & Jackson, 1987; Teo et al., 2011).

6.3 CONTRIBUTIONS FROM THIS STUDY

The empirical findings of this study posit numerous theoretical and practical implications for people management practices in SMEs which are discussed below.

6.3.1 Theoretical contributions

Literature depicts a scarcity of HRM related research in Asian contexts (Budhwar & Debrah, 2009; Nankervis, 2016) that specifically includes Pakistan (Mansoor & Matthew, 2015; Yasmin, 2008). Moreover, an overwhelming share of literature concerning HRM practices has primarily focused on large organisations while the strength of empirical evidence in SMEs context is quite weak (Botero & Litchfield, 2013; Nguyen & Bryant, 2004; Paul & Nealia, 2016; Uhlaner, & Thurik, 2006; Wiesner, McDonald, & Banham, 2007), and even weaker for SMEs in Pakistan (Mansoor & Matthew, 2015; Khilji, 2001, Shih et al., 2006; Rana et al., 2007). SMEs are recognised as the back-bone of Pakistan's economy and represent more than 90% of all the businesses in Pakistan. However, SMEs in Pakistan face various challenges and the major shortcoming that confines their ability to contribute fully to the national economy relates to the lack of a strategic approach towards managing human resources (Khawaja, 2006; Mansoor & Matthew, 2015; Mustafa & Khan, 2005; Rohra & Panhwar, 2009; SBP, 2010). Moreover, considering the high failure rate of SMEs in Pakistan (90 per cent), institutional pressures are regarded as key determinants of their failure (Ullah et al., 2011). Hence, this study adds distinctive value to the HRM literature by following an integrated theoretical approach (RBV and institutional theory) to investigate the HRM practices in Pakistani SMEs.

Within the realm of an institutional perspective, there are various dimensions (e.g., culture, competition, contextual organisational characteristics) that have been incorporated in prior studies to investigate their influence on HRM practices (Bacon & Hoque, 2005). In line with the objectives and scope, this study included investigation of the influence of contextual factors (e.g., sector, firm size, ownership type) on the adoption of HRM practices in SMEs. A comprehensive analysis of comparative HRM practices among three important SME sectors (services, manufacturing and trade) produced findings that are not only under researched in general (Dickmann et al., 2008; Psychogios et al., 2016) but are unique in the context of Pakistan. Moreover, the scant comparative HRM literature concerning SMEs in Pakistan has

not only focused on larger firms associated with manufacturing and services sectors (Raziq, 2011) but also lack generalizations. Moreover, this study looked at the differences in the adoption of HRM practices among three business sectors of SMEs in Pakistan while controlling for the effect of firm age (Boselie & Wiele, 2002; Brewster et al., 2008; Roxas et al., 2013). This again adds distinctive value to the comparative HRM literature since estimating such comparisons while controlling for influential contextual variables (e.g., size, age) are not only rare (Harney & Dundon, 2006) but unique in the context of Pakistan.

Similarly, this study found other contextual factors (firm age, ownership by larger organisation, business plan, the presence of human resource information system and an HR department/specialist) as influential determinants of formal HRM practices. Since findings of similar studies investigating determinants (contextual factors) of best HRM practices are conducted in Western contexts (e.g., De Kok & Uhlaner, 2001; Urbano & Yordanova, 2008; Wiesner et al., 2007), findings from this study add distinctive value to the literature by confirming the institutional (contextual factors) perspective of HRM in the developing world (i.e. Pakistan).

With regards to applying an RBV perspective in the context of Pakistani SMEs, the literature is scarce in quality refereed journals (Bhutta et al., 2007; Chaudhry, 2013). Moreover, this limited literature concerning the HRM-performance link lacks generalisability because of limited samples that are usually confined to a single city (e.g., Raziq, 2011; Naz, Aftab, & Awais, 2016). The sample used in this study included 300 SMEs from the most populous province of Pakistan (Punjab) that represents more than 65 per cent of the whole SMEs in Pakistan.

This study supports the proposition that formal HRM practices in SMEs are a valuable internal resource for organisational success (financial and non-financial performance), and also finds a positive relationship between the same when controlling for contextual factors related to the organisational performance. This means that bundles of HRM practices (recruitment, selection, training & development, performance appraisal, compensation & benefits) will contribute towards enhanced firm performance regardless of the effect of contextual factors. These findings support a ‘universalistic perspective’ (residing within the realm of RBV), consequently helping to fill the gap in HRM-performance literature in the context of Pakistan.

6.3.2 Practical implications

The prime objectives of this study were to establish the role of contextual factors in shaping HRM practices and to confirm the HRM-performance link in SMEs in Pakistan. The findings posit numerous implications for SME owners/managers.

Firstly, results suggest that services sector SMEs employ more formal HRM practices than manufacturing and trade. Since theory and practice both have established the positive role of formal HRM practices in enhanced organisational performance through employee satisfaction, lower turnover and increased labour productivity (Nguyen & Bryant, 2004; Sels et al., 2006, Paauwe et al., 2013; Zhou, Hong & Liu, 2013), SME owners/managers of manufacturing and trade sectors can not only learn from this but implement sophisticated HRM practices (e.g., selection, compensation & benefits) for superior organisational gains. Secondly, since this study confirms the adoption of HRM practices in SMEs closely associated with contextual factors, managers/owners can work towards aligning their HRM practices with these contextual factors. For example, the availability of HRIS and an HR department/specialist in SMEs are found to be influential determinants of best HRM practices. Hence, SME owners/managers can incorporate not only technology to facilitate HR related functions but can also secure human expertise in the form of an HR specialist to experience enhanced HRM formality. Similarly, SMEs in the initial stages of their life cycle are less likely to adopt sophisticated HRM practices due to resource constraints. With the growth of the firm, those SME owners/managers who realise the importance of moving from recruitment to retention and training are more likely to experience increased HRM formality resulting in enhanced firm performance (Rutherford et al., 2003). This study also implies that SMEs with longer operational history are more likely to capitalise on formal HRM systems. SME owners/managers should also realise the importance of having a structured business plan. This way, employees are more likely to be informed of the organisational objectives and management can appraise and compensate employees in line with those objectives. Similarly, HR managers and firm owners can align HR functions in line with the organisational objectives that can contribute to the organisational success (Kok & Uhlaner, 2001; Sels et al., 2006; Wiesner & Millet, 2012).

Lastly, HRM practices in Pakistani SMEs are characterised by informality whereas traditional barriers (e.g., bureaucracy, nepotism) are mainly responsible for informal people management practices (see Section 3.3). This study implies that SMEs with formal HR functions are more likely to select and retain a productive workforce by providing

opportunities for professional development and compensating them through formal and structured appraisal systems. This consequently results in attaining superior organisational performance both, financially (e.g., profits) and non-financially (e.g., customer satisfaction, employee retention).

6.3.2.1 Implications for policy

In line with a coordinated approach for SME development (Parker, 2002), the government of Pakistan took numerous capacity building measures including the establishment of SMEDA (small and medium enterprise development authority) and an SME bank. SMEDA proposed its first policy document in 2007 that included a comprehensive framework for SMEs to strive for growth and success. Regardless of these efforts, the SME sector in Pakistan faces an array of challenges that influence their ability to fully contribute to the national economy. These include inferior levels of production, a lack of business information infrastructure, an absence of strategic planning, ineffective human resource development and a lack of interest to invest in people and complex procedures for lending (Mustafa & Khan, 2005; Rohra & Panhwar, 2009; SBP, 2010). However, this study offers certain implications for this policy (SMEDA, 2007) which are briefly outlined next.

SMEDA policy for SMEs advocates the need to invest in human resources for favorable economic outcomes (see also ASEAN SME Policy Index, 2014). The findings of this study confirm the RBV perspective in SMEs in Pakistan that superior HRM practices can result in enhanced value addition for the firms. However, the findings suggest that the adoption of best HRM practices is influenced by certain institutional contextual factors. For instance, the age of the firm was found to be an influential determinant of HRM formality. This is because it can take time for owners/managers to realise the significance and perceived value of formal people management practices. It is therefore advised that SMEDA should play an imperative role to educate the owners/managers by arranging training sessions that focus on formulation and implementation strategies relating to HRM practices.

Similarly, association with an established parent company and strategic planning have been identified as influential determinants of HRM formality. The SMEDA policy also argues a lack of strategic planning in SMEs that can adversely influence sustainable outcomes. Again, management training can be pivotal in terms of educating owners/managers so that they can devise and implement strategic plans effectively for securing superior organisational performance. SMEDA can introduce short courses that could be offered by both public and

private institutions. Also, SMEDA can take capacity building measures to attract foreign companies (establishing subsidiaries/spinoffs in Pakistan) by advising the government of Pakistan to legislate favourable policies for attracting FDI.

Lack of business information infrastructure as a result of insufficient and inadequate use of information technology has also been acknowledged as an influential determinant of SME failures in SMEDA policy. The descriptive findings of this study suggest that 46% of SMEs use information technology to facilitate business processes from a very low to a moderate level. Hence, efforts are needed by the government (especially in trade sector where the inadequate use of IT is around 72%) to prioritise the availability and access to low cost (or subsidised) IT infrastructure for SMEs (e.g., currently there are subsidised electricity rates for manufacturing SMEs). Also, based on the findings of this study, SMEDA can provide the facility of a basic human resource information system (HRIS) to the progressive SMEs where the initial gains in terms of improved management of people can motivate their owners/managers to incorporate other/advanced information systems to facilitate business processes from a variety of functional areas (e.g., ERP, CRM).

Moreover, the data collection experience exposed the potential downside of the lack of a SME database. The available sources appear to have limited and scattered information and hence, SMEDA should address this issue on urgent basis by providing a comprehensive database that should include the key characteristics of SMEs.

Lastly, based on the findings of this study, the trade sector SMEs are found to be less formal than manufacturing and service sector SMEs. Given the important role of trading SMEs in low-income countries in terms of promoting inclusive economic growth (World Trade Organisation, 2016), efforts are needed by the SMEDA to prioritise this sector by facilitating their financial, technical and intellectual needs (e.g., access to low interest on borrowings, subsidized ICT infrastructure, innovation funds, tax relief for exporting SMEs, management training).

6.4 RECOMMENDATIONS FOR FURTHER RESEARCH

The findings of this study have addressed important gaps in HRM literature, specifically in the context of Pakistani SMEs. However, due to the scarcity of HRM related research concerning small and medium sized enterprises in general (Botero & Litchfield, 2013; Nguyen & Bryant, 2004; Paul & Nealia, 2016; Uhlaner, & Thurik, 2006; Wiesner, McDonald, & Banham, 2007) and in the context Pakistan (Bhutta et al., 2007; Chaudhry, 2013; Mansoor & Mathew, 2015), further research in this domain may include:

- Comparing HRM practices of small (20-50 employees) and medium sized (51-250 employees) firms collectively and on the basis of distinctive industrial sectors.
- Comparative HRM practices while controlling for the effect of various institutional factors (e.g., market competition).
- Estimating the effect of contextual factors (e.g., firm age, firm size, growth orientation) on the adoption of HRM practices relevant to different industrial sectors. This can potentially unleash the most influential determinants of HRM practices in SMEs that might have been shaped by the association of SMEs with specific industrial sectors.
- Opening the '*black box*' in the context of Pakistani SMEs. Rich explanations can be secured with respect to the underlying mechanism through which, best HRM practices of SMEs in Pakistan influence firm performance (e.g., mediation of employee satisfaction and commitment). In case of service sector SMEs, innovation capabilities of employees as a mediating factor of HRM-performance link could be a worthwhile endeavor.
- Investigating contextual factors (e.g., industrial sector, business strategy) as possible moderators of HRM-performance link in SMEs ('*contingency*' perspective).
- Investigating the HRM-performance link in Pakistani SMEs by deploying longitudinal strategies to control for reverse causality, an approach that has been under-researched in HRM-performance literature.

6.5 CONCLUDING SUMMARY

The principal objectives of this empirical investigation were to explore the influence of contextual factors in shaping HRM practices in Pakistani SMEs and to further unfold the nature of relationship between formal HRM practices and organisational performance. The justifications for exploring these objectives were twofold. First, SMEs play a pivotal role in strengthening a nation's economy and the research carried out to-date in this particular domain is sparse. In the context of Pakistan, the national economy is also a direct reflection of its SME sector (Afraz et al., 2014) and the HRM literature lacks perspectives from SMEs (Mansoor & Matthew, 2015). Second, the SME sector in Pakistan is facing numerous challenges and a strategic approach towards people management practices is characterized as the most imminent and influential (Khawaja, 2006; Mustafa & Khan, 2005; Rohra & Panhwar, 2009; SBP, 2010). Also, the failure rate of SMEs in Pakistan is around 90% and a lack of training, institutional pressures and informal management practices are considered as key determinants of their failure (Ullah, Shah, Hassan, & Zaman, 2011).

In line with the objectives, this study applied an integrated philosophical approach guided by two theories, namely RBV and institutional theory (Tzabbar, et al., 2017). Literature relevant to the application of institutional theory in SMEs was reviewed to comprehend the nature of associations between contextual factors and the adoption of HRM practices (Kotey & Folker, 2007; Little, 1986; Marlow, 1998; Mellahi, Demirbag, Collings, Tatoglu, & Hughes, 2013; Newman & Z. Sheikh, 2014; Wager, 1998). It was revealed that empirical findings concerning this domain gave mixed results (Newman & Sheikh, 2014). Moreover, the majority of the studies presented perspectives from SMEs in Western contexts (Budhwar & Singh, 2007; Chaudhry, 2013) whereas empirical evidence from Pakistani SMEs was almost non-existent. Similarly, studies applying an RBV perspective in SMEs were thoroughly reviewed. It was concluded that literature predominantly upholds the RBV perspective both in larger firms and SMEs (e.g., Chadwick, Way, Kerr, & Thacker, 2013; Koch & McGrath, 1996; Paul & Nealia, 2016; Sheehan, 2014).

The research questions formulated for this study required investigation of differences among three SME sectors in Pakistan (manufacturing, services and trade) in terms of overall HRM formality and its underlying individual HR functions (e.g., recruitment, training & development). To further explore the influence of contextual factors on the adoption of HRM practices, hypotheses related to the association between contextual factors (firm size, firm age, ownership type, existence of business plans, exporting, provision of HRIS and an HRM

department/specialist) and HRM formality (including individual HR functions) were prescribed. Similarly, based on an RBV perspective, positive relationships between HRM formality and organisational performance were hypothesized.

The research design followed a positivistic paradigm and quantitative methods. This cross-sectional study undertook analysis of primary data collected through a survey method. A stratified sampling technique is used in order to include three major business sectors of small to medium sized enterprises. A structured questionnaire was used to collect data from SME owners/managers. The reliability and validity of the instrument was tested (e.g., factor analysis, inter-item correlations). The data were analysed using various statistical tools such as analysis of variance (ANOVA), analysis of co-variance (ANCOVA), multivariate analysis of variance (MANOVA) and ordinary least square (OLS) multiple regression.

The key findings in relation to the research questions implied that service sector SMEs have adopted more formal HRM practices (including underlying HR functions) than manufacturing and trade SMEs. Moreover, manufacturing firms are found to be more formal than trade firms in terms of overall HRM formality and its underlying components of recruitment, selection, training & development, performance appraisal and compensation & benefits. These findings corroborate earlier empirical evidence (Chow, 1995; Datta et al., 2005; Jiang, 2009; Marlow, 1998; Psychogios et al., 2016; Terpstra & Rozell, 1993). With regards to the influence of contextual factors on the adoption of HRM practices, firm age, ownership by a larger organisation, business planning, availability of HRIS and an HR department/specialist were found to be influential determinants of HRM practices in SMEs. These findings were supportive of prior empirical evidence (Bacon & Hoque, 2005; Boselie et al., 2003; Chandler & McEvoy, 2000; Edwards & Ram, 2006, Newman & Sheikh, 2014; Storey et al., 2010) that also confirmed the role of institutional (contextual) factors in shaping HRM practices in SMEs. Similarly, the RBV perspective in the context of Pakistan was confirmed since increased HRM formality was found to be positively associated with SME performance (Lai et al., 2016; Nguyen & Bryant, 2004; Paul & Nealia, 2016; Sels et al., 2006; Sheehan, 2014; Teo et al., 2011; Way, 2002; Zhou et al., 2013). Results also suggested that the HRM-performance link in Pakistani SMEs holds positive while controlling for influential contextual factors of firm performance (business plan, HRIS and HR department/specialist).

In terms of theoretical contributions, findings confirm the institutional perspective in the context of SMEs in Pakistan, according to which contextual factors (e.g., business sector,

business plan) play a pivotal role in shaping the nature of HRM practices in SMEs. This study has also added distinctive value in terms of confirming an RBV perspective in the context of Punjab, the most populous province of Pakistan that represents more than 65% of all SMEs. With regards to the contributions in practice, SME owners/managers can align their HRM activities relevant to their contextual influential factors to achieve superior organisational gains.

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Appendices

Appendix A

Survey Questionnaire

University of HUDDERSFIELD

Queensgate, Huddersfield, West Yorkshire HD1 3DH, United Kingdom
+44 1484 422288

The Survey Questionnaire
Research on HRM formality and organizational performance of Pakistani SMEs

This questionnaire should be filled in by Owner or HRM/Personnel Manager or a senior Manager directly reporting to CEO/Owner.

Dear Sir/Madam,

I hope that by the grace of Almighty Allah, this questionnaire finds you in your sound health. I am a PhD research scholar enrolled at Huddersfield University, UK and conducting a research on the HRM practices (Formality) and organizational performance in Pakistani small to medium sized enterprises. The information that you will provide will help significantly in establishing the factors that influence the formality of HRM practices in SMEs and how/if it is linked to the organizational performance. The success of this study is entirely dependent on the provision of honest and fair information. It is the responsibility of the researcher to ensure the anonymity and confidentiality of the information provided. It is pertinent to mention here that the results derived from the study will not identify/highlight any individual organization in any published reports or papers.

Thank you indeed for your cooperation in this regard.

Reminder: This questionnaire should be filled in by Owner or HRM/Personnel Manager or a senior Manager directly reporting to CEO/Owner.

Please do not hesitate to contact the researcher in case of any queries at;

Muhammad.Burhan@hud.ac.uk, Muhammad.burhan@nu.edu.pk, Cell: 0092 03238415453

OrganizationName:_____

Filled by_____

Position/Title:_____

Section A: You and Your Organization

1. How many employees are currently working in your organization? (Nearest approximate)

   _____

2. For how long has your company been in business? (Please state number of years)

   _____

3. Which industry sector does your company operate?
   - Manufacturing
   - Services
   - Trade
   - Other
4. Is this organization owned by a family?
   - Yes
   - No (If 'No' then please go to Question 6)
5. What is the extent to which family members are involved in organizational decision making?
   - Hardly ever
   - Occasionally
   - Sometimes
   - Frequently
   - Almost Always
6. Is this company owned by a larger parent organization, nationally or internationally? (includes subsidiary/spinoff of a parent or holding company)
   - Yes
   - No
7. Has your business established a business plan? (specific goals and objectives identified)
   - Yes
   - No (If 'No' then please go to Question 9)

8. Has the business altered its practices in order to achieve the goals and objectives identified in the business plan?
    - Not at all
    - Very little
    - Moderately
    - Fairly well
    - comprehensively
9. Does your organization export? (either a product or services)
    - Yes
    - No (If 'No' then please go to Question 11)
10. If your organisation does export, how long have you exported your product or service?
    - Less than 2 years
    - 2 to 5 years
    - More than 5 years
11. How would you rate the extent to which your organization integrates the use of Information and Communication technology into its business operations and work processes? (Includes use of Computer systems, Internet, specific software's (e.g. ERPs)
    - Very Low
    - Low
    - Moderate
    - High
    - Very High
12. Does your organization have a human resource information system? (Integration of IT with HRM activities with the help of a facilitating software (HRIS), such as digitized employee record keeping, automated payroll, time and attendance, performance records and evaluations, etc.)
    - Yes
    - No
13. Does your organization have an HR specialist or a separate HRM department?
    - Yes
    - No
14. Does your organization conduct HRM planning?
    - Yes
    - No (If 'No' then please go to Question 16)
15. Are your HR plans documented?
    - Yes
    - No
16. What is the management level of your current work position?
    - Chief Executive Officer/Owner
    - Senior Manager reporting to CEO/Owner
    - Middle manager
    - Supervisor
    - Other (please specify) _____

17. What is your highest level of formal education?

□ Primary School	□ Bachelor Degree
□ Secondary School	□ Master Degree
□ Diploma	□ Other

18. Please specify your age group

- □ Under 30 years
- □ 30 to 40 years
- □ 40 to 50 years
- □ 50 plus

19. Please indicate your gender

- □ Male
- □ Female

Section B: Human Resource Practices

B1: Recruitment

Specify the extent to which the following recruitment methods have been used in your organization for the past 2 years.

Circle one for each method

Recruitment Methods	Never	Rare	Some-times	Most of the times	Always
1. Print Media (e.g. Newspapers, Magazines)	1	2	3	4	5
2. Company website	1	2	3	4	5
3. Third Party recruitment Website (e.g., Rozee.pk)	1	2	3	4	5
4. Educational Establishments (including job fairs)	1	2	3	4	5
5. Use of social media (e.g. LinkedIn)	1	2	3	4	5
6. Walk-ins	1	2	3	4	5
7. Referrals (Employee/Family friends)	1	2	3	4	5
8. Employment agencies	1	2	3	4	5

B2: Selection

Please tick the most appropriate option for the following practices that have been used in your organization over the past two years.

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1- Job descriptions are used during recruitment and selection process.					
2- The selection of prospective candidates is a step-by-step process.					
3- Company uses application pro forma for screening purposes.					
4- Organization uses well defined criteria for selection process.					
5- Number of years of experience is used as a basis for hiring employees as one of the selection criteria.					
6- Capabilities and skills of employees are used as basis for hiring employees.					
7- Company conducts tests to ascertain candidates' skills and capabilities where applicable.					
8- Qualifications of applicants are used as one of the selection criteria.					
9- Preliminary/initial interviews are conducted for vacant positions.					
10- Second interviews are conducted for shortlisted candidates.					
11- Reference checks/employment history checks are conducted where necessary.					
12- Adequate and relevant information about the organization and job is provided to the candidate at the time of selection. (Realistic job preview)					
13- Selection of a candidate is strictly based on his/her merit.					
14- Employment contract is provided to the successful candidate.					
15- New employees are hired on probation period.					

B3: Training & Development

Please tick the most appropriate option for the following practices that have been used in your organization over the past two years.

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The business has a formal training budget.					
2. The company conducts training on regular basis.					
3. Company follows a formal/systematic way of identifying training needs. (e.g. reviewing problem areas, job analysis, performance appraisal)					
4. The company arranges orientation / induction sessions for new employees to get them familiar with the working environment.					
5. The company conducts on-the-job training for the new employees.					
6. The company conducts on-the-job training for the current employees.					
7. Mentoring and coaching methods are used for on-the-job training of employees.					
8. The company facilitates and conducts training of vocation or technical nature (i.e. apprenticeships, re-training current/older employees, especially due to changing technological demands).					
9. The business have management & development training (i.e. leadership, supervisory skills, personal communication, graduate and postgraduate sponsorship)?					
10. Off-the-job training is arranged and conducted by the company management for employees where necessary. (e.g. training sessions on how to efficiently surpass departmental targets)					
11. The company has increased training where a program previously existed.					
12. Effectiveness of training is measured by pre and post-test evaluation.					
13. Training can be linked to performance and productivity.					

B4: Performance Appraisal

Please tick the most appropriate option for the following practices that have been used in your organization over the past two years.

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The company conducts performance appraisal of all employees.					
2. The company conducts performance appraisal on a regular basis.					
3. Company uses job descriptions to translate job requirements into levels of acceptable and unacceptable performance.					
4. The appraisal system includes individual evaluation methods. (e.g. essay evaluation, checklists, rating scales based on performance, rating scales based on behaviours)					
5. The appraisal system includes MBO method where management sets individual objectives with employees' involvement.					
6. The appraisal system includes multiple-person evaluation methods. (e.g. paired comparison)					
7. The company provides an opportunity for employees to evaluate their managers and their peers. (360 degree method)					
8. Organization provides feedback to employees after performance appraisal.					
9. The feedback provided constructively addresses weak and strong areas.					
10. The company uses performance appraisal for employee attainment/achievement. (e.g. Career development, wage increment, promotion)					
11. The company uses performance appraisal for highlighting employee training and development needs.					

B5: Compensation & Benefits

Please tick the most appropriate option for the following practices that have been used in your organization over the past two years.

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The company has a formal/systematic way of rewarding/compensating its employees.					
2. The Company follows Government policy on wage standards.					
3. The company conducts job evaluation (a systematic way of determining the relative worth of a job in relation to other jobs in the organization) and uses this for setting pay levels for most of the jobs.					
4. Pay levels are determined based on employee performance.					
5. Company takes into account the acquired skills of the employees when deciding pay levels.					
6. Company values seniority when assessing pay levels.					
7. Company offers individual/group incentive programs. (e.g. bonus pay, profit sharing, vacation incentives)					
8. Company offers discretionary benefits to its employees. (e.g. Paid holidays, health and insurance)					
9. Company offers employee services as additional benefits. (e.g. relocation allowances, child care, subsidized food/cafeteria, financial help (loans))					
10. The company properly acknowledges and adequately compensates overtime.					
11. Company is offering market competitive wages to its employees					
12. Jobs are grouped into well-defined pay grades.					

Section C: Organizational Performance

How would you compare your firm's performance over the past two years to that of your competitors in relation to……..

Subjective Performance: Non-Financial	Very Poor	Poor	Average	Good	Very Good
1. Quality of Products or services					
2. Development/addition of new products or services					
3. Ability to attract employees					
4. Ability to retain employees					
5. Productivity of employees					
6. Skills level of employees					
7. Satisfied customers/clients					
8. The speed of customer order handling and processing					
Subjective Performance: Financial	Very Poor	Poor	Average	Good	Very Good
9. Sales turnover					
10. Profitability					
11. Market share					

Section D: Contact Details

We would like to follow up this research with some individual organisations with their cooperation. If you are willing to participate in any further extension of this project, would you please fill out the details below, so that we might contact you, if necessary? We reiterate that all information provided on this form will be kept confidential. The research findings will not directly or indirectly identify any particular organisation.

NAME_____

POSITION/TITLE_____

ORGANISATION_____

ADDRESS_____

_____

CITY_____**PROVINCE** _____

MOBILE_____

LANDLINE_____

EMAIL_____

(Thank you indeed for your cooperation)

Appendix B

Descriptive statistics for underlying items of constructs

Construct	Items		*M*	*SD*
Recruitment	R1	Print Media (e.g. Newspapers, Magazines)	3.6	1.13
	R2	Company website	2.9	1.47
	R3	Third Party recruitment Website (e.g. Rozee.pk)	3.1	1.25
	R4	Educational Establishments (including job fairs)	2.5	1.30
	R5	Use of social media (e.g. LinkedIn)	2.8	1.33
	R6	Walk-ins	3.5	0.97
	R7	Referrals (Employee/Family friends)	3.9	0.96
	R8	Employment agencies	2.7	1.16
Selection	S1	Job descriptions are used during recruitment and selection process.	3.4	1.11
	S2	The selection of prospective candidates is a step-by-step process.	3.4	1.08
	S3	Company uses application pro forma for screening purposes.	3.6	1.09
	S4	Organization uses well defined criteria for selection process.	3.5	1.06
	S5	Number of years of experience is used as a basis for hiring employees as one of the selection criteria.	3.8	0.93
	S6	Capabilities and skills of employees are used as basis for hiring employees.	3.8	0.90
	S7	Company conducts tests to ascertain candidates' skills and capabilities where applicable.	3.1	1.21
	S8	Qualifications of applicants are used as one of the selection criteria.	3.8	0.95
	S9	Preliminary/initial interviews are conducted for vacant positions.	3.9	0.85
	S10	Second interviews are conducted for shortlisted candidates.	3.4	1.12
	S11	Reference checks/employment history checks are conducted where necessary.	3.4	1.18
	S12	Adequate and relevant information about the organization and job is provided to the candidate at the time of selection. (Realistic job preview)	3.5	1.11
	S13	Selection of a candidate is strictly based on his/her merit.	3.5	1.04
	S14	Employment contract is provided to the successful candidate.	3.6	1.17
	S15	New employees are hired on probation period.	3.8	1.01
Training & Development	TD1	The business has a formal training budget.	3.0	1.19
	TD2	The company conducts training on regular basis.	3.2	1.11
	TD3	Company follows a formal/systematic way of identifying training needs. (e.g. reviewing problem areas, job analysis, performance appraisal)	3.2	1.18
	TD4	The company arranges orientation / induction sessions for new employees to get them familiar with the working environment.	3.6	1.09
	TD5	The company conducts on-the-job training for the new employees.	3.8	0.91
	TD6	The company conducts on-the-job training for the current employees.	3.6	0.95
	TD7	Mentoring and coaching methods are used for on-the-job training of employees.	3.6	0.90
	TD8	The company facilitates and conducts training of vocation or technical nature (i.e. apprenticeships, re-training current/older employees)	3.2	1.04
	TD9	The business have management & development training (i.e. leadership, supervisory skills, personal communication, graduate and postgraduate	3.1	1.23
	TD10	Off-the-job training is arranged and conducted by the company management for employees where necessary.	3.1	1.09
	TD11	The company has increased training where a program previously existed.	3.2	1.15
	TD12	Effectiveness of training is measured by pre and post-test evaluation.	3.4	1.09
	TD13	Training can be linked to performance and productivity.	3.7	1.02

Construct	Items		*M*	*SD*
Performance Appraisal	PA1	The company conducts performance appraisal of all employees.	3.3	1.05
	PA2	The company conducts performance appraisal on a regular basis.	3.3	1.08
	PA3	Company uses job descriptions to translate job requirements into levels of acceptable and unacceptable performance.	3.3	1.06
	PA4	The appraisal system includes individual evaluation methods. (e.g. essay evaluation, checklists, rating scales based on performance)	3.5	1.06
	PA5	The appraisal system includes MBO method where management sets individual objectives with employees' involvement.	3.4	1.09
	PA6	The appraisal system includes multiple-person evaluation methods. (e.g. paired comparison)	3.3	1.19
	PA7	The company provides an opportunity for employees to evaluate their managers and their peers. (360 degree method)	2.8	1.25
	PA8	Organization provides feedback to employees after performance appraisal.	3.6	1.08
	PA9	The feedback provided constructively addresses weak and strong areas.	3.6	1.07
	PA10	The company uses performance appraisal for employee attainment/achievement. (e.g. Career development, wage increment)	3.7	1.00
	PA11	The company uses performance appraisal for highlighting employee training and development needs.	3.2	1.06
Compensation & Benefits	CB1	The company has a formal/systematic way of rewarding/compensating its employees.	3.4	1.11
	CB2	The Company follows Government policy on wage standards.	3.6	1.00
	CB3	The company conducts job evaluation (a systematic way of determining the relative worth of a job in relation to other jobs in the organization) and uses this for setting pay levels for most of the jobs.	3.1	1.16
	CB4	Pay levels are determined based on employee performance.	3.7	0.95
	CB5	Company takes into account the acquired skills of the employees when deciding pay levels.	3.7	0.94
	CB6	Company values seniority when assessing pay levels.	3.8	0.87
	CB7	Company offers individual/group incentive programs. (e.g. bonus pay, profit sharing, vacation incentives)	3.6	0.94
	CB8	Company offers discretionary benefits to its employees. (e.g. Paid holidays, health and insurance)	3.3	1.05
	CB9	Company offers employee services as additional benefits. (e.g. relocation allowances, child care, subsidized food/cafeteria, financial help (loans))	3.3	1.21
	CB10	The company properly acknowledges and adequately compensates overtime.	3.3	1.07
	CB11	Company is offering market competitive wages to its employees.	3.4	1.04
	CB12	Jobs are grouped into well-defined pay grades.	3.3	1.17
Organisational Performance	OP1	Quality of Products or services	3.7	0.99
	OP2	Development/addition of new products or services	3.6	1.14
	OP3	Ability to attract employees	3.6	1.04
	OP4	Ability to retain employees	3.6	1.08
	OP5	Productivity of employees	3.7	0.98
	OP6	Skills level of employees	3.6	1.02
	OP7	Satisfied customers/clients	3.9	0.93
	OP8	The speed of customer order handling and processing	3.7	1.06
	OP9	Sales turnover	3.8	0.98
	OP10	Profitability	3.5	1.13
	OP11	Market share	3.2	1.20

Appendix C

ANOVA: Outliers in each group of independent variable

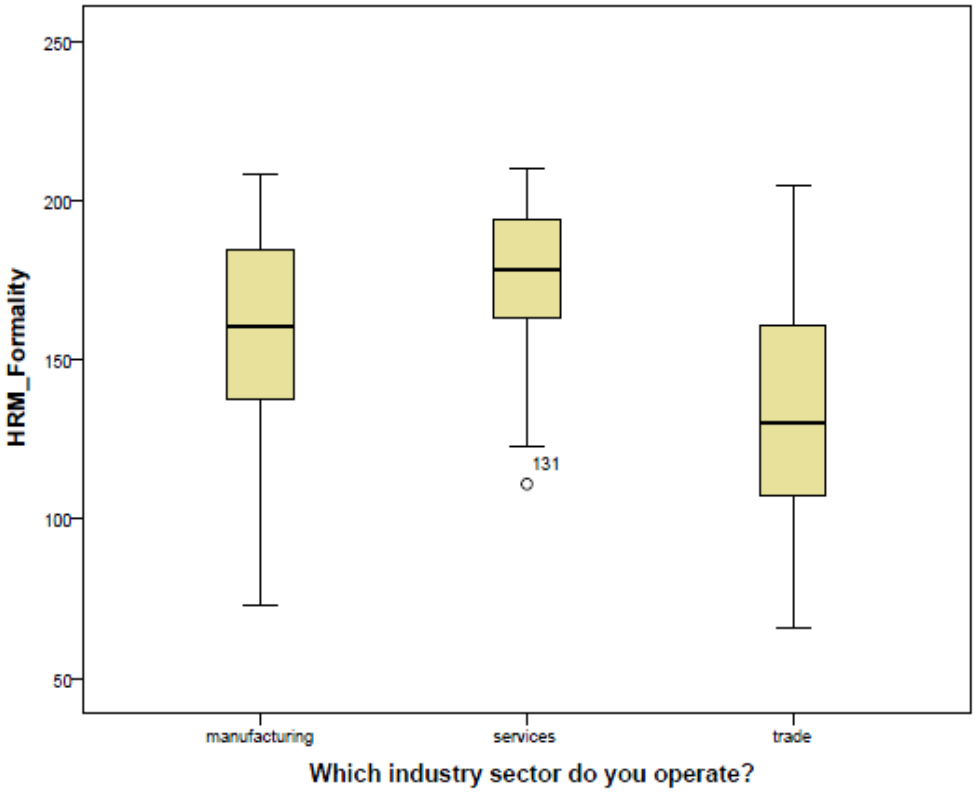

Figure D. Assessment of outliers on each group using boxplot

Appendix D

Correlations between variables (IVs & DVs)

	Size	Age	Family owned	Parent firm	Business Plan	Exporting	HRIS	HRM Department	Recruitment	Selection	Training & Development	Performance Appraisal	Compensation & Benefits	HRM Formality	Organisational Performance
Size	1														
Age	.48**	1													
Family owned[a]	-.22**	-.15*	1												
Parent firm[a]	.25**	.14*	-.30**	1											
Business Plan[a]	.30**	.20**	-.26**	.27**	1										
Exporting[a]	.19**	.10	-.13*	.08	.21**	1									
HRIS[a]	.20**	.03	-.09	.19*	.27**	.08	1								
HRM Department[a]	.49**	.27**	-.36**	.48**	.35**	.17*	.19**	1							
Recruitment	.35**	.22**	-.30**	.45**	.39**	.11	.31**	.53**	1						
Selection	.38**	.34**	-.31**	.40**	.49**	.23**	.26**	.51**	.66**	1					
Training & Development	.44**	.34**	-.36**	.44**	.49**	.21**	.24**	.57**	.69**	.80**	1				
Performance Appraisal	.40**	.31**	-.32**	.38**	.48**	.20**	.26**	.53**	.67**	.82**	.83**	1			
Compensation & Benefits	.39**	.41**	-.30**	.35**	.41**	.16**	.17**	.43**	.53**	.78**	.74**	.76**	1		
HRM Formality	.44**	.37**	-.35**	.44**	.52**	.22**	.26**	.58**	.76**	.94**	.91**	.93*	.86**	1	
Organisational Performance	.44**	.41**	-.32**	.36**	.43**	.19*	.17**	.54**	.62**	.77**	.91**	.93**	.86**	.85**	1

Note. [a] Dichotomous variable: The relationship between two nominal variables is measured by the Phi coefficient. For dichotomous variables, the Phi coefficient is identical to Pearson's correlation. Fisher's exact test is used to test for dependency between two dichotomous variables.

*$p < 0.05$, **$p < 0.01$

Appendix E

MANOVA: Linear relationships of DVs among each other in each group (sectors)

Manufacturing

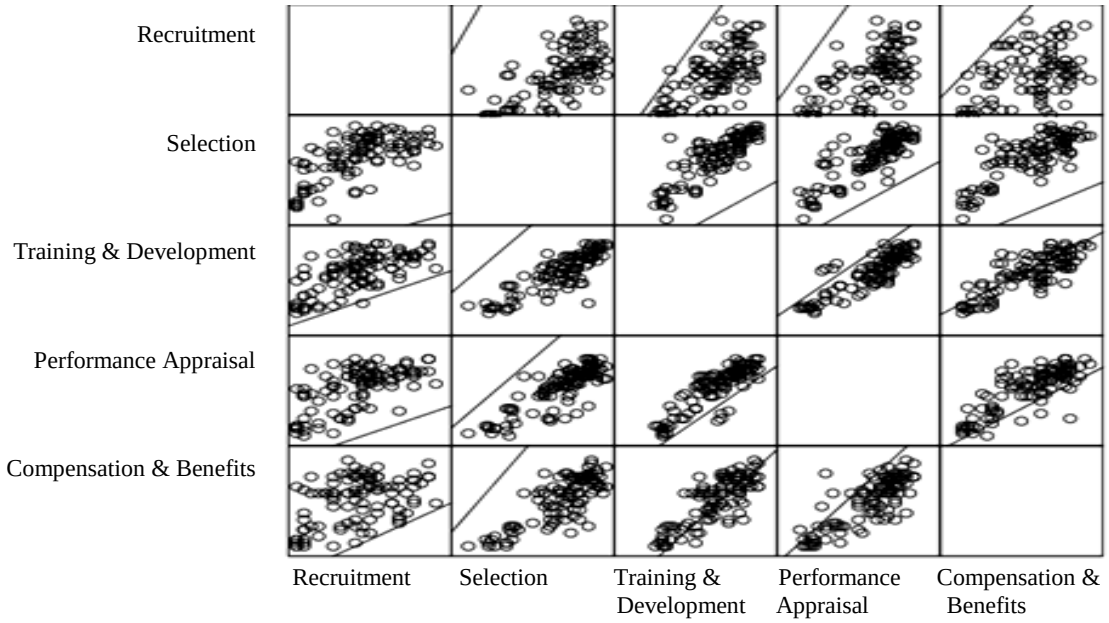

Figure E1. Scatter plot for assessing linear relationships among DVs on manufacturing group

Services

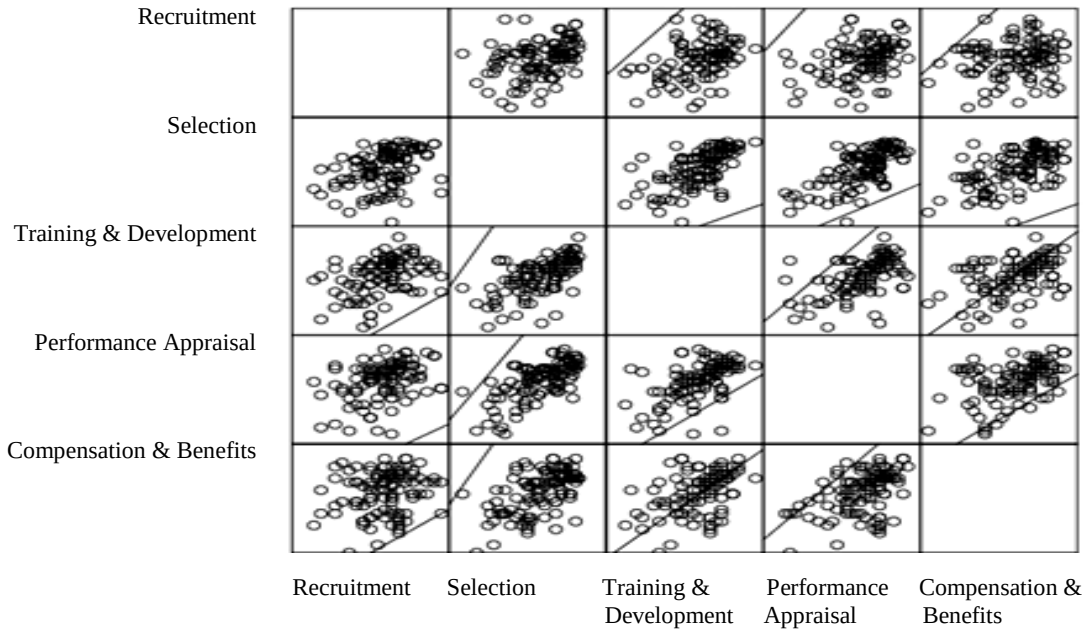

Figure E2. Scatter plot for assessing linear relationships among DVs on services group

Trade

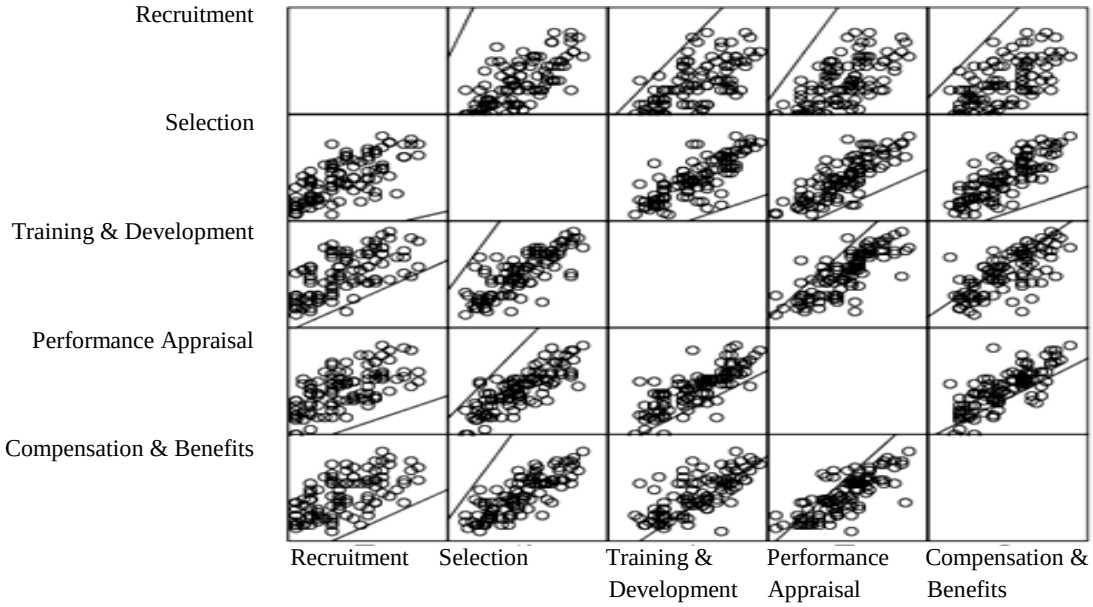

Figure E3. Scatter plot for assessing linear relationships among DVs on Trade group

Appendix F

ANCOVA: Assessment of homoscedasticity

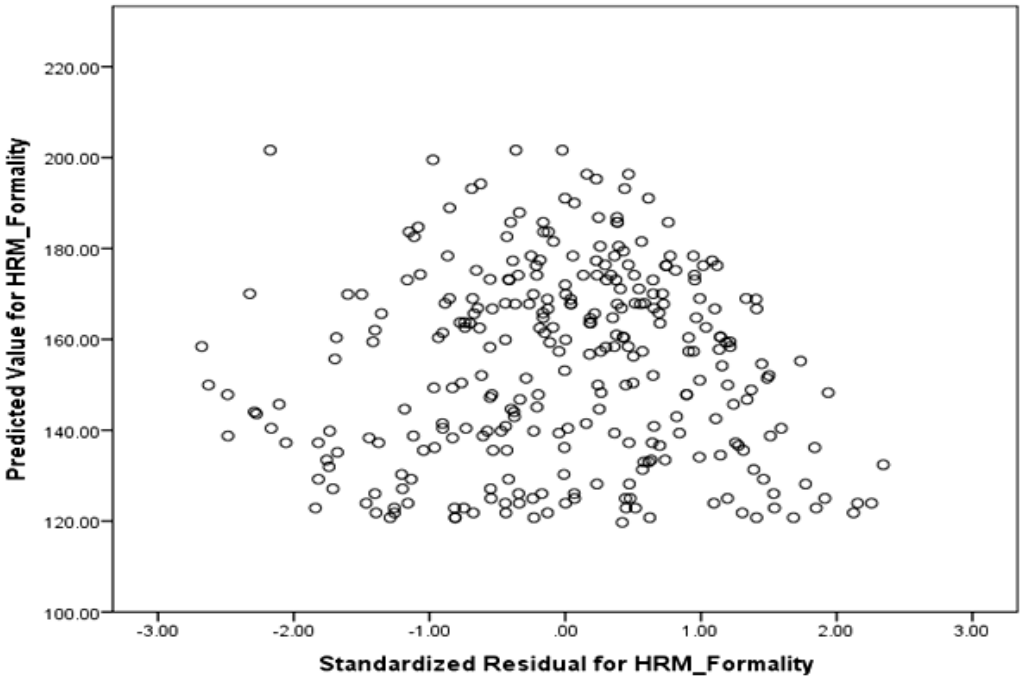

Figure F. Scatter plot for assessing homoscedasticity (ANCOVA)

Appendix G

Influential determinants of HRM_Formality: Assessment of linear relationship of IVs collectively with DV, homoscedasticity and distribution of residuals

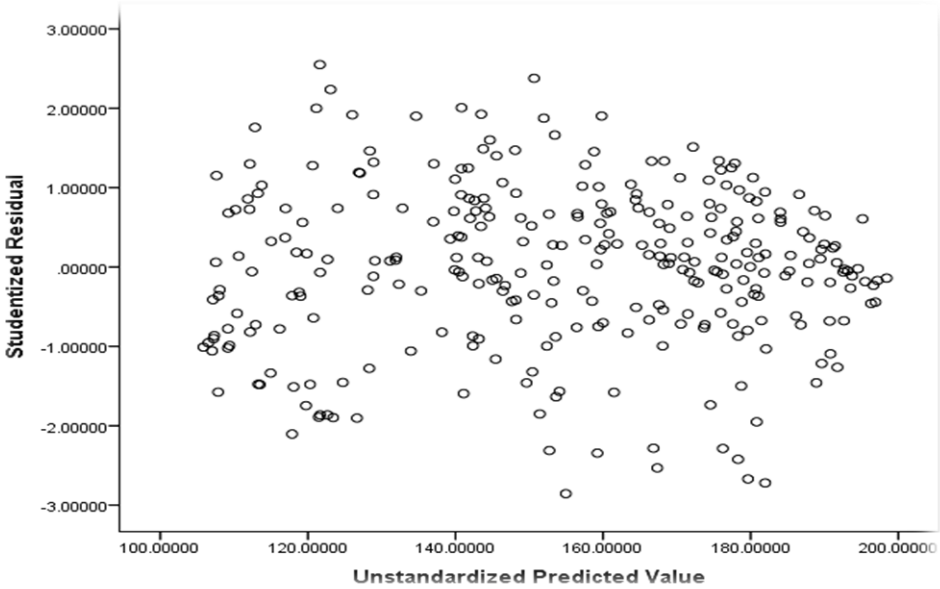

Figure G1. Scatter plot for assessing homoscedasticity and linear relationship of IVs collectively with DV

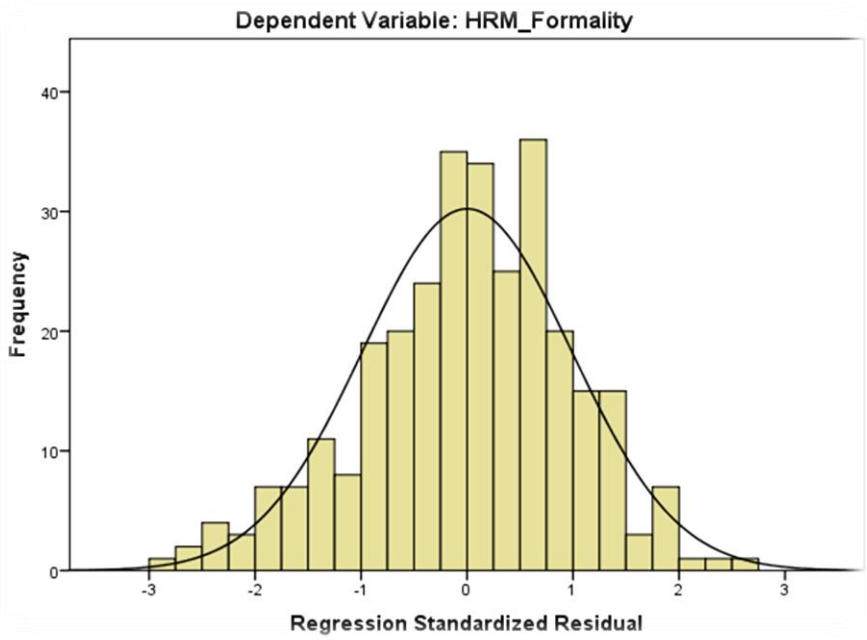

Figure G2. Distribution of error terms (residuals)

Appendix H

Influential determinants of Recruitment: Assessment of linear relationship of IVs collectively with DV, homoscedasticity and distribution of residuals

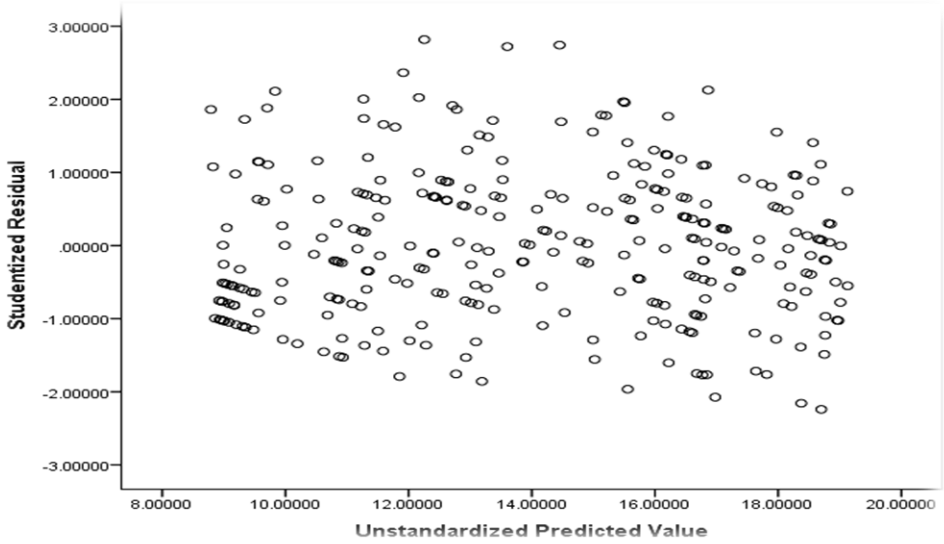

Figure H1. Scatter plot for assessing homoscedasticity and linear relationship of IVs collectively with DV

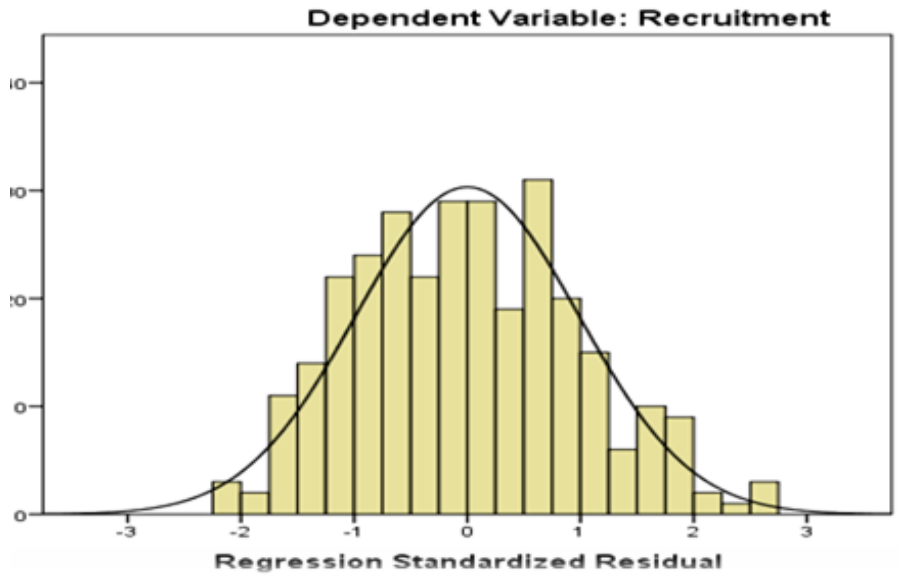

Figure H2. Distribution of error terms (residuals)

Appendix I

Influential determinants of Selection: Assessment of linear relationship of IVs collectively with DV, homoscedasticity and distribution of Residuals

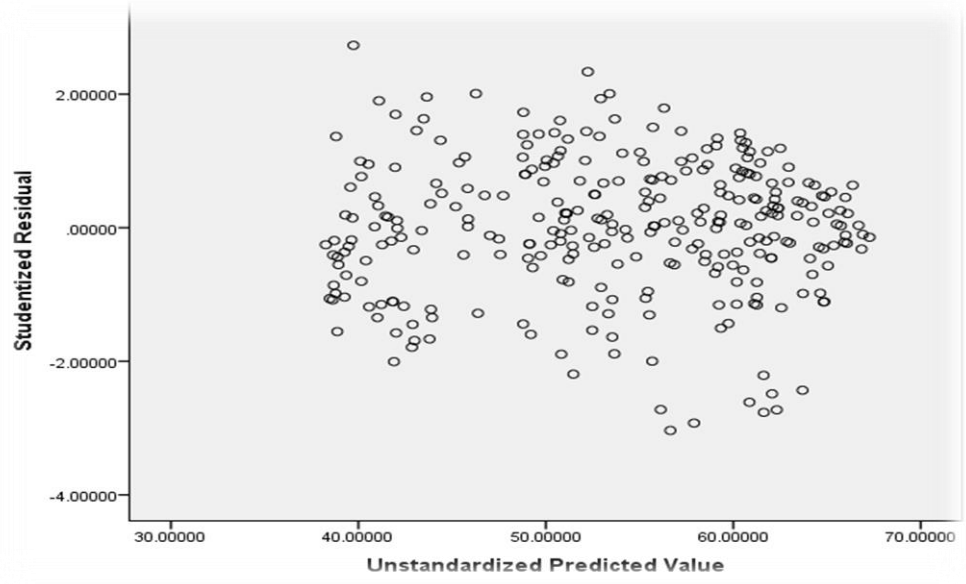

Figure I1. Scatter plot for assessing homoscedasticity and linear relationship of IVs collectively with DV

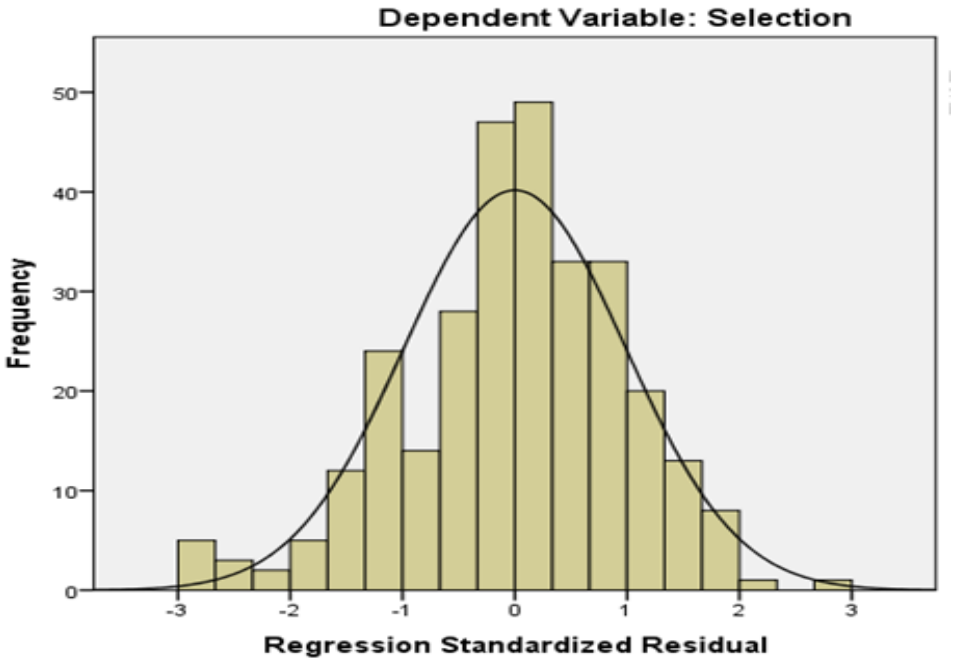

Figure I2. Distribution of error terms (residuals)

Appendix J

Influential determinants of Training_Development: Assessment of Linear relationship of IVs collectively with DV, Homoscedasticity and Distribution of Residuals

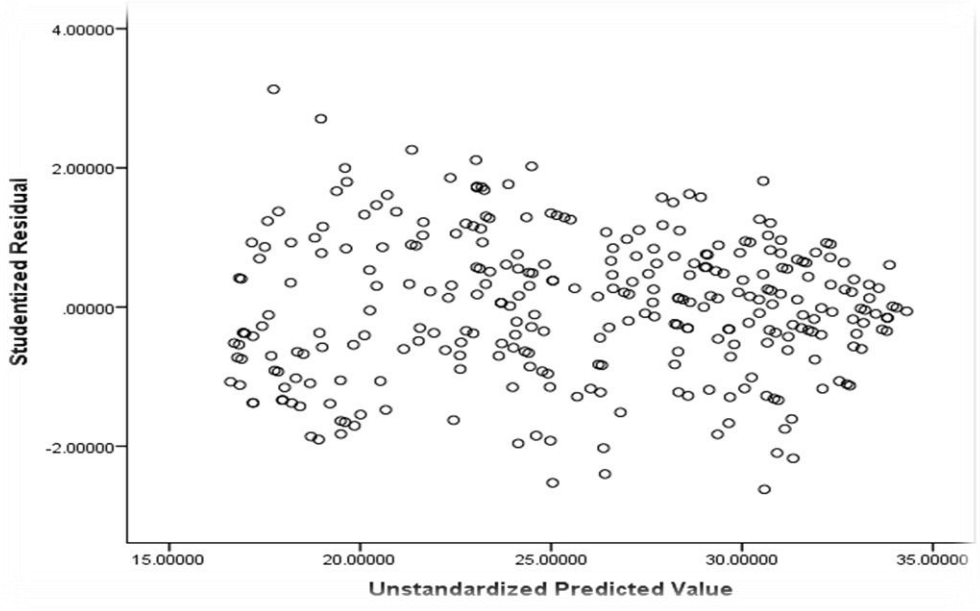

Figure J1. Scatter plot for assessing homoscedasticity and linear relationship of IVs collectively with DV

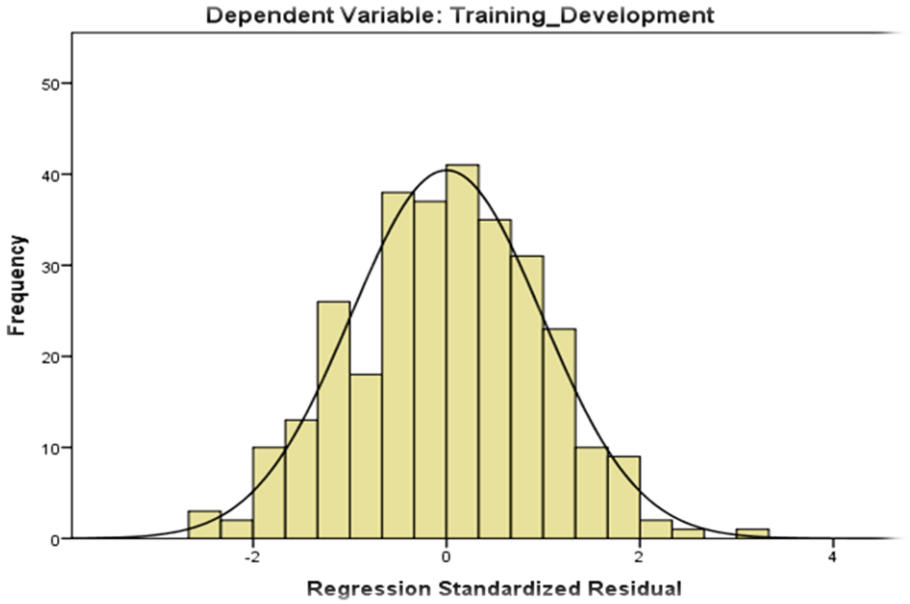

Figure J2. Distribution of error terms (residuals)

Appendix K

Influential determinants of Performance_Appraisal: Assessment of linear relationship of IVs collectively with DV, homoscedasticity and distribution of residuals

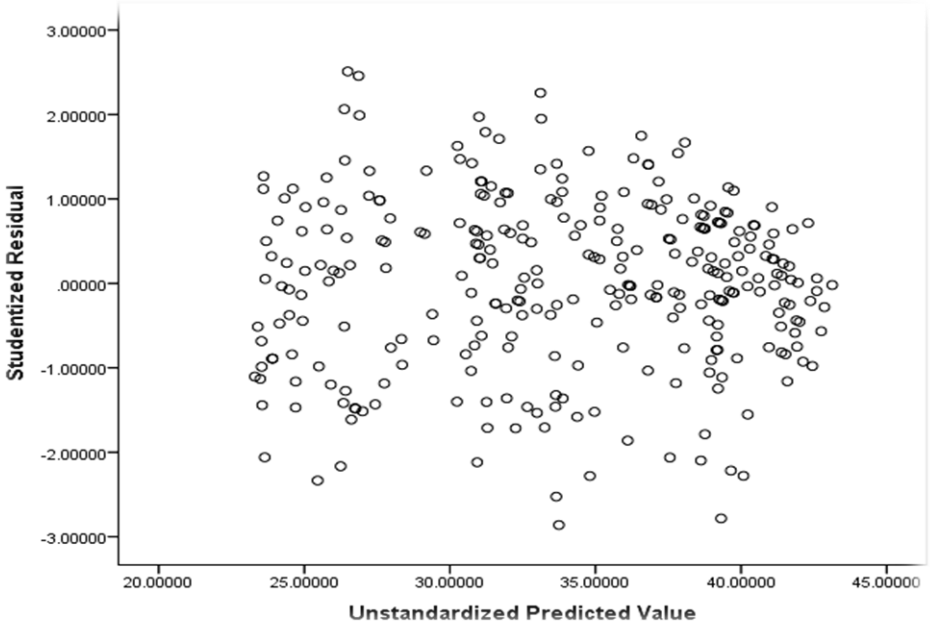

Figure K1. Scatter plot for assessing homoscedasticity and linear relationship of IVs collectively with DV

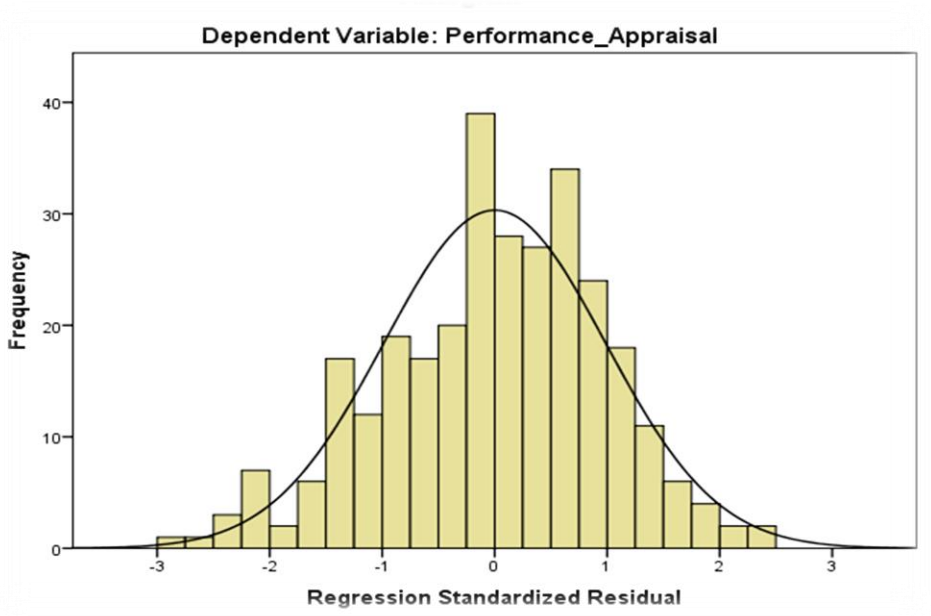

Figure K2. Distribution of error terms (residuals)

Appendix L

Influential determinants of Compensation_Benefits: Assessment of linear relationship of IVs collectively with DV, homoscedasticity and distribution of residuals

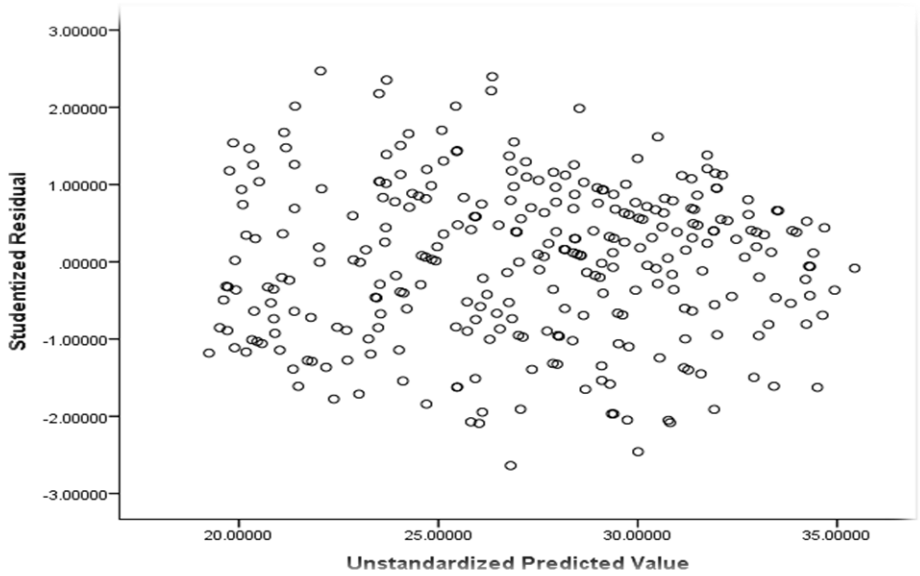

Figure L1. Scatter plot for assessing homoscedasticity and linear relationship of IVs collectively with DV

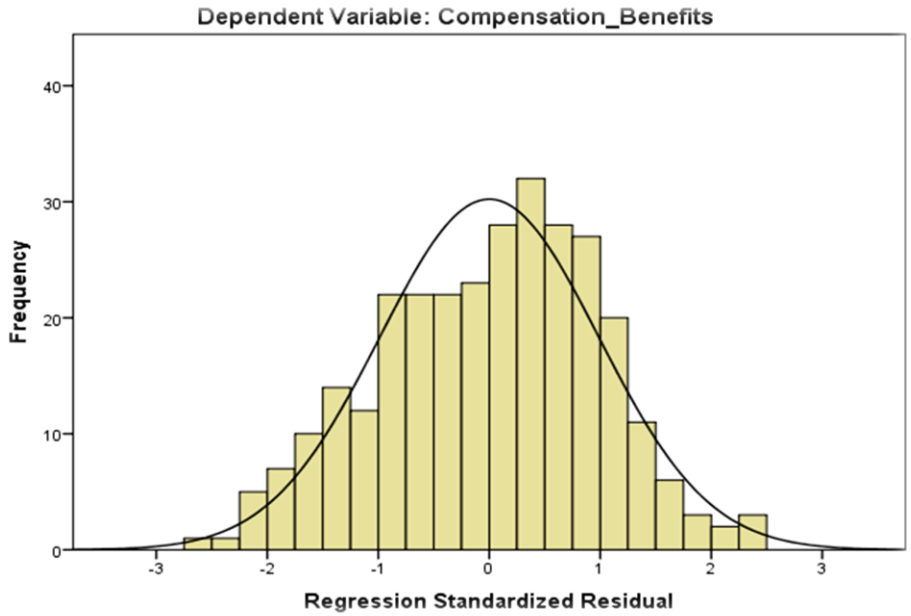

Figure L2. Distribution of error terms (residuals)

Appendix M

HRM_Formality and Organizational_Performance: Assessment of linear relationship of IVs collectively with DV, homoscedasticity and distribution of residuals

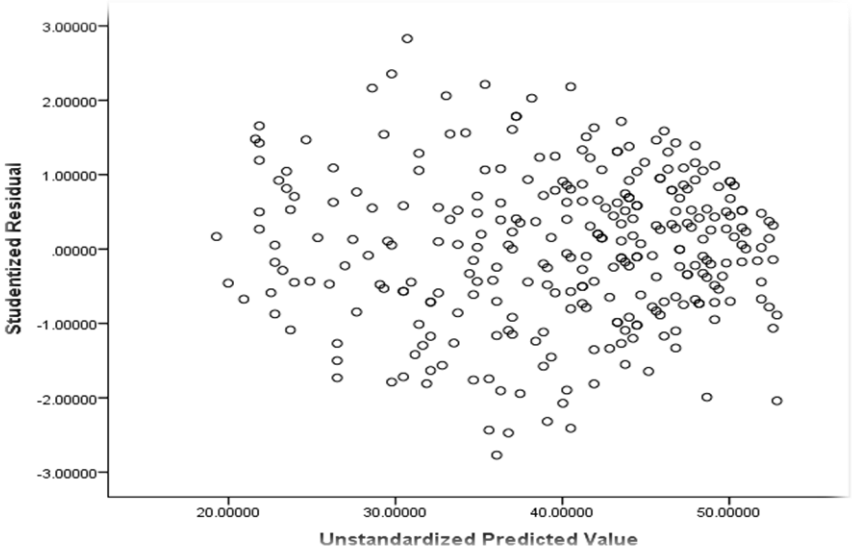

Figure M1. Scatter plot for assessing homoscedasticity and linear relationship of IVs collectively with DV

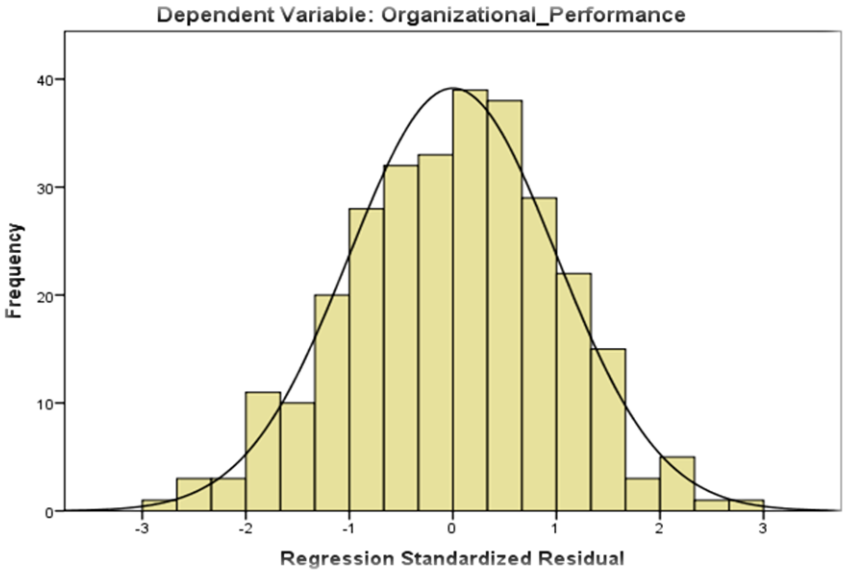

Figure M2. Distribution of error terms (residuals)

Appendix N

HRM_Formality and Organizational_Performance (with covariates): Assessment of linear relationship of IVs collectively with DV, homoscedasticity and distribution of residuals

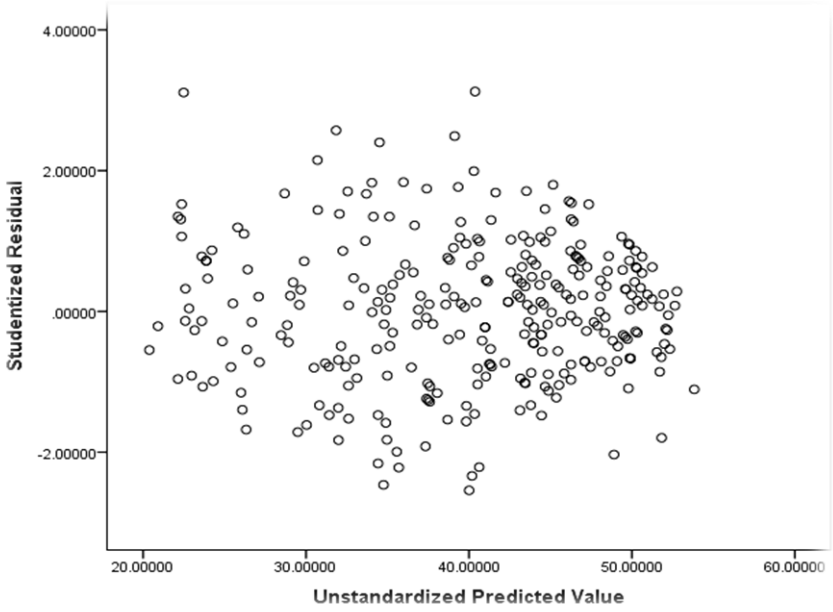

Figure N1. Scatter plot for assessing homoscedasticity and linear relationship of IVs collectively with DV

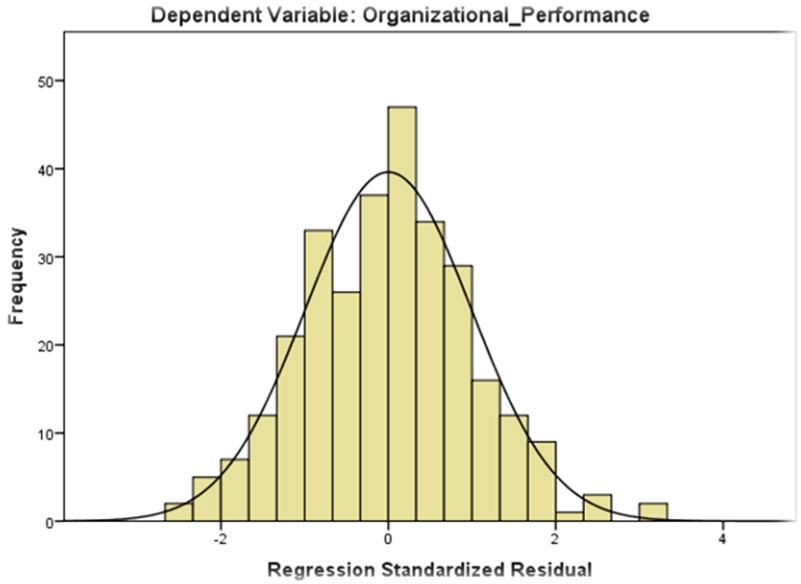

Figure N2. Distribution of error terms (residuals)