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**TOPIC OF DOCTORAL DISSERTATION**

**THE IMPACT OF HUMAN RESOURCE MANAGEMENT PRACTICES  
TO FINANCIAL AND NON-FINANCIAL PERFORMANCE OF SMEs IN  
MANUFACTURING INDUSTRY**

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## **DEDICATION**

*This dissertation is dedicated to my beloved family, to the memory of my father Shaban and to my beloved mother Remziye*

## **Table of Contents**

List of Figures .....	vi
List of Charts .....	vii
List of Tables .....	viii
List of abbreviations .....	ix
<b>ABSTRACT .....</b>	<b>x</b>
<b>АИСТРАКТ .....</b>	<b>xi</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1. Actuality of the Research Problem and Scientific Contribution to the Field.....	4
2. Research hypotheses .....	7
3. Subject, aim, objectives and research questions of the study.....	8
4. Chapters' Outline .....	10
5. Methodological Approach.....	12
<b>CHAPTER I - LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK OF HUMAN RESOURCE MANAGEMENT AND SMEs PERFORMANCES.....</b>	<b>14</b>
1.1 Definition of the human resource management (HRM).....	14
1.1.1 The development of the term HRM .....	16
1.1.2 The philosophy of theories of HRM .....	17
1.2 Human resource management practices .....	18
1.2.1 The meaning of human resource management practices .....	19
1.2.2 The process of selecting human resource management practices .....	20
1.2.2.1 Recruitment and selection.....	21
1.2.2.2 Training and development.....	23
1.2.2.3 Communication and information .....	24
1.2.2.4 Compensation and reward.....	26
1.2.2.5 Job design.....	27
1.2.2.6 Performance appraisal.....	28
1.3 Human resource management practices on SMEs .....	29
1.4 The term and significance of the SME's performance.....	32
1.4.1 The term and significance of the SME's financial performance.....	32
1.4.1.1 Return on investment (ROI).....	34
1.4.1.2 Growth in sales.....	35

1.4.1.3 Return on sales (ROS).....	37
1.4.1.4 Profit Growth .....	39
1.4.1.5 Manufacturing cost .....	40
1.4.2 The term and significance of the non-financial performance .....	41
1.4.2.1 Product or services quality .....	43
1.4.2.2 Responsiveness to customers .....	44
1.4.2.3 Customer satisfaction.....	45
1.4.2.4 Delivery speed.....	46
1.4.2.5 Delivery dependability .....	46
1.4.2.6 Market shares .....	48
<b>CHAPTER II - RELATIONSHIP BETWEEN HRM PRACTICES AND SME'S PERFORMANCE .....</b>	<b>49</b>
2.1 Relationship between HRM practices and organizational performance in SMEs .....	49
2.1.1 Human resource management practices relationship on financial performance .....	51
2.1.2 Human resource management practices relationship on non-financial performance.....	52
2.1.3 Relationship between different types of HRM practices and performance of SMEs .....	54
2.1.3.1 Relationship between recruitment and selection and performance of SMEs .....	54
2.1.3.2 Relationship between training and development and performance of SMEs .....	55
2.1.3.3 Relationship between communication and information and performance of SMEs.....	57
2.1.3.4 Relationship between compensation and reward and performance of SMEs .....	58
2.1.3.5 Relationship between job design and performance of SMEs.....	60
2.1.3.6 Relationship between performance appraisal and performance of SMEs.....	61
2.2 Relationship between non-financial performance and financial performance in SMEs.....	63
<b>CHAPTER III - EMPIRICAL RESEARCH OF THE IMPACT OF HRM PRACTICES TO PERFORMANCES OF THE SME'S IN THE MANUFACTURING INDUSTRY IN REPUBLIC OF KOSOVO.....</b>	<b>65</b>
3.1 Conceptual framework and research model .....	66
3.2 Research sample and data collection.....	68
3.2.1 Questionnaire designed and measures .....	69
3.2.2 Definition of the variables in the model.....	71
3.2.2.1 Human resource management practices as independent variables.....	71
3.2.2.2 SMEs Performance as dependent variables .....	72
3.2.2.3 Control variables .....	73

3.2.3 Pre-pilot study and pilot study .....	74
3.2.4 Large scale method .....	75
3.2.5 Comprehensive analysis of HRM practices and SME performance .....	77
3.2.6 Non-response bias and common-method bias.....	93
3.3 Research variables .....	94
<b>CHAPTER IV - DATA AND RESULTS OF CORRELATION AND REGRESSION ANALYSES .....</b>	<b>96</b>
4.1 Reliability and validity of collected data.....	96
4.1.1 Convergent and discriminant validity of the first-order constructs.....	97
4.2 Hypotheses testing of the model .....	101
4.2.1 Direct effects of the model .....	105
4.2.2 Direct effects of HRM practices on financial performance of SME .....	113
4.2.3 Direct effects of HRM practices on non-financial performance of SME.....	114
4.2.4 Direct effects of HRM practices on organizational performance of SME.....	116
<b>CHAPTER V – DISCUSSION, RESEARCH IMPLICATIONS AND LIMITATIONS OF EMPIRICAL RESEARCH.....</b>	<b>119</b>
5.1 Research implications .....	121
5.1.1 The role of HRM practices in influencing financial and non-financial performance of SMEs.....	121
5.1.2 The role of HRM practices in influencing organizational performance of SMEs .....	126
5.2 Theoretical implications .....	127
5.3 Managerial implications .....	129
5.4 Limitation of this study and future research.....	132
<b>CONCLUSION .....</b>	<b>135</b>
<b>REFERENCES.....</b>	<b>142</b>
<b>APPENDIX.....</b>	<b>176</b>
Appendix 1 .....	176
Appendix 2 .....	182
Statistical Appendices .....	182

## List of Figures

Figure 1: Research problem framework .....	6
Figure 2: Conceptual framework of the study for testing variables.....	67
Figure 3: Conceptual Diagram - direct effects of main hypotheses .....	68

## List of Charts

Chart 1: Recruitment and selection .....	78
Chart 2: Training and development .....	80
Chart 3: Communication and information .....	82
Chart 4: Compensation and reward .....	84
Chart 5: Job design .....	86
Chart 6: Performance appraisal .....	88
Chart 7: Non-financial performance .....	90
Chart 8: Financial performance .....	92

## List of Tables

Table 1: Characteristics of sample SMEs .....	76
Table 2: Summary constructs of the current study.....	95
Table 3a: Measurement items (with factor loadings) for first-order constructs of HRM practices.....	98
Table 3b: Measurement items (with factor loadings) for first-order constructs of organizational performance of SME.....	99
Table 4: Means, standard deviations and reliability of the first-order constructs of (a) HRM practices, (b) organizational performance of SME.....	100
Table 5: Convergent and discriminant validity of the first-order factors.....	101
Table 6a: Correlation matrix of the main variables used in hierarchal regression.....	102
Table 6b: Correlation matrix of the main variables used in multivariate regression.....	103
Table 6c: Correlation matrix of the main variables used in multivariate regression.....	103
Table 6d: Correlation matrix of the main variables used in multivariate regression.....	103
Table 7: Results of hierarchical regression analysis on financial performance.....	107
Table 8: Results of hierarchical regression analysis on non-financial performance.....	111
Table 9: Regression analysis of dependent variable “financial performance” .....	114
Table 10: Regression analysis of dependent variable “non-financial performance” .....	115
Table 11: Regression analysis of dependent variable “Organizational performance of SMEs” .....	117
Table 12: Hypotheses test results.....	118



## List of abbreviations

<b>HRM</b>	Human Resource Management	<b>RecSel</b>	Recruitment and selection
<b>HRMp</b>	Human Resource Management Practices	<b>TraDev</b>	Training and development
<b>KAS</b>	Kosovo Agency of Statistics	<b>ComInf</b>	Communication and information
<b>OP</b>	Organizational Performance	<b>ComRew</b>	Compensation and reward
<b>SPSS</b>	Statistical Package for the Social Sciences	<b>JobDes</b>	Job Design
<b>SME</b>	Small and Medium-sized Enterprises	<b>PerApp</b>	Performance appraisal
<b>EFA</b>	Exploratory Factor Analysis	<b>Non_Fin_Per</b>	Non- financial performance
<b>CFA</b>	Confirmatory Factor Analysis	<b>FinPer</b>	Financial performance
<b>VIF</b>	Variance Inflation Factor	<b>SME_size</b>	Small and Medium-sized Enterprises Size
<b>KMO</b>	Kaiser-Meyer-Olkin	<b>SME_age</b>	Small and Medium-sized Enterprises Age
<b>IFI</b>	Incremental Fit Index	<b>HR</b>	Human Resource
<b>NNFI</b>	Non-normed Fit Index	<b>RBV</b>	Resource-based view
<b>CFI</b>	Comparative Fit Index		
<b>RMSEA</b>	Root Mean Square Error of Approximation		
<b>SRMR</b>	Standardized Root Mean Square Residual		
<b>ROI</b>	Return on Investment		
<b>ROS</b>	Return on Sales		
<b>ANOVA</b>	Analysis of variance		
<b>CR</b>	Composite reliability		
<b>AVE</b>	Average variance extracted		

## **ABSTRACT**

Conducting business in today's ever-changing market environment necessitates making strategic decisions that reach beyond the borders of an SME. To not only survive but also thrive in the face of constant shifts, it is essential to make well-thought-out choices that allow for adaptation, resilience, and prosperity. The research emphasizes the significance of two perspectives, one individually and the other on bundling, and strategically implementing these perspectives of human resource management (HRM) practices within small and medium-sized enterprises (SMEs) to improve their competitive position, financial performance, non-financial performance, and organizational performance. Hence, through the adoption of an integrative interdisciplinary approach and a relational perspective, this thesis sheds light on the influence of Human Resource Management (HRM) practices (recruitment and selection, training and development, communication and information, compensation and reward, job design, performance appraisal) and their impact from multiple dimensions on organizational performance (financial and non-financial) of SMEs. As a result, a quantitative study using self-administered questionnaires with the SMEs was conducted. Using the data obtained from 153 manufacturing SMEs, it tests, examines, and develops the direct relationship between HRM practices and the financial performance, non-financial performance, and organizational performance of SMEs. The findings indicate a positive relationship between HRM practices and financial performance, a positive influence of HRM practices on the non-financial performance of SMEs, and a direct impact of HRM practices as a bundle on the organizational performance of SMEs. In addition, the findings also show that some HRM practices that act individually have a non-significant impact on financial and non-financial performance. This research provides a substantial contribution to the theoretical and practical understanding of the relationship between HRM practices and SME performance.

**Keywords:** Human Resource Management Practices; Financial performance; Non-financial performance; Organizational Performance; Manufacture Industry; SME.

## АПСТРАКТ

Бизнисот при денешното постојано менување на пазарното опкружување бара донесување стратешки одлуки кои ги надминуваат границите на МСП. Не само да опстанат, туку и да напредуваат во услови на постојани промени, од суштинско значење е да се направат добро осмислени избори кои овозможуваат адаптација, издржливост и просперитет. Овој труд го потенцира значењето на две перспективи, едната гледана засебно, а другата за здружување и стратешкото спроведување на практиките за управување со човечки ресурси (МЧР) кај малите и средни претпријатија (МСП) за подобрување на нивната конкурентска позиција, финансиските, нефинансиски и организациски перформанси. Затоа, со преземање интердисциплинарен пристап со меѓусебна поврзаност на варијаблите, трудот има интегративен и современ пристап кон осветлувањето на улогата на практиките за управување со човечки ресурси МЧР) (регрутирање и селекција, обука и развој, комуникација и информации, компензација и награда, дизајн, проценка на перформансите) и нивното влијание од повеќе димензии врз организациските перформанси (финансиски и нефинансиски) на МСП. Како резултат на тоа, спроведена е квантитативна анализа користејќи само-администрирани прашалници со МСП. Користејќи ги податоците добиени од 153 производствени мали и средни претпријатија, моделот ја тестира, испитува и развива директната врска на практиките за HRM со финансиските и нефинансиски перформанси и организациското работење на МСП. Наодите укажуваат на позитивна поврзаност помеѓу практиките за управување со човечки ресурси и финансиските перформанси, позитивно влијание на практиките за управување со човечки ресурси врз нефинансиското работење на МСП и директно влијание на практиките за управување со човечки ресурси како сет врз организациските перформанси на МСП. Дополнително, наодите покажуваат дека некои практики за управување со човечки ресурси кои дејствуваат поединечно имаат незначително влијание врз финансиските и нефинансиските перформанси. Оваа студија дава значителен придонес кон теоретското и практичното разбирање на врската помеѓу менаџмент практиките за човечки ресурси и перформансите на МСП.

**Клучни зборови:** Практики за управување со човечки ресурси; финансиски перформанси; нефинансиско работење; организациски перформанси; преработувачка индустрија; МСП.

## INTRODUCTION

The dynamic shifts in the business landscape are evolving rapidly, and the current market stability can swiftly transform into unpredictability in the foreseeable future. In this volatile market scenario, the level of competition undergoes periodic fluctuations. Enterprises are in constant pursuit of enhancing their competitive prowess to outperform their competitors and secure the coveted positions of ultimate survivors and industry leaders. Firms must equip themselves to effectively respond to unforeseen alterations in order to confront this unparalleled level of uncertainty, unprecedented in human history. Consequently, they should consistently maintain their readiness to deploy their available resources and capabilities strategically for the forthcoming stages of the competitive arena. In an era characterized by the influence and complexities resulting from the shift towards globalization and the adoption of "free market" economics, there has been an increased focus on the examination of the effects of Human Resource Management (HRM) on organizational performance. In this context, it is essential to explore how human resource management practices impact the financial and non-financial performance of Small and Medium-sized Enterprises (SMEs) in the manufacturing sector.

This section of the introduction addresses theoretical and practical concerns related to three fundamental components of our study: (1) the conceptualization of small and medium-sized enterprise (SME) performance, (2) the identification of human resource management (HRM) practices, and (3) the theoretical conceptualization framework about the relationship between the of HRM practices and organizational (financial and non-financial) performance.

(1) The significance of small and medium-sized enterprises (SMEs) as a critical business sector has been recognized in many nations across the globe, given that they comprise over 90 percent of the total enterprise population. SMEs play a significant role in the majority of economies, particularly in emerging countries (World Bank Group, 2019), "Are the engine of growth," and "are essential for a competitive and efficient market" (Ayandibu & Houghton, 2017, p. 135). These entities create significant job prospects, which contribute to the equitable distribution of the country's income across all regions (rural, semi-urban, and urban), thus promoting economic expansion and maintaining regional and local progress (Kishore et al., 2012). Consequently, the

indispensable contribution of SMEs to economic development is widely recognized (Neagu, 2016). In this vein, part of this study are SMEs in the manufacturing sector of Kosova knowing for they role in economic development. The sampling frame for this doctorate study was acquired from the registry of the Kosovo Agency of Statistics (KAS). The data were obtained by a mail survey administered to SMEs in the manufacturing sector. From a population of ten thousand small and medium-sized enterprises (SMEs) registered with KAS, a sample of 300 entities was randomly selected based on satisfying our selection criteria and possessing up-to-date contact information. It was made sure that firms that were contacted had a minimum of 10 full-time employees, whereas the maximum number was 249 employees, according to the European Union standard and KAS for SMEs. Although small and medium-sized enterprises (SMEs) may possess fewer resources in comparison to their larger counterparts, the adoption of efficient human resource management (HRM) practices can substantially enhance their overall performance and achievements.

(2) The development of HRM practices linked to business strategy is regarded as a critical factor for SMEs in gaining a sustainable competitive advantage and, ultimately, determining enterprise performance (Barrett and Mayson, 2007). As a result, human resources, as a company's important asset, are the undeniable solution to dispelling all doubts about how a firm can improve performance, achieve a competitive advantage, compete in the market, and improve organizational performance over time (Lee et al., 2010).

Empirical studies have shifted towards investigating HRM formality in terms of "bundles" or assemblages of HRM practices rather than single practices (De Kok and Hartog, 2006; Drummond and Stone, 2007), in the scholarly literature has frequently been categorized under several labels such as "best practices" (Pfeffer, 1994), "high performance work systems" (Appelbaum et al., 2000), or "high commitment management/practices" (De Kok et al., 2006). Bundles or systems of specific HR practices may have a bigger impact on business performance than unconnected HRM practices operating independently (De Kok & Hartog, 2006). Bundles of HRM practices, in essence, have synergistic impacts that outperform the sum of individual practices (Jiang et al., 2012). Through the use of bundled human resource management (HRM) practices, small and medium enterprises (SMEs) have the opportunity to establish a cohesive and integrated framework for effectively managing their workforce. The HRM practices examined in this study is organized into bundles for the main hypothesis and individually for the sub-

hypotheses. These practices include recruitment and selection, training and development, communication and information, compensation and reward, and job design performance appraisal. Various studies, including Ahmad and Schroeder (2002), Amin et al. (2014), Arslan (2017), Iqbal (2015), Islami (2021a, b), Lee et al. (2010), Otoo (2019), and Singh (2004), served as the sources for these practices.

(3) Many of the theories in the field of HRM, such as human capital theory, the resource-based view, organizational behavior theory, AMO theory, contingency theory, institutional theory, social exchange theory, and agency theory, have demonstrated a significant positive impact on firm performance. The resource-based view (RBV) thesis contends that enterprises should look within the company to identify sources of competitive advantage by maximizing their resources, particularly human resources, in order to gain firm competitive advantage and improve organizational performance (Barney, 1991; Barney et al., 2001). The resource-based view (RBV) theory argues that firms should look inside the company to find the sources of competitive advantage by maximizing their resources, especially HR, to achieve firm competitive advantage and enhance organizational performance (Barney, 1991; Barney et al., 2001). The contingency theory perspective, also known as the "external fit" perspective, places importance on the alignment between business strategy and HRM practices. This perspective suggests that HRM practices are influenced by and aligned with business strategies, ultimately impacting business performance (Schuler & Jackson, 1987; Gomez-Mejia & Baklin, 1992; Huselid, 1995). These theories, along with others in the field of HRM, provide frameworks and insights that can inform the design and implementation of effective HRM practices. By understanding and applying these theories, organizations have the potential to positively impact their performance through strategic management of their human resources.

The relationship between HRM and organizational performance has long piqued the interest of both researchers and practitioners; numerous studies have found that the implementation of certain HRM practices can improve the organizational (financial and non-financial) performance of SMEs (Huselid, 1995; Tsai et al, 2010; Allen et al, 2013; Sheehan, 2014). Otoo (2019) demonstrated in his study the positive impact of five HRM practices (recruitment and selection, career planning, employee participation, training and development, and performance appraisal) on organizational performance. Also, Allen et al. (2013) discovered a positive relationship

between high-commitment HRM practices and perceived financial performance. On the other hand, Ahmad and Schroeder (2003) proved the impact of seven HRM practices (selective hiring, employment security, compensation/incentive contingent on performance, use of teams and decentralization, status differences, extensive training, and sharing information) on non-financial performance. Based on the literature review on this study part of organizational performance are financial and non-financial performance measurement items (growth in return on investment has been increased; sales of products/services have increased; return on sales (ROS) has been increased; our company's profit has increased; and manufacturing cost has been reduced; the overall product quality has been improved; responsiveness to customers has been increased; customer satisfaction with the service to him has increased; the delivery speed of the product has been increased; delivery dependability has been improved; and our firm's market share growth has increased) that were adopted from Flynn et al. (2010), Gölgeci and Kuivalainen (2020), Islami (2021a, b), Huo et al. (2014), and Qi et al. (2011) and Chow & Van Der Stede (2006), Alves and Lourenço (2022), and were modified for the purposes of the current study.

This study aims to make a substantial contribution to the field of Human Resource Management (HRM) by not only confirming existing knowledge about HRM practices, but also by delving deeper into the complex interplay of factors that influence organizational performance. By accomplish this through the application of a complete three-dimensional strategic model that integrates HRM practices, financial performance, and non-financial performance within small and medium-sized firms (SMEs). This method goes beyond surface-level analysis to provide a more in-depth understanding of how HRM affects overall organizational effectiveness.

## **1. Actuality of the Research Problem and Scientific Contribution to the Field**

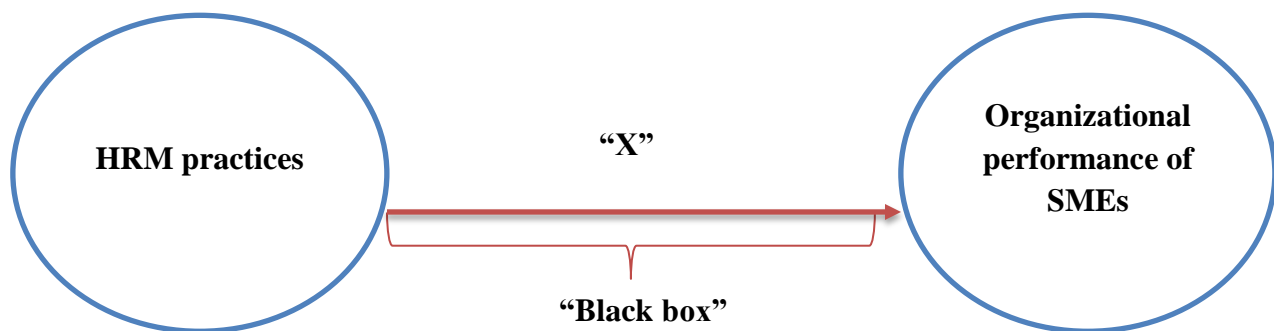
According to Becker and Huselid (2006), the investigation of a "more explicit articulation of the 'black box' between HRM and firm performance" is the most significant theoretical and empirical challenge facing strategic HRM research. As a result, a number of authors have discussed and proposed a variety of methods for opening the black box. Guest (2011, p. 7) discusses how the HR-performance debate has evolved from "What impact does HR have on performance?" to "What is the process by which HRM can impact performance?" Paauwe and

Farndale (2006) addressed the question: "What are the intervening variables that explain the relationship between HR practices and firm performance?" According to Purcell et al. (2003), many previous studies investigated the link between HRM practices and performance and found a positive relationship, but none have addressed the nature of this connection or how and why HRM practices impact performance. The "people and performance model" approach focus on the development of employees' abilities, motivation, and efforts as the primary method by which HRM can directly affect employees and consequently influence performance outcomes (Purcell et al., 2003). Consequently, many academics have been studying the "black box" or mechanisms by which HR practices influence organizational performance (Huselid, 1995, Tsai et al, 2010; Sheehan, 2014; Otoo, 2019), financial performance (Allen et al, 2013) and non-financial performance (Ahmad & Schroeder, 2003) of SMEs, i.e., "unlocking the black box" (Purcell, et al., 2003). The significance of being clear on "how" something is done, as opposed to merely "what" has been done, is significant, and consequently, the research literature has become increasingly focused on the "black box" (Boselie et al., 2005).

The central research problem that this study addresses is to examine, understand and develop how this relationship is formed between three key elements, i.e., HRM practices, financial performance and non-financial performance. Specifically, the study aims to uncover the direct and integrative effects of HRM practices on the overall organizational performance of SMEs operating in the manufacturing sector. This dissertation is comprised of analyses pertaining to two main questions, each of which investigates the crucial role that human resources play in improving organizational performance. The first question seeks to explore how a set of bundled HRM practices influences the overall organizational performance of SMEs. This question delves into the holistic impact of HRM practices on SMEs' performance metrics. The second question aims to understand how different HRM practices affect both financial and non-financial performance indicators of SMEs. This question is concerned with dissecting the specific contributions of various HRM practices to the financial and non-financial aspects of performance. Figure 1 visually presents the research problem. Factors that are usually referred to as "a remaining void," "a gap," or "a largely unexplained facet" can be clarified by examining this enigmatic "Black Box".



The purpose of this study is to find solutions to challenges that are frequently overlooked yet are critical in establishing the relationship between HRM practices and financial and non-financial performance of SMEs.



*Figure 1: Research problem framework*

*Source: author*

The research addresses the central gap in the HRM field - understanding the "black box" between HRM practices and firm performance. Despite the fact that many studies have demonstrated a positive relationship between HRM practices and SME performance, there's a lack of explanation regarding the nature of this connection. In particular, the relationship between HRM practices and financial and non-financial performance of SMEs, as well how these three elements respond and influence the overall organizational performance on firms.

Focusing on SMEs adds further value, whose resource limitations and distinctive dynamics demand a more profound comprehension of the ways in which HRM practices influence their performance. This study focuses to fill this gap, contributing to a more comprehensive understanding.

The scientific contribution of this study is by delving into the "black box", the research has the potential to provide insights into the mechanisms by which HRM practices influence organizational performance, financial performance, and non-financial performance of SMEs.

This can lead in enhancing conceptual frameworks and a more profound comprehension of the relationship between HRM and performance. The study proposes to analyze both direct and integrative effects of HRM practices, offering a more comprehensive picture of their impact. Additionally, focusing on both financial and non-financial performance provides a broader perspective on organizational success.

## 2. Research hypotheses

The analyzed literature provides theoretical support to test the relation of an integrative model including tools as: HRM practices, financial and non-financial performance. From the main subject and aim of the research come out the *General Hypothesis* of the research:

➤ General hypothesis (**H<sub>g</sub>**):

*Do human resource management practices have a positive influence on organizational performance (non-financial and financial performance) of the SMEs in manufacturing industry?*

➤ First hypotheses (**H<sub>1</sub>**): *Human resource management practices have positive relationship on financial performance.*

**H<sub>1a</sub>**: Recruitment and selection have positive relationship on financial performance.

**H<sub>1b</sub>**: Training and development have positive relationship on financial performance.

**H<sub>1c</sub>**: Communication and information have positive relationship on financial performance.

**H<sub>1d</sub>**: Compensation and reward have positive relationship on financial performance.

**H<sub>1e</sub>**: Job design has positive relationship on financial performance.

**H<sub>1f</sub>**: Performance appraisal has positive relationship on financial performance.

➤ Second hypotheses (**H<sub>2</sub>**): *Human resource management practices have positive relationship on non-financial performance.*

**H<sub>2a</sub>**: Recruitment and selection have positive relationship on non-financial performance.

**H<sub>2b</sub>**: Training and development have positive relationship on non-financial performance.

**H<sub>2c</sub>**: Communication and information have positive relationship on non-financial performance.

**H<sub>2d</sub>**: Compensation and reward have positive relationship on non-financial performance.

**H<sub>2e</sub>**: Job design has positive relationship on non-financial performance.

**H<sub>2f</sub>**: Performance appraisal has positive relationship on non-financial performance.

➤ Third hypotheses (**H<sub>3</sub>**): *Non-financial performance is positively related to financial performance.*

### **3. Subject, aim, objectives and research questions of the study**

The research subject of the proposed doctoral dissertation, under the title “The impact of human resource management practices on the financial and non-financial performance of SMEs in the manufacturing industry,” aims to investigate and analyze the intricate relationship between HRM practices and the overall performance of small and medium-sized enterprises (SMEs) operating in the manufacturing sector. Discovering and understanding these complex relations between HRM and performance should improve efficiency and effectiveness in achieving better results for SMEs and, in the long term, could lead to a firm’s sustainable competitive advantage. Using the relational perspective, this study begins to investigate the "black box" relationship between human resource management practices, financial performance, non-financial performance, and organizational performance. First, it examines the relationships between a set bundle of HRM practices, financial performance, non-financial performance and organizational performance of SMEs in the manufacturing industry from a holistic view. Second, it examines the relationship between each HRM practices (recruitment and selection, training and development, communication and information, compensation and reward, job design and performance appraisal) and the financial and non-financial performance of SME in the manufacturing industry.

The main goal of this thesis will be to develop an integrative approach that will increase the benefits of firm performance through the close coordination and integration of the firm's key internal and external components, which enables it to better utilize opportunities that may lead to business success and sustainable competitive advantage. The choice of this research subject, on the specific topic about HRM practices and performance of SMEs in Kosovo, can be considered a necessary idea that will have a positive contribution to the management function of young and future small business entrepreneurs.

It also intends to provide a theoretical, methodological, and practical knowledge of the integrative strategic approach by answering research questions about the impact of strategic tools on SME organizational performance. This through using the data from 153 participants (manufacturing SMEs), it tests the model that posits HRM practices direct between organizational performance of SMEs (financial and non-financial).

Specific goals of this study can be defined as:

- Creating and exploring an integrative model/approach;
- Determining the role of HRM practices as the key organizational resource that leads an SME toward success;
- Measuring the importance of HRM practices in financial and non-financial performance;
- Developing HRM practices, as the pivotal instruments on creating sustainable organizational strategy;
- Analyzing HRM practices/performance linkage to create a sustainable competitive advantage for SMEs;
- Creating guidance for strategic researchers and practitioners to develop the organizational system to cope with global competition.

In order to fulfill the above-mentioned goals, it is essential to clarify the objectives of this study and explain the way in which these study goals will be achieved. Thus, the objectives include:

- A literature review related to the key strategic instruments, which aims to build a conceptual model of the study. The literature review is oriented in four directions: HRM practices, financial performance, non-financial performance and organizational performance of SMEs. More specifically, this review aims to shed light on the impact of HRM practices on the overall organizational performance of SMEs, both in terms of their individual effects and their collective impact on financial and non-financial performance, as well as the holistic organizational performance of SMEs.
- Verifying the relationship between HRM practices with organizational performance of SMEs (financial and non-financial), indicating which of the HRM practices have more impact on financial and non-financial success based on the data gathered by manufacturing SMEs; empirically realized integrated strategy model that gives a long-term competitive advantage for SMEs; testing the conceptual framework using mathematical models, computer algorithms and statistical methods.
- Identifying challenges in strategic management that demand more elaboration and significant review.

To achieve the objectives, this research study addresses the concern of strategic authors and clarifies issues lacking in current literature. These research questions enable to accomplish the

aim and objectives of the study. Pivotal statements are presented in the research questions form as follow:

- Which practices represent effectively HRM, and why?
- Identify the importance of HRM practices implementation in SMEs?
- Do SMEs that implement a bundle of HRM practices have a better organizational performance?
- Do SMEs that implement a bundle of HRM practices have a better financial performance?
- Do SMEs that implement a bundle of HRM practices have a better non-financial performance?
- Which HRM practices is more significant, directly and indirectly, to the financial performance of SMEs?
- Which HRM practices is more significant, directly and indirectly, to the non-financial performance of SMEs?
- What is the nature of HRM practices existing in the researched firms?
- Which dimension of competitive strategy is more efficient in moderating role of HRM practices on organizational performance? Do SMEs with a high level of HRM practices have a high level of organizational performance?
- What is the main goal to create an integrative approach?

#### **4. Chapters' Outline**

This study consists of five chapters that serve as integral components of its overall structure. Chapters 4 and 5 answer the research questions and test the research hypotheses.

*Chapter 1: Literature Review and Conceptual Framework of Human Resource Management and SMEs Performances*

Chapter one presents a systematic overview of existing literature as a background for constructing the conceptual model of the study. The literature explored and analyzed in this chapter is related to human resource management, HRM practices, HRM practices on SME, financial performance and non-financial performance. This chapter will develop the practices of HRM and financial and non-financial performance dimensions. It also explains the main gaps in

the existing literature that need to be analyzed further in this study related to the integrative strategic instruments approach. Finally, it highlights the known findings in this field and emphasizes the researcher's appeal for further study in this area.

#### *Chapter 2: Relationship between HRM practices and SME's Performance*

Chapter two of this study presents the logical relationship among the dimensions of key elements that are presented in the strategic literature. Therefore, based on previous credible research studies of the strategic area, this part is focused on four main issues, i.e.: (a) presenting the relationship between HRM practices, and organizational performance of SME, (b) presenting the relationship between HRM practices and financial performance of SME, (c) presenting the relationship between HRM practices and non-financial performance of SME, and (d) showing the effects of each HRM practices on the relationship between SME performance. Finally, it examines the relationship between strategic instruments, misconceptions around these relationships and the lack of literature regarding these relationships, which will be supplemented by the outcomes of this study.

#### *Chapter 3: Empirical Research of the impact of HRM practices to performances of the SMEs in the manufacturing industry in Republic of Kosovo*

Chapter three explains the methodology employed to investigate the relationships cited in this study. It clarifies the research method employed, the adopted research strategy, the development of questionnaires, and the estimation technique for analyzing questionnaires. It also illustrates the philosophical assumption and methodological implications in relation to the quantitative approach. Specifically, the process of data collection, data analysis, and the ethical considerations posed by the distribution of our questionnaires are discussed.

#### *Chapter 4: Data and Results of Correlation and Regression Analyses*

Chapter four finds and analyzes the empirical issues related to the gathered data. The chapter outlines various statistical tests that facilitate the efficient and accurate discovery of information. It presents the statistical tests, such as: t-test, ANOVA, Pearson Correlation, Regression Analysis (including hierarchical linear regression), and mathematical models.

#### *Chapter 5: Discussion, Research Implication and Limitations of Empirical Research*

Chapter five provides an in-depth analysis of the research findings and their implications for the suggested business model. This section is dedicated to the analysis and evaluation of the theoretical and managerial aspects, as well as the identification of potential areas for additional future research in this topic. This study proposes multiple pathways for developing an integrative strategic instruments model, drawing on specific findings. These approaches aim to help firms maintain a competitive edge in the market and establish a managerial framework for implementing strategic initiatives. Furthermore, the limitations of this study will be discussed, as well as provide potential avenues for future research in this field.

### *Conclusions*

In the final part, this study's contributions will be presented in the form of conclusions. The thesis' findings and interpretations have been effectively summarized, and the main research issues and opportunities have been highlighted, offering a clear understanding of the implications of the study.

## **5. Methodological Approach**

The collection, systematization, analysis, and presentation of available data and information in the doctoral dissertation titled "The impact of human resource management practices on the financial and non-financial performance of SMEs in the manufacturing industry" is done using a logically justified and scientifically based approach. The doctoral dissertation was prepared using a combination of deductive, inductive, analytical and comparative analysis methods.

Firstly, the foundational method employed in this thesis is the deductive approach. It serves as the bedrock for our exploration of the literature, the establishment of research hypotheses, and the delineation of causal relationships. Thus, this method begins with scientific principles existing in the literature, through defining the content of the problem, determining the assumptions for its resolution, formulating research hypotheses and their interlaced testing, emphasizing the cause-effect relationships between research variables, and gathering representative materials of research study.

Secondly, in the latter stages of this study, we embrace the inductive method, often referred to as inductive logic, have been used in the final part of this study when the applicative dimensions of

the research hypotheses are tested and discussed. As a result, the inductive method will be employed in the discussion section, as well as in explanations of theoretical and managerial implications, conclusions, and future developments in the field of human resource management and the performance of small and medium-sized enterprises (SMEs). The inductive method is a key driver in bringing together the diverse facets of our study, facilitating a comprehensive understanding of the practical implications and potential directions for further research.

Third, the analytical method attempts to deconstruct the dimensions of the research study in order to extract significant discourses and research implications. In contrast, the synthesis approach has been utilized as an addition to provide the foundation for general knowledge and helps in drawing conclusions.

Fourthly, the method of comparative analysis has been used to compare the direct effects of the relationship between HRM practices and organizational performance (financial and non-financial performance). By employing comparative analysis, we gain insights into the nuanced dynamics at play in the relationship between HRM practices and performance outcomes of SME in manufacturing industry.

To obtain valuable insights for the doctoral dissertation, a wide range of statistical methods were utilized, each meticulously chosen for its relevance and significance. The research design, aligned with the overarching objectives, guided the utilization of various statistical tests within the SPSS statistical software, such as: descriptive analysis, convergent and discriminant validity, t-test, ANOVA, correlation matrix, and regression analysis (including hierarchical linear regression and multivariate regression). Descriptive analysis method provides a foundational understanding of the data. Convergent and discriminant validity tests are essential elements of research methodology, especially in the field of measurement validation. These assessments are conducted to guarantee the reliability and distinctiveness of the constructions being examined. Moving beyond, the statistical toolbox encompasses the t-test and ANOVA, allowing for nuanced group comparisons and variability assessments. The correlation matrix aids in discerning relationships among variables, while regression analysis, including both hierarchical linear regression and multivariate regression, serves as a powerful tool for unraveling intricate patterns and predicting outcomes. By employing statistical methods, the study aims to distill meaningful insights from the gathered data, uncovering patterns, relationships, and trends that enhance the comprehension of the hypothesis presented in this doctoral dissertation.



## **CHAPTER I - LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK OF HUMAN RESOURCE MANAGEMENT AND SMEs PERFORMANCES**

This chapter provides an overview of the definitions put forth by previous authors regarding the subjects investigated in this research, as well the findings found in the existing literature related to this topic. It begins with a comprehensive exploration of Human Resource Management (HRM) and its strategic relevance. Then it goes further with the theoretical and practical findings that treat the relationship between factors, such as HRM practices, financial performance, and non-performance are also reviewed.

Consequently, this chapter outlines what is currently known about these key elements, contrasts of the various sources and expert viewpoints about these elements, identifies the most important issues or variables in the examined topic, describes research questions and identifies additional questions or issues for future research, illustrates how this study deals with research findings and allows comparison to previous works, and provides a synthesis of all relevant data in a way that readers will be able to understand and which will properly support the work (Matthews & Ross, 2010).

In addition, it assists readers by providing them with the ability to comprehend what is revealed in the literature before the study is published and how it complements existing literature. The literature study is specifically centered on providing a detailed description, analysis, and development of the strategic perspective of HRM practices, financial performance, and non-financial performance. This serves as the foundation for the research hypotheses in the pursuing chapter.

### **1.1 Definition of the human resource management (HRM)**

The debate on the definition of human resource management (HRM) has gradually reduced over time, but an attempt to provide a comprehensive and widely accepted definition poses a problem due to the varying framework of understanding the functions of managing human resources. There is no consensus among authors regarding a singular definition that is universally accepted.

However, several definitions offered by a variety of authors provide light on its core characteristics and essential components. Storey (1995, p. 5), defines HRM as “a distinctive approach to employment management which seeks to achieve competitive advantage through the strategic deployment of a highly committed and capable workforce, using an integrated array of cultural, structural and personnel techniques”. Armstrong (2014, p. 5) also defines HRM as “a strategic, integrated and coherent approach to the employment, development and well-being of the people working in organizations”. Boxall et al. (2011) offer a more concise definition, describing HRM as “the press of managing work and people in organizations”. This study follows the definition adopted by Armstrong (2006), who defines HRM as “a strategic and coherent approach to the management of an organization’s most valued assets – the people working there who individually and collectively contribute to the achievement of its objectives” (p. 3). Human resource management is commonly defined in the literature as an organizational undertaking that leverages its employees as a resource in order to develop and execute a strategy that will successfully accomplish its goals. According to Greenwood (2002), HRM involves the effective management of people to accomplish organizational goals. Schermerhorn (2001) defines human resource management as the process of attracting, developing, and retaining a competent and dynamic staff to support an organization's mission, goals, and strategies.

Laka-Mathebula (2004) defines HRM as a planned development process and an integrated strategy for effectively utilizing human resources to accomplish organizational objectives.

Noe et al. (2006) define HRM in terms of its practices, systems, and policies, and their influence on employees' attitudes, behaviour, and performance. The evolving nature of HRM is highlighted, emphasizing the importance of its practices, policies, and systems. Armstrong (2006) further elucidates that HRM operates through human resource systems, which bring together various components in a coherent manner:

- ✓ “*HR philosophies* describing the overarching values and guiding principles adopted in managing people.
- ✓ *HR strategies* defining the direction in which HRM intends to go.
- ✓ *HR policies*, which are the guidelines defining how these values, principles and the strategies should be applied and implemented in specific areas of HRM.
- ✓ *HR processes* consisting of the formal procedures and methods used to put HR strategic plans and policies into effect.

- ✓ *HR practices* comprising the informal approaches used in managing people.
- ✓ *HR programs*, which enable HR strategies, policies and practices to be implemented according to plan” (p.4).

The overarching goal of HRM is to ensure that the organization is able to achieve success through people (Armstrong, 2006). In essence the HRM function primarily focuses is in the delivery business– providing the advice and services that enable organizations and their line managers to accomplish goals through the employment of people (Armstrong, 2014).

Human resource management is a constantly evolving field, driven by ongoing developments in its practices. The focus of this study is the HRM practices which have become the focal point of current studies and are frequently suggested by authors for further investigation.

### **1.1.1 The development of the term HRM**

Over history, the name HRM has changed several times. According to Armstrong (2014), the word HRM has mainly replaced 'people management', which replaced 'labor management' in the 1940s and 'welfare' in the 1920s. The term 'human resource management' first appeared in textbooks written in the United States in the mid-1960s (Strauss, 2001). The move from personnel management to human resources management had begun (Sammartino, 2002), mostly with principles revealed by North American authors between 1960 and 1970, and the term "HRM" has since been progressively embraced worldwide (Ahmed & Kazmi, 1999). It was not until the early 1980s that the term "human resource management" gained a distinct meaning separate from that of personal management. Torrington and Hall (1998) note the distinction that Personnel Management is a “workforce centered idiom”, while HRM is a “resource-centered idiom”. As Guest (1987) points out HRM should not be regarded as a substitute for Personnel Management as a term but is something quite distinctive. According by Storey (2007) “In its generic broad and popular sense it HRM simply refers to any system of people management” (p.6). This is indicated by the fact that people started to talk about HRM as if it were a relatively new innovation, suggested by the statement of Galang et al. (1999): that, “HRM is recognized to have originated post-1970s from U.S. business schools.” (p.43), among these business schools,

the ones at Harvard and Michigan played particularly crucial roles in this transformation (Legge, 2005; Reichel & Mayrhofer, 2009).

The introduction of key concepts and frameworks by the Harvard and Michigan business schools played a significant role in the transformation of Human Resource Management. The Michigan School provided one of the first explicit statements about the concept of human resource management (Fombrun et al, 1984). The Michigan School of thought prioritized strategic alignment, advocating for the congruence of HR systems with organizational strategy. The other founding fathers of HRM were the Harvard School of Beer et al. (1984) who developed what Boxall (1992) calls the 'Harvard framework'. "This framework is based on the belief that the problems of historical personnel management can only be solved: when general managers develop a viewpoint of how they wish to see employees involved in and developed by the enterprise, and of what HRM policies and practices may achieve those goals. Without either a central philosophy or a strategic vision – which can be provided only by general managers – HRM is likely to remain a set of independent activities, each guided by its own practice tradition" (Armstrong, 2006, p. 6). Traditionally, Personnel Management was concerned with workforce performance and how it could be improved. As a result, administrative issues such as compensation and benefits became more important; however, the focus of HRM is at a higher level and has a direct impact on all parts of the organization's strategic decision-making process (Keir & Youssif, 2016).

### **1.1.2 The philosophy of theories of HRM**

Noon (1992) raised concerns about whether HRM could be classified as a map, a model, or a theory, casting doubt on its categorization. The philosophy of HRM made by Legge (1989) presented an analysis of various HRM models and identified common themes: "That human resource policies should be integrated with strategic business planning and used to reinforce an appropriate (or change an inappropriate) organizational culture, that human resources are valuable and a source of competitive advantage, that they may be tapped most effectively by mutually consistent policies that promote commitment and which, as a consequence, foster a willingness in employees to act flexibly in the interests of the adaptive organizations pursuit of

excellence” (p.25). These themes reflect the philosophy of HRM, highlighting the integration of HR policies with strategic planning, the value of human resources, the promotion of commitment, and the creation of an adaptive and high-performing organization. There are several key theories and perspectives that have contributed to the understanding and development of Human Resource Management (HRM), like: human capital theory, the resource-based view, resource dependence theory, organizational behavior theory, AMO theory, contingency theory, institutional theory, social exchange theory, agency theory and more.

Many of the theories in the field of HRM, such as human capital theory, the resource-based view, organizational behavior theory, AMO theory, contingency theory, institutional theory, social exchange theory, and agency theory, have demonstrated a significant positive impact on firm performance. These theories, along with others in the field of HRM, provide frameworks and insights that can inform the design and implementation of effective HRM practices. By understanding and applying these theories, organizations have the potential to positively impact their performance through strategic management of their human resources.

## **1.2 Human resource management practices**

Human Resource Management (HRM) practices are essential for organizational management, since they aim to efficiently utilize human resources in order to accomplish strategic objectives. HRM practices refer to the strategies, policies, and procedures implemented by an organization to manage its human capital effectively. HRM practices are the major levers by which the business can influence the pool of human capital and attempt to change employee behaviors that lead to organizational performance (Wright et al., 2001). HRM primarily encompasses the development, execution, and enhancement of policies and procedures pertaining to workforce management. The efficacy of HRM practices is crucial for cultivating a favorable workplace culture, augmenting employee engagement, and eventually bolstering the overall prosperity and longevity of a firm. In order to achieve competitiveness and success, firms must now comprehend and execute efficient HRM processes as they navigate the ever-changing modern workplace. Therefore the next subchapters of this thesis will delve into a detailed exploration of Human Resource Management practices. Exploring the meaning and significance of HRM

practices, highlighting their crucial contribution to the success of a company. The next segment will explain the complex procedure included in choosing suitable HRM practices, emphasizing the significance of aligning these practices with company objectives and principles. The next subchapters will provide detailed explanations of the main HRM practices examined in this study, revealing their intricate roles within the organizational context.

### **1.2.1 The meaning of human resource management practices**

HRM Practices have been defined as “a set of distinct but interrelated activities, functions, and processes that are directed at attracting, developing, and maintaining (or disposing) a firm’s human resource” (Lado & Wilson, 1994, p. 701). As stated by Wright et al. (2001), the attainment of core competencies was facilitated by HRM practices that served as the cornerstone for dynamic capability, knowledge management, and intellectual capital. Furthermore, HRM practices that strive to enhance the capabilities, prospects, and motivation of employees while also promoting a harmonious equilibrium between their personal and professional lives are regarded as efficacious and broadly embraced by both employees and organizations (Blom et al., 2018).

For the past three decades, academics have concentrated on analyzing how HRM affects organizational outcomes and competitive advantage. For instance, Lado and Wilson (1994) point out that HR systems/practices “can contribute to sustained competitive advantage through facilitating the development of competencies that are firm specific, produce complex social relationships, are embedded in a firm’s history and culture, and generate tacit organizational knowledge” (p. 699). HRM practices can be considered as a source of competitive advantage since alignment of the set of practices, and complimentary of the HRM would be inimitable (Barney, 1997).

In order for HRM practices to result in improved performance, they must satisfy the following three conditions: employees must be motivated to utilize their skills, they must be equipped with well-developed abilities, and they must have opportunities to contribute their efforts (MacDuffie, 1995). However, just when HRM practices take on a strategic role, they focus on creating high performance in the near future (Pfeffer, 2005).

These conditions have evolved to establish how a system of a high-involvement HRM practices or bundles known have been confirmed to significantly improve a firm's financial performance and non-financial performance - organizational performance (Huselid, 1995; Becker and Huselid, 1998; MacDuffie, 1995).

### **1.2.2 The process of selecting human resource management practices**

A lot of studies in the field of HRM have examined the significance of an organization's use of multiple HRM practices, analyzing the relationship between HRM practices and their impact on different aspects of organizational performance. Huselid (1995) illustrates HRM with seven practices: personnel selection, recruiting intensity and training, incentive compensation, performance appraisal, information sharing, labor/management participation and formal grievance procedures. Otoo (2019) examined the mediating role of employee abilities in the link between HRM practices and organizational performance. He demonstrates HRM through five practices: recruitment and selection, training and development, career planning, employee participation and performance appraisal. Sun et al. (2007) examined the linkage between high-performance human resource practices and organizational performance from a relational perspective. They employed eight practices to explain high-performance human resources: selective staffing, extensive training, internal mobility, employment security, clear job description, results-oriented appraisal, incentive reward and participation. A study from Singh et al. (2020), indicate that human resource practices, in the form of strategic recruitment and selection, encouraging employees' participation in the decision-making process, effective training programs and fair performance appraisal can lead to innovative work behavior of employees. Lee et al. (2010) evaluated the relationship between HRM practices, business strategy, and firm performance, assessing the HRM effect using six practices: teamwork, human resource planning, training and development, employment security, compensation/incentives, and performance appraisal. These practices are considered to be positively related with product quality, firm performance, production flexibility, product delivery, and production cost. According to Dessler (2013) study, HRM practices included were: job analysis, recruitment, selection, orientation, compensation, performance appraisal, training and development, and labor

relations. The results of Singh (2004) study indicate a positive relation among several HR practices like selection, job definition, performance appraisal, training, compensation employee participation, and firm performance. Zakaria et al. (2018) conducted a study adopting five HRM practices in SME: communication and information sharing, compensation, job design, performance appraisal, selection and training and development; the statistical results show certain HRM practices, namely, communication and information sharing and selection are positively related to organizational performance. Pao-Long and Wei-Ling (2002) examined the relationship between HRM practices and firm performance in Taiwan's high-tech sector. They discovered a statistically significant positive correlation between the six dimensions of HRM practices under investigation. These were - training and development, teamwork, benefits, human resource planning, performance appraisal and employment security. In their study of HRM practices on organizational performance in the Indian hotel industry, Chand and Katou (2007) surveyed 439 three- to five-star hotels and claimed that the results demonstrated conclusively that HRM practices were positively correlated with hotel sector performance. Their correlation analysis revealed that hotel performance was positively impacted by recruitment and selection, manpower planning, job design, training and development, quality circles, and pay and incentives.

In order to build the theoretical concept, the function of these practices will be explained in the following subchapters, and their relationship to the performance of SMEs will be explained in chapter three. Accordingly, based on the suitability of HRM practices which are chosen based on its fitness with other research variables of the study, HRM is presented through six practices: recruitment and selection, training and development, communication and information, compensation and reward, job design, performance appraisal.

### **1.2.2.1 Recruitment and selection**

The processes of recruitment and selection are fundamental components of human resource management (HRM) that play a significant role in shaping the workforce of an organization. The literature consistently emphasizes the importance of these practices in attracting both internal (insider) and external (outsider) prospective employees. According to Ekwoaba et al. (2015),



recruitment and selection are vital functions of HRM for any business organization. Recruitment and selection practices have moved from a traditional to a strategic perspective inside the organization (Huselid, 1995). The objective is to be attractive to prospective candidates and hire them as employees of an organization (Jabbour & Santos, 2008).

As part of the human resource management process, recruitment and selection are crucial steps; therefore, it is worth clarifying the difference and linkage between those concepts. Recruitment can be defined as the range of practices and activities conducted by an organization to primarily identify and attract potential employees (Noe et al., 2008, Breugh & Starke, 2000). On the other hand, selection, according to Bohlander and Snell (2007), entails the process of selecting people who meet the requirements for a particular position from a pool of candidates.

Recruitment and selection in an organization always require some form of investment (Fening & Amaria, 2011); additionally, a rigorous recruitment and selection system fosters elitism, raises performance expectations, and sends a message about the importance of people to the organization (Pfeffer, 1994). Phillips and Gully (2015) define strategic recruitment as a set of recruitment practices that are aligned with organizational characteristics, goals, firm strategy and context, which are connected across multiple levels of analysis. As a result, an effective process of employee recruitment and selection can provide a competitive advantage and improve organizational performance (Chen & Cheng, 2012). According to Syed and Jamal (2012), the successful implementation of a recruitment process in an organization is significantly related to firm performance. A lot of studies point out that implementation of an effective recruitment and selection process significantly influences firm performance (Husien, 2012; Wright et al., 2005).

To summarize, recruitment and selection are integral aspects of Human Resource Management (HRM), with recruitment focusing on attracting potential employees and selection involving choosing individuals who meet position requirements. The effective implementation of these processes necessitates investment, but can significantly contribute to the success of an organization. The integration of strategic recruitment practices and selection with the goals and context of an organization has the potential to confer a competitive advantage and improve overall performance.

### **1.2.2.2 Training and development**

Training and development refer to the amount of formal training given to employees (Lee et al., 2010). Firms can develop and enhance the quality of the current employees by providing comprehensive training and development (Singh, 2004). Williams et al. (1993) identifies the training and development process as a crucial step towards increasing employees' performance, satisfaction, commitment and matching employees with work value. Noe et al. (2008) define training as an organized effort by an organization to support its employees in the learning process of job-related competences, such as knowledge, skills, or behaviors that are critical to the success of an individual's job performance. Whereas development refers to formal education, relationships, job experiences, and personality and capability assessments that help employees prepare for the future (Noe et al., 2017).

Training and development are a pair of effective human resource management practices, that encourage employees to feel more obligated and provide a sense of belonging, allowing employees to stay with the organization for a longer period of time (Beck & Wilson, 2000).

It is interesting to mention that empirical research has demonstrated that employee training is a valuable mechanism for encouraging professional growth and development. Hohenstein et al. (2014) consider that training is crucial for employee development, as the "training programs can assess proficiencies and provide employees with best practices while increasing the necessary competencies for certain positions in order to ensure superior job performance" (p. 442). According to Ipe (2003), training is vital in the context of knowledge sharing since it allows employees to exchange information, HRM practices, and ideas during official training sessions or informal contacts between two or more people. Training focuses on skill development, whether technical, clinical, or soft skills like teamwork, leadership, and interviewing (Delery and Doty, 1996).

DeNisi and Griffin (2001) identify training as methods used to provide new or existing employees with the skills, knowledge, habits, and other abilities required to execute their jobs.

Training is one of the activities that improves the capabilities and skills of both current and future workers; training differs from education in that training focuses on increasing the capabilities and skills required to do a specific job, whereas education reported on increases in knowledge and perceptions that are not necessarily related to specific action (Zuelv, 2003).

Training can effectively address barriers to knowledge sharing, including challenges related such as learner's lack of motivation, low absorption capacity and integration capability (Rhodes et al., 2008). Based on this topic literature provides a diverse range of perspectives on training, encompassing various forms such as formal training, on-job training, off-job training, cross-functional training, skill training, classroom training, team training, literacy training, mentoring and so on (Gomez-Mejia et al., 2004).

An effective training and development process creates by ensuring that employees, through their value addition, can perform their jobs effectively, gain a competitive advantage, and seek self-growth, ultimately improving overall organizational performance (Niazi, 2011). According to Harel and Tzafrir (1999), training can influence performance in two ways: first, through improving relevant skills and abilities; and second, through increasing employees' satisfaction with their current job and workplace. Khan et al. (2011) empirically demonstrated that training and development have a significant impact on improving overall organizational performance. A lot of studies reveal that there is a positive relationship between training and firm performance (Qureshi et al., 2010; Pao-Long & Wei-Ling, 2002; Singh, 2004).

### **1.2.2.3 Communication and information**

Communication and information are essential HRM (Human Resource Management) practices that contribute to an organization's success and efficiency. Effective communication ensures that employees are well-informed, engaged, and motivated, whereas the provision of pertinent information supports decision-making processes and promotes organizational transparency. Smith and Rupp (2002) defined Communication, as human interaction via conversation and the use of body language and deemed fundamental to encourage knowledge transfer. Communication refers to the process used to transfer information and influence from one entity to another (Jablin 1979). Hornby (2010), sees communication as "the activity or process of expressing ideas and feelings or of giving people information", moreover, the effectiveness of information is a proven fact, and employees must be provided with pertinent information that enables them to perform their work, tasks, and duties effectively (Veronica & Inradevi, 2014). As a result, communication and information define activities and processes that facilitate and

improve information and knowledge sharing among employees and departments within the firm (Arslan, 2017), so these practices can serve as an important tool whereby the goals, policies, procedures and mission of any particular firm can be expressed to the employees to ensure effectiveness and efficiency (Chukwuka, 2015).

The categorization of communication can be classified into two distinct forms: formal and informal, the former is characterized by its transmission through official channels such as meetings, manuals, sets of procedures, rulebooks, and other similar mediums (Mohr & Nevin, 1990). Informal communication, on the other hand, is based on social interactions between employees, allowing them to communicate work-related information and collaborate outside of formal channels (Smith et al., 1994). Communication is essential for organizational functioning and has been recommended as a technique of increasing organizational effectiveness (Bush & Frohman, 1991). Communication and information sharing play a crucial role in the success and productivity of firms and employers. Human resources have become a relatively important source of competitive advantage for knowledge-based firms as a result of technological developments and rapid advancements in information and communication technologies (Chuang et al., 2013).

An effective organizational communication has a positive impact on the job satisfaction and job performance of employees (Giri & Pavan Kumar, 2010), as well as on workers' performance, productivity, and commitment (Femi, 2014). For instance, a study conducted by Vlachos (2008) found that information sharing increased market share and sales through synergistic working connections among employees. This will motivate people to fully commit to the organization, resulting in a lower turnover rate and improved organizational performance (Subramaniam et al., 2011). In summary, communication and information are integral to HRM practices. By implementing effective communication channels and providing relevant information, HR professionals can enhance employee engagement, facilitate skill development, resolve conflicts, and support organizational goals, ultimately contributing to a productive and satisfied workforce.

#### **1.2.2.4 Compensation and reward**

Compensation and reward refer to the means by which organizations acknowledge and compensate their employees for their contributions and performance. Firms influence employee motivation in a variety of ways, including performance-based compensation, which compensates employees for meeting the firm's specified goals and objectives (Singh, 2004). Compensation consists of “all the extrinsic rewards that employees receive in exchange for their work” such as benefits, wages and bonuses (Byars & Rue, 2006, p. 249). Compensation and reward are a system that a company provide to individuals in turn for their willingness to perform various jobs and tasks within organizations (DeNisi & Griffin, 2001). A compensation and reward system is founded on the expectation theory, which states that employees are more motivated to perform when they believe there is a strong link between their performance and the rewards that they receive (Guest, 2002). According to Robbins and DeCenzo (2008), compensation and rewards motivate employees to improve their individual performance.

Firms offer compensation as an appreciation of certain behavior in the form of financial and nonfinancial rewards after the accomplishment of assigned tasks (Danish & Usman, 2010). A definition that focuses only on financial aspects of compensation shows that “compensation and pay refer to financial returns, such as fixed and variable payments, tangible services and benefits those employees receive for their work contribution” (Hohenstein et al., 2014, p. 440). To better specify the financial and nonfinancial compensation systems, according to Gomez-Mejia et al. (2004), there exist three distinct compensation strategies: (a) the base compensation - fixed pay to employees, (b) pay incentives - bonuses and profit sharing, and (c) indirect compensation - health insurance, vacation, unemployment compensation. According to Milne (2007), involving employees in the design of their incentive and reward plans can lead to increased job satisfaction, a sense of control, and ultimately, stronger commitment and work values. In order for a Compensation and reward system to be effective, it has to be adequate, equitable, balanced, cost-effective, incentive-providing and accepted by employees (Patton, 1997).

The relationship between compensation and pay and work performance is often emphasized as a crucial factor in motivating individuals to perform well (Ellinger et al., 2002). The purpose of rewards and bonuses is not only to attract dedicated employees, but also to motivate individuals to exert more effort in order to improve their performance (Ghazanfar et al., 2011).

Compensation and reward are one of the most important factors affecting motivation individuals to grow, develop and sustain learning, stimulate productivity and strive to improve the overall performance of the firm.

#### **1.2.2.5 Job design**

The term "job design" pertains to the systematic arrangement and configuration of work-related duties, accountabilities, and relationships within an organization. The concept of job design, as described by Davis (1966), refers as: "the specification of the contents, methods, and relationships of jobs in order to satisfy technological and organizational requirements as well as the social and personal requirements of the job holder". According to another definition, job design is the functions of arranging task, duties and responsibilities in to an organizational unit of work (Opatha, 2002). Job design is in fact a combination of job content and the work method which has been adopted in the performance of the job (Durai, 2010). Herzberg (1966) suggested that jobs must be designed so that they could enable employees to improve their capability, clarify accountability, and provide sense of recognition and achievement.

According to Armstrong (2014), "Job design specifies the contents of jobs in order to satisfy work requirements and meet the personal needs of the job holder, thus increasing levels of employee engagement" (p.145). Job design has two aims: first, to satisfy the requirements of the organization for productivity, operational efficiency and quality of product or service, and second, to satisfy the needs of the individual for interest, challenge and accomplishment, thus providing for 'job engagement' – commitment to carrying out the job well (Armstrong, 2006, p.331). Job design is about identifying and arranging the tasks, duties, and responsibilities of the job (Opatha, 2002).

The job characteristics model created by Hackman and Oldham (1974) is the model that has the most influence on job design. This identifies five core job characteristics, namely: (a) skill variety; (b) task identity; (c) task significance; (d) autonomy; and (e) feedback; and the main job design approaches are: job rotation, job enlargement, job enrichment, self-managing teams, high-performance work design (Armstrong, 2006). These job characteristics and approaches aim to enhance employee motivation, job satisfaction, and overall organizational effectiveness by

aligning job design with employee needs and firm performance. The study conducted by Foss et al. (2009) highlights the importance of job design, specifically in terms of autonomy, task identity, and feedback, in motivating knowledge-sharing among knowledge workers. Bassey (2002) conducted a study that highlights the significance of various factors in motivating employees, including skills, task identity, task significance, autonomy, feedback, job security, and compensation. Fahr (2011) examined the impact of enriched job design on high autonomy and multitasking features affects job satisfaction. According to Onimole (2015) research, job approaches like: job enlargement, job enrichment, and job rotation; increase motivation and jobs satisfaction. Al-Ahmadi (2009) finds that Job Design significantly and positively contributes to employee performance.

#### **1.2.2.6 Performance appraisal**

Performance appraisal, which is also referred to as performance evaluation or performance review, is a systematic method employed by organizations to evaluate and assess the job performance and productivity of an employee. According to Islami et al. (2018), performance appraisals are widely acknowledged as a valuable tool used by organizations to enhance employee development, motivation, and evaluation. Mondy (2010) describes performance appraisal as “a formal system of review and evaluation of individual or team task performance”. Armstrong (2006) defines performance appraisal “[...] as the formal assessment and rating of individuals by their managers at, usually, an annual review meeting” (p. 500). Firms commonly use performance appraisal to enhance employee performance and support organizational success (Aguinis, 2013).

The process of performance appraisal involves evaluating an employee's job performance and providing feedback on areas of improvement (Byars & Rue, 2004). Noe et al. (2017) proclaims that “performance appraisal is the process through which an organization gets information on how well an employee is doing his or her job” (p. 321). Effective performance appraisal ensures that employees are aware of their current performance and concur on their job responsibilities and performance expectations (Palaiologos et al. 2011). As per Werner et al. (2012), the appraisal process entails the responsibility of employees to actively “seeking honest feedback

and using it to improve their performance” (p. 295), on the other hand HR specialists are responsible for ensuring their organization’s performance management practices are internally aligned, meet legal standards, and encompass state of the art insights and knowledge (Werner et al., 2012). Performance appraisal is a multifaceted concept has been analyzed by numerous authors from different perspectives. Study from Mostafa et al. (2015) have shown that the performance appraisal used by firms have a direct impact on employees’ attitude and behavior. Furthermore, performance appraisal systems serve the purpose of identifying deficiencies in employee skills within their respective job roles, and it provides valuable insights on the types of training that can be organized to address these skill deficiencies and guide the development of employees in specific areas (Minbaeva, 2005). On the other hand, several authors state that there is a significant relationship between performance appraisal and organizational performance (Khan, 2010; Pao-Long & Wei-Ling, 2002).

### **1.3 Human resource management practices on SMEs**

SMEs play a crucial role in the economies of many countries, especially in emerging countries (World Bank Group, 2019), [...] “are the engines of growth”, and [...] “are essential for a competitive and efficient market” (Ayandibu & Houghton, 2017, p. 135). It is widely recognized that SMEs play a crucial role in economic development (Neagu, 2016). While large businesses undoubtedly contribute to the economic growth of a country, it is equally important to recognize the significant role that SMEs play in stimulating and strengthening economic indicators (Dundon & Wilkinson, 2018). There is ample evidence to support the significant role that SMEs play in driving economic development, reducing poverty, and creating jobs, particularly in developing countries (Maksimov et al., 2017). According to Umer (2012), small firms have the potential to act as "growth engines" and make significant social and economic contributions to a country's development.

The implementation of human resource management (HRM) practices is of crucial significance in small and medium-sized enterprises (SMEs). Although SMEs do not generally have HRM departments and major decisions are usually made solely by the owner or managing director (Fabi et al., 2009). Thus, the structure and implementation of HRM practices vary between



SMEs and large organizations (Taylor and Taylor, 2014). According to Behrends (2007), SMEs tend to rely more on informal management practices. The scope and application of HRM practices in SMEs often result in a more informal and less systematized approach (Galang & Osman, 2016). Although, SMEs typically rely upon informal HRM practices, the adoption of formal HRM practices by SMEs can lead to organizational change that has the potential to boost the firm's capacity for growth and expansion (Barrett & Mayson, 2007).

However, Psychogios et al. (2016, p. 322) show that “the degree of formality of HRM depends on the three key factors: the geographic operation of SMEs (international vs local range of operations), the sector (manufacturing vs services and retail) and organizational size (large vs small)”. The comparative HRM literature the impact of the business sector on HRM formality and best practices (Datta et al., 2005; Jiang, 2009) and argues that the adoption of HRM activities in various SME sectors is typically driven by specific needs (Deshpande & Golhar, 1994; Jiang, 2009). Empirical studies have moved toward on investigating HRM formality in terms of “bundles” or configurations of HRM practices rather than single practices (De Kok & Hartog, 2006; Drummond & Stone, 2007).

The HRM bundle concept is judged more relevant to the way owner-managers view people management in their organizations as it appreciates the flow of “interrelated” HRM activities (Cardon & Stevens, 2004, p. 318) and “knock on impact” of HR practices (Allen et al., 2013). This approach is in line with strategic conceptualizations of HRM as multiple practices, systems, or bundles (Bainbridge et al., 2017), as well as empirical research that has examined HRM in a SME context (Samnani & Singh, 2013). Bundling occurs under different names but represents a similar underlying philosophy (Wiesner et al., 2007); for example, high-performance work systems (Qiao et al., 2015), high-performance work practices (Huselid, 1995), sophisticated HRM practices (Golhar & Deshpande, 1997) and HRM formality (Lai et al., 2016). HRM formality is defined as a collection of HR practices/functions. Bundles or systems of specific HR practices may have a greater impact on business performance than unconnected HRM practices working separately (De Kok & Hartog, 2006). By implementing bundled HRM practices, SMEs can create a coherent and integrated approach to managing their human capital. It's important to note that the specific composition of HRM bundles may vary depending on the firm context and goals. Although small and medium-sized enterprises (SMEs) may possess fewer resources in

comparison to their larger counterparts, the adoption of efficient human resource management (HRM) practices can substantially enhance their overall performance and achievements.

*Impact of HRM practices on SMEs* - According to the HRM framework proposed in the study (Islami, 2021a; Islami, 2021b), the implementation of HRM practices has a direct impact on both the financial and non-financial performance of a firm. The adoption of HRM practices has been found to enhance the operational efficiency of SMEs (Mulolli et al., 2015). Furthermore, research by Lee et al. (2010) suggests that the utilization of HRM practices has the potential to increase an organization's market share, while Otoo (2019) indicates that it can enhance overall organizational performance. According to Wuen et al. (2020), particular HRM practices have a significant impact on the performance of SMEs. There is substantial evidence that specific HRM practices can improve the organizational performance of SMEs (Huselid, 1995, Tsai et al, 2010; Allen et al, 2013; Sheehan, 2014).

In a study conducted by Sang (2005), it was found that the implementation of formal and structured recruitment and selection methods had a significant positive impact on the performance of SMEs. According to Wuen et al. (2020), training and development serve as a means to enhance employees' skills, knowledge, and attributes, thereby improving their capabilities, and prior research by Khan et al. (2011) demonstrates that training and development have a significant positive impact on organizational performance. An effective organizational communication has a positive impact on the job satisfaction and job performance of employees (Giri & Pavan Kumar, 2010), as well as on workers' performance, productivity, and commitment (Femi, 2014). It is imperative for organizations to prioritize their compensation incentives and reward policies in order to enhance employee performance (Lipuku et al., 2022), employee satisfaction (Yasmeen et al., 2013), employee motivation, and organizational efficiency (Gulzar, 2017). Job design can greatly improve organizational performance (Ismail et al., 2019). Performance appraisal is a powerful tool that organizations use to enhance the development, motivation, and evaluation of their employees, leading to increased firm performance (Islami et al., 2018).

In academic research studying HRM bundles in small and medium-sized firms (SMEs), a framework of six HRM functions/practices is typically used, which are chosen based on its fitness with other research variables of the study. As a result, this research analyzes human resource management through six practices, namely: recruitment and selection, training and

development, communication and information, compensation and reward, job design, performance appraisal.

#### **1.4 The term and significance of the SME's performance**

The term "SME's performance" refers to the overall effectiveness and achievements of Small and Medium-sized Enterprises (SMEs) in both financial and non-financial spheres. Evaluating SME performance is essential for comprehending their long-term viability, ability to compete, and influence on the overall economic environment. This study utilizes a complete set of five monetary indicators to evaluate the efficacy of small and medium-sized enterprises (SMEs) from a financial performance standpoint. The metrics encompassed are: return on investment (ROI), growth in sales, return on sales (ROS), profit growth, and manufacturing cost. The subchapters for financial indicators collectively provide comprehensive analysis of the economic sustainability and profitability of SMEs, providing a holistic assessment of their financial well-being. Concurrently, the study also emphasizes the significance of non-financial performance metrics. It utilizes six distinct items to gauge non-financial aspects, encompassing: Product or services quality, responsiveness to customers, customer satisfaction, delivery speed, delivery dependability, and market share. These non-financial measures shed light on critical aspects of SME performance beyond mere financial metrics. By incorporating both financial and non-financial perspectives, this study aims to provide a holistic evaluation of SME performance, reflecting the varied character of success in the dynamic business environment.

##### **1.4.1 The term and significance of the SME's financial performance**

Financial performance is the evaluation of a company's financial aspects and its capacity to generate profits, control expenses, and create value for its stakeholders. It involves analyzing various financial indicators and metrics to assess the organization's financial health, efficacy, and effectiveness. Financial performance is concerned with factors that can be quantified in monetary terms and reflect financial value in a direct or specific manner, as opposed to non-financial

performance, which is concerned with non-monetary terms (identifying items that provide a competitive advantage) (Spencer et al., 2009). Otley (1999) considers financial performance to be the ultimate objective and outcome for any organization, as any business must provide perceived value in exchange for the money invested by its owners and shareholders. Financial performance is the narrowest conception of organizational performance (Yamin et al., 1999), which focuses on the use of a simple outcome based on financial indicators that are assumed to reflect the achievement of the organization's economic objectives. According to Ismanu et al. (2017) financial indicators are the most used and preferred by the firm to measure performance due to measurement easiness. The financial performance measures provide a comprehensive view of the company's economic indicators and its ability to generate value (Galeazzo & Furlan, 2018). Financial metrics are widely recognized as short-term indicators that rely solely on past data, but even that are crucial to the productivity and efficacy of SMEs. It is worthwhile to present a number of items that have been used in past studies to measure firm performance using financial indicators/criteria. As an example, Acquah (2007) assessed firm performance by focusing solely on financial indicators. These included the growth of net income, sales and revenues, return on assets, productivity growth, and return on sales. Abor (2007) used three financial indicators: gross profit margin, return on assets and for the Tobin's q. In their study, Chow and Van Der Stede (2006) used the following financial measurements: asset deployment (ROI), total gross and total manufacturing cost. Lastly, Danso et al. (2019) present financial performance with eight components: growth in profitability, return on equity, return on investment, and return on net worth, return on assets, net profit margin, gross profit margin and overall financial performance. As stated previously, measuring financial performance allows us to identify and analyze the monetary side of the company in terms of profitability and overall return on investment. Understanding and optimizing financial performance is extremely important for SMEs. Limited resources necessitate a focused approach, and the mentioned financial indicators serve as valuable tools for SME owners and managers to assess their company's financial viability. Therefore, this study uses five monetary items to measure financial performance, namely: return on investment (ROI), growth in sales, return on sales (ROS), growth in profit and manufacturing cost.

### **1.4.1.1 Return on investment (ROI)**

ROI is the ultimate measure of accountability that answers the question: Is there economic value added to the organization for investing in programs, processes, initiatives, and performance improvement solutions? (Phillips & Phillips, 2019), so return on investment (ROI), measures the overall effectiveness of management in generating profits with its available assets (Ichsani & Suhardi, 2015). Initially, DuPont established the ROI metric to calculate the rate of return on investments in physical capital (Kaplan, 1984). ROI is calculated by combining two accounting measures: the sales turnover ratio (sales/total investment) and the operational ratio (net earnings/sales) (Merchant & Van der Stede, 2012).

In the past, ROI it has primarily been used to calculate the returns on investments in physical capital. However, more recent applications have been found in other areas. Among these are marketing (Rust et al., 2004), information systems (Guedes et al., 2021), and HC (human capital) (Phillips, 2012). According to Phillips and Phillips (2019), the ROI methodology is a comprehensive evaluation process developed in 1973 by Jack J. Phillips. While the five-level evaluation framework is the basis for categorizing data and based on Raymond Katzell's four steps of evaluation. This five level five-level evaluation framework represent categories of data: Reaction and Planned Action-data representing participants' reactions to the program and their planned actions are collected and analyzed; Learning- data representing the extent to which participants acquired new knowledge and skills are collected and analyzed; Application and Implementation-data are collected and analyzed to determine the extent to which participants effectively apply their newly acquired knowledge and skills; Impact- data are collected and analyzed to determine the extent to which participants' applications of acquired knowledge and skills positively influenced key measures that were intended to improve as a result of the program, and lastly Return on Investment- impact measures are converted to monetary values and compared with the fully loaded program costs (p. 6,7), so the ROI methodology is the operational process that ensures data collected and categorized within the framework are reliable. More than that, it is a process that enables talent development, and other functions within the organization, to do their job, that is, drive value in the organization. Application of the process is not limited.

In fact, the ROI methodology areas in which organizations apply this process include: human resources/human capital, training/learning/development, leadership/coaching/mentoring, knowledge management/transfer, recognition/incentives/engagement, communications/public relations, environment/sustainability and others process (p. viii). It offers firms with a practical and adaptable tool for assessing the impact of their investments and initiatives on their overall profitability and effectiveness. Based on the findings the impact of ROI on the firm is multidimensional. According to the Burket (2005) study, training functions might be seen as more trustworthy by evaluating training programs with the ROI in mind. The findings of a ROI evaluation can be used by trainers, designers, and developers to improve training alignment with business goals and the efficiency of the training design, development, and delivery life cycle. Chalutz Ben-Gal (2019), study results indicate that empirical and conceptual studies in HR analytics generate higher ROI. Furthermore, study findings show that workforce planning and recruitment and selection are two HR jobs with the highest ROI. Another study shows a positive effect of customer orientation on the profitability levels (ROI) of SMEs (Appiah-Adu & Singh, 1998). In the context of marketing, Scuotto et al. (2017) emphasize that the adoption of Social Media Networks (SMNs) by SMEs requires minimal investment and can result in an increased ROI. These findings suggest that implementing SMNs as part of the marketing strategy can yield positive financial outcomes for small and medium-sized enterprises.

To summarize, ROI has a significant impact on firms' financial performance, decision making, resource allocation, performance evaluation, strategic planning, and investor confidence. It serves as a crucial instrument for assessing profitability, guiding investments, and maximizing overall financial success.

#### **1.4.1.2 Growth in sales**

Growth is a goal, opportunity, and requirement for many businesses, and is a “foundational topic of management research” (Nason & Wiklund, 2018). A firm's growth is caused by an increase in demand for goods and services, of which initial results will be seen in sales growth and consequently in investments in additional factors of production to enable it meet to new demands (Janssen, 2009). Firms to reach their financial objectives effectively must use a wide variety of

goals, including sales growth (Kaplan & Norton, 1996). According to Hughes (1998), the success of a firm appears to be measured mostly in terms of sales growth. Sales Growth is the number of sales this year compared to the previous year's sales (Harahap, 2008). Sales growth influence a range of factors from internal motivation to promotion and retention of talented employees all the way to the implied opportunities for investments in new equipment and technologies that upgrade the production process as a whole, furthermore sales growth creates opportunities for economies of scale and learning curve benefits (Brush et al., 2000).

Sales growth is a crucial factor in driving the total expansion of a company. The observed phenomenon can be attributed directly to the heightened level of demand for the goods and services offered by the firms. With the increase in demand, there is a corresponding growth in sales numbers, which leads enterprises to undertake strategic investments in new production elements. Effectively attaining financial objectives involves the establishment of several targets, with a notable emphasis on the growth of sales. The measure of success in the business environment is frequently determined by the level of sales expansion achieved by a company. The phenomenon of sales growth has a complex and diverse impact on a company. It functions as a potent catalyst for employees, generating intrinsic motivation and dedication. Moreover, the expansion of sales fosters a strategic advantage through the creation of opportunities for achieving economies of scale and reaping the benefits of the learning curve. As a company expands, it has the potential to enhance production efficiency, minimize expenses, and enhance its competitive position within the market.

One of the most important performance indicators is sales growth; it describes (i) industry competitiveness, (ii) market opportunities and how firms are strategically positioned to add value, (iii) the firm's ability to continue activities, and (iv) the firm's relative performance relative to its competitors (Fávero et al., 2018). Many authors have stated that sales growth is an important performance metric in small and medium-sized enterprises (SMEs), affecting the firm from a variety of aspects. It is considered a crucial metric that affects the overall success and sustainability of SMEs. The study conducted by Covin et al. (2006) focused on 110 manufacturing firms and examined the relationship between entrepreneurial orientation and sales growth rate; their study found that entrepreneurial orientation had a positive effect on sales growth rate.

According to the study by Batt (2002), a larger use of high-involvement practices is associated with lower quit rates and higher sales growth in customer service and sales centers, and higher sales growth in small business and residential centers. Barbera and Hasso (2013), study have examined the relationship between the usage of an external accountant and sales growth and survival in small and medium-sized family enterprises in Australia, based on the results, they conclude that external accountant usage is positively related to sales growth. Another study from He and Wong (2004), had a sample of 206 manufacturing firms in Malaysia and Singapore and found that the interaction between explorative and exploitative innovation strategies significantly predicted sales growth and that the relative imbalance between explorative and exploitative innovation strategies negatively impacted sales growth.

Indeed, sales growth is a crucial performance indicator that provides valuable insight into many aspects of a company's operations. As a significant performance indicator, it should be analyzed alongside with other financial and operational metrics to obtain a complete understanding of a company's overall performance, profitability, and market position.

#### **1.4.1.3 Return on sales (ROS)**

Return on Sales (ROS), also referred to as Operating Profit Margin, is a key financial performance indicator that measures a company's profitability by evaluating its ability to generate profit from its primary operations. Return on Sales (ROS) is one of the three most often used indicators of financial performance to measure current profitability, the other two being return on assets and return on equity (Teirlinck, 2017). ROS is a crucial indicator for evaluating a company's financial performance, as it provides essential insight into its profitability. It is a key indicator in assessing financial performance that must be used by stakeholders to substantiate decisions (Diana & Maria, 2020). Li and Ye (1999) argued that there is no single objective measure that can capture the overall performance effectively. It is essential to acknowledge that although ROS holds significance as a financial performance indicator, it should be used in conjunction with other financial metrics to provide a comprehensive view of a company's financial health.



Return on Sales (ROS), also known the net profit margin, serves as a measure of the management's effectiveness in generating profits from the company's sales. The calculation involves the division of net profit by sales. According to Walton's (2000) research, the calculation for the Return on Sales (ROS) ratio is as follows:  $ROS (\text{Net Profit Margin}) = (\text{Net Profit before Interest and Tax} / \text{Sales}) * 100$ .

ROS and other indicator are commonly used performance indicators in a range of fields such as entrepreneurship (Bamford et al., 2000). In the context of small and medium-sized enterprises (SMEs), which do not have shares on the stock exchange, financial performance is measured by revenue and profitability ratios such as return on sales (Storey et al. 2016). For small and medium-sized enterprises (SMEs) that may not have publicly traded shares, revenue and profitability ratios such as ROS become vital measures of their financial performance.

Return on Sales (ROS) influences the financial performance of the firm from different viewpoints. A lot of studies have been made on the subject. A study made by Lwiki et al. (2013), about the impact of inventory management practices on financial performance of sugar manufacturing firms, the finding suggest that inventory management practices have significant correlations with profitability and return on sales (ROS). Another study by Triguero et al. (2012) on the relationship between HRM practices and organizational performance in Spanish firms from a financial and non-financial perspective (subjective) that was conducted with 102 firms in Andalusia (Spain). The outcomes have demonstrated a positive relationship between HRM practices and financial (ROS&ROA) and subjective performance indicators. A study conducted by Uchegara (2019) found out through OLS regression analyses a positive relationship between Corporate Social Responsibility activities and Return on Sales (ROS). According to the conclusions of a study conducted by Samardi (2013), a substantial association was observed between intellectual capital and two performance measures, namely return on equity and return on sales, in Petrochemical Companies registered in the Tehran Stock Exchange. Furthermore, the research reveals that within the realm of intellectual capital, the efficiency of structural capital exhibits the strongest correlation with financial performance indicators. Specifically, among the various financial performance indicators, return on sales (ROS) has the most significant association with the component of intellectual capital.

In summary Return on Sales (ROS) is important as a financial performance indicator, It can be influenced by various perspectives, including operational efficiency, pricing, cost management,

revenue growth, market positioning, financial management, customer focus, market conditions, technology, innovation, and regulatory/environmental factors.

Ultimately, a healthy ROS reflects effective management and operational efficiency, contributing positively to the company's overall financial health and sustainability. But it should be utilized with other financial indicator to provide a complete picture of a company's finances.

#### **1.4.1.4 Profit Growth**

Profit growth is a financial metric that measures the rate at which a company's profit grows over time. It is a significant measure of the company's financial performance and overall business health since it demonstrates the company's ability to generate more profit from its operations. Profit growth for the organization is vital for both internal and external stakeholders; profit growth can provide a signal that the company's finances are moving positively which will affect firm value (Endri et al., 2020). According to Alchian (1950), profit realization is the criterion used to pick successful enterprises, and those that achieve positive profits grow. An increasing rate of profit growth indicates the ability of a firm to generate higher profits from its activities, which has major implications for stakeholders both within and outside the company.

As companies strive to improve their financial position and stock value, profit growth becomes a key objective (Brealey et al., 2008). Firms strive for profitable growth in their quest to create superior returns for their shareholders (Raisch, 2008). According to Morgan et al. (2009), to achieve profit growth, firms can increase sales revenue, margins, or both. Sustainable profit growth is an important concern for all firms and one of the most critical challenges facing senior executives today (Raisch, 2008).

Positive profit growth reflects the company's ability to manage and utilize its resources to generate profits and deliver good company's performance and vice versa (Harahap, 2007). According to Mair (2005), profit growth combines growth and profitability, two of the main aspects of economic performance, and provides a more suitable measure of superior performance. It signals to the market that the company is not only financially stable but also capable of delivering superior returns. This can increase investor confidence, increase stock value, and attract new investors and partners.

Profit growth performance in firm is affected from different perspectives. Lee et al. (2010), stated that human capital of business managers will influence business success and profit growth. Mair (2005) study about 119 managers in European financial services firms, the results indicate that middle managers' actions that are aligned with the company's strategy are positively and significantly associated with profit growth. Another study from Sari and Rokhmania (2020) shows profit growth has a positive effect on earnings quality.

Kim and Ployhart (2014) in a study of 359 firms, suggest that selective staffing and internal training directly and interactively influence firm profit growth through their effects on firm labor productivity.

Profit growth is thus more than just a metric of financial performance; it reflects a company's strategic cognitive ability, operational efficiency, and adaptability, making it a critical driver of financial success and long-term sustainability.

#### **1.4.1.5 Manufacturing cost**

The success of modern manufacturing enterprises relies on the seamless coordination and collaboration of various departments, including sales, marketing, design, manufacturing, and quality control, which communicate from idea conceptualization to final product realization (Panicker et al., 2019). In response to growing sustainability concerns, manufacturing companies must devise methods for evaluating sustainable manufacturing performance with the objective of integrating sustainability factors, the performance is critical to the success of many firms (Amrina & Yusof, 2011). Manufacturing performance indicators serve a dual purpose by not only describing past events but also exerting influence on future outcomes; they provide decision-makers with valuable information that can guide their choices, potentially impacting the organization's future competitive standing (Harinder et al., 2004).

The manufacturing industry and researchers have collaborated to develop various key performance indicators to assess and monitor an enterprise's success based on objectives for performance (Parmenter, 2015). According to Hudson et al. (2001), the most generally stated factors for evaluating manufacturing performance are quality, cost, delivery, and flexibility. These indicators are financial and non-financial measurement indicators. Manufacturing

performance indicators serve to reflect the current condition of manufacturing, monitor and regulate operational efficiency, drive improvement initiatives, and gauge the effectiveness of manufacturing decisions (Hon, 2005). In this sub-chapter in focus is manufacturing cost as financial performance indicator. The measures of cost performance identified by Neely and Platts (2005) include manufacturing cost, value added cost, selling price, running cost, and services cost. Another author Panicker et al. (2019) describes manufacturing cost using six cost components: facility cost, capital cost, utilities costs, raw material cost, labour cost, and maintenance cost.

These elements work together to establish a manufacturing operation's cost efficiency. When these costs are poorly managed, they can erode profit margins, making it difficult for the company to maintain market competitiveness. For various reasons, effective cost control in manufacturing is critical. Firstly, it has a direct impact on product cost structure, which dictates pricing tactics. A high manufacturing cost may compel a firm to raise its prices, thereby rendering its products less competitive and lowering market share. Secondly, manufacturing cost management impacts overall profitability. A company's profit margins can be improved through cutting costs, resulting in more net income. As a result, the company's financial performance and attractiveness to investors and stakeholders improve.

Additionally, efficient cost management is vital for sustainability and growth. Therefore, prudent management of manufacturing costs is essential for achieving and sustaining financial success in the manufacturing industry. In this paper manufacturing costs are generalizing as a singular variable in order to reduce overall production costs.

#### **1.4.2 The term and significance of the non-financial performance**

Non-financial performance measures are expressed in units other than dollars, such as productivity, customer satisfaction or quality failures (Collier, 2006). Non-financial performance measurements, in other words, are used to assess the quality or quantity of a business activity (Warren & Reeve, 2006).

They can cover any aspect of running a business. To be effective, nonfinancial performance measures should be defined as precise objectives with exact definite times of completion (Dewan

& Sudarshan, 2003). Non-financial performance measures are based on measures that complement financial statements such as “operational measures on customer satisfaction, internal business processes, and the organization’s innovation and improvement activities” (Kaplan and Norton, 1992, p. 71). Chan (2004) described the use of non-financial measurements in the balanced scorecard as a performance management system for reporting on diverse management tasks. According to a review of the performance measurement literature, non-financial measurements have greater advantages and are more directly traceable to the strategy of any firm (Shank & Govindarajan, 1993). This is due to the needs of stakeholders to obtain value relevant information regarding a firm’s prospects, non-financial measures support (or reflect) firm strategies and are expected to improve organizational decisions and performance (Otley, 2003).

In general, based on the existing literature, it is possible to conclude that the majority of authors who have utilized the non-financial performance dimension in their studies have employed roughly the same indicators. According to Alves and Lourenço (2022) non-financial performance are measures that provide performance information in non-monetary terms, such as market share, customer satisfaction, innovation/new product development and employee turnover. Lee et al. (2010) measured firm non-financial performance through four dimensions: production cost, product quality, product delivery and production flexibility. Zehir et al. (2016), in their study included four measures indicators such as: market share, quality, satisfaction and market effectiveness. A review of the literature showed essentially identical indicators used in other fields of study, such as customer satisfaction, product or services quality, market shares and employee efficiency (Zaman, 2004; CIMA, 1993; Cho and Pucik, 2005). In another study, Skinner (1974) used five indicators, such as short and dependable delivery, fast new product development, superior quality, volume flexibility and low cost. Spencer et al. (2009) employed non-financial indicators, such as: development of new products, sales volume, market share, market developments, personnel developments and political-public affairs.

There is no universally standardized list of non-financial performance indicators should be used in all studies; the selection of criteria should be based on the specific nature of the work being studied, the industry or sector, the organizational goals, and the research objectives.

This study uses six items to represent our non-financial performance, namely: overall product quality, responsiveness to customers, customer service level, delivery speed, delivery dependability and market share.

#### **1.4.2.1 Product or services quality**

Quality is the key to success of every firm, now days the customers are demanding quality products and the firms that are able to produce quality products at lower cost win the game (Bhatti et al. 2014). Parfitt and Sanvido (1993), define quality as the totality of features required by a product or service to satisfy a given need; fitness for purpose. Most firms prioritize quality because they have made promises to their customers regarding the quality of their services and products (Heckl & Moormann, 2010). Product or service quality is considered as the appropriate nonfinancial measure for companies to evaluate their overall performance. (Cima,1993, Cho & Pucik, 2005).

Product quality incorporates several dimensions, including product specifications (product standard), product performance (product functions), product reliability, product serviceability (repairability of service), and product durability (product life), among others (Kotler, 2003).

Bhatti et al. (2014) studied product quality in manufacturing organizations in Pakistan, and the results show that manufacturing organizations in Pakistan focus more on product quality than other performance indicators. This result was also seen in customer perceptions and in textile organizations, where product quality was the most important performance indicator. Hernaus et al. (2012) conducted a study that emphasized the positive and statistically significant relationship between performance measurement practices and product or service quality. There have been studies that show a beneficial relationship between human resources and product quality. These studies highlight the critical role that human resources play in ensuring and improving product quality.

Training and employee empowerment enables firms to provide high-quality, low-cost products and services that are requested in today's sophisticated markets (Brancato, 1995). Another study from Lee et al. (2010) concluded that HRM practices are positively associated with firm performance, product quality, production cost, product delivery, and production flexibility.

### **1.4.2.2 Responsiveness to customers**

Responsiveness is the ability to respond purposefully and within an appropriate time-scale to customer demand or changes in the marketplace, to bring about or maintain competitive advantage (Kritchanchai & MacCarthy, 1999). Chen et al. (2004), describes responsiveness as the firm's ability to respond in a timely manner to the needs and wants of its customers. Potentially, emphasizing responsiveness is the key to retaining current customers as well as adding new customers. (Daugherty et al., 1995). According to Kohli and Jaworski (1990), responsiveness entails selecting target markets and designing and offering products/services that meet their current and anticipated needs.

Customer responsiveness is defined as the propensity of a company to act on market knowledge in order to anticipate and/or rapidly address modifications to customer expectations (Bernardes & Hanna, 2009). By prioritizing customer responsiveness, the firm may gain a competitive advantage and high-performance levels as a result of its improved understanding of consumer needs and the reputation it establishes (Kohli & Jaworski, 1990).

Customer responsiveness can have a significant impact on a company's performance and success. Non-financial indicators, such as customer responsiveness, provide valuable insight into the consumer experience and overall satisfaction. In a lot of studies customer responsiveness has been found to have significant impacts on various aspects of firm's performance.

In a study from Pehrsson (2011) has been found a significant correlation appeared for financial performance and firm's attention to customer responsiveness. Also, another study from Pehrsson (2014) stated that the firm's customer responsiveness correlated significantly and positively with the firm's performance. According to Beamon (1999), observation performance measurement in commercial supply chains is predominantly concerned with cost and customer responsiveness. The empirical findings of Salavou (2002) indicate that small firms are able to improve profitability by matching customer responsiveness and market-driven pricing policy with product innovation. A study made form Mosey et al. (2003), suggest that all SMEs sought to achieve growth via quickly responding to customers through the introduction of new products.

### 1.4.2.3 Customer satisfaction

Customer satisfaction refers to the measurement of how satisfied customers are with a company's products, services, or overall experience. Customer satisfaction is defined as the degree to which customers believe they received services or products worth more than the price they paid (Tracey, 1996). According to Kotler et al. (2000), customer satisfaction depends on how products and services meet or surpass customer expectation. Customer satisfaction exists when performance is below the customer's desired service level but greater than or equal to the predicted service level, i.e., when the service performs as well as or better than predicted, but below the desired service level (Davis & Heineke, 1998). Firms achieve customer satisfaction by building capabilities on a set of competencies (Day, 1994). They should focus on developing core competencies that help it to create enduring customer satisfaction (Prahalad & Hamel, 1990).

Customer satisfaction measurement has become one of the commonest prescriptions to managers and organizations, from a wide variety of sources (Piercy, 1996). Customer satisfaction affects firms from different perspectives. According to the literature analysis, customer service has a significant impact on firm performance and other elements relevant to the company's operations. For example, customer satisfaction has a measurable impact on purchase intentions (Bolton and Drew, 1991), influences customer loyalty to organizations (Harazneh et al., 2020), has a positive association with financial performance Banker et al. (2000), are related with service quality provided significant effects on customer satisfaction (Supriyanto, et al., 2021).

In a study from Alves and Lourenço (2022), provides information on the use of different types of non-financial measurement, they found out that customer satisfaction and productivity are the most commonly used non-financial measurement in managerial compensation in SMEs. From human resources perspective an improvement in employees' attitudes led to an improvement in customer satisfaction that, in turn, led to an improvement in revenue growth (Koys, 2003). It is also possible for customer satisfaction to influence employees' HR Attributes, such that high customer satisfaction ratings result in the belief that HRM practices must be designed with service quality in mind (Nishii et al., 2008).



#### **1.4.2.4 Delivery speed**

Delivery speed can be defined as particular firm with an industry can deliver more quickly than its competitors or meet a required delivery date when only some or even none of the competition can do so. (Hill, 1989). This advantage allows the firm to either surpass the delivery speed of its rivals or fulfill a specified delivery date even when its competitors are unable to do so, or in some cases, have no capacity to meet the required delivery date.

According to Greasley (1999), the concept of delivery speed refers to the time range encompassing the customer's request for a particular product or service and the subsequent fulfillment of the said request. Delivery performance comprises two crucial elements: speed and reliability. Quick shipment to the customer provides many competitive advantages and delivery speed is vitally important to many enterprises; consequently, growing competition compels businesses to increase delivery speed (Şengül et al., 2015).

Delivery speed is frequently regarded as a crucial factor in the success of numerous industries and enterprises. Customers have come to expect faster delivery times, and businesses that can provide quick and dependable delivery services typically acquire a competitive advantage. For example, Fisher et al. (2019) reported in an online retailer study that increasing physical delivery speed boosts overall revenue by 4% and net profits by 2.2%. Tuzkaya and Önüt (2009) consider warehouse and transportation functions to be the most essential supply network activities that can influence delivery speed.

The research conducted by Hilmola et al. (2015) suggests that SME manufacturers in Finland tend to prioritize delivery speed and punctuality over new product development, broadness of product line, and after-sales service. Another study from human resource perspective made by Boohene et al. (2020), the research found a positive and significant relationship between social capital and emotional intelligence and a positive and a significant relationship between emotional intelligence and firm sales growth, market share, delivery speed and product quality.

#### **1.4.2.5 Delivery dependability**

Delivery Dependability is the ability to exactly meet quoted or anticipated delivery dates and quantities (Vickery et al., 1997). According to Nair (2005), delivery dependability is the ability

to meet quoted or anticipated delivery dates and quantities on a consistent basis. Blackburn (1991) refers delivery dependability as the ability of an organization to have accurate and reliable deliveries. Leong et al. (1990) describes dependability of delivery as the ability to meet delivery schedules or promises. Overall, delivery dependability is concerned with ensuring that customers can rely on the delivery service to deliver things on time, in the expected condition, and with appropriate communication along the process. Otherwise, if companies continue to miss deadlines, customers will increasingly stop considering them as potential suppliers, resulting in the loss of market share or even the entire business; these companies will need to improve their delivery dependability, or they may not be able to compete in the marketplace (Hill, 2000).

Several studies have identified delivery dependability as a crucial non-financial characteristic that affects enterprises. By measuring and assessing delivery dependability, companies can gain insights into their supply chain performance, customer satisfaction levels, and overall operational efficiency.

In a study conducted by Marinagi and Trivellas (2014), the researchers examined the effects of various supply chain management (SCM) practices on delivery dependability within a sample of 200 manufacturing small and medium-sized enterprises (SMEs) in Greece. The findings of the study indicated that all categories of SCM practices exerted a significant influence on the delivery dependability performance of the firms. Jayaram et al. (1999) found that delivery dependability is positively related with market share and that customer responsiveness, followed by delivery dependability, is rated highest in terms of strategic importance. Another study found that increased information sharing practices can lead to greater supplier network responsiveness, which can have a direct positive impact on a firm's delivery dependability (Thatte et al., 2009).

Considering these impacts, businesses recognize the importance of measuring and improving delivery dependability as a key non-financial indicator. By tracking performance metrics related to delivery dependability, companies can identify areas for improvement, implement corrective measures, and enhance their overall delivery dependability.

#### **1.4.2.6 Market shares**

Market share is defined as a company's entity's monetary-based or volume-based share of the overall market (absolute market share) or of the output of the largest competitor/combined market share of several leading competitors (relative market share) (Edeling & Himme, 2018). Market share, according to O'Regan (2002), can be defined as a company's sales in relation to total industry sales. It measures a company's relative strength and position in relation to its competitors. Market share is another indicator of a company's competitive advantage over its industry competitors; larger market share indicates greater competitive advantage for a firm (Gordon et al., 2009). According to literature, one of the most important indicators of organizational success is market share (O'Regan, 2002). Market share is a common indicator of firm growth within an industry, and many firms attempt to obtain increasingly higher amounts of market share, in other words many firms look to market share as a key indicator of their performance in the market (Bloodgood & Katz, 2004).

Among those financial or non-financial measures, market share has been the one which researchers and business managers focus on the most (Hsu, 2022). It has been used as performance indicator in many researches. For example, in a study of HRM practices made by Vlachos (2011) indicated that selective hiring, compensation policy, and training & development was the predictor of perceived market share growth. Another study from O'Regan (2002) concluded that market share influences the organizational thinking and strategic planning of small- to medium-sized enterprises. Another study made in manufacturing firms, where they tested the impact of manufacturing strategy and competitive strategy have on firm performance, findings indicated that quality is the only manufacturing strategy component that influences performance and have influence to both sales' growth and market share performance (Amoako-Gyampah & Acquah, 2008). Alam and Noor (2009) on their empirical study confirm the positive effect of information and communication technologies on firm performance in terms of productivity, profitability, market value and market share.

## **CHAPTER II - RELATIONSHIP BETWEEN HRM PRACTICES AND SME'S PERFORMANCE**

This chapter presents the logical relationship among the dimensions of instruments that are presented in the strategic literature. Therefore, based on previous credible research studies of the strategic area, this part is focused on four main issues, i.e.: (a) presenting the relationship between HRM practices and organizational performance of SME, (b) presenting the relationship between HRM practices and financial performance of SME, (c) presenting the relationship between HRM practices and non-financial performance of SME, and (d) showing the effects of each HRM practices on the relationship between SME performance. Finally, it examines the relationship between strategic instruments, misconceptions around these relationships and the lack of literature regarding these relationships, which will be supplemented by the outcomes of this study.

### **2.1 Relationship between HRM practices and organizational performance in SMEs**

Organizational performance is a measure that evaluates the effectiveness and efficacy with which an organization achieves its organizational objectives (Ho, 2008). According to Yamin et al. (1999), it measures how organizations accomplish financial as well as market-oriented goals.

Numerous studies have measured organizational performance through the use of a combination of financial and non-financial indicators, including market share, the growth of ROI, return on investment (ROI), growth of sales, profit margin on sales, product quality, customer satisfaction, overall competitive position (e.g. see Huo et al., 2014; Islami, 2021a, Islami, 2021b, Li et al., 2006), it is necessary for firms to integrate financial and non-financial measures for organizational performance measurement (Banerjee and Kane, 1996).

The relationship between HRM and organizational performance has been a subject of great interest to researchers and practitioners for a long time. Numerous studies have shown that the implementation of specific HRM practices can significantly improve organizational performance of SMEs (Huselid, 1995, Tsai et al, 2010; Allen et al, 2013; Sheehan, 2014). The collection of

human resource management (HRM) practices discussed in scholarly literature has frequently been categorized under several labels such as "best practices" (Pfeffer, 1994), "high performance work systems" (Appelbaum et al., 2000), or "high commitment management/practices" (De Kok et al., 2006), although they all amount to bundles of HR practices/functions. Bacon et al. (1996) suggest that smaller firms may find it easier to implement best HRM practices, this is because of their flat hierarchical structures, greater flexibility, and the direct impact that employees have on organizational success. Bundles or systems of specific HR practices are thought to have a greater impact on firm performance than HRM practices acting independently (De Kok & Hartog, 2006). In essence, it's the synergistic effects that create a greater impact than the sum of individual practices (Jiang et al., 2012). Firms seek to determine the optimal combination of HRM practices to use. To know that according to Shih et al. (2006) firms should focus in the previous firm performance because is a significant factor in a firm's decision to adopt bundles of HR practices to enhance organizational performance. In addition, these HR practices must be aligned with organizational objectives and compatible with each other to enhance organizational performance (Wright & McMahon, 1992) or with other words a system of good human resource management (HRM) practices need to be addressed as to ensure the development of organizational performance run smoothly (Cappelli & Neumark, 2001).

Numerous empirical studies have shown that interrelated bundles of human resource management (HRM) practices can influence the organizational performance of small and medium-sized organizations (SMEs). For example, in a comprehensive meta-analytic evaluation conducted by Combs et al. (2006), it was shown that high performance work systems (HPWS) exhibited a more substantial influence on organizational performance when compared to individual human resource (HR) practices. The study encompassed an extensive analysis of 92 relevant papers. Also, Otoo (2019) illustrated in his study the positive relationship impact of five HRM practices (recruitment and selection, career planning, employee participation, training and development and performance appraisal) on organizational performance. A study conducted by Chang and Chen (2002) examined the effects of different HRM practices on the performance of 62 high-tech firms in Taiwan. The studies consistently demonstrate that implementing HRM practices improves organizational performance.

On the other hand, Amin et al. (2014) studied the impact of seven HRM practices (career planning, compensation, employee participation, job definition, performance appraisal,

recruitment and training) on organizational performance. Using a questionnaire-based survey consisting of 46 items to collect data from 300 employees working at a public university in Malaysia, the study revealed that HRM practices have significant impact on organizational performance. Another study conducted by Chan and Mak (2012) about High-performance HRM practices (careful selection, enhanced jobs, extensive training, high payments, and information sharing and performance feedback). Gathering data from 227 HRM employees in four industries (finance, insurance, manufacturing and real estate) in Hong Kong, it was shown that there exists a positive correlation between the implementation of high-performance HRM practices and organizational performance (OP). Based on the review of the literature above, this study, therefore, proposes general hypothesis ( $H_g$ ).

### **2.1.1 Human resource management practices relationship on financial performance**

Financial performance measurements are those that indicate the overall performance of a company in terms of economic indicators and portray the ability of firms to create value (Galeazzo & Furlan, 2018), so the implementation of human resource management (HRM) practices has the potential to exert a substantial influence on the financial performance of small and medium-sized firms (SMEs). According to Islami, (2021a, b) the implementation of HRM practices has a direct impact on both the financial and non-financial performance of a firm. Consequently, it is widely acknowledged that HR outcomes serve as key mediators in the relationship between HRM practices and organizational and financial results (Jiang et al., 2012). Numerous empirical studies have been conducted to investigate the comprehensive relationship between human resource management (HRM) practices and financial performance, either by incorporating specific HRM practices or by examining HRM practices as a bundle in relation to financial performance. For example, Gamage (2014) discovered that there is an immediate relationship between the use of effective recruitment and selection practices and positive HR outcomes, these HR outcomes, in turn, contribute to improved operational and financial performance of manufacturing SMEs in Japan.

Another study made by Morishima (1991), in manufacturing firms discovered a stronger relationship between information sharing and productivity and profitability (as measured by

Return on Assets and Return on Sales), which led to improved financial performance for firms. From the bundle perspective a lot studies have concluded the impact of HRM on financial performance. For example, Allen et al. (2013) discovered a positive relationship between high-commitment HR practices and perceived financial performance. Wei and Lau (2010) found a positive relationship between high-performance work systems and financial performance. Also, Arunprasad (2017) conducted a study to assess the influence of strategic human resource management (HRM) practices and knowledge strategies on the performance of a sample of Indian software companies. The findings revealed that knowledge strategy and strategic HRM practices had a considerable positive impact on financial performance, with knowledge strategy acting as a moderator variable. Another study made by Sels et al. (2003) investigates how HRM affects company financial performance in Belgian SMEs. They claim that HRM intensity has a significant impact on productivity, and that productivity has a squeezing effect on personnel costs/gross margin. They also discover that HRM intensity has a significant and favorable impact on profitability and its financial performance. In a recent study made by Islami (2021b) found out that the implementation of various HRM practices, such as recruitment and selection, training and development, teamwork and participation, performance appraisal and compensation/incentives, may improve the organization's marketing and financial performance in the long run. On the other hand, a study made from Mulolli and Boskovska (2020) found a positive correlation between HRM practices and financial performance. Based on the review of the literature above, this study, therefore, proposes the first hypotheses ( $H_1$ ).

### **2.1.2 Human resource management practices relationship on non-financial performance**

Non-financial performance measurements are used to assess the quality or quantity of a business activity (Warren & Reeve, 2006). Non-financial performance it is preoccupied with finding and measuring how well a firm has created value for their customers (Spencer et al., 2009). There is no universally standardized list of non-financial performance indicators should be used in all studies; the selection of criteria should be based on the specific nature of the work being studied, the industry or sector, the organizational goals, and the research objectives. Empirical evidence suggests that effective HRM practices relationship within non-financial performance in SMEs

have consistently demonstrated a significant and positive association with the creation of value for customers and the overall quality of firm's activities. In this regard, through HRM practices a high level of non-financial performance can be achieved (Islami & Mulolli, 2021).

Numerous empirical studies on the relationship between human resource management (HRM) practices and non-financial performance have been conducted. The study conducted by Lee et al. (2010) discovered a noteworthy positive relationship between six HRM practices (teamwork, training and development, employment security, compensation/incentives, performance appraisal, and human resource planning) and non-financial performance. Also, Sang (2005) investigated the links between nine HRM practices (HR planning, staffing, incentives, appraisal, training, collaboration, employee engagement, status inequalities, and employment security) and the perception of business performance (non-financial and financial performance).

Meanwhile, Sang put the nine HRM practices to the test to see how they affected four operational performance components: product quality, product cost, product delivery, and production flexibility. According to the findings of Sang's study, HR planning, staffing, incentives, appraisal, training, teamwork, and employee participation all have a favorable impact on employee productivity. Furthermore, a beneficial association between HRM practices and non-financial performance has been established. Another study made by Ahmad and Schroeder (2003) proved the impact of seven HRM practices (selective hiring, employment security, compensation/incentive contingent on performance, use of teams and decentralization, status differences, extensive training, and sharing information) on non-financial performance.

Also, Kokkaew et al. (2022) conducted a study about the impact of human resource management and knowledge management on non-financial organizational performance, the results supported a positive and direct relationship exists between HRM and KM with non-financial organizational performance. Recently, a study made by Islami et al. (2023) found out the use of various HRM practices, such as compensation/incentives, performance appraisal, teamwork and participation, training and development, and recruitment and selection, which can provide the company with better non- financial performance in terms of speed of delivery, responsiveness to customers, delivery reliability, and product quality. Based on the review of the literature above, this study, therefore, proposes the second hypotheses (**H<sub>2</sub>**).



### **2.1.3 Relationship between different types of HRM practices and performance of SMEs**

The relationship between Human Resource Management (HRM) practices and the performance of Small and Medium-sized Enterprises (SMEs) is a topic of significant interest and significance in organizational study. Given the significant impact of SMEs on economic development and job creation, it is imperative to comprehend the influence of different HRM practices on their performance in order to promote sustainable growth.

This study aims to investigate and clarify the complex relationships between various HRM practices and the performance of small and medium-sized enterprises (SMEs). The research aims to investigate the effects of HRM practices, including recruitment and selection, training and development, communication and information, compensation and reward, job design, and performance appraisal, on the financial and non-financial aspects of SME performance.

These subchapters emphasize the theoretical support for our hypothesis by analyzing these relationships.

#### **2.1.3.1 Relationship between recruitment and selection and performance of SMEs**

The recruitment and selection process plays a crucial role in SMEs as it helps attract employees who align with the company's values and interests (Zheng et al., 2009). The main objective of implementing HRM practice in the SMEs is to effectively attract and retain highly-skilled employees who possess key attributes that align with the firms' main objectives (Langwell & Heaton, 2016). According to Jeske and Shultz (2016), experienced candidate, as compared to a fresh candidate, can perform business functions more efficiently and improves the non-financial and financial performance of the enterprise.

Numerous empirical studies have consistently demonstrated that recruitment and selection practices have a substantial positive effect on both the financial and nonfinancial aspects of the performance of SMEs. So, an effective process of employee recruitment and selection can provide a competitive advantage and improve organizational performance (Chen & Cheng, 2012). In a study conducted by Sang (2005), it was found that the implementation of formal and structured recruitment and selection methods had a significant positive impact on the

performance of SMEs. Obasan (2012) found that formal and structured recruitment and selection approaches had a substantial positive influence on SMEs' performance in a sample of 100 businesses. Another study made by Gamage (2014), found out that higher use of effective recruitment and selection practices is directly related to higher levels of positive HR outcomes and then these HR outcomes lead to higher operational and financial performance of manufacturing SMEs in Japan. The research conducted by Ahmad et al. (2019) revealed a consistent and statistically significant association between recruitment and various positive outcomes, including lower employee turnover, higher productivity, and higher financial performance. Based on the review of the literature above, this study, therefore, proposes the hypotheses **H<sub>1a</sub>** and **H<sub>2a</sub>**.

### **2.1.3.2 Relationship between training and development and performance of SMEs**

The training and development process is a procedure that improves employees' abilities, knowledge, and attributes (Zheng et al., 2009). Therefore, securing and training high-quality personnel are crucial for the development of small and medium-sized enterprises (SMEs), which frequently have limited opportunities to utilize managerial resources, it takes many months, if not years, of training and commitment to attain a high level of service quality (Gamage 2014). Training and development play a crucial role in obtaining competitive advantage (Niazi, 2011) Training represents the firm's investment in human capital and is a vital component of its productive resources, which, according to the resource-based view, impart competitive advantages (Ipinnaiye et al., 2017).

On the other hand, Human capital development refers to processes related to training, education, and other professional initiatives aimed at increasing an employee's levels of knowledge, skills, abilities, values, and social assets, which will lead to employee satisfaction and performance, and eventually firm performance (Ogunyomi & Bruning, 2016).

In SMEs informal training methods are commonly used. Employees at SMEs are less likely to have access to formal training provisions than their counterparts in larger firms when it comes to training and development (Gilbert & Jones, 2000). According Jayawarna et al., (2007), informal training initiatives, are ad hoc, fragmented, and flexible, depending on the context of the

organization, the nature of the work at hand, the propensity of employees to learn, and lack a formal structure and stated goals. Kotey and Folker (2007) suggest that informal training is linked to the short-term strategic orientation of the firm.

Storey and Westhead (1997) find that smaller firms provide less formal training than their larger counterparts due to a lack of awareness of its benefits and the high implementation costs. But in SMEs operating in the manufacturing sector, are at a disadvantage due to the practice of prioritizing informal training over formal training (Matlay, 1999). A lot of study's findings indicate that formal training is more crucial than informal training in SMEs. According to Patton and Marlow (2002), formal training and development refers to interventions that are recognized by both recipients and deliverers as having a structured mode of delivery; the primary objective of such interventions is to impart new awareness or knowledge related to a specific workplace process or activity. In Jayawarna et al., (2007), findings indicate that formal training is likely to be a targeted activity that contributes more significantly to performance than informal training. Felstead et al. (2009) demonstrate that formal training significantly raises the performance of the sampled firms.

Formal training is also proved to help small enterprises' performance (Ndiaye et al., 2018). Numerous authors and studies have demonstrated the positive impact of training and development on the overall performance of SMEs, in financial and non-financial perspective. Numerous empirical investigations have examined the relationship between training and development initiatives and financial performance in a broad manner. In general, the results indicate a positive impact on productivity (Birdi et al., 2008), return on sales (ROS) (Barrett & Mayson, 2007), and revenues (Ellinger et al., 2002). Many studies have found a link between training implementation and SME performance.

A study from Garavan et al., (2021) has found a positive association between training and firm performance. According to Singh (2004) study, training had a positive and significant effect on firm performance. A study conducted by Pauli (2020) examined the feasibility of assessing the professionalization of training and determining the relationship between the level of training professionalization and business outcomes in a sample of 100 SMEs in Poland.

There is statistical evidence to support the notion that companies that implement training processes in accordance with theoretical models tend to achieve better outcomes and experience improvements across a wide range of performance indicators.

Also, the research conducted by Beaver and Hutchings (2005) found that the introduction of different training programs enhances learning and enhances the overall skills of employees, and it is believed that implementing training programs also leads to higher SME organizational performance. Based on the review of the literature above, this study, therefore, proposes the hypotheses **H<sub>1b</sub>** and **H<sub>2b</sub>**.

### **2.1.3.3 Relationship between communication and information and performance of SMEs**

To collect and process data, SMEs employ both formal and informal communication channels (Rasheed et al., 2017). Due to the lack of a communication strategy, SMEs mainly employ open communication (Wilkinson, 1999). According to Evans and Davis (2005), open communication is a critical element of a high-performance work system since it influences employee relationships and, ultimately, company performance. To increase communication, management must make the employee aware that the company is sharing information about company circumstances, that the employee can readily express their opinion to their supervisor, and that they can communicate effectively with coworkers. Through discussions, debates, and conflicts that challenge current assumptions and renew knowledge, communication among team members can prompt them to identify process-related problems and generate new ideas for resolving them, thereby enhancing the team's ability to integrate acquired information into innovative solutions (Wang et al., 2018). According to Benton and Maloni (2005), there is evidence suggesting that communication can serve as a predictor of enhanced performance.

Also, information sharing impacts organizational performance in two ways: first, it conveys the trust the organization has in its employees, and second, it provides employees with access to the information they need to make crucial decisions (Subramaniam et al., 2011). According to Ngah and Jusoff (2009), the engagement in information sharing activities or knowledge sharing activities within small and medium-sized enterprises (SMEs) holds significance as it contributes to the cultivation of creativity and innovation, ultimately leading to improved performance.

Extensive research and scholarly literature have consistently documented the significant benefits that communication and information sharing bring to (SMEs). By cultivating a culture that prioritizes efficient communication and establishing mechanisms for the dissemination of

pertinent information, SMEs have the potential to improve their overall performance in terms of both financial and non-financial aspects. This, in turn, can contribute to their long-term success and sustainability.

A study conducted in small and medium-sized enterprises (SMEs) in Malaysia revealed that there is a positive relationship between certain human resource management (HRM) practices, specifically communication and information sharing, as well as selection, and organizational performance, as indicated by the statistical results (Zakaria et al., 2018). Another study made by Subramaniam et al. (2011), found out that information sharing was significant in influencing positively organizational performance. Using non-financial performance indicators Vlachos (2008), on manufacturing companies who had operated in Greece for a minimum of 5 years, found a positive relationship between information sharing and market share. From the standpoint of financial performance indicators. In manufacturing firms, Morishima (1991) discovered a stronger relationship between information sharing and productivity and profitability (as measured by Return on Assets and Return on Sales) than in non-manufacturing firms. Another study made by Patrashkova-Volzdoska et al. (2003), found important evidence that in cross-functional teams, communication frequency can have a positive relationship to performance. According to a study conducted by Richbell et al. (2010) on Hungarian SMEs, formal communications, such as regular formal meetings or written communications via e-mail are more important for successful sales growth than informal communications arrangements. Based on the review of the literature above, this study, therefore, proposes the hypotheses  $H_{1c}$  and  $H_{2c}$ .

#### **2.1.3.4 Relationship between compensation and reward and performance of SMEs**

Compensation and rewards are integral elements of an organization's human resources strategy, exerting a substantial influence on the attraction, motivation, and retention of employees. These terms refer to the financial and non-financial benefits that employees obtain in return for their labor and contributions to the company. Compensation is described as both monetary and non-monetary benefits intended to motivate employees to perform effectively in the organization (Youndt et al. 1996). Compensation and rewards are indicators of how well a firm can meet its employees' work values, objectives, personal ideals, and prospects for advancement (Nayak &

Sahoo, 2015). By applying equitable compensation and reward strategies, employees can therefore be motivated and will become both effective and efficient (Singh et al., 2017). A compensation and reward system are founded on the expectancy theory, which posits that employees are more likely to be motivated to perform when they perceive a strong connection between their performance and the reward they receive (Guest, 2002). A well-designed compensation system enhances employee loyalty and work quality, thereby bolstering the company's competitiveness (Mura et al., 2019). It is imperative for organizations to prioritize their compensation incentives and reward policies in order to enhance employee performance (Lipuku et al., 2022),

SMEs frequently encounter distinct obstacles in contrast to larger corporations. These challenges encompass restricted financial resources, a smaller labor force, and a work environment that emphasizes personalized interactions. The implementation of compensation and rewards strategies can yield substantial impacts on small and medium-sized enterprises (SMEs). According to Carlson et al. (2006), the implementation of compensation policy or reward system on SMEs has a significant impact on organizational performance.

Numerous authors and studies have provided evidence to support the claim that Compensation and rewards have a positive influence on the overall performance of small and medium-sized enterprises (SMEs). According to Cardon and Stevens (2004), study compensation affects both personnel and business performance. According to the findings of Paul and Anantharaman's (2003) study, it was observed that rewards and compensation have a direct impact on operational performance. The study conducted by Wang et al. (2018) provides evidence that the implementation of the "pay-for-performance" principle has positively impacted the overall performance of SMEs in Canada. Singh et al. (2017) conducted a study on SMEs in the Caribbean, specifically in Trinidad. The researchers discovered that the formalization of performance appraisal and compensation systems had a positive impact on SMEs performance. In a study conducted by Mulolli et al. (2015) on small and medium enterprises (SMEs) in Kosovo, it was found that compensation and rewards exert a significant influence on firm performance. A study made by Islami (2021) in 157 manufacturing organizations, resulted that HRM practices including compensation/incentives have a positive influence on its organizational performance.

The study by Islami et al. (2023) demonstrated that a company's HRM practices have a positive effect on company performance, including practices such as compensation/incentives, performance appraisal, teamwork and participation, training and development, and recruitment and selection, which can result in improved operational performance in terms of delivery speed, customer responsiveness, delivery reliability, and product quality. In turn, this can drive financial performance via market share growth, revenue growth, return on investment growth, and profit growth. Based on the review of the literature above, this study, therefore, proposes the hypotheses **H<sub>1d</sub>** and **H<sub>2d</sub>**.

#### **2.1.3.5 Relationship between job design and performance of SMEs**

Job design is critical to the success of small and medium-sized businesses (SMEs). Jobs that are well-designed can result in greater productivity, employee satisfaction, and overall organizational success. According to Bates (2004), an effective job design entails engaging employees in work-related tasks, resulting in a clear forecast of employee output, departmental productivity, and overall organizational performance. Job design is concerned with the activities of employees, their responsibilities, the tasks required to perform their work, and how these tasks and responsibilities are structured and scheduled (Morgeson & Humphrey, 2008). It encompasses a range of aspects, including a variety of task, knowledge, social, and contextual characteristics (Morgeson & Humphrey, 2006). Job design has a significant impact on many elements of small and medium-sized organizations (SMEs). Many studies have been conducted to determine the impact of job design on business and employee performance. According to Al-Ahmadi (2009), study there is a positive correlation between the nature of one's employment and their performance. This suggests that the level of satisfaction about the amount of variation and difficulty in one's job can significantly impact their performance. According to the study conducted by Ali and Zia-ur-Rehman (2014), it was discovered that the use of job design can improve employee performance.

Another study from Wood et al. (2012) discovered that high involvement management and enriched work design mediated the four performance indicators via job satisfaction and job-

related anxiety-comfort. Those of enriched job design through job satisfaction are significant on three performance measures: financial performance, labour productivity, and quality.

A study made by Ismail et al. (2019), concluded that Job design can greatly improve organizational performance. Based on the review of the literature above, this study, therefore, proposes the hypotheses **H<sub>1e</sub>** and **H<sub>2e</sub>**.

### **2.1.3.6 Relationship between performance appraisal and performance of SMEs**

Performance appraisal is defined as the process and technique of formally evaluating someone's work and giving feedback on performance during a particular period of time (Singh et al., 2017). Performance appraisal is a tool to control and shape employee attitude and behaviors (Saratun, 2016), is one of the most efficient methods for employees' development, motivation and evaluation, in modern time (Islami et al., 2018). Academics and practitioners commonly refer to performance appraisal as a human resource practice (Bayo-Moriones et al., 2020), that tries to assess employees' effectiveness and efficiency (Islami et al., 2018). According to Joarder and Ashraf (2012), performance appraisal is essential for providing incentives to talented employees to be satisfied with the firm.

Performance appraisals are a fundamental component of human resource management: the outcomes of appraisals serve as the foundation for many HR decisions (Brown et al., 2010). Performance appraisals play a crucial part in evaluating an employee's job performance, identifying their strengths and areas that require improvement, and gauging their potential for advancement and professional development within the firm. However, it is essential to observe that performance appraisal may not be the only factor influencing the overall performance of a company. Firms are complex entities, with their success typically resulting from a combination of diverse HR practices, managerial strategies, and market dynamics. It is unwise to attribute the entire performance of a company to the effectiveness of its performance appraisal system. As a result, no single HR practice, such as performance appraisal, will have a significant impact on firm performance on its own. Performance appraisal systems will be most effective when they are integrated with other HR practices, consistent with the firm's strategic goals, focused on



behaviors that employees can control, and focused on behaviors that employees can see are related to achieving strategic goals (DeNisi & Smith, 2014).

Performance appraisal in SMEs is informal and less structured, with a focus on monitoring employees' performance (Newman & Sheikh, 2014). However, according to Zakaria et al. (2011), SMEs' owners/managers will perceive an improvement in overall firm performance if they introduce more formal appraisal systems. Benefits of effective formal performance appraisals include more effective performance planning, better coaching and performance management, providing a platform for discussing and achieving performance improvement and employee development, and providing documentation that can be used for a wide range of HR decisions (Longenecker & Fink, 2011).

A wide range of studies have extensively examined the relationship between performance appraisals and firm performance, with a significant number of them indicating favorable impacts of performance appraisals on SMEs performance. In the study by Singh et al. (2017), formal performance appraisals had the strongest positive relationship with firm performance compared to the other HRM practices and were commonly used by SME owners to manage key employees. Chang and Chen (2002) conducted a study that revealed a significant relationship between performance appraisal and firm financial performance in Enhancing Chinese SME performance Taiwanese high-tech firms and multinational companies in Singapore. Another study conducted by Islami and Mustafa (2023), it was found a positive relationship between performance appraisal and with teamwork and participation and operational performance. Osman et al. (2011) conducted survey research on performance appraisal and firm performance in 800 Malaysian industry sectors. The regression result shows that there is significant positive relationship between the performance appraisal and performance. Similarly, a study conducted by Sabiu et al. (2018) revealed a positive and statistically significant relationship between performance appraisal and organizational performance. The findings of the study made by Islami and Mulolli (2021) indicate a positive and statistically significant relationship between the implementation of performance appraisal practices and operational performance. The findings of the study revealed that the effective implementation of performance appraisal practices by organizations has a significant positive impact on operational performance. The findings of this study suggest that the implementation of a performance appraisal system by organizations has the potential to enhance their operational performance in various aspects, including product quality,

responsiveness to customers, delivery speed, and delivery dependability. Based on the review of the literature above, this study, therefore, proposes the hypotheses  $H_{1f}$  and  $H_{2f}$ .

## **2.2 Relationship between non-financial performance and financial performance in SMEs**

It has been demonstrated that non-financial performance is a leading indicator of financial performance (Bititci et al. 2013). In both academic research and practical business management, it is well-established the idea that non-financial performance can serve as a leading indicator of financial performance. Firms often monitor a combination of financial and non-financial metrics to get a more comprehensive view of their overall health and future prospects. The relationship between non-financial and financial performance is central to all modern performance measurement and management frameworks, including Balanced Scorecards (Kaplan & Norton, 1992), Strategy Maps (Kaplan & Norton, 2000), performance drivers (Olve et al. 1999), and others frameworks. Regarding the relationship between financial and non-financial performance, Hoque (2005), argues that firms that create success factors through the measurement of non-financial performance manifest higher financial performance. Furthermore, various studies argue that the business activities of some firms affect financial performance via non-financial performance (Baker & Sinkula, 2005). Several studies have indicated that firms that employ non-financial performance measures were found to have superior financial performance compared to other firms (Zhang et al., 2013; Huelsbeck et al., 2011). Additionally, efforts to improve a firm's non-financial performance can help to improve its financial performance by eliminating possible conflicts between society and the enterprise and reducing related costs (Erhemjamts & Huang, 2019). A considerable number of these nonfinancial measurements are actively evaluated as performance drivers that offer early indications of future performance.

Numerous empirical studies have been conducted to investigate the comprehensive relationship between non-financial and financial performance. For example, a study conducted by Banker et al. (2000) found a positive association between customer satisfactions one of the non-financial performance indicator and financial performance. According to the research conducted by Pavlov et al. (2017), it was found that there is a positive relationship between firm non-financial performance and financial performance. In a recent study conducted by Liu et al. (2022), it was

observed that the influence of non-financial performance on financial performance remained both positive and significant, regardless of considering the potential effect of environmental and social activities on financial performance. Based on the review of the literature above, this study, therefore, proposes the third hypotheses (**H<sub>3</sub>**).

### **CHAPTER III - EMPIRICAL RESEARCH OF THE IMPACT OF HRM PRACTICES TO PERFORMANCES OF THE SME'S IN THE MANUFACTURING INDUSTRY IN REPUBLIC OF KOSOVO**

This study takes an integrative and fresh approach to illuminate the processes that occur within the "black box" between key strategic instruments, such as HRM practices, the financial and non-financial performance of SMEs, and their relationship between those three variables, as well as their direct and indirect influence on organizational performance of SMEs.

This study employs a quantitative methodology that adopts a positivist approach. A cross-sectional research design is utilized, along with large-scale surveys administered using questionnaires, to find potential cause-and-effect relationships among the variables under investigation. Consequently, based on the characteristics of the current study, IBM SPSS Statistics were used to analyze the questionnaire data. The employed methodology for the research is the "evaluation strategy".

In accordance with the general research design of the present study, in order to acquire the research results, data gathered from questionnaires passed through several SPSS statistical software tests, such as: descriptive analysis, convergent and discriminant validity, t-test, ANOVA, correlation matrix, and regression analysis (including hierarchical linear regression and multivariate regression).

It is important to highlight that the current study will conduct a thorough review of existing literature to identify reliable measures for constructs and modify relevant items. This demonstrates that both primary and secondary data have been taken into consideration in the execution of this research. Consequently, the background of the research model and research hypotheses will be developed by analyzing secondary data in the existing literature, which this includes scientific publications and articles published by credible publishers like: Academy of Management, Elsevier, Emerald, Springer, Taylor & Francis, and so forth; and in reliable databases, such as: Scopus, Web of Science, EBSCO, and Google Scholar was also used as a search engine. The search for literature began with the titles and abstracts of documents retrieved from search engines using the following keywords: ("Human resource management practices" OR "Financial performance" OR "Non-financial performance" OR "Relationship" OR OR

"Contingency") and ("Model" OR "Integration" OR "Instruments" OR "Dimension" OR "Construct" OR "Method" OR "Concept"). Whereas primary data was collected using self-administered questionnaires provided to a sample group of manufacturing SMEs in the Republic of Kosovo. The data regarding manufacturing SMEs was obtained from the Kosovo Agency of Statistics (KAS). Participating firms will be randomly chosen from manufacturing SMEs evidenced on that list. The data collection period from questioner encompassed the months of March through May 2023.

Namely, the process of preparing this study contain 7 phases: (1) analyzing the previous literature regarding the HRM practices, financial performance, non-financial performance and organizational performance overall, (2) finding and analyzing the existing literature for constructing the integrative conceptual model, (3) searching for elements that each testable variable have to include, (4) constructing questionnaires based on current literature (identifying practices that each instrument must include), (5) pre-pilot study, (6) pilot study, and (7) large-scale data analysis.

### **3.1 Conceptual framework and research model**

Figure 2 depicts a graphic representation of the current study's interactions between variables, known as the research framework. Indeed, the conceptual diagram visually supports this research by presenting assumptions regarding the link between variables. As a result, testing aims to investigate the potential relationships between variables in order to construct a typology, or typical model, of how variables are found in relation to one another in the current model. The conceptual framework of the current study contains four main variables: a) human resource management practices "HRM practices"; b) financial performance; c) non-financial performance; and d) organizational performance. Each of these variables contains several constructs/dimensions, whereas each construct is created by a group of items.

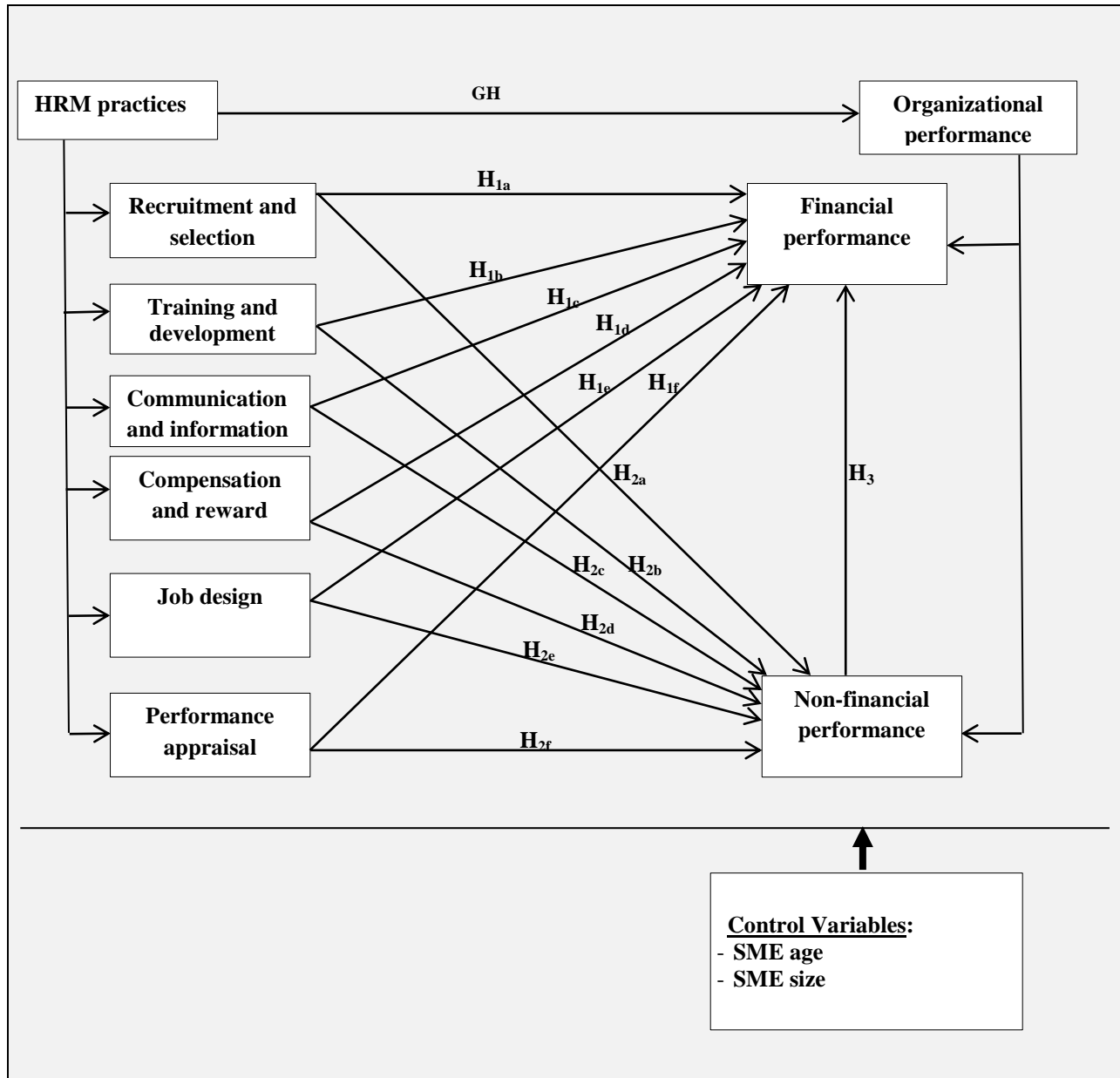


Figure 2: Conceptual framework of the study for testing variables

Source: Author

Figure 2 shows the structure of research hypotheses that, as an image, present the path of the proposed relationship between variables.

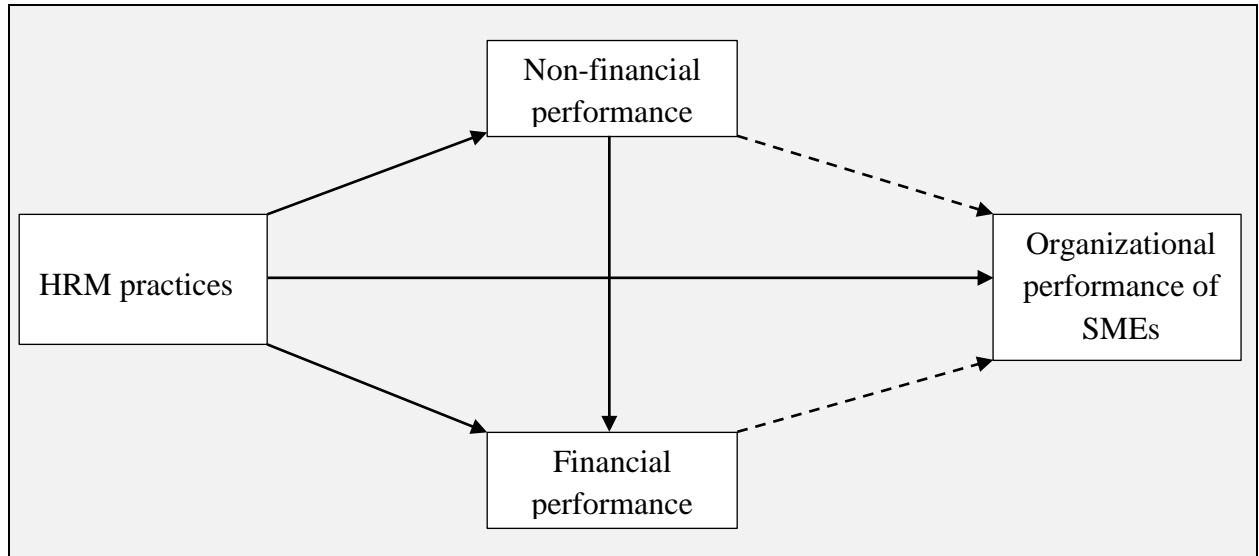


Figure 3: Conceptual Diagram - direct effects of main hypotheses

Source: author

In Figure 3 is presented the conceptual diagram framework for the main hypotheses like how human resource management practices affect a) financial performance; b) non-financial performance; and c) organizational performance of SMEs.

### 3.2 Research sample and data collection

Survey data was collected from manufacturing SMEs in Kosovo over the last year performance. The study's sampling frame was obtained from the Kosovo Agency of Statistics (KAS) registry. The manufacturing sector was chosen because it has been the focus of the majority of research in many industrialized and transitional economies (Bowen & Schneider, 1988) which Kosovo is as well. Furthermore, both developed and developing countries have been attempting to expand the manufacturing sector, which is seen as a national strategic industry that provides economic stability (Islami et al., 2020b).

The focus of the study was SMEs that have more than 10 employees, small, medium firms, but not micro-businesses (less than 10 employees). In alignment with the business regulations established in Kosovo and following the European Union's classification, small and medium-sized enterprises (SMEs) are categorized based on the number of employees they have.

According to these criteria, small enterprises must have ten (10) to forty-nine (49) employees; medium enterprises must have from fifty (50) to two hundred forty-nine (249) employees.

Out of the pool of ten thousand SMEs that are registered with KAS, a total of 300 entities were chosen at random after meeting our selection criteria. The questionnaires were designed to take the evaluation of the SMEs managers regarding the application of HRM practices in their SMEs, and its relationship with financial and non-financial performance. Participants were directed to complete the questionnaires solely by high- and middle-level managers with broad responsibilities in SMEs. It is anticipated that these managers possess a thorough comprehension of the operational mechanics of SMEs, in addition to financial managers who are tasked with supervising the financial facets of the SMEs. The data collection period encompassed the months of March through May 2023.

The sub-chapter below will explain the formulation of the questionnaire and describing the design process, identifying HRM practices as independent variables, SME performance variables as dependent variables, outlining control variables, detailing the pre-pilot and pilot study, elucidating the large-scale methodology, and providing a comprehensive analysis of the tools incorporated in the questionnaire and addressing non-response bias.

### **3.2.1 Questionnaire designed and measures**

A comprehensive examination of the available literature was conducted in order to identify valid measures for relevant constructs and adapted existing scales to measure the study variables. The current study adopts an interdisciplinary approach and employs a relational perspective. To gather data, questionnaires were developed, incorporating two strategic instruments: HRM practices and SMEs performance. These instruments encompass two distinct strategic perspectives within the firm's context. When the current literature failed to provide consistent and valid measures, new measures were developed based on the author's comprehension of the constructs, observations made during company visits, and interviews with a number of senior-level managers and academics. Questionnaires contained six pages, and their preparation was a combination of the questionnaires from doctoral dissertation and scientific publication which



will be explained in the following subsections. The constructs and measures used in this study are shown in Appendix 1.

In order to obtain the necessary data for this study, participants were directed to complete the questionnaires solely by high- and middle-level managers with broad responsibilities in manufacturing SMEs.

The research questionnaires consist of four sections: (1) The cover letter is attached to each questionnaire to provide an explanation of the survey's purpose, assure respondents of the confidentiality of their responses, highlight the benefits of the study, offer incentives to participate, and emphasize the voluntary nature of participation. Additionally, a web address is provided for respondents to access and complete the survey online; (2) general information for SMEs; (3) HRM practices and (4) SMEs performance. Constructs/dimensions development methods for HRM practices, SMEs performance include four phases: item generation, pre-pilot study, pilot study, and large-scale data analysis (this was adapted see example: Islami (2021a); which has been used in his PhD dissertation).

A comprehensive survey comprising 46 questions was developed specifically for managers within the manufacturing sector of Kosovo about their views on various research variables. All the variables in our model were Likert measurement scales with anchor values of 1 to 5, except questions that require general information for SMEs. Respondents were requested to provide ratings on a five-point scale, where higher values indicated heightened using of HRM practices or improved performance.

Because the scales derived from existing literature were in English, to assure questionnaire reliability, the English version was prepared first, evaluated, and then translated into Albanian by an English language expert and controlled by a skilled Kosovan management professor. Another English professor and an English-speaking HRM professor translated the Albanian version into English. The back-translated version was compared against the English version for discrepancies. Albanian questions were reworded to match their English counterparts.

The examination of constructs in this research involved utilizing a selection of perceptive elements from HRM and SME performance databases. Consequently, a considerable portion of the measurement items associated with these constructs was modified from established instruments and dimensions/practices that had been employed in previous research.

### 3.2.2 Definition of the variables in the model

In a concise overview of the model, it comprises three main variables: independent, dependent, and control variables.

- *Independent variables*: recruitment and selection (RS), training and development (TD), communication and information (CI), compensation and reward (CR), job design (JD), performance appraisal (PA) and HRM practices (HRMp) as a second order latent variable.
- *Depended variables*: non-financial performance (NFP), financial performance (FP), and overall organizational performance of SMEs (OPS) as a second order latent variable.
- *Controls variables are*: SME age and SME size as control variables.

#### 3.2.2.1 Human resource management practices as independent variables

The measures for HRM practices were sourced from various studies such as: (a) Ahmad and Schroeder (2002), Amin et al. (2014), Arslan (2017), Iqbal (2015), Islami (2021a, b), Lee et al. (2010), Otoo (2019), and Singh (2004). HRM practices were treated as a second-order latent variable measured by six first-order latent variables: recruitment and selection, training and development, communication and information, compensation and reward, job design performance appraisal.

Items for these six constructs/dimensions were adopted/created as follows: (a) *recruitment and selection* – five measurement items were adopted from studies by Ahmad and Schroeder (2002), Iqbal (2015), Islami (2021a, b), and have been modified for the purposes of the current study; (b) *training and development* - five measurement items were adopted from studies by Singh (2004), Lee et al. (2010), Islami (2021a, b) and Otoo (2019), and have been modified for the purposes of the current study; (c) *communication and information* – five measurement items were adopted from studies by Arslan (2017), Iqbal (2015), and have been modified for the purposes of the current study; (d) *compensation and reward* - five measurement items were adopted from studies by Singh (2004), Islami (2021a, b), Amin et al. (2014), Lee et al. (2010), and have been modified for the purposes of the current study; (e) *job design* - five measurement items were adopted from studies by Arslan (2017), Singh (2004), and have been modified for the purposes of the current

study; and (f) *performance appraisal* - five measurement items were adopted from studies by Singh (2004), Islami (2021a, b), Lee et al. (2010), and have been modified for the purposes of the current study.

Finally, a 30-item from five constructs was used to measure HRM practices. The respondents were asked to specify the degree to which HRM practices had been used within their SMEs in last year.

Recruitment and selection, training and development, communication and information, compensation and reward, job design performance appraisal and overall HRM practices are identified as independent variables.

### **3.2.2.2 SMEs Performance as dependent variables**

Following Islami (2021a, b) and Huo et al. (2014), the present study measured the organizational performance of SMEs through two dimensions: non-financial and financial performance. Where, organizational performance of SMEs was treated as a second-order latent variable measured by two first-order latent variables: non-financial performance and financial performance.

The six non-financial performance measurement items (the overall product quality has been improved; responsiveness to customers has been increased; customer satisfaction with the service to him has increased; the delivery speed of the product has been increased; delivery dependability has been improved; and our firm's market share growth has increased) were adopted from Huo et al. (2014), Islami (2021a, b), Alves and Lourenço (2022), and were modified for the purposes of the current study.

The respondents, high-level or middle managers were asked to indicate their performance of SMEs on these items for the last year. Respondents indicated this on a five-point Likert-type scale ranging from 1 – “not at all” to 5 – “to a large extent”.

The measures for financial performance measurement items were adopted from those featured in Flynn et al. (2010), Gölgeci and Kuivalainen (2020), Islami (2021a, b), Huo et al. (2014), and Qi et al. (2011) and Chow & Van Der Stede (2006). These self-reported financial performance measures were assembled from the firms' financial managers by asking them to compare their

individual firms: growth in return on investment has been increased; sales of products/services have increased; return on sales (ROS) has been increased; our company's profit has increased; and manufacturing cost has been reduced. The respondents, financial managers were asked to indicate their performance of SMEs on these items for the last year. Respondents indicated this on a five-point Likert-type scale ranging from 1 – “not at all” to 5 – “to a large extent”.

Non-financial and financial performance of SMEs and overall organizational performance of SMEs are identified as depended variables.

### **3.2.2.3 Control variables**

Besides from the dependent and independent variables, this study includes two control variables which are expected to influence the connection of HRM practices with financial and non-financial performance of SMEs. The control variables used in this study are “SME size” and “SME age.” which are likely to influence our results.

Following Danso et al. (2019), firm size is calculated as the natural logarithm of the number of full-time employees. Whereas the firm’s age is the number of years elapsing since its establishment (Casillas et al., 2009).

SME age – includes the number of years the participant SME has been in operation in order to determine if older firms implement more HRM practices and perform better in financial and non-financial aspects than their younger counterparts.

It has been demonstrated that the age of a firm influences its organizational performance, with elder firms being more profitable and less productive than newer ones (Majumdar, 1997).

SME size – is considered one of the significant determinants of SMEs growth and profitability (Njeru et al., 2012), the size of a firm affects performance in many ways (Majumdar, 1997). As a result, it is controlled for SME size because it may impact financial resources (Brammer & Millington, 2006), where larger firms are more productive but less profitable (Majumdar, 1997). Small firms, on the other hand, experience greater difficulties in covering up informational irregularities with creditors and other capital providers than large firms relegating the former to the use of internally generated funds for growth and to increase profitability (Sup Cho, 2016).

SME size was included as the participant firm's number of employees in our analyses, to test whether it explains some of the variations in HRM practices, financial and non-financial performance. These two control variables on questionnaire were presented as closed question form with a specific answer.

### **3.2.3 Pre-pilot study and pilot study**

In accordance with the pre-pilot study conducted by Islami (2021a), the research items underwent a review process by a panel consisting of five doctoral students specializing in management and organizational sciences, one professor of HRM, and one professor of financial management.

The research constructs were subsequently re-evaluated through structured interviews conducted with five practitioners, who were invited to offer input regarding their appropriateness. In response to the feedback received, modifications were made to the wording of certain inquiries and ambiguous elements, with the aim of enhancing their comprehensibility and relevance to the operational context in Kosovo.

Subsequently, the preliminary version of the survey was subjected to pre-testing in five manufacturing SMEs located in Kosovo, whereby face-to-face conversations were conducted. The recommendations provided by the SMEs were incorporated into the revised iteration of the survey.

During the pilot study phase, the Q-sort technique was utilized to evaluate the convergent and discriminant validity of the measures. HR, strategic, and financial managers served as judges for item categorization. HR managers were invited to act as judges, categorizing the items based on similarities and differences into the six aspects of HRM practice.

A strategic manager was asked to act as a judge and place the items of non-financial performance dimension, based on similarities and differences among them. And financial managers were asked to act as judges and position the items within the financial performance dimension based on their similarities and differences.

### 3.2.4 Large scale method

The study's sampling frame was obtained from the Kosovo Agency of Statistics (KAS) registry. Data were collected by mail survey from manufacturing SMEs. Out of the pool of ten thousand SMEs that are registered with KAS, a total of 300 entities were chosen at random after meeting our selection criteria and that had updated contact information.

Participants were directed to fill out the questionnaires exclusively by high- and middle-level managers who hold complete responsibilities in SMEs to answer questions on HRM practices, financial and non-financial performance.

It is expected that these managers have a good understanding of the operational mechanics of SMEs, as well as finance managers who are entrusted with overseeing the financial aspects of the SMEs. It was made sure that firms that were contacted had a minimum of 10 full-time employees, whereas the maximum number was 249 employees, according to the European Union standard for SMEs.<sup>1</sup> The data collection period encompassed the months of March through May 2023.

The questionnaires were mailed, along with a cover letter that accompanied the questionnaires conveyed to the participants the study's objectives, ethical considerations, data confidentiality, and potential contributions. The implementation of follow-up telephone calls and mailings, as suggested by Frohlich (2002) and Islami (2021a), led to an improvement in the response rate.

A total of 160 responses were obtained from SMEs, with an effective response rate of 53.3% ( $160/300 = 53.3\%$ ) of the total sample, which was deemed adequate for our study. After the screening, it was found that one of the questionnaires was incomplete, and six small and medium-sized enterprises (SMEs) failed the employee's criteria of 10-249 employees, with three SMEs having fewer than 10 employees and three having more than 250 employees.

These questionnaires were rejected, leaving 153 usable responses. Finally, 153 samples were used in our subsequent analyses, with an effective response rate of 51% ( $153/300 = 51\%$ ) of the total sample, which was deemed adequate for our study.

Key characteristics of the sample of manufacturing SMEs are summarized in Table 1.

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<sup>1</sup> SMEs are defined as employing less than 250 persons, (EU Small and Medium-sized Enterprises: An Overview, 2022)

Table 1: Characteristics of sample SMEs (N=153)

Characteristics	Number	Percent (%)
<b>Industry sector</b>		
Food	30	19.6 %
Textile	11	7.2 %
Construction	42	27.5 %
Chemical	4	2.6 %
Other	66	43.1 %
<b>Number of employees</b>		
10–49	94	61.4 %
50-249	59	38.6 %
<b>Firm age</b>		
≤10	35	22.9 %
11–20	45	29.4 %
>20	73	47.7 %
<b>Role in SMEs</b>		
Owner	42	27.5 %
CEO - chief executive officer	29	19.0 %
Human Resource Manager	18	11.8 %
Manufacturing Manager	10	6.5 %
Marketing Manager	9	5.9 %
Financial Manager	27	17.6 %
Other	18	11.8 %
<b>Annual revenue (2022 value)</b>		
≤ €1 million	64	41.8 %
€1 million–10 million	76	49.7 %
>€10 million	13	8.5 %

Source: author

The results show that a large percentage of our respondents are from the construction and food sectors. A majority of the Small and Medium Enterprises (SMEs) that participated in the survey, specifically 61 percent, reported having a workforce size of less than 49 employees. Additionally, approximately 48 percent of these SMEs indicated having accumulated over 20 years of work experience and 27.5 percent of the participants were Owners of SMEs. According

to our analysis, it was found that 50 percent of the Small and Medium Enterprises (SMEs) that participated in the survey fall between the revenue ranges of €1 million to €10 million per annum in the year 2022.

### **3.2.5 Comprehensive analysis of HRM practices and SME performance**

This section contains the 153 responses collected from Small and Medium Enterprises (SMEs) in response to the questionnaire's second segment on human resource management practices and third segment on the performance of SMEs. All variables within our model were assessed using Likert measurement scales, featuring anchor values ranging from 1 to 5 (1 – "not at all"; 2 – "slightly"; 3 – "neutral"; 4 – "to a moderate extent"; 5 – "to a large extent").

The second segment, on Human Resource Management Practices, included six primary questions covering important topics including Recruitment and Selection, Training and Development, Communication and Information, Compensation and Reward, Job Design, and Performance Appraisal. Each of these primary questions was expanded with five sub-questions, yielding a total of 30 measuring items for this part. Within the context of the questionnaire, this comprehensive approach allowed for a detailed assessment of numerous aspects connected to human resource management.

The final segment of the questionnaire, dedicated to assessing the performance of Small and Medium Enterprises (SMEs), encompassed two primary questions: Non-Financial Performance and Financial Performance of SMEs. A total of six sub-questions were incorporated into the Non-Financial Performance category, whereas the Financial Performance category consisted of only five sub-questions. In total, this segment incorporated 11 measuring items. This structured approach enabled a comprehensive evaluation of both non-financial and financial dimensions of SME performance, facilitating a nuanced understanding of the factors contributing to overall organizational effectiveness.

The responses from Small and Medium Enterprises (SMEs) participants are arranged into a set of eight charts in this section. Each chart depicts the data visually, presenting the responses in terms of frequency and complemented by a percentage commentary. This dual presentation method aims to offer a comprehensive overview of the distribution and significance of the responses.



*Recruitment and selection* - The survey respondents were asked about various aspects of recruitment and selection practices. The questions included: RecSec\_1 (Our firm applies the form of recruitment through online job portals, recruitment websites, agencies, or social media), RecSec\_2 (Our firm spends a great effort in selecting the right person for every position), RecSec\_3 (Attitude/desire to work in a team as a criterion in employee selection), RecSec\_4 (Selecting employees who can provide ideas to improve the manufacturing process), RecSec\_5 (Selecting employees based on their overall fit to the firm, was used as a criterion for their selection). In Chart 1, respondents' answers to the Recruitment and Selection questions are visually represented using a Likert scale ranging from 1 to 5.

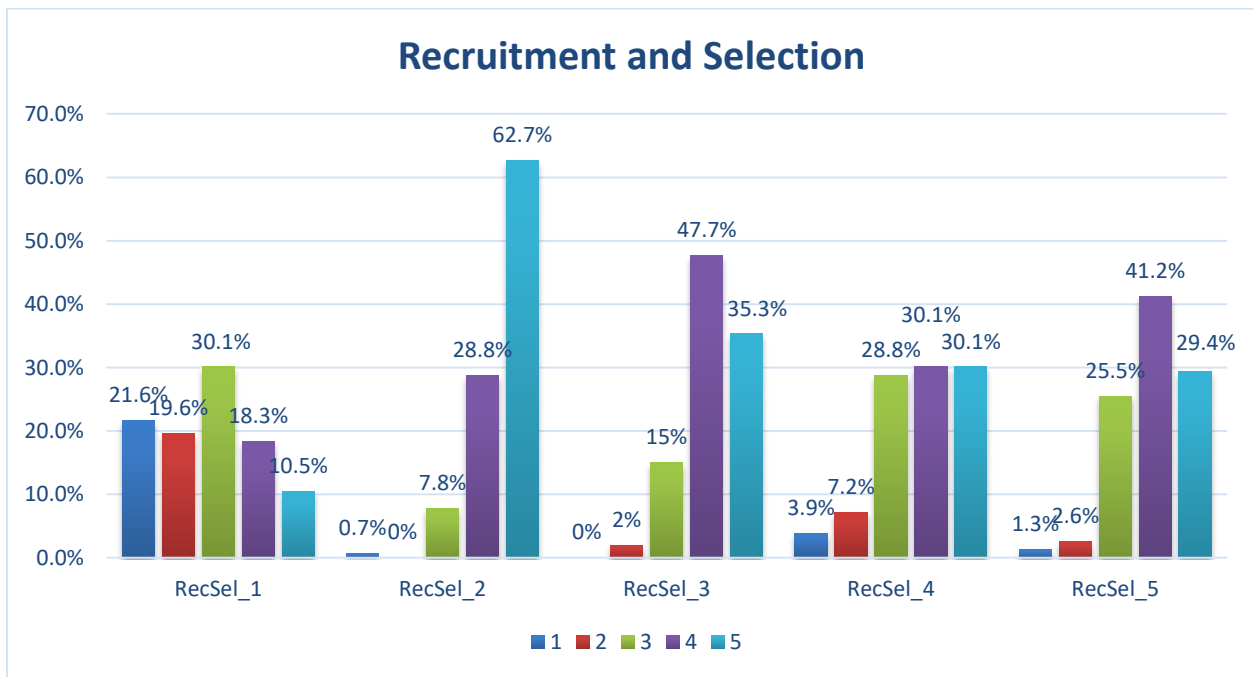


Chart 2: Recruitment and selection (N=153)

Source: author

The most remarkable finding is that a sizable proportion of respondents 30.1% chose "Neutral" in their responses to Segment RecSel\_1. This indicates a high level of uncertainty or neutrality among participants regarding the use of recruitment channels such as online job portals, recruitment websites, agencies, or social media. Following closely behind, 19.6% of respondents expressed a "Slightly" positive inclination, indicating a moderate level of agreement and smaller

percentage, 10.5%, leaned towards the "to a large extent" category, signifying a more decisive agreement for using this channel of recruiting and selecting employers.

The insights derived from the analysis of RecSel\_2 in Chart 1 highlight a distinct and positive trend in respondents' perceptions regarding their firms' dedication to selecting the right individuals for every position. Finds indicate that the respondents 62.7% chose "to a large extent" category indicates a robust consensus among participants that their respective firms exert a substantial effort in the careful selection of individuals for each position. Following behind, 28.8% of respondents expressed a "to a moderate extent" positive inclination.

The findings derived from the analysis of RecSel\_3 highlight a distinct and positive trend in respondents' perceptions regarding the attitude/desire to work in a team as a criterion in employee selection. Finds indicate that the respondents 47.7%, chose "to a moderate extent", a positive response in the form of indicating that the attitude/desire to work in a team is a crucial criterion in employee selection. Following behind, 35.3% of respondents expressed a "to a large extent" further reinforces the notion that teamwork is considered a significant and crucial criterion in recruitment process.

The findings obtained from the examination of RecSel\_4 highlight a distinct and positive trend in respondents' perceptions regarding the importance of selecting employees who can contribute ideas to improve the manufacturing process. The responses demonstrate a balanced perspective regarding the significance attributed to employees in contributing ideas aimed at improving the manufacturing process. Specifically, 30.1% of respondents chose "to a large extent," while an equal percentage of 30.1% opted for "to a moderate extent." This suggests a collective recognition among participants of the value of employee input in driving process improvements.

The insights derived from the analysis of RecSel\_5 in Chart 1 highlight a distinct and positive trend in respondents' perceptions regarding selecting employees based on their overall fit to the firm. Finds indicate that the respondents 41.2% chose "to a moderate extent" category, indicated the agreement with the statement that selecting employees based on their overall fit to the firm is an important criterion in their selection. Following behind, 29.4% of respondents expressed a "to a large extent" positive inclination.

*Training and development* - The survey extensively inquired about various aspects of training and development practices, seeking insights from respondents. The specific questions posed were as follows: TraDev\_1 (Our employees are provided with on-the-job training), TraDev\_2

(Activities of the training program provided meet the needs of the employees), TraDev\_3 (Providing formal training programs to teach new hires the skills they need to perform their jobs), TraDev\_4 (Training needs are identified through a formal performance appraisal mechanism), TraDev\_5 (Our company provides e-learning and training opportunities, as well as participation in workshops for employees). Chart 2 shows how respondents rated these aspects using a Likert scale from 1 to 5.

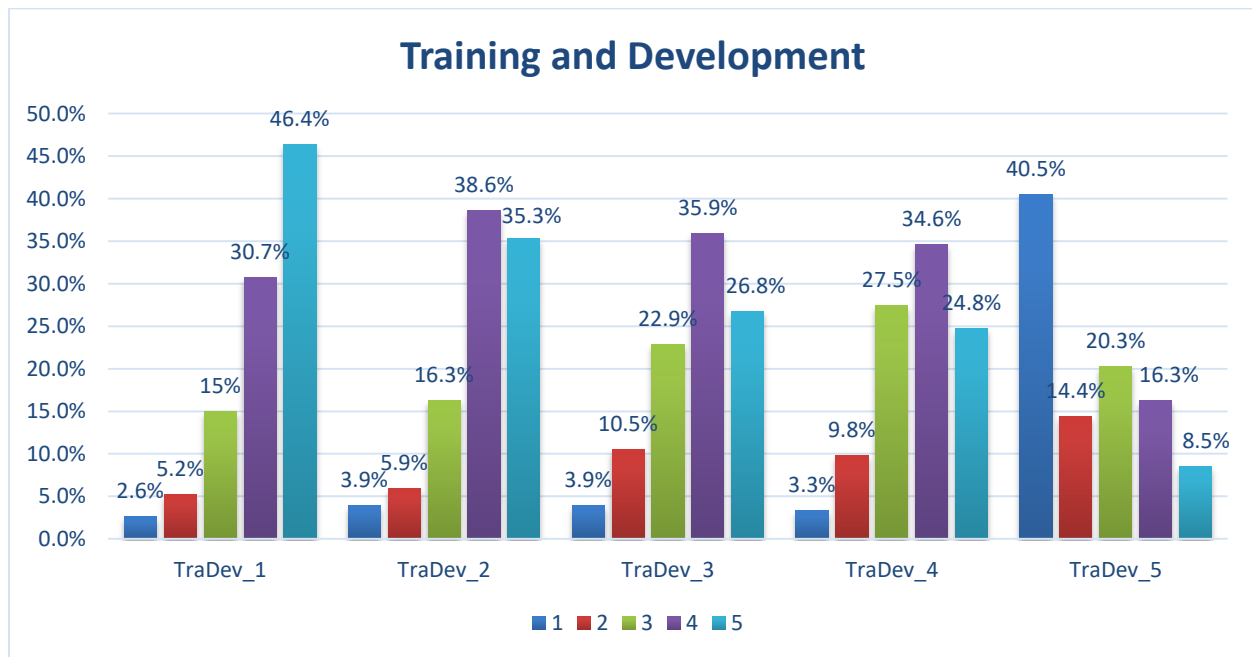


Chart 2: Training and development (N=153)

Source: author

The most notable finding from the study of Segment TraDev\_1 in Chart 2 is that a substantial portion of respondents, specifically 46.4%, expressed a positive inclination by choosing “to a large extent”. This highlights a distinct and positive trend in respondents' perceptions regarding about the significance of on-the-job training. Following closely behind, 30.7% of respondents expressed a “to a moderate extent ” positive inclination, suggesting acknowledgment of the value of on-the-job training within the surveyed SMEs.

The insights derived from the analysis of TraDev\_2 in Chart 2 highlight a distinct and positive trend in respondents' perceptions concerning the alignment of training program activities with the needs of employees. Finds indicate that the respondents 38.6%, chose “to a moderate extent” category. This suggests a consensus among participants that the activities of the training

programs are moderately aligned with the needs of employees. Following behind, 35.3% of respondents expressed a "to a large extent" positive inclination. This indicates that a considerable proportion of respondents hold the firm conviction that the training programs' activities are precisely matched with the requirements of staff, which is a positive reflection on the efficacy of these training efforts.

The findings derived from the analysis of TraDev\_3 highlight a distinct and positive trend in respondents' perceptions of providing formal training programs to teach new hires the skills they need to perform their jobs. Finds indicate that the respondents 35.9%, chose "to a moderate extent", and a positive response in the form of indicating that the formal training programs teach new hires the skills they need to perform their jobs. Following behind, 26.8% of respondents expressed a "to a large extent" positive inclination. This confirms the positive trend, demonstrating that a sizable portion of participants firmly believes that formal training programs play an important role in teaching new recruits the skills required for their job roles.

The findings obtained from the examination of TraDev\_4 highlight a distinct and positive trend in respondents' perceptions regarding the training needs are identified through a formal performance appraisal mechanism. Specifically, 34.6% of respondents chose "to a moderate extent," while an equal percentage of 24.8 % opted for "to a moderate extent". This suggests a positive and consensus-driven perception regarding the identification of training needs through a formal performance appraisal mechanism.

The insights derived from the analysis of TraDev\_5 highlight a distinct and negative trend in respondents' perceptions regarding our company provides e-learning and training opportunities, as well as participation in workshops for employees. Finds indicate that the respondents 40.5% chose "not at all" category, indicated the agreement with the statement that they don't use e-learning and workshops as opportunities for training programs. Following behind, 20.3% of respondents expressed a "neutral" and "slightly with 14.4% indicating the negative trend in respondents' perceptions regarding the provision of e-learning and workshop opportunities for training within their SMEs.

*Communication and information* - The survey respondents were asked about various aspects of practices. The questions included: ComInf\_1 (We inform personnel about their performance), ComInf\_2 (Our firm facilitates employees to acquire required information easily at any time), ComInf\_3 (Employees of our firm openly discuss their experiences in order to learn from each

other), ComInf\_4 (People on our company frequently share information based their experience on task difficulty's), ComInf\_5 (Our firm use technology and tools to facilitate communication and information sharing among employees). In Chart 3, respondents' answers to the Communication and information questions are visually represented using a Likert scale ranging from 1 to 5.

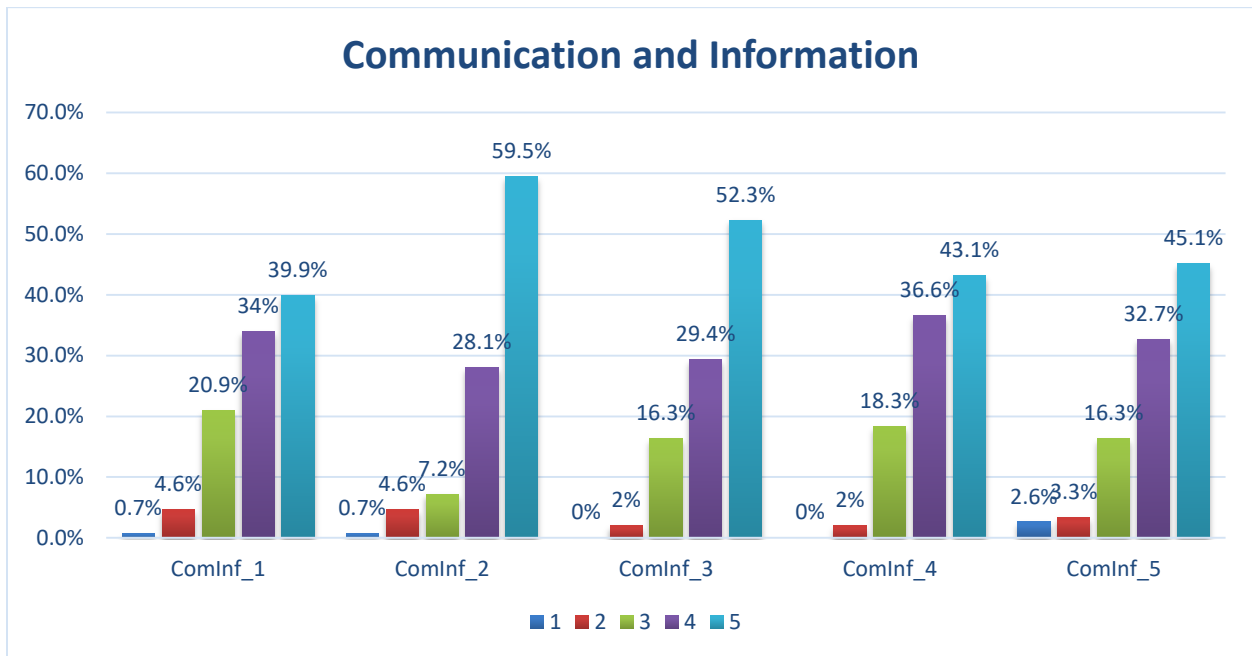


Chart 3: Communication and information (N=153)

Source: author

The findings obtained from the examination of ComInf\_1 highlight a distinct and positive trend in respondents' perceptions regarding of informing personnel about their performance. Finds indicate that the respondents 39.9%, chose "to a large extent" in their responses to Segment. Following closely behind, 34% of respondents expressed a "to a moderate extent" positive inclination. Responses reflect well on the communication practices within the surveyed SMEs, indicating a commitment to keeping employees well-informed about their performance.

The insights derived from the analysis of ComInf\_2 in Chart 3 highlight a distinct and positive trend in respondents' perceptions regarding the accessibility of required information for employees at any time. Finds indicate that the respondents 59.5% chose "to a large extent" category indicates a robust consensus among participants that their firms' employees have access easily to information at any time. Following behind, 28.1% of respondents expressed a "to a

moderate extent" positive inclination. The responses emphasize that the surveyed SMEs effectively facilitate access to information, thereby contributing to a work environment that is streamlined and efficient.

The findings derived from the analysis of ComInf\_3 highlight a distinct and positive trend in respondents' perceptions regarding the openness of employees in discussing their experiences to facilitate mutual learning. Finds indicate that the respondents 52.3%, chose "to a large extent", a positive response in the form of indicating employees within their respective firms openly discuss their experiences. Following behind, 29.4% of respondents expressed a "to a moderate extent" further reinforces the notion.

The findings obtained from the examination of ComInf\_4 highlight a distinct and positive trend in respondents' perceptions regarding the sharing of information based on experience related to task difficulties within the company. Finds indicate that the respondents 43.1%, chose "to a large extent", while an equal percentage of 36.6% opted for "to a moderate extent". Responses highlight the businesses' effectiveness in developing a culture of collaboration and knowledge-sharing, particularly when tackling difficult tasks.

The insights derived from the analysis of ComInf\_5 in Chart 3 emphasize a distinct and positive trend in respondents' perceptions regarding the use of technology and tools to facilitate communication and information sharing among employees. Finds indicate that the respondents 45.1% chose "to a large extent" category, indicate s a robust consensus among participants that their SMEs effectively utilize technology and tools to enhance communication and information sharing among employees. Following behind, 32.7% of respondents expressed a "to a moderate extent" positive inclination. Responses underscore the effectiveness of the SMEs in leveraging technology for enhanced workplace communication.

*Compensation and reward* - The survey respondents were asked about various aspects of practices. The questions included: ComRew\_1 (Compensation is decided on the basis of competence or ability of the employee), ComRew\_2 (Job performance is an important factor in determining the incentive compensation of employees), ComRew\_3 (In our firm, incentive systems (rewards and bonuses) encourage people to work towards achieving the firm's goals), ComRew\_4 (The compensation for all employees is directly linked to his/her performance), ComRew\_5 (Firm offer other forms of non-monetary compensation, such as training and development programs, recognition, participation in social events). In Chart 4, respondents'

answers to the Compensation and reward questions are visually represented using a Likert scale ranging from 1 to 5.

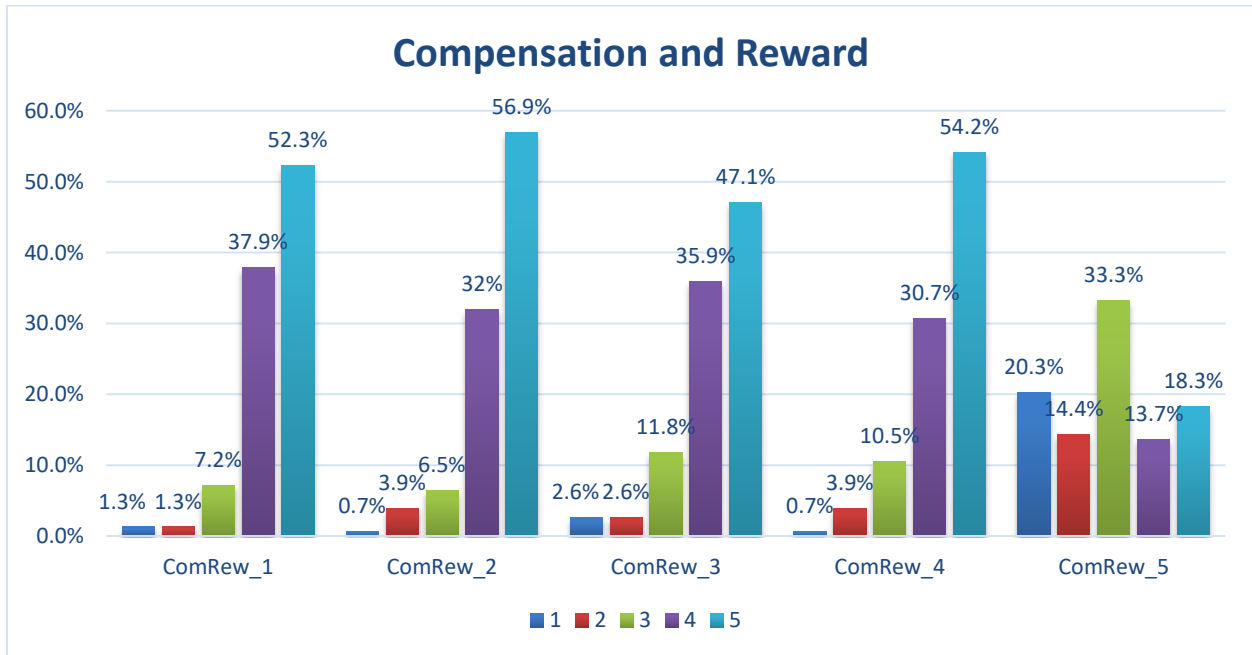


Chart 4: Compensation and reward (N=153)

Source: author

The findings obtained from the examination of ComRew\_1 highlight a distinct and positive trend in respondents' perceptions regarding how compensation is determined based on the competence or ability of the employee. Finds indicate that the respondents 52.3%, chose "to a large extent" in their responses to segment. This indicates a robust consensus among participants that their SMEs prioritize compensating employees based on their competence and abilities. Following closely behind, 37.9% of respondents expressed a "to a moderate extent" positive inclination. Responses underscore the effectiveness of the SMEs in linking compensation to the competence and abilities of their employees.

The insights derived from the analysis of ComRew\_2 emphasize a distinct and positive trend in respondents' perceptions regarding the significance of job performance as a factor in determining incentive compensation for employees. Finds indicate that the respondents 56.9% chose "to a large extent" category. This indicates a robust consensus among participants that job performance is considered a crucial and primary factor in determining incentive compensation within their SMEs. Following behind, 32% of respondents expressed a "to a moderate extent"

positive inclination. Responses underscore the effectiveness of the firms in aligning compensation practices with individual and team performance.

The findings obtained from the examination of ComRew\_3 highlight a distinct and positive trend in respondents' perceptions regarding the effectiveness of incentive systems, including rewards and bonuses, in encouraging people to work towards achieving the firm's goals. Finds indicate that the respondents 47.1%, chose "to a large extent", while a percentage of 35.9% opted for "to a moderate extent". Responses underscore the effectiveness of these SMEs in utilizing incentives as motivational tools for goal alignment. In other words, incentive systems play a crucial role in motivating individuals to work towards achieving the firm's goals.

The findings derived from the analysis of ComRew\_4 highlight a distinct and positive trend in respondents' perceptions regarding compensation for all employees is directly linked to his/her performance. Finds indicate that the respondents 54.2%, chose "to a large extent", this indicates a robust consensus among participants that compensation for all employees is directly tied to their performance. Following behind, 30.7% of respondents expressed a "to a moderate extent" positive inclination. This confirms the positive trend, of a substantial proportion of participants who acknowledge, to a moderate degree, the correlation between compensation and performance. The findings obtained from the examination of ComRew\_5 highlight a neutral trend in respondents' perceptions regarding how firms offer other forms of non-monetary compensation, such as training and development programs, recognition, participation in social events. Finds indicate that the respondents 33.3% chose "neutral" in their responses to segment. Following behind, 20.3% of respondents expressed a "not at all". According to the varied responses, it may be advantageous for SMEs to gain a deeper comprehension of employee viewpoints and modify non-monetary compensation practices in order to increase their efficacy.

*Job design* - The survey respondents were asked about various aspects of practices. The questions included: JobDes\_1 (The duties of every job are clearly defined in our firm), JobDes\_2 (Job design involves a lot of teamwork with cross-functional teams and networks), JobDes\_3 (Our company emphasizes employees' job rotation and flexible work assignments in different work areas), JobDes\_4 (Our firm offers flexibility in terms of working hours and location), JobDes\_5 (Employees are independent in performing their work duties). In Chart 5, respondents' answers to the Job design questions are visually represented using a Likert scale ranging from 1 to 5.



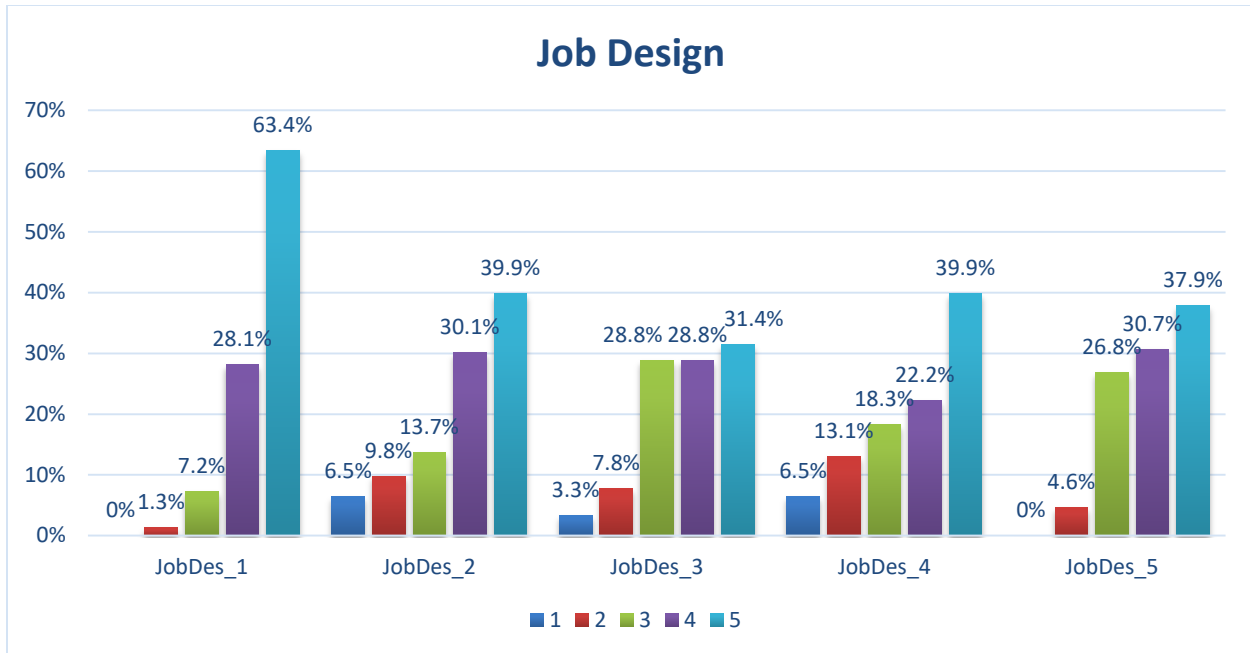


Chart 5: Job design (N=153)

Source: author

The insights derived from the analysis of JobDes\_1 in Chart 5 emphasize a distinct and positive trend in respondents' perceptions regarding the duties of every job are clearly defined in our firm. Finds indicate that the respondents 63.4%, chose "to a large extent" in their responses to segment. This indicates a robust consensus among participants that their SMEs prioritize and excel in clearly defining the duties of every job within the firm. Following behind, 28.1% of respondents expressed a "to a moderate extent" positive inclination. Responses underscore the effectiveness of these SMEs in prioritizing and communicating clear job responsibilities to their employees.

The findings obtained from the examination of JobDes\_2 highlight a distinct and positive trend in respondents' perceptions regarding the involvement of teamwork, cross-functional teams, and networks in job design. Finds indicate that the respondents 39.9%, chose "to a large extent", while an equal percentage of 30.1% opted for "to a moderate extent". Responses highlight the effectiveness of these SMEs in adopting collaborative approaches to shape and enhance job roles within their respective teams.

The findings derived from the analysis of JobDes\_3 emphasize a distinct and positive trend in respondents' perceptions regarding the emphasis on employees' job rotation and flexible work assignments in different work areas within their companies. Finds indicate that the respondents 31.4% chose "to a large extent" category indicates a robust consensus among participants that

their respective firms emphasize employees' job rotation and flexible work assignments in different work areas. Following behind, 28.8% of respondents expressed a "to a moderate extent" positive inclination. Responses highlight the effectiveness of these firms in implementing strategies that enhance employee development and adaptability.

The insights derived from the analysis of JobDes\_4 highlight a distinct and positive trend in respondents' perceptions the provision of flexibility in terms of working hours and location within their firm. Finds indicate that the respondents 39.9%, chose "to a large extent", a positive response in the form of indicating that their firm prioritizes and actively offers flexibility in both working hours and location for its employees. Following behind, 22.2% of respondents expressed a "to a moderate extent" category; this still represents a noteworthy proportion of participants who acknowledge, to a moderate degree, the availability of flexibility in working arrangements. The findings obtained from the examination of JobDes\_5 highlight a distinct and positive trend in respondents' perceptions regarding the independence of employees in performing their work duties within their firms. Finds indicate that the respondents 37.9%, chose "to a large extent", a positive response in the form of indicating that their firms foster an environment where employees are granted independence in performing their work duties. Following behind, 30.7% of respondents expressed a "to a moderate extent" category. Responses underscores the effectiveness of these firms in fostering a workplace culture that values and encourages employee autonomy.

*Performance appraisal* - The survey respondents were asked about various aspects of practices. The questions included: PerApp\_1 (Performance of the employees is measured on the basis of objective quantifiable results), PerApp\_2 (Our performance appraisal system is oriented towards the growth and development of employees), PerApp\_3 (Appraisal system has influence on individual and team behavior), PerApp\_4 (The objectives of the appraisal system are clear to all employees), PerApp\_5 (Firm use performance appraisals to make decisions about promotions, transfers and compensation of employees). In Chart 6, respondents' answers to the Performance appraisal questions are visually represented using a Likert scale ranging from 1 to 5.

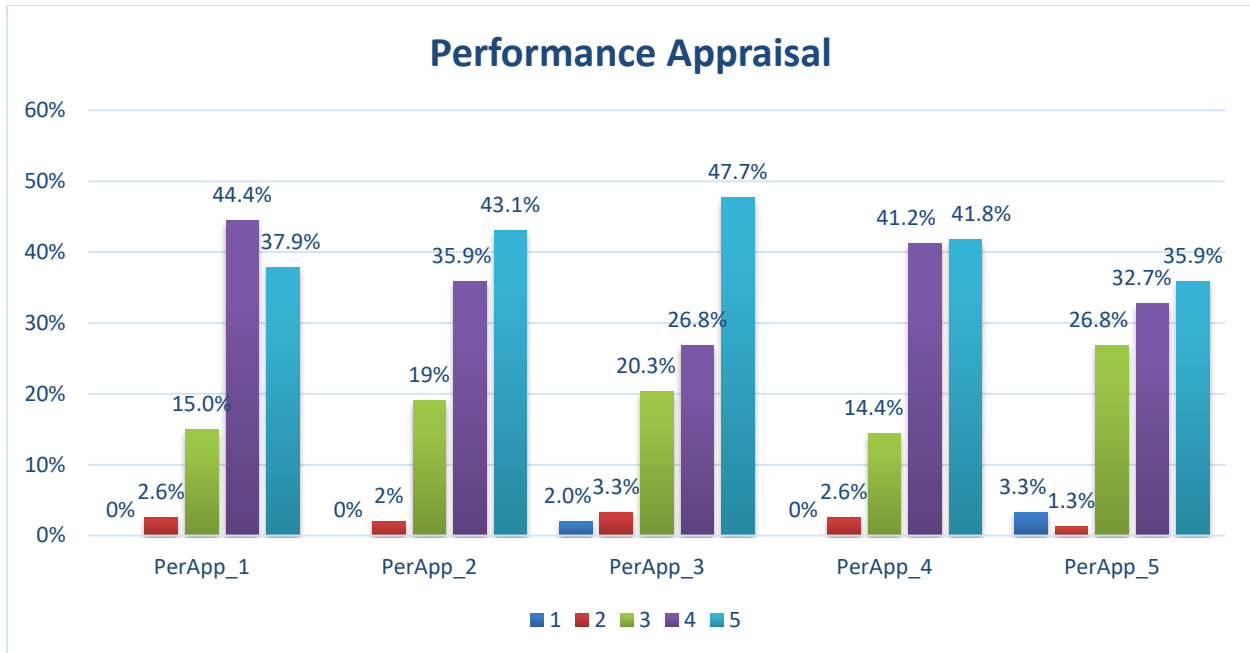


Chart 6: Performance appraisal (N=153)

Source: author

The findings obtained from the examination of PerApp\_1 in Chart 6 highlight a distinct and positive trend in respondents' perceptions regarding the measurement of employee performance based on objective and quantifiable results. Findings indicate that the respondents 44.4% chose "to a moderate extent" in their responses to segment. This indicates a robust consensus among participants that their SMEs prioritize the measurement of employee performance based on objective and quantifiable results. Following closely behind, 37.9% of respondents expressed a "to a large extent" positive inclination. Responses underscore the effectiveness of these in valuing and implementing transparent performance assessment practices.

The insights derived from the analysis of PerApp\_2 emphasize a distinct and positive trend in respondents' perceptions regarding the orientation of their performance appraisal system towards the growth and development of employees. Findings indicate that the respondents 43.1% chose "to a large extent" category. This indicates a robust consensus among participants that performance appraisal system is oriented towards the growth and development of employees. Following closely behind, 35.9% of respondents expressed a "to a moderate extent" positive inclination. Responses underscore the effectiveness of these in utilizing the appraisal process as a strategic tool for nurturing the professional development of their workforce.

The findings derived from the analysis of PerApp\_3 emphasize a distinct and positive trend in respondents' perceptions regarding the influence of their appraisal system on individual and team behavior. Finds indicate that the respondents 47.7%, chose “to a large extent” category indicates a robust consensus among participants that their appraisal system has a substantial influence on shaping both individual and team behavior within the SMEs. Following behind, 26.8% of respondents expressed a "to a moderate extent" positive inclination. Responses highlight the acknowledge the significant impact that the appraisal system has on influencing the behavior of employees, both at an individual and team level.

The findings obtained from the examination of PerApp\_4 highlight a distinct and positive trend in respondents' perceptions regarding the clarity of objectives of the appraisal system for all employees. Finds indicate that the respondents 41.8%, chose “to a large extent”, while an equal percentage of 41.2% opted for "to a moderate extent". Responses highlight the effectiveness of these firms in establishing transparent and well-understood objectives for their performance appraisal system.

The findings derived from the analysis of PerApp\_5 emphasis a distinct and positive trend in respondents' perceptions regarding the use of performance appraisals in making decisions about promotions, transfers, and compensation of employees. Finds indicate that the respondents 35.9%, chose “to a large extent”, while a close percentage of 32.7% opted for "to a moderate extent" category. Results suggests a positive perception among respondents that their SMEs recognize and acknowledge the instrumental role of performance appraisals in influencing decisions related to career advancements, transfers, and compensation.

*Non-financial performance* - The survey respondents were asked about various aspects of SME non-financial performance. The questions included: Non\_FinPer\_1 (The overall product quality has been improved), Non\_FinPer\_2 (Responsiveness to customers has been increased), Non\_FinPer\_3 (Customer satisfaction with the service to him has increased), Non\_FinPer\_4 (The delivery speed of the product has been increased), Non\_FinPer\_5 (Delivery dependability has been improved) and Non\_FinPer\_6 (Our firm's market share growth has increased). In Chart 7, respondents' answers to the non-financial performance questions are visually represented using a Likert scale ranging from 1 to 5.

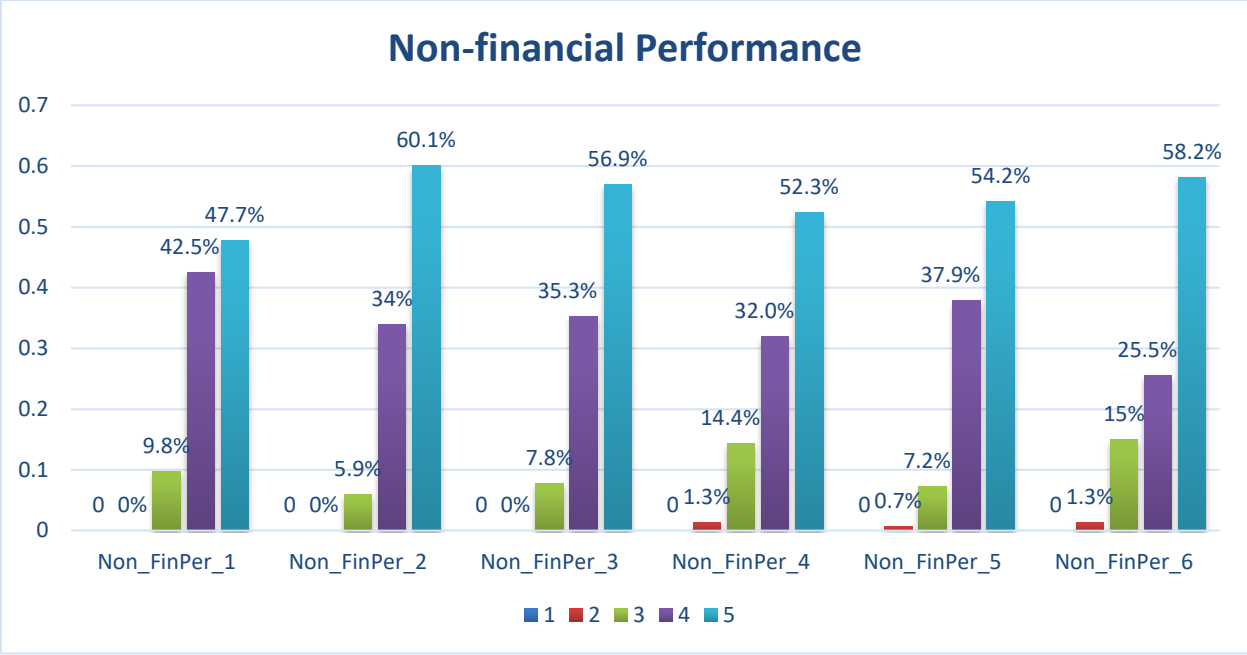


Chart 7: Non-financial performance (N=153)

Source: author

The insights derived from the analysis of Non\_FinPer\_1 in Chart 7 emphasize a distinct and positive trend in respondents' perceptions regarding the improvement of overall product quality. Finds indicate that the respondents 47.7%, chose “to a large extent”, while an equal percentage of 42.5% opted for "to a moderate extent" category.

The insights derived from the analysis of Non\_FinPer\_2 emphasize a distinct and positive trend in respondents' perceptions regarding the increase in responsiveness to customers. Finds indicate that the respondents 60.1% chose “to a large extent” category. This indicates a robust consensus among participants that in the study SMEs, there has been a significant increase in responsiveness to customers. Following behind, 34% of respondents expressed a "to a moderate extent" category; this additional support strengthens the overall statement. Responses suggest a multifaceted recognition of significant improvements, contributing to a positive shift in customer interactions and relations.

The findings derived from the analysis of Non\_FinPer\_3 highlight a distinct and positive trend in respondents' perceptions regarding the increase in customer satisfaction with the service provided. Finds indicate that the respondents 56.9%, chose “to a large extent”, a positive response in the form of indicating that in the studied firms, there has been a substantial and notable increase in customer satisfaction with the service provided. Following behind, 35.3% of

respondents expressed a "to a moderate extent" further reinforces the notion. Responses suggest a multifaceted recognition of significant improvements, contributing to a positive shift in customer satisfaction levels.

The findings obtained from the examination of Non\_FinPer\_4 highlight a distinct and positive trend in respondents' perceptions regarding the increase in the delivery speed of products. Finds indicate that the respondents 52.3% chose "to a large extent" category. This indicates a robust consensus among participants that, in the studied firms, there has been a substantial and notable increase in the delivery speed of products. Following behind, 32% of respondents expressed a "to a moderate extent" positive inclination. Responses suggest a multifaceted recognition of significant improvements, contributing to a positive impact on operational efficiency and customer service.

The insights derived from the analysis of Non\_FinPer\_5 emphasize a distinct and positive trend in respondents' perceptions regarding the improvement in delivery dependability. Finds indicate that the respondents 54.2% chose "to a large extent" category, indicated the agreement with the statement that in the studied firms, there has been a substantial and notable improvement in delivery dependability. Following behind, 37.9% of respondents expressed a "to a moderate extent" positive inclination; this supplementary support strengthens the overall statement.

The findings obtained from the examination of Non\_FinPer\_6 highlight a distinct and positive trend in respondents' perceptions regarding the increase in market share growth in the studied firms. Finds indicate that the respondents 58.2% chose "to a large extent" category, indicated the agreement with the statement that in the studied firms, there has been a substantial and notable increase in market share growth. Following behind, 25.5% of respondents expressed a "to a moderate extent" positive inclination; this supplementary support strengthens the overall statement.

*Financial performance* - The survey respondents were asked about various aspects of SME financial performance. The questions included: FinPer\_1 (Growth in return on investment has been increased), FinPer\_2 (Sales of products/services have increased), FinPer\_3 (Return on sales (ROS) has been increased), FinPer\_4 (Our company's profit has increased), FinPer\_5 (Manufacturing cost has been reduced). In Chart 8, respondents' answers to the financial performance questions are visually represented using a Likert scale ranging from 1 to 5.

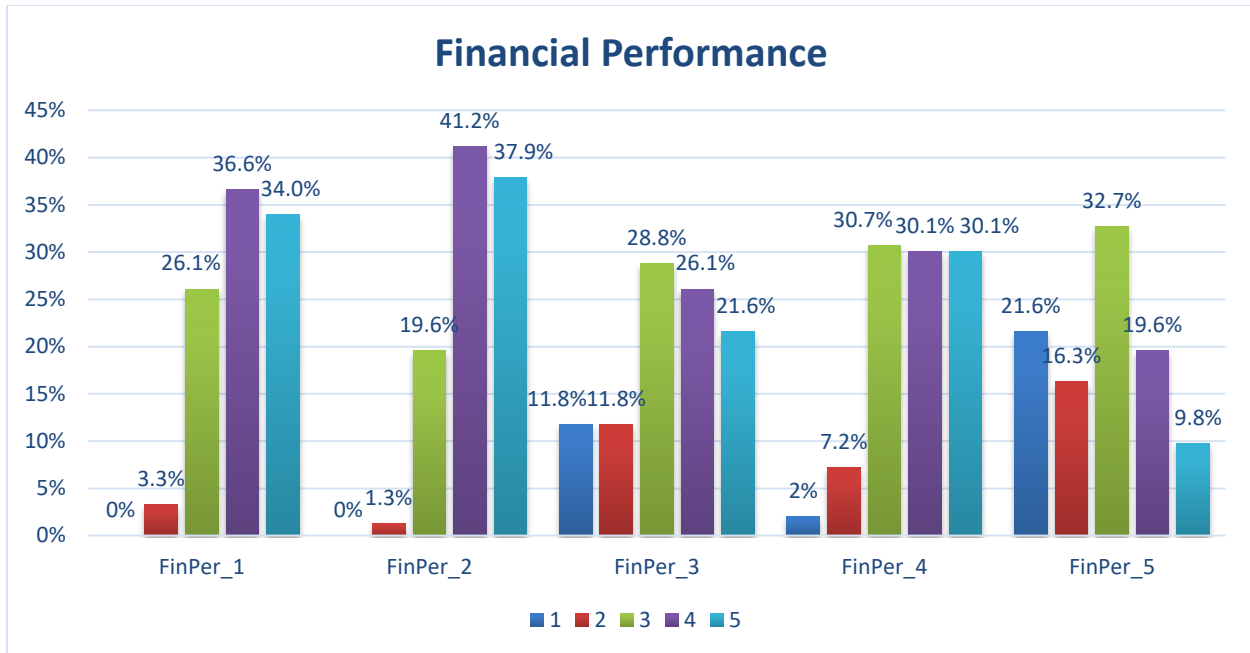


Chart 8: Financial performance (N=153)

Source: author

The insights derived from the analysis of FinPer\_1 in Chart 8 highlight a distinct and positive trend in respondents' perceptions regarding the increase in growth in return on investment (ROI) in the studied firms. Finds indicate that the respondents 36.6%, chose “to a moderate extent” category, while an equal percentage of 34% opted for "to a large extent" category. Responses suggest a multifaceted recognition of financial improvement, contributing to positive business performance and sustainability.

The findings derived from the analysis of FinPer\_2 highlight a distinct and positive trend in respondents' perceptions regarding the increase in sales of products/services in the studied firms. Finds indicate that the respondents 41.2%, chose “to a moderate extent” category, while an equal percentage of 37.9% opted for "to a large extent" category. Responses suggest, in the studied firms, there has been a discernible increase in the sales of products/services.

The findings derived from the analysis of FinPer\_3 highlight a neutral and moderate trend in respondents' perceptions regarding the increase in Return on Sales (ROS) in the studied SMEs. Finds indicate that the respondents 28.8%, chose “neutral” category, while an equal percentage of 26.1% opted for "to a moderate extent" category. This could imply that there is variability in how participants perceive the increase in Return on Sales, with some expressing uncertainty or neutrality.

The findings obtained from the analysis of FinPer\_4 highlight a neutral and positive trend in respondents' perceptions regarding the company's profit has increased in the studied SMEs. Finds indicate that the respondents 30.7% chose “neutral” category, while an equal percentage of 30.1% opted for "to a large extent", "to a moderate extent" category. Responses underscore the importance of understanding the varied dynamics influencing perceptions of financial outcomes for the studied SMEs.

The findings derived from the analysis of FinPer\_5 highlight a neutral trend in respondents' perceptions regarding manufacturing cost has been reduced in the studied SMEs. Finds indicate that the respondents 32.7% chose “neutral” category, while a percentage of 21.6% opted for "not at all" category. These responses could reflect different cost structures or challenges faced by these SMEs, contributing to a mixed perception of manufacturing cost reduction.

### **3.2.6 Non-response bias and common-method bias**

The present study did not directly examine non-response bias because to the limited information available on the mailing list, which only included the names and addresses of the SMEs. However, this limitation was intentionally imposed as a procedural measure aimed at mitigating common method bias, a practice supported by the recommendations of previous research (Podsakoff et al., 2003; Podsakoff et al., 2012).

Common method bias refers to the potential distortion in research findings that may arise when data are collected from a single source using a consistent method. Furthermore, the present study aimed to mitigate potential non-response bias during the process of data collecting by employing several strategies.

To begin, it is worth noting that the response rate in this study was relatively high, with 51 % of the total sample and 53.3% of the contacted sample participating. This high response rate is indicative of a substantial level of engagement and cooperation from the respondents, which increases the probability of obtaining a representative sample for the overall research project.

This suggests that the respondents are likely to provide a reasonable level of representativeness for the overall sample used in this research, thus addressing any potential non-response bias (Podsakoff et al., 2003; Rose et al., 2007).



In order to achieve a high response rate, the study takes comprehensive steps to minimize potential biases and enhance the validity and reliability of the research findings. These efforts collectively contribute to the robustness of the study's methodology and strengthen the confidence in the representativeness of the obtained data.

### **3.3 Research variables**

Table 2 provides a distinct illustration of the research variables and their respective constructs used in this study. It clarifies for the reader the function and order of variables within this model. In the model, there are two second order constructs: human resource management practices, and organizational performance of SMEs. The second-order structure of constructs for “human resource management practices” were derived from six first-order constructs (recruitment and selection, training and development, communication and information, compensation and reward, job design and performance appraisal) while the “organizational performance of SMEs” were derived from two first-order constructs (non-financial performance and financial performance). In this study, these second-order constructs serve as reflective variables. Particularly, second-order constructs are created because the first-order constructs were "factor scores". Variables such as SME size and age, on the other hand, were included as items in the final model.

Table 2: Summary constructs of the current study

Constructs order	Measure(s) of performance	HRM practices variables	Control variables	Country
	A composite average perceptual measure of:			
<b>Second order/latent</b>	- Organizational performance of SMEs	- HRM practices		
<b>First order/latent</b>	- Non-financial performance - Financial performance	- Recruitment and selection - Training and development - Communication and information - Compensation and reward - Job design - Performance appraisal	- SME age - SME size (number of employees)	Kosovo
<b>Items/ observe</b>	Items of each dimension that are presented in Appendix 1			

Source: Adopted from Islami (2021a)

In a concise overview of the model, it comprises three main variables: independent, dependent, and control variables.

## **CHAPTER IV - DATA AND RESULTS OF CORRELATION AND REGRESSION ANALYSES**

The present study on data analysis and results has undergone through processes that contain several steps. First, the exploratory factor analysis (EFA) technique was used to assess the purity and reliability of the measurement variables. As a result, a principal component factor analysis with varimax rotation was used to condense the acquired data into specified first and second-order constructs/factors in order to purify the measurement scales and define their dimensionality. After the factor analysis, to make sure that the first and second-order constructs were reliable, an internal consistency analysis (Cronbach's alpha) and correlation were done after the factor analysis. According to the guidelines for determining significant factor loadings based on sample size (Hair et al., 2019), a factor loading of .45 requires a sample size ranging from 150 to 200 respondents in order to be significant at the .05 significance level (a). Thus, in this study, for first-order and second-order factors, measurement items with a factor loading greater than 0.45 were selected as the member of a specific factor. Whereas a Cronbach's alpha value of 0.6 to 0.8 is considered acceptable (Shi et al., 2012). Finally, hierarchical regression analysis and multivariate regression analysis were employed to test the hypotheses.

### **4.1 Reliability and validity of collected data**

In this study, a rigorous process is used to develop and validate the constructs, including pre-data collection, previous studies to support content validity, an iterative construct review by domain experts, careful synthesis and critical evaluation of existing constructs executive interviews, pre-pilot study and pilot study. Based on previous practices utilized by Islami (2021a, b) and Huo et al. (2015). Then, after the data were collected, a series of analyses to test the reliability and validity of the constructs was performed.

Following data collection, multiple purification processes and analyses were performed to verify the constructs' reliability and validity, including factor analysis, means, standard deviations, internal consistency analysis (Cronbach's alpha), and correlation analysis. The method of factor

analysis used in this study is: (a) exploratory factor analysis (EFA) and (b) confirmatory factor analysis (CFA). There are two levels of latent constructs/variables based on the complexity of these studies: first-order and second-order constructs. Similarly, the analysis is so complex that the validity of both levels of constructs must be defended. The contents of the first-order and second-order constructs are shown in Appendix 1, which contains multiple examples of each construct. The statistical analysis used to determine the reliability and validity of each construct is discussed in the following section.

#### **4.1.1 Convergent and discriminant validity of the first-order constructs**

To establish scale uni-dimensionality, exploratory factor analysis (EFA) was conducted in order to establish the research constructs. A principal component factor analysis with varimax rotation was used to detect the underlying dimensions. For simplicity, only loadings above .45 (>0.45) (Hair et al., 2019) are displayed in Tables 3a – 3b.

For HRM practices (HRMp), a factor analysis was initially conducted using the 30 items that measure the six factors (first-order constructs). An initial factor analysis indicated that items: RecSel\_1, ComInfo\_4, ComRew\_5, had a low-loading on their respective factors. After removing these three items, the twenty-seven remaining items were factor analyzed and the results indicated that all items loaded on their respective factors with loadings above the recommended cut-off value of .45 (most of items loaded above 0.60), furthermore, it is noteworthy that all t-values surpassed the threshold of 2.0 (Huo et al., 2015), and none of the items cross-loaded on other factors, as shown in Table 3a. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy value suggests that the use of factor analysis was appropriate as it is greater than 0.8 (> 0.80) (Kaiser, 1974), and it is reaffirmed by the value of Bartlett test for sphericity which indicated that the data is acceptable according to Hair et al. (2019).



In table 3b is presented the factor analysis for organizational performance of SMEs (OPS) with two factors (first-order constructs) initially conducted using the 11 items, all of the items pass the low-loading test, and as it can be seen from the table all items loaded on their respective factors, with most loadings above .70 and all of the *t*-values were greater than 2.0. The KMO and the Bartlett test result indicated that the data acceptable, (KMO is .847, Bartlett test 703.504).

*Table 3b: Measurement items (with factor loadings) for first-order constructs of organizational performance of SME*

<b>KMO test</b>		.847	>0.80
<b>Bartlett test</b>	<b>Approx. <math>\chi^2</math></b>	703.504	
	<b>df</b>	55	
	<b>Sig.</b>	.000	<0.05

<b>Organizational performance of SME</b>	<b>Factor loadings<sup>b</sup></b>
<b>Non-financial performance</b>	
Non_FinPer_1	.727
Non_FinPer_2	.771
Non_FinPer_3	.854
Non_FinPer_4	.704
Non_FinPer_5	.756
Non_FinPer_6	.763
<b>Financial performance</b>	
FinPer_1	.838
FinPer_2	.810
FinPer_3	.579
FinPer_4	.799
FinPer_5	.599

Note: <sup>b</sup>All loadings are significant at  $p < .001$  (\*\*\*).

*Source: author*

Then, the reliability test for each construct was calculated. The reliability of an instrument relates to its stability and consistency; Cronbach's alpha represents the instrument's reliability level (Creswell, 2010). To explore assessing the reliability of the constructs, this study follows Li et al. (2006), who analyzed the reliabilities of HRM practices organizational performance of SMEs with Cronbach's alpha. Table 3 report the number of items and reliability values for each of the constructs, means and standard deviations. In accordance with Pallant (2001) and Nunnally and Bernstein (1994), an Alpha Cronbach value of 0.6 or greater is regarded as a reliable and acceptable index. The value of Cronbach's alpha between 0.6 to 0.8 is deemed acceptable (Shi et

al., 2012). The reliability values for all constructs were higher than the suggested threshold of 0.6 (>.60), which are considered acceptable and further confirms the reliability of the measurement items.

*Table 4: Means, standard deviations and reliability of the first-order constructs of (a) HRM practices, (b) organizational performance of SMEs*

<b>Construct</b>	<b># Items</b>	<b>Cronbach's alpha (reliability)</b>	<b>Mean</b>	<b>St. Dev.</b>
<b><i>(a) HRM practices</i></b>				
1. Recruitment and selection (RS)	4	.653	4.098	.852
2. Training and development (TD)	5	.787	3.571	1.120
3. Communication and information (CI)	4	.632	4.239	.896
4. Compensation and reward (CR)	4	.780	4.338	.856
5. Job Design (JD)	5	.648	3.991	1.038
6. Performance appraisal (PA)	5	.827	4.144	.871
<b><i>(b) Organizational performance of SME</i></b>				
1. Non-financial performance (NFP)	6	.852	4.438	.688
2. Financial performance (FP)	5	.746	3.620	1.036

*Source: author*

The means, standard deviations, and reliability measurements for the first-order constructs, which include (a) human resource management (HRM) practices and (b) organizational performance of Small and Medium-sized Enterprises (SMEs), are summarized in Table 4.

The confirmatory factor analysis (CFA) measurement models were then used to evaluate first-order construct validity (Gölgeci & Kuivalainen, 2020). The results showed that the composite reliability (CR) and average variance extracted (AVE) estimations for all constructs were more than the recommended criteria of 0.7 and 0.5, indicating convergent validity (Bagozzi & Yi, 2012).

*Table 5: Convergent and discriminant validity of the first-order factors.*

<b>Construct</b>	<b>CR<sup>a</sup></b>	<b>AVE<sup>b</sup></b>
Recruitment and selection	.863	.621
Training and development	.865	.567
Communication and information	.784	.581
Compensation and reward	.858	.603
Job Design	.781	.520
Performance appraisal	.884	.604
<b>Construct</b>	<b>CR</b>	<b>AVE</b>
Non-Financial performance	.893	.584
Financial performance	.851	.538

<sup>a</sup>Composite reliability.

<sup>b</sup>Average variance extracted.

*Source: author*

Table 5, summarizes the convergent and discriminant validity evaluations for the first-order components that include HRM practices and SME performance.

#### **4.2 Hypotheses testing of the model**

In order to simplify the interactions of testing hypotheses, the first- and second-order factors were reduced to factor scores, as explained in the previous section. Then, Table 6a, b, c and d provide the correlations among the main variables. It shows significant correlations between variables and under the value 0.7. In fact, the variance inflation factors (VIFs) of the HRM practice variables were all less than 10 (ranging from 1.0 to 2.17), indicating that multicollinearity is not a cause for concern (Hoejmose et al., 2013).



Table 6a: Correlation matrix of the main variables used in hierarchal regression (N=153)

Variables	RS	TD	CI	CR	JD	PA	FP	NFP	SAge	SSize
RecSel (RS)	1									
TraDev (TD)	.381**	1								
ComInf (CI)	.388**	.478**	1							
ComRew (CR)	.335**	.226**	.439**	1						
JobDes (JD)	.354**	.407**	.472**	.393**	1					
PerApp (PA)	.370**	.521**	.591**	.545**	.509**	1				
FinPer (FP)	.172*	.145	.179*	.114	.195	.289	1			
NonFinPer (NFP)	.310*	.279**	.395**	.399**	.388**	.353**	.443**	1		
SME age <sup>a</sup>	.018	.082	.112	.131	.31	.060	.114	-.002	1	
SME size <sup>b</sup>	-.042	.024	.009	-.031	.096	.043	.173*	.016	.039	1

\* $p < 0.05$ ; \*\* $p < 0.01$ .

<sup>a</sup>Log of number of years since it is established.

<sup>b</sup>Log of number of employees.

Source: author

Table 6b: Correlation matrix of the main variables used in multivariate regression (N=153)

Variables	HRMp	FinPer (FP)	SME age <sup>a</sup>	SME size <sup>b</sup>
HRMp	1			
FinPer (FP)	.256**	1		
SME age <sup>a</sup>	.100	.114	1	
SME size <sup>b</sup>	.026	.173*	.039	1

\*p < 0.05; \*\*p < 0.01.

Source: author

<sup>a</sup>Log of number of years since it is established.

<sup>b</sup>Log of number of employees.

Table 6c: Correlation matrix of the main variables used in multivariate regression (N=153)

Variables	HRMp	NonFinPer (NFP)	SME age <sup>a</sup>	SME size <sup>b</sup>
HRMp	1			
NonFinPer (NFP)	.488**	1		
SME age <sup>a</sup>	.100	-.002	1	
SME size <sup>b</sup>	.026	.016	.039	1

\*p < 0.05; \*\*p < 0.01.

Source: author

<sup>a</sup>Log of number of years since it is established.

<sup>b</sup>Log of number of employees.

Table 6d: Correlation matrix of the main variables used in multivariate regression (N=153)

Variables	HRMp	OrgPer (OP)	SME age <sup>a</sup>	SME size <sup>b</sup>
HRMp	1			
OrgPer (OP)	.438**	1		
SME age <sup>a</sup>	.100	.066	1	
SME size <sup>b</sup>	.026	.172	.039	1

\*p < 0.05; \*\*p < 0.01.

Source: author

<sup>a</sup>Log of number of years since it is established.

<sup>b</sup>Log of number of employees.

The study employed a hierarchical multiple regression analysis (Islami 2021a, b; Acquaaah, 2007; Hoejmose et al., 2013; Huo et al., 2014) to investigate the direct effects of: human resource management practices on financial performance; human resource management practices on non-financial performance; the non-financial performance on financial performance; and multivariate regression analysis has been used to examine the direct effects of HRM practices as a bundle on organizational performance of SMEs.

Seven models were created with fifteenth sub-models to test the hypotheses of the current study. For better clarification were presented separately in two main models. The dependent variables were financial and non-financial performance. The first model has two sub-models: Model 1a and Model 1b - the control variables including SME size and SME age were entered to the relationship between financial and non-financial performance. The second model adds recruitment and selection to the two sub-models: Model 2a and Model 2b as independent variable to see the effects on financial and non-financial performance. In the third model: Model 3a and 3b - training and development was entered to the second model (2a, 2b) to see the effect on financial and non-financial performance. Model four represents the effect of communication and information on financial performance on sub-Model 4a and non-financial performance on sub-Model 4b which were entered into the third model (3a, 3b). These fourth models enable the hypotheses (**H<sub>1a</sub>**, **H<sub>2a</sub>**, **H<sub>1b</sub>**, **H<sub>2b</sub>**, **H<sub>1c</sub>**, **H<sub>2c</sub>**) to be tested.

A fifth model was estimated by adding compensation and reward in interactions between financial performance on sub-Model 5a and non-financial performance on sub-Model 5b, that were integrated into the four model (4a and 4b). Model six is represented by two sub-models: Model 6a - which represents the effect of job design on financial performance and Model 6b - which represents the effect of job design on non-financial performance that was entered to the fifth model (5a, 5b).

Model seven, represent 3 new sub-Models: Model 7a - which represents the effect of performance appraisal on financial performance, Model 7b - which represents the effect of performance appraisal on non-financial performance and Model 7c - which represents the effect of financial performance on non-financial performance, these components were integrated into the third model (6a and 6b). These models enable the hypotheses (**H<sub>3</sub>**, **H<sub>1d</sub>**, **H<sub>2d</sub>**, **H<sub>1e</sub>**, **H<sub>2e</sub>**, **H<sub>1f</sub>**, **H<sub>2f</sub>**) to be tested.

#### 4.2.1 Direct effects of the model

Table 7 presents the standardized hierarchical regression used to examine Hypotheses ( $H_{1a}$ ,  $H_{1b}$ ,  $H_{1c}$ ,  $H_{1d}$ ,  $H_{1e}$ ,  $H_{1f}$ , and  $H_3$ ). Model 1a, which tests the relationship between the control variables and financial performance, shows that SME age is significant and positively related to financial performance ( $p < 0.05$ ). On the other hand, although SME size has a positive link with financial performance, it does not reach statistical significance ( $p > .10$ ). This result indicates that, in the sample, older SMEs tend to have better financial performance which could be attributed to factors such as experience, established market presence, and the ability to adapt to changing business conditions over time.

In Model 2a, where the recruitment and selection variable are added to Model 1a, the results show that recruitment and selection is positively and significantly related to financial performance ( $p < 0.05$ ) In this vein, Model 2a provides evidence to support  $H_{1a}$  ( $H_{1a}\uparrow$ ). It should also be mentioned that the inclusion of the recruitment and selection it significantly improves the explanatory power of Model 1a, as indicated by the F-test for the change in adjusted  $R^2$  ( $R^2 = 3.2\%$ ,  $F > 3.906$ ,  $p < 0.05$ ), and it is therefore clear that Recruitment and Selection plays a significant role in financial performance of the manufacture SMEs. This implies that in the context of manufacturing SMEs, better practices or strategies related to recruitment and selection are associated with improved financial performance.

In Model 3a, the training and development variable was added to Model 2a, the results show non-significant positive effect for training and development ( $\beta = .076$ ,  $p > 0.10$ ) on financial performance. Thus, hypothesis  $H_{1b}$  was not supported ( $H_{1b}\downarrow$ ).

In Model 4a, the communication and information variable were added to Model 3a, this addition led to a marginal and non-significant changed on the explanatory power of Model 3a, as indicated by the F-test for the change in adjusted  $R^2$  ( $R^2 = 0.7\%$ ,  $F > 3.119$ ,  $p > .10$ ), and it is therefore clear that communication and information based on the result has a non-significant role in financial performance of the manufacture SMEs. Additionally, the result shows that communication and information have a non-significant positive influence on financial performance ( $\beta = .102$ ,  $p > .10$ ), thus  $H_{1c}$  was not supported ( $H_{1c}\downarrow$ ).

In Model 5a, the compensation and reward variable was added to Model 4a it, additionally, the result shows that compensation and reward has a non-significant positive influence on financial performance ( $\beta = .017, p > .10$ ), thus hypothesis **H<sub>1d</sub>** was not supported (**H<sub>1d</sub>↓**).

In Model 6a, the job design variable was added to Model 5a, the regression result shows that job design has a non-significant positive influence on financial performance ( $\beta = .098, p > .10$ ), thus hypothesis **H<sub>1e</sub>** was not supported (**H<sub>1e</sub>↓**).

In Model 7a, the performance appraisal variable was added to Model 6a, and it improves the explanatory power of Model 6a as indicated by the F-test for the change in adjusted  $R^2$  ( $R^2 = 4\%$ ,  $F > 2.742, p < 0.05$ ), and it is therefore clear that performance appraisal based on the results has significant role in financial performance of the manufacture SMEs. Additionally, the result shows that performance appraisal has a significant positive influence on financial performance ( $\beta = .296, p < 0.05$ ), thus supporting **H<sub>1f</sub>** (**H<sub>1f</sub>↑**).

In Model 7c, in order to measure the direct effect of non-financial performance variable on financial performance, was added to model 6a, which significantly improves the explanatory power of Model 6a as indicated by the F-test for the change in adjusted  $R^2$  ( $R^2 = 15.7\%$ ,  $F > 6.448, p < 0.001$ ). The regression results show that the non-financial performance is positive and significantly related to financial performance ( $p < 0.001$ ) and provides compelling support for **H<sub>3</sub>**, (**H<sub>3</sub>↑**), as shown in Table 7.

Based on the results that we concluded from the hierarchal regression analysis that **H<sub>1</sub>** is partially supported, this may be that SMEs in the manufacturing industry may perceive investment in human resources management (HRM) practices as an additional expense that raises the firm's financial burden. This perspective could be based on a lack of awareness regarding the strategic benefits of these practices. This statement also implies that human resource managers may be distracted with broader business strategies and, as a result, might overlook their role in collaborating with line management. This might result in a misalignment between HR practices and the strategic goals of the firm. To address this issue, we will use multivariate regression to examine the influence of HRM practices as bundles on financial performance in the next subchapter.

Table 7: Results of hierarchical regression analysis on financial performance ( $N = 153$ )<sup>a</sup> ...

Dependent Variable	Financial Performance (FP)											
Dependent Variable	Financial Performance (FP)											
Variables	Model 1a			Model 2a			Model 3a			Model 4a		
	$\beta$	( <i>t</i> -value) <sup>b</sup>	VIF <sup>c</sup>	$\beta$	( <i>t</i> -value)	VIF	$\beta$	( <i>t</i> -value)	VIF	$\beta$	( <i>t</i> -value)	VIF
SME size (SS) <sup>d</sup>	.108	(1.346)	1.00	.104	(1.320)	1.00	.099	(1.245)	1.10	.091	(1.143)	1.13
SME age (SA) <sup>e</sup>	.168	(2.104)**	1.00	.176	(2.226)*	1.00	.173	(2.187)*	1.12	.172	(2.179)*	1.13
RecSel (RS)				.178	(2.252)*	1.00	.149	(1.742) <sup>+</sup>	1.03	.124	(1.406)	1.08
TraDev (TD)							.076	(.882)		.037	(.400)	
ComInf (CI)										.102	(1.090)	
R <sup>2</sup>	.041			.073			.078			.085		
Adjusted R <sup>2</sup>	.029			.054			.053			.054		
Change in adjusted R <sup>2</sup>				.032			.005			.007		
p-value for R <sup>2</sup> change	.042			.026			.379			.278		
Model F	3.235**			3.906***			3.119**			2.736**		

Source: author

<sup>a</sup> The coefficients are standardized regression coefficients.

<sup>b</sup> Critical values of the *t* distribution for  $\alpha = 0.10$ ,  $\alpha = 0.05$ ,  $\alpha = 0.01$ , and  $\alpha = 0.001$  (two-tailed test) are <sup>+</sup> $=1.65$ ,  $*$  $=1.96$ ,  $**=2.58$ , and  $***=3.30$ , respectively.

<sup>c</sup> Variance inflation factor.

<sup>d</sup> Log of number of employees.

<sup>e</sup> Log of number of years since the SME is established.

Note that for the change in adjusted R<sup>2</sup> and *F*-test change in adjusted R<sup>2</sup>, Model 2a is compared with Model 1a.

Variables	Model 5a			Model 6a			Model 7a			Model 7c		
	$\beta$	( <i>t</i> -value) <sup>b</sup>	VIF <sup>c</sup>	$\beta$	( <i>t</i> -value)	VIF	$\beta$	( <i>t</i> -value)	VIF	$\beta$	( <i>t</i> -value)	VIF
SME size (SS) <sup>d</sup>	.089	(1.114)	1.00	.094	(1.170)	1.00	.105	(1.331)	1.10	.134	(1.862) <sup>+</sup>	1.03
SME age (SA) <sup>e</sup>	.173	(2.177) <sup>*</sup>	1.00	.163	(2.034) <sup>*</sup>	1.00	.153	(1.953) <sup>+</sup>	1.12	.148	(2.078) <sup>*</sup>	1.02
RecSel (RS)	.121	(1.334)	1.00	.109	(1.197)	1.00	.105	(1.176)	1.10	.062	(.761)	1.34
TraDev (TD)	.038	(.405)	1.00	.018	(.189)	1.00	-.060	(-.616)	1.10	-.087	(-.972)	1.59
ComInf (CI)	.095	(.961)	1.00	.072	(.703)	1.00	-.003	(-.032)	1.10	-.081	(-.843)	1.83
ComRew (CR)	.017	(.187)	1.00	-.004	(-.043)	1.00	-.097	(-.995)	1.10	-.205	(-2.257) <sup>*</sup>	1.66
JobDes (JD)			1.00	.098	(1.019)	1.00	.054	(.556)	1.10	-.026	(-.294)	1.58
PerApp (PA)						1.00	.296	(2.586) <sup>**</sup>	1.10	.307	(2.947) <sup>**</sup>	2.17
NonFinPer (NFP)										.461	(5.609) <sup>***</sup>	1.35
R <sup>2</sup>	.085			.092			.132			.289		
Adjusted R <sup>2</sup>	.048			.048			.084			.244		
Change in adjusted R <sup>2</sup>	.000			.007			.040			.157		
p-value for R <sup>2</sup> change	.852			.310			.011			.000		
Model F	2.271 <sup>*</sup>			2.095 <sup>*</sup>			2.742 <sup>**</sup>			6.448 <sup>***</sup>		

...continuation of Table 7

Table 8 presents the standardized hierarchical regression used to examine Hypotheses ( $H_{2a}$ ,  $H_{2b}$ ,  $H_{2c}$ ,  $H_{2d}$ ,  $H_{2e}$ , and  $H_{2f}$ ).

Model 1b, which tests the relationship between the control variables and non-financial performance, shows that SME age non-significant and negatively related to non-financial performance ( $p > .10$ ). Also, although SME size has a positive link with non-financial performance, it does not reach statistical significance ( $p > .10$ ). This result in Model 1b that neither SME age nor SME size has a statistically significant relationship with non-financial performance

In Model 2b, where the recruitment and selection variable are added to Model 1b, the results show that recruitment and selection is positively and significantly related to non-financial performance ( $p < 0.001$ ) In this vein, Model 2b provides evidence to support  $H_{1b}$  ( $H_{1b}\uparrow$ ). It should also be mentioned that the inclusion of the recruitment and selection it significantly improves the explanatory power of Model 1b, as indicated by the F-test for the change in adjusted  $R^2$  ( $R^2 = 9.7\%$ ,  $F > 5.344$ ,  $p < 0.001$ ), and it is therefore clear that recruitment and selection plays a significant role in non-financial performance of the manufacture SMEs.

Model 3b, in order to measure the direct effect of training and development on non-financial performance, this variable was added to Model 2b, which marginally significant changed the explanatory power of Model 2b as indicated by the F-test for the change in adjusted  $R^2$  ( $R^2 = 3\%$ ,  $F > 5.408$ ,  $p < 0.05$ ). The regression results show that training and development has a significant positive influence on non- financial performance ( $\beta = .189$ ,  $p < 0.05$ ), thus supporting  $H_{2b}$  ( $H_{2b}\uparrow$ ).

In Model 4b the communication and information variable were added to Model 3b, it significantly improves the explanatory power of Model 3b, as indicated by the F-test for the change in adjusted  $R^2$  ( $R^2 = 6.4\%$ ,  $F > 6.963$ ,  $p < 0.01$ ), and it is therefore clear that communication and information based on the result has a significant role in non-financial performance of the manufacture SMEs. Additionally, the result shows that communication and information have a significant positive influence on non-financial performance ( $\beta = .299$ ,  $p < 0.01$ ), thus  $H_{2c}$  is accepted ( $H_{2c}\uparrow$ ).

In Model 5b, which introduces the compensation and reward variable to Model 4b, which marginally significant changed the explanatory power of Model 4b, as indicated by the F-test for the change in adjusted  $R^2$  ( $R^2 = 5.3\%$ ,  $F > 7.869$ ,  $p < 0.01$ ), Furthermore, the results reveal a



significant and positive influence of compensation and reward on non-financial performance ( $\beta = 0.263, p < 0.01$ ), thus  $H_{2a}$  is accepted ( $H_{2a}\uparrow$ ). The findings highlight the significance of well-designed compensation and reward systems as a driver for non-financial performance.

In Model 6b, the job design variable was added to Model 5b, which changed the explanatory power of Model 5b as indicated by the F-test for the change in adjusted  $R^2$  ( $R^2 = 1.9\%$ ,  $F > 7.415, p < 0.10$ ). Additionally, the result shows that job design has a marginally significant influence on non-financial performance ( $\beta = .169, p < 0.10$ ). In this vein, Model 6b provides evidence to support  $H_{2e}$  ( $H_{2e}\uparrow$ ).

In Model 7b, the performance appraisal variable was added to Model 6b, based on the regression results it non-significantly shrinks the explanatory power of Model 6b as indicated by the F-test for the change in adjusted  $R^2$  ( $R^2 = 0\%$ ,  $F > 7.415, p > .10$ ), and it is therefore clear that performance appraisal based on the results has a non-significant role in non-financial performance of the manufacture SMEs. Additionally, the result shows that performance appraisal has a non-significant negative influence on non-financial performance ( $\beta = -.023, p > .10$ ), thus  $H_{2f}$  is rejected ( $H_{2f}\downarrow$ ).

Based on the results that we concluded from the hierarchal regression analysis that  $H_2$  is partially supported, even though that just performance appraisal had a non-significant effect on non-financial performance. This indicates that when HRM practices are well-aligned with the organization's strategy, it has a measurable and meaningful impact on various aspects of non-financial performance. As a result of this alignment, the study suggests that firms can achieve several positive outcomes: such as improvements in product quality, increased responsiveness to customers, higher customer satisfaction, and faster product delivery, enhanced delivery dependability, and increased market share growth. These all are critical indicators of non-financial performance.

Table 8: Results of hierarchical regression analysis on non-financial performance (N = 153)<sup>a</sup> ...

Dependent Variable	Non-Financial Performance (FP)											
	Model 1b			Model 2b			Model 3b			Model 4b		
	$\beta$	(t-value) <sup>b</sup>	VIF <sup>c</sup>	$\beta$	(t-value)	VIF	$\beta$	(t-value)	VIF	$\beta$	(t-value) <sup>b</sup>	VIF <sup>c</sup>
SME size (SS) <sup>d</sup>	-.003	(-.035)	1.0	-.009	(-.115)	1.00	-.023	(-.297)	1.0	-.046	(-.613)	1.0
SME age (SA) <sup>e</sup>	.016	(.196)	1.0	.029	(.375)	1.00	.022	(.289)	1.0	.020	(.269)	1.0
RecSel (RS)				.312	(3.998) <sup>***</sup>	1.00	.239	(2.877) <sup>**</sup>	1.1	.167	(2.006) <sup>*</sup>	1.2
TraDev (TD)							.189	(2.271) <sup>*</sup>	1.1	.076	(.874)	1.3
ComInf (CI)										.299	(3.410) <sup>***</sup>	1.3
R <sup>2</sup>	.000			.097			.128			.191		
Adjusted R <sup>2</sup>	-.013			.079			.104			.164		
Change in adjusted R <sup>2</sup>				.097			.030			.064		
p-value for R <sup>2</sup> change	.981			.000			.025			.001		
Model F	.019			5.344 <sup>**</sup>			5.408 <sup>**</sup>			6.963 <sup>***</sup>		

Source: author

<sup>a</sup> The coefficients are standardized regression coefficients.

<sup>b</sup> Critical values of the t distribution for  $\alpha=0.10$ ,  $\alpha=0.05$ ,  $\alpha=0.01$ , and  $\alpha=0.001$  (two-tailed test) are <sup>+</sup>=1.65, \*=1.96, \*\*=2.58, and \*\*\*=3.30, respectively.

<sup>c</sup> Variance inflation factor.

<sup>d</sup> Log of number of employees.

<sup>e</sup> Log of number of years since the SME is established.

Note that for the change in adjusted R<sup>2</sup> and F-test change in adjusted R<sup>2</sup>, Model 2b is compared with Model 1b.

...continuation of Table 8

Dependent Variable	Non- Financial Performance (FP)								
	Model 5b			Model 6b			Model 7b		
Variables	$\beta$	( <i>t</i> -value) <sup>b</sup>	VIF <sup>c</sup>	$\beta$	( <i>t</i> -value)	VIF	$\beta$	( <i>t</i> -value)	VIF
SME size (SS) <sup>d</sup>	-.069	(-.953)	1.0	-.062	(-.851)	1.0	-.062	(-.859)	1.0
SME age (SA) <sup>e</sup>	.028	(.383)	1.0	.010	(.143)	1.0	.011	(.152)	1.0
RecSel (RS)	.113	(1.377)	1.3	.093	(1.136)	1.3	.094	(1.136)	1.3
TraDev (TD)	.085	(1.005)	1.3	.051	(.597)	1.4	.057	(.633)	1.5
ComInf (CI)	.202	(2.244) <sup>*</sup>	1.5	.162	(1.760) <sup>*</sup>	1.6	.167	(1.745) <sup>+</sup>	1.7
ComRew (CR)	.263	(3.197) <sup>**</sup>	1.3	.227	(2.719) <sup>**</sup>	1.3	.234	(2.598) <sup>**</sup>	1.5
JobDes (JD)				.169	(1.946) <sup>+</sup>	1.4	.173	(1.947) <sup>+</sup>	1.5
PerApp (PA)							-.023	(-.216)	2.1
R <sup>2</sup>	.244			.264			.264		
Adjusted R <sup>2</sup>	.213			.228			.223		
Change in adjusted R <sup>2</sup>	.053			.019			.000		
p-value for R <sup>2</sup> change	.002			.054			.829		
Model F	7.869 <sup>***</sup>			7.415 <sup>**</sup>			6.451 <sup>**</sup>		

To be sure of the effects, we will use multivariate regression to examine the influence of HRM practices as bundles on non-financial performance in the next subchapter.

#### 4.2.2 Direct effects of HRM practices on financial performance of SME

In order to measure the impact of independent variable in dependent variable “financial performance” of SME, a multivariate regression analysis has been used. Regression analysis is presented in Table 9. According to regression analysis, independent variables that enter in the analysis explain 5.9% of dependent variable “financial performance” of SME. F value is 10.553 (sig. 0.01), which means that the model is statistically important with the significance level  $\alpha = 0.05$ . Independent variable “HRMp” is positively connected with dependent variable “financial performance” by predicting it for 25.6% ( $b = 0.256$  and  $p = 0.001$ ), which means that for each 1% change in application of the HRM practices the financial performance will change by 25.6%. In light of the empirical findings of this research, the econometric model is employed to present the hypothesis and provide greater clarity regarding the mathematically tested dependent and independent variable.

$$\hat{Y}_{fp} = \alpha + b_1 \text{HRMp} + \epsilon_i \rightarrow \hat{Y}_{fp} = -1.031 + 0.256 * \text{HRMp} + \epsilon_i \quad (1)$$

As demonstrated in table 9, the tested variable "HRMp" has had a positive effect on SME financial performance. Table 9 illustrates that by pursuing Human resource management practices (HRMp) in situations that remain constant, financial performance of SME will grow by 25.6%. In this econometric model, the constant term is negative, it means that when HRMp is zero, the dependent variable would be equal to the negative value (-1.031), which could be caused by factors not included in the model. See the “beta” column of Table 10. If we increase using HRMp by 1 standard deviation, the financial performance of SME will increase by 0.256. Based on the findings "HRMp" is positively and significantly connected to "financial performance" provides compelling support for the  $H_1$  ( $H_1 \uparrow$ ), as shown in Table 9.

Table 9. Regression analysis of dependent variable “financial performance”, n=153

Model	R <sup>2</sup>	ΔR <sup>2</sup>	β	b	S.E	F	t	p
	.065	.059				10.553		
<i>(Constant)</i>				-1.031	.078		.000	1.000
<i>HRMp</i>			.256	.256	.079		3.249	.001

Note: b=Un-standardized Coefficients, S.E=standard error of variables, Source: author  
 β=standardized coefficients, t=t-statistic, p=significance level. R<sup>2</sup> = square, ΔR<sup>2</sup> =adjusted R square.

In summary, the findings of the multivariate regression analysis indicate a favorable and statistically significant relationship between the implementation of bundle HRM practices, denoted as "HRMp," and the financial performance of small and medium-sized enterprises (SMEs). This finding implies that SMEs can enhance their financial performance by focusing on human resource management practices. This information should help managers recognize the significance of HRMp in their decision-making processes, resulting in better financial outcomes and long-term success for their SMEs. It contributes to the field of strategic management by providing empirical evidence that demonstrates the value of HRMp and their favorable contribution to financial performance.

#### 4.2.3 Direct effects of HRM practices on non-financial performance of SME

In order to measure the impact of independent variable in dependent variable “non- financial performance” of SME, a multivariate regression analysis has been used. Regression analysis is presented in Table 10. According to regression analysis, independent variables that enter in the analysis explain 23.3% of dependent variable “non-financial performance” of SME. F value is 47.132 (sig. 0.001), which means that the model is statistically important with the significance level  $\alpha = 0.05$ . Independent variable “HRMp” is positively connected with dependent variable “non-financial performance” by predicting it for 48.8% (b = 0.488 and p = 0.000), which means that for each 1% change in application of the HRM practices the non-financial performance will change by 48.8%.

In light of the empirical findings of this research, the econometric model is employed to present the hypothesis and provide greater clarity regarding the mathematically tested dependent and independent variable.

$$\hat{Y}_{nfp} = \alpha + b_1 \text{HRMp} + \epsilon_i \rightarrow \hat{Y}_{nfp} = -1.580 + 0.488 * \text{HRMp} + \epsilon_i \quad (2)$$

As demonstrated in table 11, the tested variable "HRMp" has had a positive effect on SME non-financial performance. Table 10 illustrates that by pursuing Human resource management practices (HRMp) in situations that remain constant, non-financial performance of SME will grow by 48.8%. In this econometric model, the b constant term is negative, it means that when HRMp is zero, the dependent variable would be equal to the negative value (-1.580), which could be caused by factors not included in the model. See the "beta" column of Table 10. If we increase using HRMp by 1 standard deviation, the financial performance of SME will increase by 0.488.

Based on the findings "HRMp" is positively and significantly connected to "non-financial performance" provides compelling support for the  $H_2$  ( $H_2\uparrow$ ), as shown in Table 10.

Table 10. Regression analysis of dependent variable "non-financial performance", n=153

Model	R <sup>2</sup>	ΔR <sup>2</sup>	β	b	S.E	F	t	p
	.238	.233				47.132		
<i>(Constant)</i>				-1.580	.071		.000	1.000
<i>HRMp</i>			.488	.488	.071		6.865	.000

Note: b=Un-standardized Coefficients, S.E=standard error of variables, Source: author  
 β=standardized coefficients, t=t-statistic, p=significance level. R<sup>2</sup> = square, ΔR<sup>2</sup> =adjusted R square.

In summary, the findings of the multivariate regression analysis indicate a favorable and statistically significant relationship between the implementation of bundle HRM practices, denoted as "HRMp," and the non- financial performance of small and medium-sized enterprises (SMEs). This finding implies that SMEs can enhance their financial performance by focusing on human resource management practices. As a result of this alignment, the study suggests that firms can achieve several positive outcomes: such as improvements in product quality, increased

responsiveness to customers, higher customer satisfaction, and faster product delivery, enhanced delivery dependability, and increased market share growth. These all are critical indicators of non-financial performance. In particular, top managers are advised to use effective and reliable HRM practices as “bundle” to measure the impact of HRM on these non-financial performance metrics. But more essential is to a strategic acting plane and to inform employees about how HRM practices will be implemented and align them with the organization's goals and strategy. This alignment seeks to ensure employee satisfaction with and acceptance of these practices, as well as commitment to reaching the intended non-financial performance goals.

#### 4.2.4 Direct effects of HRM practices on organizational performance of SME

In order to measure the impact of independent variable in dependent variable “Organizational performance of SME” multivariate regression analysis has been used. Regression analysis is presented in Table 11. According to regression analysis, independent variable that enter in the analysis explain 18.6% of dependent variable “Organizational performance of SME.” F value is 35.769 (sig. 0.001), which means that the model is statistically important with the significance level  $\alpha = 0.05$ . Independent variable “HRMp” is positively connected with dependent variable “OPS” by predicting it for 43.8% ( $b = 0.438$  and  $p = 0.000$ ), which means that for each 1% change in application of the HRM practices the organizational performance will change by 43.8%. Based on the findings "HRMp" is positively and significantly connected to "Organizational performance of SME" provides compelling support for the **General hypothesis (GH $\uparrow$ )**, as shown in Table 11.

In light of the empirical findings of this research, the econometric model is employed to present the general hypothesis and provide greater clarity regarding the mathematically tested dependent and independent variable.

$$\hat{Y}_{op} = \alpha + b_1 \text{HRMp} + \epsilon_i \rightarrow \hat{Y}_{op} = 3.696 + 0.438 * \text{HRMp} + \epsilon_i \quad (3)$$

As demonstrated in table 10, the tested variable "HRMp" has had a positive effect on SME organizational performance. Table 11 illustrates that by pursuing Human resource management

practices (HRMp) in situations that remain constant, organizational performance of SME will grow by 43.8%. In this econometric model, exactly the impact of HRMp in organizational performance of SME is presented, and these results have a positive impact in managers' decision making and in enriching the strategic literature related on using Human resource management practices as a bundle and their impact on organizational performance of SME. See the "beta" column of Table 11. If we increase using HRMp by 1 standard deviation, the organizational performance of SME will increase by 0.438.

Table 11. Regression analysis of dependent variable "Organizational performance of SMEs", n=153

Model	R <sup>2</sup>	ΔR <sup>2</sup>	β	b	S.E	F	t	p
	.192	.186				35.769		
<i>(Constant)</i>				3.696	.073		.000	1.000
<i>HRMp</i>			.438	.438	.073		5.981	.000

Note: b=Un-standardized Coefficients, S.E=standard error of variables, Source: author  
 β=standardized coefficients, t=t-statistic, p=significance level. R<sup>2</sup> = square, ΔR<sup>2</sup> =adjusted R square.

In summary, the multivariate regression analysis shows that the application of bundle HRM practices, represented by "HRMp" is positively and significantly associated with organizational performance in SMEs. This result support and indicates that changes in HRM practices can have a substantial impact on the performance of small and medium-sized enterprises.



Table 12. Hypotheses test results

Hypotheses - (Path)	Results
<i>Direct effects</i>	
<b>H<sub>0</sub></b> : HRM practices → Organizational performance of SME	Supported
<b>H<sub>1</sub></b> : HRM practices → Financial performance	Supported
<b>H<sub>1a</sub></b> : Recruitment and selection → Financial performance	Supported
<b>H<sub>1b</sub></b> : Training and development → Financial performance	Rejected
<b>H<sub>1c</sub></b> : Communication and information → Financial performance	Rejected
<b>H<sub>1d</sub></b> : Compensation and reward → Financial performance	Rejected
<b>H<sub>1e</sub></b> : Job design → Financial performance	Rejected
<b>H<sub>1f</sub></b> : Performance appraisal → Financial performance	Supported
<b>H<sub>2</sub></b> : HRM practices → Non-financial performance	Supported
<b>H<sub>2a</sub></b> : Recruitment and selection → Non-financial performance	Supported
<b>H<sub>2b</sub></b> : Training and development → Non-financial performance	Supported
<b>H<sub>2c</sub></b> : Communication and information → Non-financial performance	Supported
<b>H<sub>2d</sub></b> : Compensation and reward → Non-financial performance	Supported
<b>H<sub>2e</sub></b> : Job design → Non-financial performance	Supported
<b>H<sub>2f</sub></b> : Performance appraisal → Non-financial performance	Rejected
<b>H<sub>3</sub></b> : Non-financial performance → Financial performance	Supported
<i>Control paths</i>	
SME size → Financial performance	.108 (1.346) <sup>+</sup>
SME age → Financial performance	.168 (2.104)*
SME size → Non-financial performance	-.003 (-.035)
SME age → Non-financial performance	.016 (.196)

Source: author

In Table 12 are summarized *Hypotheses test results* of this study.

## **CHAPTER V – DISCUSSION, RESEARCH IMPLICATIONS AND LIMITATIONS OF EMPIRICAL RESEARCH**

The present research study investigated the relationship between human resource management (HRM) practices and their impact on organizational performance. This is accomplished by examining the implementation of a comprehensive three-dimensional strategic model that incorporates HRM practices, financial performance, and non-financial performance in small and medium-sized businesses (SMEs). This method goes beyond surface-level analysis to provide a more in-depth understanding of how HRM affects overall organizational effectiveness. By doing so, it will contribute to the success of Small and Medium Enterprises (SMEs) and enhance the existing body of strategic literature by providing valuable findings in this area.

Additionally, the study examined the relationship between human resource management practices, as an independent variable, and organizational performance, while taking into account the competitive strategic orientation of the business. The results indicated that the application of bundle HRM practices is positively and significantly associated with organizational performance in SMEs. This result support and indicates that changes in HRM practices can have a substantial impact on the performance of small and medium-sized enterprises. The findings provide further evidence in line with existing research in the field of Human Resource Management (HRM) that highlights the favorable influence of HRM practices on the organizational performance of SMEs (Huselid, 1995; Combs et al., 2006; Tsai et al., 2010; Allen et al., 2013; Sheehan, 2014; Amin et al., 2014; Otoo, 2019). Furthermore, it is worth noting that the findings of De Kok and Hartog (2006) suggest that a specific system of HRM practices bundles are thought to have a greater impact on firm performance than HRM practices acting independently.

Further, it is hypothesized in this study that SMEs, HRM practices have a positive influence on financial performance. Related to the financial performance in terms of SME age the results indicate that older SMEs have a better financial performance than newer ones, on other hand SME size based on the result had a positive but not significant relationship with financial performance. The results of the study indicated that employing various human resource management practices acting independently, such as training and development, communication and information, compensation and reward, job design have a non-significant role in financial

performance of the manufacture SMEs. Whereas recruitment and selection and performance appraisal have a positive influence on financial performance, so the main hypothesis was supported. These results are in line with the previous findings by certain authors (e.g., Wei & Lau 2010; Allen et al. 2013; Gamage, 2014; Arunprasad, 2017; Mulolli and Boskovska, 2020; Islami, 2021a, b). On the other hand, the sub-hypotheses that were not supported are in the line with previous finding by certain authors (e.g., Zakariaet al., 2018; Manresa et al., 2019; Erick et al., 2014).

Whereas, the direct relationship between HRM practices and non-financial performance hypothesized as: main hypothesis Human resource management practices have positive relationship on non-financial performance and sub hypotheses (recruitment and selection, training and development, communication and information, compensation and reward, job design, performance appraisal) have positive relationship on non-financial performance, the main hypothesis was supported, all of the sub-hypotheses related to HRM practices, including recruitment and selection, training and development, communication and information, compensation and reward, job design demonstrated a positive impact on non-financial performance, which provide the company better efficacy on overall product quality, responsiveness to customers, customer satisfaction; delivery speed, delivery dependability, market share growth. Interestingly, performance appraisal did not show a significant relationship with non-financial performance. These results support the previous findings by certain authors (e.g., Ahmad & Schroeder, 2003; Sang, 2005; Lee et al., 2010; Islami et al. 2023).

Lastly in this study was measured the direct effects of non-financial performance on financial performance, and the results revealed a positive relationship between these variables. This finding suggests that by enhancing non-financial performance, SMEs in the manufacturing sector can achieve better overall performance, ultimately benefiting their financial outcomes.

In this respect, it supports Erhemjamts and Huang (2019), who pointed out that efforts to improve a firm's non-financial performance can help to improve its financial performance by eliminating possible conflicts between society and the enterprise and reducing related costs. The results of the study are in the line previous findings by certain authors (Zhang et al., 2013; Pavlov et al., 2017; Liu et al., 2022).

## **5.1 Research implications**

The results of this research study led firms to succeed and enrich the strategic literature by shedding light on the intricate interplay between HRM practices and various aspects of SME performance. By exploring the links between HRM and both financial and non-financial performance as individual's aspects and in organizational performance as holistic approach, this research extends our theoretical understanding of how HRM influences SMEs, which will be used by academics and practitioners for further examination. Improving the opinion on strategic management by incorporating the function of strategic instruments in organizational success highlights the research's theoretical significance. This integration not only expands the theoretical framework but also enriches our understanding of how these instruments influence SMEs outcomes. Thus, developing a comprehensive strategic model that includes these major strategic instruments serves as a springboard for future researchers to conduct their own study. The managerial implications of this study, on the other hand, lay the groundwork for developing a strategy model based on the process of integrating strategic instruments with the goal of developing SMEs through the appropriate use of HRM practices as a bundle, which may provide a synergistic effect, or to see the effects on financial and non-financial performance when firms use individual HRM practices.

### **5.1.1 The role of HRM practices in influencing financial and non-financial performance of SMEs**

This subchapter will provide a well-rounded understanding of how diverse approaches to human resource management influence the performance of SMEs by discussing both bundled and individual HRM practices. It offers valuable insights for SMEs looking to optimize their HRM strategies to achieve their financial and non-financial objectives.

So first, using a behavioral perspective to examine how the bundling of HRM practices influences the financial performance of SMEs. Results which support this hypothesis indicate that human resource management practices developed from SMEs have a direct effect on financial performance. In keeping with the findings of prior studies (e.g., Wei & Lau 2010; Allen

et al. 2013; Gamage, 2014; Arunprasad, 2017; Mulolli and Boskovska, 2020; Islami, 2021a, b) it demonstrates how human resource management practices positively improved financial performance. A possible explanation may be that the implementation of various HRM practices, such as: recruitment and selection, training and development, communication and information, compensation and reward, job design and performance appraisal as set of practices generates tangible improvements across various financial performance indicators. SMEs, in their pursuit of competitive advantage, can potentially experience enhanced return on investment, increased sales growth, improved return on sales, expanded profitability, and reduced manufacturing costs through the judicious utilization of these HRM practices.

Second, in this study was examined how the bundling of HRM practices influences the non-financial performance of SMEs. Results which support this hypothesis indicate that human resource management practices developed from SMEs have a direct effect on non-financial performance. In keeping with the findings of prior studies (e.g., Ahmad & Schroeder, 2003; Sang, 2005; Lee et al., 2010; Islami et al. 2023) it demonstrates that human resource management practices positively enhance non-financial performance. A possible explanation may be that the implementation of a set of HRM practices may provide the SMEs with a better non-financial performance on product quality, responsiveness to customers, delivery speed, delivery dependability and market share. This suggests that SMEs, by leveraging effective HRM practices, can position themselves to deliver higher-quality products, respond more efficiently to customer demands, expedite delivery processes, enhance dependability in meeting delivery commitments, and expand their market share. These non-financial performance improvements can significantly contribute to the overall success and competitiveness of SMEs in a dynamic business environment.

Third, it was hypothesized that each of the following HRM practices: recruitment and selection, training and development, communication and information, compensation and reward, job design have positive effects on financial and non-financial performance. According to the findings, recruitment and selection had a positive effect on both performance indicators of SMEs, which is consistent with the previous study of Gamage (2014), which discovered that higher levels of positive HR outcomes are directly related to higher levels of effective recruitment and selection practices, and that these HR outcomes lead to higher operational and

financial performance of manufacturing SMEs in Japan. The study's results confirm the critical role of recruitment and selection in shaping the overall performance of SMEs. This highlights the importance of a strategic approach to talent acquisition and selection, underscoring its potential impact on the competitive positioning and success of SMEs in various operational and financial contexts.

Fourth, in contrast to the positive effect observed for recruitment and selection, the impact of training and development yielded distinct outcomes in the study. Although the research validated the notion that training and development positively affects non-financial performance, it failed to identify a substantial influence on the financial performance of small and medium-sized enterprises (SMEs). This suggests that while training and development practices positively contribute to non-financial performance aspects such as product quality, responsiveness to customers, delivery speed, delivery dependability and market share, their effect on financial performance metrics may not be as pronounced. The distinction between financial and non-financial performance highlights the intricate characteristics of human resource management (HRM) practices and the diverse ways in which they impact various aspects of SME performance. These findings emphasize the need for SMEs to carefully consider how they design and implement training and development programs, tailoring them to align with their specific goals and challenges. According to Niazi (2011), who concluded that a strong training and development process can lead to the creation of learning organizations, this process also helps employees perform their jobs effectively, gain a competitive advantage, and pursue personal growth. This provides valuable insights for SMEs seeking to optimize their HRM strategies to achieve a balanced and holistic approach to performance enhancement.

Fifth, the study found similar different results when analyzing the effects of communication and information on financial and non-financial performance in SMEs. While there was support for a positive influence on non-financial performance, no significant impact was found on financial performance. This suggests that the way in which SMEs handle communication and information practices can enhance aspects of non-financial performance. However, these practices may not directly translate into improved financial performance indicators. These findings underscore the need for SMEs to tailor their communication and information strategies to maximize their impact on both financial and non-financial performance. While by implementing effective

communication channels and providing relevant information, HR professionals can enhance employee engagement, facilitate skill development, resolve conflicts, and support organizational goals, ultimately contributing to a productive and satisfied workforce.

Sixth, in the case of compensation and reward practices within SMEs financial and non-financial performance, the study revealed a consistent pattern of results. The findings indicate that these practices have a positive influence on non-financial performance. However, similar to the previous HRM practices discussed, no significant impact was found on financial performance indicators within the context of SMEs. This suggests that compensation and reward strategies effectively contribute to enhancing aspects of non-financial performance, fostering a positive work environment and employee well-being. Similar effects were found on previous study of Ellinger et al. (2002) it was discovered that employee compensation and payment are closely tied to work performance and play a significant role in motivating individuals to perform well. While compensation and reward practices can increase non-financial performance significantly, SMEs may need to complement them with other strategies or approaches to achieve the desired financial outcomes.

Seventh, the study also demonstrated a consistent pattern of results on the relationship Job design between financial and non-financial performance. While there was support for a positive effect on non-financial performance, no significant effect on financial performance was discovered. These findings emphasize the role of job design in enhancing the work experience for employees and fostering non-financial dimensions of performance. According to Armstrong (2014), “Job design specifies the contents of jobs in order to satisfy work requirements and meet the personal needs of the job holder, thus increasing levels of employee engagement” (p.145). When jobs are well-designed to align with employee skills and preferences, it can lead to a more satisfying and productive work environment. For SMEs, these results imply the importance of optimizing job design to improve employee well-being and non-financial performance. However, it may be necessary to complement job design efforts with other strategies to directly impact financial performance outcomes. These outcomes highlight the significance of optimizing job design for SME non-financial performance and employee well-being. To directly influence financial performance outcomes, it might be essential to supplement job design initiatives with additional strategies.

Eight, in contrast to the observed patterns in previous human resource management practices, the study produced an alternative set of outcomes concerning performance appraisal. Although a positive effect was detected on financial performance, no significant impact was observed on non-financial performance indicators. These results suggest that the way SMEs implement performance appraisal practices has a direct and positive effect on financial performance metrics, such as: enhanced return on investment, increased sales growth, improved return on sales, expanded profitability, and reduced manufacturing costs through the use of this HRM practices. These results are in the line with the study of Chang and Chen (2002) conducted a study that revealed a significant relationship between performance appraisal and firm financial performance in Enhancing Chinese SME performance, Taiwanese high-tech firms and multinational companies in Singapore. However, performance appraisal practices may not have a notable impact on non-financial aspects like on product quality, responsiveness to customers, delivery speed, delivery dependability and market share. For SMEs, these results underscore the need to balance HRM practices in a way that optimizes both financial and non-financial performance. The study provides valuable insights into the specific areas where HRM practices can be strategically deployed to achieve various performance objectives.

Ninth, it was hypothesized that non- financial performance has a direct positive effect on financial performance. This result suggests that as non-financial performance metrics such as: product qualities, responsiveness to customers, delivery speed, delivery dependability and market share, have a positive impact on the financial health and success of the SMEs. These results are in the line with the study from Erhemjamts and Huang (2019), which states that efforts to improve a firm's non-financial performance can help to improve its financial performance by eliminating possible conflicts between society and the enterprise and reducing related costs.

It is important to recognize that HRM practices inside SMEs can be influenced by a variety of contextual factors. These factors may include the size of the SME, its age, its industry position, the availability of human resources, and the workforce's educational background. Larger SMEs often have more complex organizational structures and greater demands in terms of employee management. This complexity may necessitate more robust and sophisticated HRM practices to effectively delegate tasks, motivate employees, and manage human resources efficiently. The



level of HRM practices employed by SMEs can also be shaped by their size, age, and the education levels of their workforce. Younger SMEs may be more adaptable and open to contemporary HRM techniques, whilst older SMEs may rely on more traditional ways. Furthermore, the workforce's education and skill level might influence the amount to which specific HRM strategies are used and their success in achieving performance goals.

### **5.1.2 The role of HRM practices in influencing organizational performance of SMEs**

Rather than focusing on specific HRM practices that are used in isolation or individually, the human resource management practices in this subchapter research study are presented as bundles that provide a competitive advantage and improved organizational performance for SMEs that implement them appropriately. Bundles or systems of specific HR practices are thought to have a greater impact on firm performance than HRM practices acting independently (De Kok & Hartog, 2006). In essence, it's the synergistic effects that create a greater impact than the sum of individual practices (Jiang et al., 2012).

From a behavioral standpoint, it is hypothesized that the human resource management (HRM) practices implemented by a SME exert a favorable impact on its overall organizational performance. This hypothesis is supported by empirical evidence, aligning with prior studies that have demonstrated the positive impact of HRM practices on organizational performance. Results which support this hypothesis indicate that human resource management practices developed from SMEs have a direct effect on organizational performance. In keeping with the findings of prior studies (e.g., Huselid, 1995, Tsai et al, 2010; Allen et al, 2013; Sheehan, 2014; Lee et al., 2010; Otoo, 2019; Islami, 2021a), it demonstrates that human resource management practices positively enhance organizational performance. For example, in a comprehensive meta-analytic evaluation conducted by Combs et al. (2006), it was shown that high performance work systems (HPWS) exhibited a more substantial influence on organizational performance when compared to individual human resource (HR) practices. The study encompassed an extensive analysis of 92 relevant papers. Another study conducted by Chan and Mak (2012) focused on High-performance HRM practices (careful selection, enhanced jobs, extensive training, high payments, and information sharing and performance feedback). Based on the data collected from 227 HRM

employees in four industries (finance, insurance, manufacturing and real estate) in Hong Kong, it was found that there exists a positive correlation between the implementation of high-performance HRM practices and organizational performance (OP). Also, Otoo (2019) illustrated in his study the positive impact of five HRM practices (recruitment and selection, career planning, employee participation, training and development and performance appraisal) on organizational performance.

One possible explanation is that implementing various HRM practices such as recruitment and selection, training and development, communication and information, compensation and reward, job design, and performance appraisal as a set of practices results in tangible improvements across a variety of financial performance indicators. Through the prudent application of these HRM practices, SMEs can potentially achieve better return on investment, increased sales growth, improved return on sales, expanded profitability, and decreased manufacturing costs in their pursuit of competitive advantage. Similarly, it may improve various non-financial performance measures, including product quality, customer responsiveness, delivery speed, delivery dependability, and market share. This implies that SMEs can position themselves to offer higher-quality products, respond more efficiently to client demands, expedite delivery processes, improve reliability in meeting delivery promises, and extend their market share by adopting effective HRM practices. Thus, to remain competitive SMEs must continuously improve their usage of HRM practices since competitors will imitate the good practices.

The study emphasizes the importance of bundling and strategically implementing human resource management (HRM) practices inside small and medium-sized enterprises (SMEs) to improve their competitive position, financial performance, and non-financial performance. This study offers valuable insights into the ways in which these practices might enhance the success and competitiveness of small and medium-sized enterprises (SMEs) within a rapidly changing business environment.

## **5.2 Theoretical implications**

In the Kosovo context, this study adds to the body of literature of strategic HRM practices and the organizational performance of SME. It offers the contingency view on the relationship

between HRM practices and organizational performance of SME by delving deeper into the complex interplay of two factors. By applying a comprehensive three-dimensional strategic model that integrates human resource management (HRM) practices, financial performance, and non-financial performance within small and medium-sized enterprises (SMEs) of manufacturing industry. HRM assumes a crucial role throughout all sectors of the economy, with particular emphasis on the manufacturing industry where its significance is even greater.

First, it validates the strategic integration between second-order constructs of HRM practices and its effects on organizational performance of SME. Additionally, it distinguishes the first-order construct of HRM practices and its effects on both financial and non-financial performance, providing much-needed clarity in areas that have previously suffered from poor definitions and a lack of consensus. It offers and validates the second order construct of HRM practices form a second-order construct composed of the six first-order constructs, such as recruitment and selection, training and development, communication and information, compensation and reward, job design, performance appraisal. This hierarchical approach allows for a more nuanced analysis of how each component of HRM practices impacts organizational performance (financial and non-financial performance), shedding light on their interconnectedness Also, on addressing a number of issues raised by previous research related to the firm strategic orientation. In this way, it contributes to existing knowledge by potentially offering solutions or insights to previously debated or unclear areas within the field.

Second, previous HRM in the field of Human Resource Management (HRM) has predominantly concentrated on examining the effects of HRM practices either as bundles or individually on firm performance. However, these studies have overlooked the significance of integrated interactions between HRM practices and other organizational instruments. The study's theoretical contributions are twofold. Initially it broadens the theoretical framework by more comprehensively operationalizing organizational tools in the holistic approach of HRM practices, and then it paves the way for a finer-grained analysis of the impact of HRM practices individually on financial and non-financial performance, particularly in emerging economies. In addition, the study's findings have practical implications for business management, emphasizing the significance of a comprehensive set of HRM practices and their impact on organizational

performance of SME. This emphasizes the need of organizations recognizing the entire extent of HRM practices for strategic decision-making.

Third, HRM practices examined in this study provide information about the characteristics that all employees in a firm should possess, which may be used to improve organizational performance of SME. In this way, this study found that HRM practices play an important role in enhancing organizational performance of SMEs, which deserve more attention in future studies. The strategic fit between HRM practices and organizational performance of SMEs (OPS) is investigated from this perspective, expanding knowledge about the HRM/OPS boundary. Therefore, the empirical findings fill this gap by providing empirical evidence of the link between a set of HRM practices that aim to improve the performance of organizational performance of SMEs.

Fourth, this study tested the relationship between HRM practices, financial performance, non-financial performance and organizational performance of SME. The results reveal different patterns across different relationships. It provides empirical evidence that there are different results in the effects of HRM practices on financial performance, HRM practices on non-financial performance, HRM practices on organizational performance of SME. These patterns enrich the existing literature and suggest new directions for future research.

Therefore, present study introduces a broader viewpoint regarding the operationalization of strategic instruments, extends the existing literature and offers a more detailed and comprehensive framework for analyzing how HRM practices impact financial, non-financial, and organizational performance in emerging economies.

### **5.3 Managerial implications**

Although several companies have recognized the need of incorporating human resource management (HRM) practices, they are often unsure to determine which practices to implement, due to a lack of understanding of what constitutes a comprehensive set of HRM practices. This uncertainty stems from a limited comprehension of what encompasses a broad array of HRM activities. This study contributes to the field by presenting a multi-dimensional operational

measure of HRM practices and validating its effectiveness in enhancing the performance of small and medium-sized enterprises (SMEs). The findings of this research provide human resource managers and strategic managers with a useful tool for evaluating the comprehensiveness of their current HRM practices. Therefore, the study's findings also have significant managerial implications and insights that may allow SMEs to better manage and coordinate human resources, by adopting recommended HRM practices, SMEs can become more efficient, productive, and competitive in the marketplace, or boost their overall organizational performance.

First, according to the study findings, HRM practices have a direct and positive impact on the overall performance of SMEs. In other words, when SMEs properly integrate a set of HRM practices, it can lead to increased organizational performance. The combined effect of bundle HRM practices working together that has a greater influence on organizational performance. It's the synergistic effects that create a greater impact than the sum of individual practices (Jiang et al., 2012). As a result, human resource managers must select the best combination of HRM practices to deploy in order to match with the company's strategic goals and ensure that they are implemented effectively. In other words, a system of good human resource management (HRM) practices needs to be addressed as to ensure the development of organizational performance run smoothly (Cappelli & Neumark, 2001). Therefore, when planning to implement a set of HRM practices, managers should have in mind various HR practices condition. Select the highly-skilled candidates in the recruitment process that match the job requirements; improve employees' skills and reduce resistance to implementing organizational tasks, through organize appropriate training programs; increase communication the employee aware that the company is sharing information about company circumstances, goals, and strategies; design the job duties that engage employees in meaningful work-related tasks that align with the organization's goals; apply performance appraisal processes for development, motivation, and evaluation by assessing employee attitudes and behaviors, setting clear expectations, providing feedback, and identifying areas for improvement or recognition; and create an atmosphere of continuous employee learning. The study emphasizes the significance of two perspectives one individually and the other on bundling, and strategically implementing these perspectives of human resource management (HRM) practices within small and medium-sized enterprises (SMEs) to improve their competitive position, financial performance, non-financial performance.

Second, the study uncovered a statistically significant connection between the alignments or the cohesive integration of HRM practices as a bundle and the financial performance of SMEs operating in the manufacturing sector. This suggests that SMEs, by leveraging effective HRM practices can enhance return on investment, increased sales growth, improved return on sales, expanded profitability, and reduced manufacturing costs. However, when considered individually, certain HRM practices like: training and development, communication and information, compensation and reward and job design had a non-significant relationship with financial performance. According to the statement, SMEs in the manufacturing industry may perceive investment in human resources management (HRM) practices as an additional expense that raises the firm's financial burden. This viewpoint could stem from a lack of awareness regarding the strategic advantages that these practices can bring. This statement also implies that human resource managers may be distracted with broader business strategies potentially overlooking the alignment of HR practices with the firm's strategic goals. This might result in a misalignment between HR practices and the strategic goals of the firm. It emphasizes the need for a more systemic approach to HRM, in other words, HR practices should not be isolated but should be integrated into the broader organizational structure and strategy. Human resource managers and strategic managers by adopting a systemic approach and ensuring alignment with HRM practices across all functions, SMEs may ultimately improve their financial performance. It highlights the need for a more holistic approach to HR management within SMEs in the manufacturing industry.

Third, the study finds a statistically significant link between the alignment (fit) of HRM practices and non- financial performance in SMEs in the manufacturing sector. This indicates that when HRM practices are well-aligned with the organization's strategy, it has a measurable and meaningful impact on various aspects of non-financial performance. As a result of this alignment, the study suggests that firms can achieve several positive outcomes: such as improvements in product quality, increased responsiveness to customers, higher customer satisfaction, and faster product delivery, enhanced delivery dependability, and increased market share growth. These all are critical indicators of non-financial performance. In particular, top managers are advised to use effective and reliable HRM evaluation practices to measure the impact of HRM on these non-financial performance metrics. But more essential is to a strategic acting plane and to inform employees about how HRM practices will be implemented and align

them with the organization's goals and strategy. This alignment seeks to ensure employee satisfaction with and acceptance of these practices, as well as commitment to reaching the intended non-financial performance goals.

The ultimate goal is to boost the overall performance of SMEs. The study posits that the implementation of the prescribed human resource management (HRM) practices has the potential to enhance the operational efficiency, productivity, and competitive advantage of small and medium-sized enterprises (SMEs) within the marketplace. More importantly, the results of this study shed light on the SME that operate in Kosovo and beyond, and help strategic managers to identify more effective HRM practices and promoting them in their firms.

#### **5.4 Limitation of this study and future research**

Despite the fact that this research study has produced significant contributions, it is not without its limitations. As a result, this chapter includes a summary of the main conclusions of this study, its limitations and the research that is needed to advance this issue further.

This study presents and evaluates a comprehensive integration model that examines the relationship between HRM practices, financial and non-financial performance, and organizational performance. While this particular research study makes valuable contributions to both academic and practical spheres, it is important to acknowledge its several limitations. The limitations of this research study have opened up avenues for future research studies.

First, subjective measures of HRM practices, financial and non-financial performance and organizational performance were used. The current design of this study may impose limitations on our ability to infer causality among measures of HRM practices and financial and non-financial performance indicators. The utilization of financial and non-financial performance data from the previous year contributes to the enhancement of our current situation. However, a longer time-frame in design could be employed. In order to further expand upon these findings, future studies may employ a more carefully designed longitudinal methodology. This can be done by a three-stage design, the collection of firm-level data before and after the adoption of HRM practices, followed by the collection of performance data after a specified period of time.

By comparing data before and after the adoption of HRM practices and analyzing their impact on organizational performance in the subsequent period, researchers can establish more robust causal links between HRM practices and organizational performance of SMEs.

Second, quantitative research design was used in analyzing data collected through structured questionnaires. For future studies a combination of quantitative and qualitative data are encouraged. Adopting both qualitative and quantitative approaches would have provided a more in-depth as well as valuable clarifications (Remenyi et al., 2005).

Third, HRM is represented in this study through six practices, but these practices do not encompass all aspects of HRM, which is a mature field with numerous concepts. Therefore, future research can expand the field of HRM by investigating practices such as employment security, health and safety, HR planning, and career planning that were omitted from this study.

Fourth, this study focuses on SMEs and uses samples from Kosovo thus the findings are more meaningful in the Kosovar context. Organizational practices vary by country. This study has thus generated a wide picture of the relationship between HRM practices, financial and non-financial performance, and organizational performance of SMEs by focusing on one industry, different SME sizes and ages. Since HRM practices and performance measures are used differently across industries, firm sizes, and ages, this research cannot explain how they improve SMEs' performance in different contexts and countries. Future studies can examine the integration of HRM practices using different contextual factors (e.g., different industries), in different contexts, and conducting cross-cultural studies. Islami (2021b) suggests comparing Western cultures to those of emerging and transitional economies.

Fifth, this study concentrated its efforts on small and medium-sized enterprises (SMEs), acknowledging their unique position in the business landscape. It intentionally excluded large corporations with more than 249 employees, micro firms with fewer than 10 employees, non-profit organizations, and startups. While this strategic focus allowed for a targeted examination of HRM practices within SMEs, there exists a promising avenue for future research. Future research endeavors should explore the integration of HRM practices, particularly in organizations that were not included in the present study. These investigations can aim to address and reconcile any potential discrepancies in the findings of this study, thereby establishing the



presence of any potential contradictions. Future studies can extend this investigation by considering these different types of organizations that were not part of this study. By including large corporations, micro firms, startups, and non-profit organizations, researchers can explore how HRM practices are implemented and impact performance across a broader spectrum of organizational contexts. This broadening of scope is necessary since company size, structure, and purpose frequently present diverse HRM issues and possibilities and contend with the results of this study in order to demonstrate the existence of any possible inconsistencies.

Sixth, this study has only measured the upright relationship between HRM practices, financial and non-financial performance, and the organizational performance of SMEs. While the current study has provided valuable insights into the direct relationships between HRM practices and various dimensions of organizational performance, there exists an opportunity for future research to explore additional dimensions of these relationships. Specifically, future studies can delve into mediating relationships, such as the influence of innovation and employee performance as mechanisms that underlie the effects of HRM practices on organizational performance. Innovation and employee performance can be considered promising mediating variables in this context. HRM practices have the potential to stimulate innovation by fostering a culture of creativity, knowledge sharing, and skill development. Furthermore, these practices can directly impact employee performance by influencing motivation, job satisfaction, and skill enhancement. Therefore, investigating the mediating effects of innovation or employee performance can provide a deeper understanding of the pathways through which HRM practices influence organizational performance.

## CONCLUSION

The proposed model in this thesis provides a new and holistic perspective on the role of human resource management (HRM) practices by using an interdisciplinary approach and a relational perspective. This model systematically investigates how these HRM practices, whether considered individually or as bundles, impact financial and non-financial performance, ultimately influencing the overall organizational performance of SMEs. By adopting this comprehensive perspective, the thesis serves as a valuable resource for those seeking to gain a deeper understanding of the intricate relationship between HRM and SME performance. Taking an integrative approach is key to understanding the complexities of organizational success, and it provides a platform for further research and practical applications in the field of HRM and SME management.

The findings and interpretations presented in this thesis have been effectively summarized, and the main research issues and opportunities have been highlighted, offering a clear understanding of the implications of the study. Furthermore, the findings of this thesis will be important for researchers and strategic managers in Kosovo, the region, and beyond.

In this thesis, a comprehensive approach has been taken to develop measures that encompass a broad conceptualization of key strategic instruments. These strategic instruments primarily revolve around Human Resource Management (HRM) practices, and the thesis explores their impact from multiple dimensions

In this thesis, measures are developed for a broader conceptualization of the key strategic instruments, which include Human Resource Management (HRM) practices, and the thesis explores their impact from multiple dimensions: the study examines how each individual HRM practice influences both financial and non-financial performance indicators within SME; in addition to individual HRM practices, the thesis investigates how the bundled utilization of these practices affects both financial and non-financial performance and finally, the thesis takes a holistic perspective by examining the collective impact of these HRM practices on the organizational performance of SMEs.

Based on a review of the prior literature on HRM practices, financial and non-financial performance, and organizational performance; discovering and analyzing existing literature in

order to construct an integrative conceptual model that aligns with the research typology employed in this dissertation; searching for essential elements (practices or dimensions) that each testable variable should include; preparing questionnaires based on the existing literature (finding practices/dimensions that each instrument must include, and items that each practice should contain); pre-pilot study; pilot study, large-scale data analysis and empirical explaining of the relationships of the proposed model in function to achieve the goals and objectives of this thesis, determine the conclusions of this thesis, which are presented as follow:

1. Over the past three decades, researchers have directed their attention towards analyzing the impact of Human Resource Management (HRM) on organizational outcomes. A significant area of focus has been defining the scope and boundaries of HRM practices. In this thesis, based on the suitability with other variables that are treated, HRM is presented through six practices: recruitment and selection, training and development, communication and information, compensation and reward, job design and performance appraisal.
2. In this thesis, the effects of strategic instruments, specifically HRM practices, on organizational performance are evaluated using two distinct dimensions: financial performance (evaluated using financial criteria) and non-financial performance (evaluated using non-financial criteria). This approach allows for a comprehensive examination of how HRM practices impact an SME overall performance, acting individually or as bundle in considering both the financial and non-financial aspects.
3. The integrative model tested in this thesis provides empirical justification for a framework that identifies and develops key dimensions HRM practices acting individually or as bundle. Thus, it provides empirical evidence and supports that an integrative strategy developed from the HRM practices relationships with different aspects of performance (financial and non-financial) is crucial for SMEs as they refine their HRM strategies to optimize their overall performance after controlling for SME age and size.
4. A comprehensive, valid and reliable instrument for assessing HRM practices was developed. Rigorous statistical tests including convergent validity, discriminant validity, reliability, the validation of first and second-order constructs, hierarchical regression analysis, and multivariate regression analysis were used to examine five research questions: (1) do SMEs that implement a bundle of HRM practices have a better organizational performance; (2) do SMEs that implement a bundle of HRM practices have a better financial performance; (3) do

SMEs that implement a bundle of HRM practices have a better non-financial performance; (4) which HRM practices is more significant, directly and indirectly, to the financial performance of SMEs; (5) which HRM practices is more significant, directly and indirectly, to the non-financial performance of SMEs?

5. The relationship between the control variables and financial performance shows that SME age is significant and positively related to financial performance ( $p < 0.05$ ). On the other hand, although SME size has a positive link with financial performance, it does not reach statistical significance ( $p > .10$ ). This result indicates that, in the sample, older SMEs tend to have better financial performance which could be attributed to factors such as experience, established market presence, and the ability to adapt to changing business conditions over time.
6. Recruitment and selection is positively and significantly related to financial performance ( $p < 0.05$ ). This highlights the importance of a strategic approach to talent acquisition and selection, underscoring its potential impact on the competitive positioning and success of SMEs with improved financial performance.
7. The relationship between training and development and financial performance, the results show non-significant positive effect for training and development ( $\beta = .076$ ,  $p > 0.10$ ) on financial performance. These findings emphasize the need for SMEs to carefully consider how they design and implement training and development programs, tailoring them to align with their specific goals and challenges.
8. The relationship between communication and information and financial performance, result shows that communication and information have a non-significant positive influence on financial performance ( $\beta = .102$ ,  $p > .10$ ).
9. The relationship between compensation and reward and financial performance, result shows that compensation and reward have a non-significant positive influence on financial performance ( $\beta = .017$ ,  $p > .10$ ).
10. The relationship between job design and financial performance, result shows that job design has a non-significant positive influence on financial performance ( $\beta = .098$ ,  $p > .10$ ).
11. The relationship between performance appraisal and financial performance, the result shows that performance appraisal has a significant positive influence on financial performance ( $\beta = .296$ ,  $p < 0.05$ ). These results suggest that the way SMEs implement performance appraisal

practices has a direct and positive effect on financial performance metrics, such as: enhanced return on investment, increased sales growth, improved return on sales, expanded profitability, and reduced manufacturing costs through the use of this HRM practices.

12. Non-financial performance is positively and significantly related to financial performance ( $p < 0.001$ ). This result suggests that as non-financial performance metrics such as: product qualities, responsiveness to customers, delivery speed, delivery dependability and market share, have a positive impact on the financial health and success of the SMEs.
13. The relationship between the control variables and non-financial performance shows that SME age non-significant and negatively related to non-financial performance ( $p > .10$ ). Also, although SME size has a positive link with non-financial performance, it does not reach statistical significance ( $p > .10$ ). This result indicates that within the sample studied, neither SME age nor SME size has a statistically significant relationship with non-financial performance.
14. Recruitment and selection play a significant role in non-financial performance of the manufacture SMEs, the results show these practices are positively and significantly related non-financial performance ( $p < 0.001$ ). In other words, when these practices are executed well, they contribute to positive non-financial metrics such as: product qualities, responsiveness to customers, delivery speed, delivery dependability and market share.
15. The relationship between training and development and non-financial performance, the results show a significant positive effect for training and development ( $\beta = .189, p < 0.05$ ) on non-financial performance. This result suggests that this practice have positive effect on non-financial metrics that were part of the sample studied.
16. The relationship between communication and information and non-financial performance, result shows that communication and information have a significant positive influence on non-financial performance ( $\beta = .299, p < 0.01$ ). This suggests that the way in which SMEs handle communication and information practices can enhance aspects of non-financial performance.
17. The relationship between compensation and reward and non-financial performance, the results reveal a significant and positive influence of compensation and reward on non-financial performance ( $\beta = 0.263, p < 0.01$ ). This suggests that compensation and reward

strategies effectively contribute to enhancing aspects of non-financial performance, fostering a positive work environment and employee well-being.

18. The relationship between job design and non-financial performance, the result shows that job design has a marginally significant influence on non-financial performance ( $\beta = .169$ ,  $p < 0.10$ ).
19. The relationship between performance appraisal and non-financial performance, based on the results has a non-significant role in non-financial performance of the manufacture SMEs. Additionally, the result shows that performance appraisal has a non-significant negative influence on non-financial performance ( $\beta = -.023$ ,  $p > .10$ ). The results suggest based on the sample that performance appraisal practices may have a negative impact on non-financial aspects like on product quality, responsiveness to customers, delivery speed, delivery dependability and market share, but it's not significant.
20. HRM practice plays a positive significant role in the financial performance of the manufacture SMEs ( $p = 0.001$ ), the results suggest that the implementation of a bundle of HRM practices, such as: recruitment and selection, training and development, communication and information, compensation and reward, job design and performance appraisal may provide the SMEs with a better financial performance on enhancing return on investment, increased sales growth, improved return on sales, expanded profitability, and reduced manufacturing costs through the judicious utilization of these HRM practices.
21. HRM practice plays a positive significant role in the non- financial performance of the manufacture SMEs ( $p = 0.000$ ), results demonstrates that the implementation of a set of HRM practices may provide the SMEs with a better non-financial performance on product quality, responsiveness to customers, delivery speed, delivery dependability and market share. This suggests that SMEs, by leveraging effective HRM practices, can position themselves to deliver higher-quality products, respond more efficiently to customer demands, expedite delivery processes, enhance dependability in meeting delivery commitments, and expand their market share. These non-financial performance improvements can significantly contribute to the overall success and competitiveness of SMEs in a dynamic business environment.
22. HRM practice as set of bundles have a direct positive relationship with organizational performance of SMEs ( $b = 0.438$  and  $p = 0.000$ ) in manufacturing industry. The results

suggest that the implementation of various HRM practices such as recruitment and selection, training and development, communication and information, compensation and reward, job design, and performance appraisal as a set of practices results in tangible improvements across a variety of organizational performance indicators (financial and non-financial). Through the prudent application of these HRM practices, SMEs can potentially achieve better return on investment, increased sales growth, improved return on sales, expanded profitability, and decreased manufacturing costs in their pursuit of competitive advantage. Similarly, it may improve various non-financial performance measures, including product quality, customer responsiveness, delivery speed, delivery dependability, and market share. This implies that SMEs can position themselves to offer higher-quality products, respond more efficiently to client demands, expedite delivery processes, improve reliability in meeting delivery promises, and extend their market share by adopting effective HRM practices. Thus, to remain competitive SMEs must continuously improve their usage of HRM practices since competitors will imitate the good practices. The study emphasizes the importance of bundling and strategically implementing human resource management (HRM) practices inside small and medium-sized enterprises (SMEs) to improve their competitive position, financial performance, non-financial performance and overall organizational performance of SME.

23. In summary, this thesis can provide a possible explanation for the inconsistent findings about the effects of HRM on financial and non-financial performance and organizational performance of SMEs. The general hypothesis raised in this thesis is answered, wherein: Do human resource management practices have a positive influence on the organizational performance (non-financial and financial performance) of the SMEs in the manufacturing industry. It can be concluded that this statement was fully supported. Thus, it provides an important validation of the claim that the fit between HRM practices will determine the performance of SMEs.
24. The results of this thesis showed that the main goal of developing an integrative strategy approach is to increase the benefits of organizational performance by closely coordinating and fitting the main internal and external elements of a SME, allowing it to better capitalize on opportunities that may lead to business success. This thesis represents a significant contribution to both scientific and academic value, particularly in the domain of

understanding the relationship between human resource management practices and their influence on the performance of SMEs, encompassing both financial and non-financial dimensions. The study has relevance not only in the context of the manufacturing industry in Kosovo but also holds implications for the broader region and beyond.



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## APPENDIX

### Appendix 1

*Note: Items marked by an asterisk (\*) were removed in the final instruments.*

## QUESTIONNAIRE

### *Participant Consent Form<sup>2</sup>*

#### **Dear madam/sir,**

You are being asked to contribute in a research study examining the relationship between an HRM practices and financial and non-financial performance. After reading in more details about this study, you will be asked to consent to contribute in this study or withdraw of this contribution.

#### **Investigator:**

Enis Mulolli PhD. candidate

“Ss. Cyril and Methodius University” in Skopje, North Macedonia

Faculty of Economy - Organizational Sciences and Management (Management)

Email: [enismulolli@gmail.com](mailto:enismulolli@gmail.com)

#### **Purpose of the Study:**

This study measures the impact of human resource management practices to financial and non-financial performance of SMEs in manufacturing industry. You are one of (approximately) 300 SMEs’ managers throughout Kosovo to participate in this study.

#### **Description of the Study:**

Study contribution is voluntary. If you decide to contribute, you will be asked to answer an online survey using validated strategic instruments. To complete the questionnaire will take approximately 10-15 minutes.

#### **Risk or discomforts:**

This study is anonymous and online in the accordance with ethics. So, there should be no risk of your participation in this survey unless you save all your answers on your computer and your

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<sup>2</sup> The participant consent form was adapted by Ahmet Shala and Xhavit Islami, which has been used in their PhD dissertation.

company/organization track your saved files. If at any point, you feel uncomfortable, you may discontinue your participation at any time, either temporarily or permanently, and this will not affect your relationship with the researcher or with “Ss. Cyril and Methodius University” in Skopje. The results of this study will be used as generalized.

**Benefits of the study:**

This is the first study of treating several strategic instruments simultaneously in Republic of Kosovo. I believe this will be a great contribution to further research on this field in Kosovo and beyond. The main benefit of this research will be the scientific findings on HRM. Contributors themselves will derive direct benefit from engaging in this study.

**Anonymity:**

Only the investigator will have access to the online responses. No one will be able to determine, in any written report or article, whether you have participated in this study or not.

**Incentives to participate:**

The provision of anonymity to study contributors, as well as the scientific contribution of this study, is hoped to serve as an incentive for you to contribute in this study.

**Vulnerable nature of participation:**

Participation in this study is voluntary. Your choice whether or not to participate will not influence the future relations with the researcher nor with “Ss. Cyril and Methodius University” in Skopje. You are free to withdraw your consent and to stop your participation at any time without any penalty or loss of benefits to which you are entitled.

*Note:* once you have submitted your answers, you can no longer withdraw them, due to the anonymous nature of the study.

**Questions about the study:**

If you have any questions about the study or your rights as a participant, please contact the investigator Enis Mulolli at [enismulolli@gmail.com](mailto:enismulolli@gmail.com)

Thank you in advance for assisting with this important research.

If you agree to participate in this survey research, click “continue”

- CONTINUE

## **I. GENERAL INFORMATIONS<sup>3</sup>**

*The purpose of this section is to obtain general information on your SME and its activity. For each of question below, please circle the alternative which is the most suitable for you and your SME:*

### **1.1 In which industry operate your SME?**

- f) Food
- g) Textile
- h) Construction
- i) Electronic
- j) Chemical
- k) Other (please specify \_\_\_\_\_).

### **1.2 How many employees does your SME have? (please specify the number \_\_\_\_\_).**

### **1.3 When was your SME established? (please specify the year \_\_\_\_\_).**

### **1.4 What is your role in the SME where you are working?**

- a) Owner
- b) CEO - chief executive officer
- c) Human Resource Manager
- d) Manufacturing Manager
- e) Marketing Manager
- f) Financial Manager
- g) Other (please specify \_\_\_\_\_).

### **1.5 Which group belongs to your SME's annual turnover in 2022?**

- a) ≤ €1 million;
- b) €1 million–10 million;
- c) > €10 million.

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<sup>3</sup> This section was adapted by Xhavit Islami, which has been used in his PhD dissertation.

## II. Human Resource Management Practices

Below are items that SMEs may use in the management of their employees. For each following item, indicate the degree of each specific human resource management practice employed by your SME in last year to manage its employees. (Use: 1 – “not at all”; 2 – “slightly”; 3 – “neutral”; 4 – “to a moderate extent”; 5 – “to a large extent”)

2.1 Recruitment and selection		1	2	3	4	5
(RecSel_1)*	Our firm applies the form of recruitment through online job portals, recruitment websites, agencies, or social media.					
(RecSel_2)	Our firm spends a great effort in selecting the right person for every position					
(RecSel_3)	Attitude/desire to work in a team as a criterion in employee selection.					
(RecSel_4)	Selecting employees who can provide ideas to improve the manufacturing process					
(RecSel_5)	Selecting employees based on their overall fit to the firm, was used as a criterion for their selection.					
2.2 Training and development		1	2	3	4	5
(TraDev_1)	Our employees are provided with on-the-job training.					
(TraDev_2)	Activities of the training program provided meet the needs of the employees.					
(TraDev_3)	Providing formal training programs to teach new hires the skills they need to perform their jobs.					
(TraDev_4)	Training needs are identified through a formal performance appraisal mechanism.					
(TraDev_5)	Our company provides e-learning and training opportunities, as well as participation in workshops for employees.					
2.3 Communication and information		1	2	3	4	5
(ComInf_1)	We inform personnel about their performance.					
(ComInf_2)	Our firm facilitates employees to acquire required information easily at any time.					
(ComInf_3)	Employees of our firm openly discuss their experiences in order to learn from each other.					
(ComInf_4)*	People on our company frequently share information based their experience on task difficulty's.					
(ComInf_5)	Our firm use technology and tools to facilitate communication and information sharing among employees.					
2.4 Compensation and reward		1	2	3	4	5

(ComRew_1)	Compensation is decided on the basis of competence or ability of the employee.					
(ComRew_2)	Job performance is an important factor in determining the incentive compensation of employees.					
(ComRew_3)	In our firm, incentive systems (rewards and bonuses) encourage people to work towards achieving the firm's goals.					
(ComRew_4)	The compensation for all employees is directly linked to his/her performance.					
(ComRew_5)*	Firm offer other forms of non-monetary compensation, such as training and development programs, recognition, participation in social events.					
<b>2.5 Job design</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
(JobDes_1)	The duties of every job are clearly defined in our firm.					
(JobDes_2)	Job design involves a lot of teamwork with cross-functional teams and networks.					
(JobDes_3)	Our company emphasizes employees' job rotation and flexible work assignments in different work areas.					
(JobDes_4)	Our firm offers flexibility in terms of working hours and location.					
(JobDes_5)	Employees are independent in performing their work duties.					
<b>2.6 Performance appraisal</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
(PerApp_1)	Performance of the employees is measured on the basis of objective quantifiable results.					
(PerApp_2)	Our performance appraisal system is oriented towards the growth and development of employees.					
(PerApp_3)	Appraisal system has influence on individual and team behavior.					
(PerApp_4)	The objectives of the appraisal system are clear to all employees.					
(PerApp_5)	Firm use performance appraisals to make decisions about promotions, transfers and compensation of employees.					

### III. SMEs Performance

*Below are items that show your SME performance. (Use: 1 – “not at all”; 2 – “slightly”; 3 – “neutral”; 4 – “to a moderate extent”; 5 – “to a large extent”).*

<b>3. Please evaluate your SME’s performance for the last year? (evaluate from 1 –“ not at all” to 5 – “to a large extent”).</b>						
<b>3.1 Non-financial performance</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
(Non_FinPer_1)	The overall product quality has been improved.					
(Non_FinPer_2)	Responsiveness to customers has been increased.					
(Non_FinPer_3)	Customer satisfaction with the service to him has increased.					
(Non_FinPer_4)	The delivery speed of the product has been increased.					
(Non_FinPer_5)	Delivery dependability has been improved.					
(Non_FinPer_6)	Our firm's market share growth has increased.					
<b>3.2 Financial performance</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
(FinPer_1)	Growth in return on investment has been increased.					
(FinPer_2)	Sales of products/services have increased.					
(FinPer_3)	Return on sales (ROS) has been increased.					
(FinPer_4)	Our company's profit has increased.					
(FinPer_5)	Manufacturing cost has been reduced.					

*Thank you very much for your cooperation and for the time spent to fulfill this questionnaire.*



## Appendix 2

### Statistical Appendices

From Chapter IV – Data Analyses and Results

#### 4.1 Convergent and discriminant validity of the first-order construct - HRM practices (Recruitment and selection, Training and development, Communication and information, Compensation and reward, Job design, Performance appraisal)

##### **KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.726
Bartlett's Test of Sphericity	Approx. Chi-Square	83.619
	df	6
	Sig.	.000

##### **KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.731
Bartlett's Test of Sphericity	Approx. Chi-Square	296.070
	df	10
	Sig.	.000

##### **KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.675
Bartlett's Test of Sphericity	Approx. Chi-Square	77.689
	df	6
	Sig.	.000

##### **Communalities**

	Initial	Extraction
RecSel_2	1.000	.569
RecSel_3	1.000	.519
RecSel_4	1.000	.457
RecSel_5	1.000	.475

Extraction Method: Principal Component

##### **Communalities**

	Initial	Extraction
TraDev_1	1.000	.776
TraDev_2	1.000	.659
TraDev_3	1.000	.622
TraDev_4	1.000	.464
TraDev_5	1.000	.314

Extraction Method: Principal Component

Analysis.

##### **Communalities**

	Initial	Extraction
ComInf_1	1.000	.577
ComInf_2	1.000	.615
ComInf_3	1.000	.281
ComInf_5	1.000	.450

Extraction Method: Principal Component

Analysis.

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.769
Bartlett's Test of Sphericity	Approx. Chi-Square	163.129	
	df	6	
	Sig.		.000

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.730
Bartlett's Test of Sphericity	Approx. Chi-Square	90.269	
	df	10	
	Sig.		.000

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.835
Bartlett's Test of Sphericity	Approx. Chi-Square	274.007	
	df	10	
	Sig.		.000

**Communalities**

	Initial	Extraction
ComRew_1	1.000	.485
ComRew_2	1.000	.618
ComRew_3	1.000	.633
ComRew_4	1.000	.678

Extraction Method: Principal Component Analysis.

**Communalities**

	Initial	Extraction
JobDes_1	1.000	.249
JobDes_2	1.000	.432
JobDes_3	1.000	.433
JobDes_4	1.000	.520
JobDes_5	1.000	.465

Extraction Method: Principal Component Analysis.

**Communalities**

	Initial	Extraction
PerApp_1	1.000	.627
PerApp_2	1.000	.720
PerApp_3	1.000	.562
PerApp_4	1.000	.612
PerApp_5	1.000	.495

Extraction Method: Principal Component Analysis.

**Component Matrix<sup>a</sup>**

	Component 1
RecSel_2	.755
RecSel_3	.720
RecSel_4	.676
RecSel_5	.689

Extraction Method: Principal Component  
Analysis. a. 1 components extracted.

**Component Matrix<sup>a</sup>**

	Component 1
TraDev_1	.881
TraDev_2	.812
TraDev_3	.788
TraDev_4	.681
TraDev_5	.560

Extraction Method: Principal Component  
Analysis. a. 1 components extracted.

**Component Matrix<sup>a</sup>**

	Component 1
ComInf_1	.760
ComInf_2	.784
ComInf_3	.530
ComInf_5	.671

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

**Component Matrix<sup>a</sup>**

	Component 1
ComRew_1	.696
ComRew_2	.786
ComRew_3	.796
ComRew_4	.823

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

**Component Matrix<sup>a</sup>**

	Component 1
JobDes_1	.499
JobDes_2	.657
JobDes_3	.658
JobDes_4	.721
JobDes_5	.682

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

**Component Matrix<sup>a</sup>**

	Component 1
PerApp_1	.792
PerApp_2	.849
PerApp_3	.750
PerApp_4	.783
PerApp_5	.704

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

**4.1.1 Means, standard deviations and reliability of the first-order constructs - HRM practices**  
*(Recruitment and selection, Training and development, Communication and information, Compensation and reward, Job design, Performance appraisal)*

**Reliability Statistics**

Cronbach's Alpha	N of Items
.653	4

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
RecSel_2	11.86	4.001	.495	.560
RecSel_3	12.23	3.980	.447	.582
RecSel_4	12.64	3.100	.418	.619
RecSel_5	12.44	3.656	.429	.589

**Reliability Statistics**

Cronbach's Alpha	N of Items
.787	5

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
TraDev_1	13.73	11.069	.742	.694
TraDev_2	13.90	11.536	.633	.727
TraDev_3	14.14	11.453	.613	.732
TraDev_4	14.18	12.278	.512	.764
TraDev_5	15.48	11.554	.398	.818

**Reliability Statistics**

Cronbach's Alpha	N of Items
.632	4

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ComInf_1	12.88	3.636	.470	.520
ComInf_2	12.54	3.710	.506	.497
ComInf_3	12.63	4.470	.289	.641
ComInf_5	12.81	3.681	.395	.579

**Reliability Statistics**

Cronbach's Alpha	N of Items
.780	4

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ComRew_1	12.97	4.782	.493	.770
ComRew_2	12.95	4.339	.598	.720
ComRew_3	13.13	3.943	.608	.716
ComRew_4	13.01	4.079	.647	.693

**Reliability Statistics**

Cronbach's Alpha	N of Items
.648	5

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
JobDes_1	15.42	9.982	.283	.645
JobDes_2	16.08	7.420	.412	.593
JobDes_3	16.18	7.940	.425	.584
JobDes_4	16.20	6.830	.479	.556
JobDes_5	15.93	8.522	.437	.583

**Reliability Statistics**

Cronbach's Alpha	N of Items
.827	5

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PerApp_1	16.54	7.934	.640	.790
PerApp_2	16.52	7.488	.718	.767
PerApp_3	16.57	7.181	.605	.800
PerApp_4	16.50	7.896	.639	.790
PerApp_5	16.75	7.385	.555	.817

## 4.2 Convergent and discriminant validity of the first-order construct – Financial and Non-Financial Performance of SMEs

### **KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.766
Bartlett's Test of Sphericity	Approx. Chi-Square	228.178
	df	10
	Sig.	.000

### **Communalities**

	Initial	Extraction
FinPer_1	1.000	.702
FinPer_2	1.000	.656
FinPer_3	1.000	.336
FinPer_4	1.000	.639
FinPer_5	1.000	.358

Extraction Method: Principal Component Analysis.

### **Component Matrix<sup>a</sup>**

	Component
	1
FinPer_1	.838
FinPer_2	.810
FinPer_3	.579
FinPer_4	.799
FinPer_5	.599

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

### **KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.864
Bartlett's Test of Sphericity	Approx. Chi-Square	362.223
	df	15
	Sig.	.000

### **Communalities**

	Initial	Extraction
Non_FinPer_1	1.000	.528
Non_FinPer_2	1.000	.595
Non_FinPer_3	1.000	.730
Non_FinPer_4	1.000	.496
Non_FinPer_5	1.000	.572
Non_FinPer_6	1.000	.582

Extraction Method: Principal Component Analysis.

### Component Matrix<sup>a</sup>

	Component 1
Non_FinPer_1	.727
Non_FinPer_2	.771
Non_FinPer_3	.854
Non_FinPer_4	.704
Non_FinPer_5	.756
Non_FinPer_6	.763

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

### 4.2.1 Means, standard deviations and reliability of the first-order constructs - Financial and Non-Financial Performance of SMEs

<b>Reliability Statistics</b>		<b>Item-Total Statistics</b>				
Cronbach's Alpha	N of Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	
.746	5	FinPer_1	14.08	9.710	.632	.670
		FinPer_2	13.94	10.214	.604	.685
		FinPer_3	14.76	9.119	.405	.754
		FinPer_4	14.31	9.017	.618	.663
		FinPer_5	15.30	8.988	.431	.742

<b>Reliability Statistics</b>		<b>Item-Total Statistics</b>				
Cronbach's Alpha	N of Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	
.852	6	Non_FinPer_1	22.25	7.333	.592	.835
		Non_FinPer_2	22.08	7.381	.646	.827
		Non_FinPer_3	22.14	6.909	.762	.805
		Non_FinPer_4	22.27	6.937	.575	.841
		Non_FinPer_5	22.17	7.181	.641	.826
		Non_FinPer_6	22.22	6.648	.640	.828

### 4.3 Convergent and discriminant validity of the second-order construct - HRM practices

#### *KMO and Bartlett's Test*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.832
Bartlett's Test of Sphericity	Approx. Chi-Square	282.211
	df	15
	Sig.	.000

#### *Communalities*

	Initial	Extraction
RecSel	1.000	.396
TraDev	1.000	.479
Cominfo	1.000	.621
ComRew	1.000	.451
JobDes	1.000	.524
PerApp	1.000	.689

#### *Component Matrix<sup>a</sup>*

	Component 1
RecSel	.629
TraDev	.692
Cominfo	.788
ComRew	.671
JobDes	.724
PerApp	.830

Extraction Method: Principal Component Analysis.

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 1 components extracted.

#### 4.3.1 Means, standard deviations and reliability of the second-order constructs – HRM practices

#### *Item-Total Statistics*

#### *Reliability Statistics*

Cronbach's Alpha	N of Items		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
.817	6	RecSel	.0000000	14.161	.486	.809
		TraDev	.0000000	13.793	.542	.797
		Cominfo	.0000000	13.082	.655	.772
		ComRew	.0000000	13.943	.519	.802
		JobDes	.0000000	13.549	.580	.789
		PerApp	.0000000	12.748	.710	.760



#### 4.4 Correlation matrix of the main study variables

		<b>Correlations</b>									
		Rec Sel	Tra Dev	Com Inf	Com Rew	Job Des	Per App	Fin Per	NonFin Per	SME size	SME age
RecSel	Pearson Correlation	1	.381**	.388**	.335**	.354**	.370**	.172*	.310**	.018	-.042
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.033	.000	.826	.609
	N	153	153	153	153	153	153	153	153	153	153
TraDev	Pearson Correlation	.381**	1	.478**	.226**	.407**	.521**	.145	.279**	.082	.024
	Sig. (2-tailed)	.000		.000	.005	.000	.000	.075	.000	.315	.771
	N	153	153	153	153	153	153	153	153	153	153
ComInf	Pearson Correlation	.388**	.478**	1	.439**	.472**	.591**	.179*	.395**	.112	.009
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.026	.000	.167	.908
	N	153	153	153	153	153	153	153	153	153	153
ComRew	Pearson Correlation	.335**	.226**	.439**	1	.393**	.545**	.114	.399**	.131	-.031
	Sig. (2-tailed)	.000	.005	.000		.000	.000	.160	.000	.107	.701
	N	153	153	153	153	153	153	153	153	153	153
JobDes	Pearson Correlation	.354**	.407**	.472**	.393**	1	.509**	.195*	.388**	.031	.096
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.016	.000	.708	.238
	N	153	153	153	153	153	153	153	153	153	153
PerApp	Pearson Correlation	.370**	.521**	.591**	.545**	.509**	1	.289**	.353**	.060	.043
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.460	.599
	N	153	153	153	153	153	153	153	153	153	153
FinPer	Pearson Correlation	.172*	.145	.179*	.114	.195*	.289**	1	.443**	.114	.173*
	Sig. (2-tailed)	.033	.075	.026	.160	.016	.000		.000	.159	.033
	N	153	153	153	153	153	153	153	153	153	153
NonFinPer	Pearson Correlation	.310**	.279**	.395**	.399**	.388**	.353**	.443**	1	-.002	.016
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.978	.846
	N	153	153	153	153	153	153	153	153	153	153
SMEsize	Pearson Correlation	.018	.082	.112	.131	.031	.060	.114	-.002	1	.039
	Sig. (2-tailed)	.826	.315	.167	.107	.708	.460	.159	.978		.630
	N	153	153	153	153	153	153	153	153	153	153
SMEage	Pearson Correlation	-.042	.024	.009	-.031	.096	.043	.173*	.016	.039	1
	Sig. (2-tailed)	.609	.771	.908	.701	.238	.599	.033	.846	.630	
	N	153	153	153	153	153	153	153	153	153	153

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

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

**Correlations**

		HRMp	FinPer	SME_size	SME_age
HRMp	Pearson Correlation	1	.256**	.100	.026
	Sig. (2-tailed)		.001	.218	.752
	N	153	153	153	153
FinPer	Pearson Correlation	.256**	1	.114	.173*
	Sig. (2-tailed)	.001		.159	.033
	N	153	153	153	153
SME_size	Pearson Correlation	.100	.114	1	.039
	Sig. (2-tailed)	.218	.159		.630
	N	153	153	153	153
SME_age	Pearson Correlation	.026	.173*	.039	1
	Sig. (2-tailed)	.752	.033	.630	
	N	153	153	153	153

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

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

**Correlations**

		HRMp	NonFinPer	SME_size	SME_age
HRMp	Pearson Correlation	1	.488**	.100	.026
	Sig. (2-tailed)		.000	.218	.752
	N	153	153	153	153
NonFinPer	Pearson Correlation	.488**	1	-.002	.016
	Sig. (2-tailed)	.000		.978	.846
	N	153	153	153	153
SME_size	Pearson Correlation	.100	-.002	1	.039
	Sig. (2-tailed)	.218	.978		.630
	N	153	153	153	153
SME_age	Pearson Correlation	.026	.016	.039	1
	Sig. (2-tailed)	.752	.846	.630	
	N	153	153	153	153

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

		<b>Correlations</b>			
		HRMp	OrgPer	SME_size	SME_age
HRMp	Pearson Correlation	1	.438**	.100	.026
	Sig. (2-tailed)		.000	.218	.752
	N	153	153	153	153
OrgPer	Pearson Correlation	.438**	1	.066	.111
	Sig. (2-tailed)	.000		.418	.172
	N	153	153	153	153
SME_size	Pearson Correlation	.100	.066	1	.039
	Sig. (2-tailed)	.218	.418		.630
	N	153	153	153	153
SME_age	Pearson Correlation	.026	.111	.039	1
	Sig. (2-tailed)	.752	.172	.630	
	N	153	153	153	153

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

## 4.5 Regression results

### 4.5.1 Results of hierarchical regression analysis on financial performance – (Model 1a, 2a, 3a, 4a, 5a ,6a ,7a and 7c)

#### **Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	SME_age, SME_size <sup>b</sup>		. Enter
2	RecSel <sup>b</sup>		. Enter
3	TraDev <sup>b</sup>		. Enter
4	ComInfo <sup>b</sup>		. Enter
5	ComRew <sup>b</sup>		. Enter
6	JobDes <sup>b</sup>		. Enter
7	PerApp <sup>b</sup>		. Enter
8	NonPerFin <sup>b</sup>		. Enter

a. Dependent Variable: FinPer

b. All requested variables entered.

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.203 <sup>a</sup>	.041	.029	.98561060	.041	3.235	2	150	.042
2	.270 <sup>b</sup>	.073	.054	.97250000	.032	5.072	1	149	.026
3	.279 <sup>c</sup>	.078	.053	.97322760	.005	.777	1	148	.379
4	.292 <sup>d</sup>	.085	.054	.97261176	.007	1.187	1	147	.278
5	.292 <sup>e</sup>	.085	.048	.97582065	.000	.035	1	146	.852
6	.303 <sup>f</sup>	.092	.048	.97569193	.007	1.039	1	145	.310
7	.364 <sup>g</sup>	.132	.084	.95709646	.040	6.689	1	144	.011
8	.537 <sup>h</sup>	.289	.244	.86952976	.157	31.464	1	143	.000

a. Predictors: (Constant), SME\_age, SME\_size

b. Predictors: (Constant), SME\_age, SME\_size, RecSel

c. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev

d. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo

e. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew

f. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew, JobDes

g. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew, JobDes, PerApp

h. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew, JobDes, PerApp, NonFinPer

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.286	2	3.143	3.235	.042 <sup>b</sup>
	Residual	145.714	150	.971		
	Total	152.000	152			
2	Regression	11.082	3	3.694	3.906	.010 <sup>c</sup>
	Residual	140.918	149	.946		
	Total	152.000	152			
3	Regression	11.819	4	2.955	3.119	.017 <sup>d</sup>
	Residual	140.181	148	.947		
	Total	152.000	152			
4	Regression	12.942	5	2.588	2.736	.021 <sup>e</sup>
	Residual	139.058	147	.946		
	Total	152.000	152			
5	Regression	12.975	6	2.163	2.271	.040 <sup>f</sup>

	Residual	139.025	146	.952		
	Total	152.000	152			
6	Regression	13.964	7	1.995	2.095	.048 <sup>g</sup>
	Residual	138.036	145	.952		
	Total	152.000	152			
7	Regression	20.091	8	2.511	2.742	.008 <sup>h</sup>
	Residual	131.909	144	.916		
	Total	152.000	152			
8	Regression	43.880	9	4.876	6.448	.000 <sup>i</sup>
	Residual	108.120	143	.756		
	Total	152.000	152			

a. Dependent Variable: FinPER

b. Predictors: (Constant), SME\_age, SME\_size

c. Predictors: (Constant), SME\_age, SME\_size, RecSel

d. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev

e. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo

f. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew

g. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew, JobDes

h. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew, JobDes, PerApp

i. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew, JobDes, PerApp, NonFinPer

		<b>Coefficients<sup>a</sup></b>					<b>Collinearity Statistics</b>	
		Unstandardized		Standardized				
		Coefficients		Coefficients	t	Sig.	Tolerance	VIF
Model		B	Std. Error	Beta				
1	(Constant)	-.776	.322		-2.407	.017		
	SME_size	.221	.164	.108	1.346	.180	.998	1.002
	SME_age	.209	.099	.168	2.104	.037	.998	1.002
2	(Constant)	-.787	.318		-2.475	.014		
	SME_size	.213	.162	.104	1.320	.189	.998	1.002
	SME_age	.218	.098	.176	2.226	.028	.997	1.003
	RecSel	.178	.079	.178	2.252	.026	.998	1.002
3	(Constant)	-.763	.319		-2.390	.018		
	SME_size	.202	.162	.099	1.245	.215	.992	1.008
	SME_age	.215	.098	.173	2.187	.030	.995	1.005
	RecSel	.149	.086	.149	1.742	.084	.852	1.174
	TraDev	.076	.086	.076	.882	.379	.848	1.180

4	(Constant)	- .739	.320		-2.310	.022		
	SME_size	.186	.163	.091	1.143	.255	.984	1.017
	SME_age	.214	.098	.172	2.179	.031	.995	1.005
	RecSel	.124	.088	.124	1.406	.162	.796	1.256
	TraDev	.037	.093	.037	.400	.690	.724	1.380
	Cominfo	.102	.093	.102	1.090	.278	.716	1.397
5	(Constant)	- .736	.321		-2.291	.023		
	SME_size	.183	.164	.089	1.114	.267	.974	1.027
	SME_age	.215	.099	.173	2.177	.031	.994	1.006
	RecSel	.121	.091	.121	1.334	.184	.763	1.310
	TraDev	.038	.093	.038	.405	.686	.724	1.382
	Cominfo	.095	.099	.095	.961	.338	.636	1.573
	ComRew	.017	.090	.017	.187	.852	.766	1.306
6	(Constant)	- .721	.322		-2.242	.026		
	SME_size	.192	.165	.094	1.170	.244	.971	1.030
	SME_age	.202	.099	.163	2.034	.044	.979	1.022
	RecSel	.109	.091	.109	1.197	.233	.751	1.331
	TraDev	.018	.095	.018	.189	.850	.694	1.441
	Cominfo	.072	.102	.072	.703	.483	.603	1.659
	ComRew	-.004	.093	-.004	-.043	.966	.728	1.373
	JobDes	.098	.097	.098	1.019	.310	.671	1.490
7	(Constant)	- .726	.315		-2.302	.023		
	SME_size	.215	.162	.105	1.331	.185	.968	1.033
	SME_age	.191	.098	.153	1.953	.053	.977	1.024
	RecSel	.105	.090	.105	1.176	.241	.751	1.331
	TraDev	-.060	.098	-.060	-.616	.539	.627	1.594
	Cominfo	-.003	.104	-.003	-.032	.974	.556	1.799
	ComRew	-.097	.098	-.097	-.995	.321	.629	1.589
	JobDes	.054	.096	.054	.556	.579	.650	1.539
	PerApp	.296	.115	.296	2.586	.011	.460	2.176
8	(Constant)	- .794	.287		-2.767	.006		
	SME_size	.274	.147	.134	1.862	.065	.963	1.039
	SME_age	.184	.089	.148	2.078	.039	.977	1.024
	RecSel	.062	.082	.062	.761	.448	.744	1.343
	TraDev	-.087	.089	-.087	-.972	.332	.626	1.598
	Cominfo	-.081	.096	-.081	-.843	.401	.544	1.837
	ComRew	-.205	.091	-.205	-2.257	.025	.601	1.664
	JobDes	-.026	.089	-.026	-.294	.769	.633	1.580

PerApp	.307	.104	.307	2.947	.004	.460	2.176
NonFinPer	.461	.082	.461	5.609	.000	.736	1.358

a. Dependent Variable: FinPer

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	RecSel	.178 <sup>b</sup>	2.252	.026	.181	.998	1.002	.997
	TraDev	.133 <sup>b</sup>	1.664	.098	.135	.993	1.007	.992
	Cominfo	.168 <sup>b</sup>	2.111	.036	.170	.987	1.013	.986
	ComRew	.107 <sup>b</sup>	1.333	.185	.109	.982	1.019	.981
	JobDes	.177 <sup>b</sup>	2.238	.027	.180	.990	1.010	.989
	PerApp	.277 <sup>b</sup>	3.584	.000	.282	.995	1.005	.995
	NonFinPer	.440 <sup>b</sup>	6.143	.000	.450	1.000	1.000	.998
2	TraDev	.076 <sup>c</sup>	.882	.379	.072	.848	1.180	.848
	Cominfo	.116 <sup>c</sup>	1.348	.180	.110	.838	1.194	.838
	ComRew	.053 <sup>c</sup>	.628	.531	.052	.871	1.148	.871
	JobDes	.130 <sup>c</sup>	1.538	.126	.125	.862	1.160	.862
	PerApp	.244 <sup>c</sup>	2.938	.004	.235	.857	1.167	.857
	NonFinPer	.426 <sup>c</sup>	5.640	.000	.421	.903	1.108	.901
3	Cominfo	.102 <sup>d</sup>	1.090	.278	.090	.716	1.397	.716
	ComRew	.046 <sup>d</sup>	.539	.591	.044	.862	1.160	.786
	JobDes	.118 <sup>d</sup>	1.325	.187	.109	.778	1.285	.765
	PerApp	.261 <sup>d</sup>	2.820	.005	.227	.692	1.445	.684
	NonFinPer	.427 <sup>d</sup>	5.537	.000	.415	.872	1.146	.807
4	ComRew	.017 <sup>e</sup>	.187	.852	.015	.766	1.306	.636
	JobDes	.098 <sup>e</sup>	1.039	.301	.086	.706	1.417	.649
	PerApp	.265 <sup>e</sup>	2.583	.011	.209	.568	1.762	.568
	NonFinPer	.434 <sup>e</sup>	5.400	.000	.408	.809	1.237	.663
5	JobDes	.098 <sup>f</sup>	1.019	.310	.084	.671	1.490	.603
	PerApp	.308 <sup>f</sup>	2.738	.007	.222	.475	2.105	.475
	NonFinPer	.460 <sup>f</sup>	5.541	.000	.418	.756	1.323	.615
6	PerApp	.296 <sup>g</sup>	2.586	.011	.211	.460	2.176	.460
	NonFinPer	.457 <sup>g</sup>	5.414	.000	.411	.736	1.358	.590
7	NonFinPer	.461 <sup>h</sup>	5.609	.000	.425	.736	1.358	.460

a. Dependent Variable: FinPer

- b. Predictors in the Model: (Constant), SME\_age, SME\_size
- c. Predictors in the Model: (Constant), SME\_age, SME\_size, RecSel
- d. Predictors in the Model: (Constant), SME\_age, SME\_size, RecSel, TraDev
- e. Predictors in the Model: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo
- f. Predictors in the Model: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew
- g. Predictors in the Model: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew, JobDes
- h. Predictors in the Model: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew, JobDes, PerApp

### Collinearity Diagnostics<sup>a</sup>

Mod el	Dimensi on	Eigenval ue	Condi tion Index	Variance Proportions										
				(Consta nt)	SME_si ze	SME_a ge	RecS el	TraD ev	ComI nf	ComRe w	JobD es	PerA pp	NonFinP er	
1	1	2.852	1.000	.01	.01	.01								
	2	.107	5.161	.00	.50	.54								
	3	.041	8.383	.99	.48	.45								
2	1	2.852	1.000	.01	.01	.01	.00							
	2	1.000	1.689	.00	.00	.00	1.00							
	3	.107	5.167	.00	.50	.54	.00							
	4	.041	8.384	.99	.48	.45	.00							
3	1	2.853	1.000	.01	.01	.01	.00	.00						
	2	1.382	1.437	.00	.00	.00	.31	.31						
	3	.619	2.147	.00	.00	.00	.69	.68						
	4	.107	5.169	.00	.50	.54	.00	.00						
	5	.040	8.417	.99	.49	.45	.00	.01						
4	1	2.853	1.000	.01	.01	.01	.00	.00	.00					
	2	1.834	1.247	.00	.00	.00	.13	.14	.14					
	3	.645	2.103	.00	.00	.00	.86	.19	.15					
	4	.522	2.338	.00	.00	.00	.00	.67	.71					
	5	.106	5.178	.00	.49	.54	.00	.00	.00					
	6	.040	8.440	.99	.49	.45	.00	.00	.01					
5	1	2.854	1.000	.01	.01	.01	.00	.00	.00	.00				
	2	2.132	1.157	.00	.00	.00	.09	.08	.09	.08				
	3	.778	1.915	.00	.00	.00	.01	.37	.00	.58				
	4	.642	2.109	.00	.00	.00	.87	.09	.18	.01				
	5	.449	2.520	.00	.00	.00	.03	.46	.73	.31				
	6	.105	5.203	.00	.49	.55	.00	.00	.00	.01				
	7	.040	8.453	.99	.50	.44	.01	.00	.00	.00				



6	1	2.857	1.000	.01	.01	.01	.00	.00	.00	.00	.00		
	2	2.555	1.058	.00	.00	.00	.05	.05	.06	.05	.06		
	3	.779	1.916	.00	.00	.00	.02	.36	.00	.53	.00		
	4	.665	2.073	.00	.00	.00	.85	.03	.06	.00	.16		
	5	.552	2.275	.00	.00	.00	.05	.10	.20	.09	.76		
	6	.449	2.522	.00	.00	.00	.03	.45	.68	.31	.00		
	7	.103	5.259	.00	.50	.54	.00	.00	.00	.02	.02		
	8	.040	8.467	.99	.49	.44	.01	.00	.00	.00	.00		
7	1	3.166	1.000	.00	.00	.00	.03	.03	.03	.03	.03	.03	
	2	2.847	1.055	.01	.01	.01	.00	.00	.00	.00	.00	.00	
	3	.787	2.006	.00	.00	.00	.08	.31	.00	.41	.00	.01	
	4	.691	2.141	.00	.00	.00	.84	.06	.03	.03	.03	.04	
	5	.569	2.359	.00	.00	.00	.00	.07	.05	.04	.90	.04	
	6	.458	2.628	.00	.00	.00	.00	.24	.83	.12	.00	.04	
	7	.340	3.052	.00	.00	.00	.04	.28	.04	.34	.01	.82	
	8	.102	5.559	.00	.50	.55	.00	.01	.01	.03	.02	.01	
	9	.040	8.913	.99	.49	.44	.01	.00	.00	.00	.00	.00	
8	1	3.468	1.000	.00	.00	.00	.02	.02	.03	.02	.03	.02	.02
	2	2.850	1.103	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00
	3	.834	2.039	.00	.00	.00	.03	.30	.01	.22	.00	.00	.22
	4	.707	2.215	.00	.00	.00	.63	.00	.03	.04	.01	.10	.16
	5	.653	2.305	.00	.00	.00	.25	.05	.00	.21	.08	.02	.43
	6	.556	2.497	.00	.00	.00	.02	.09	.07	.01	.84	.01	.11
	7	.456	2.757	.00	.00	.00	.01	.28	.80	.11	.00	.03	.01
	8	.333	3.227	.00	.00	.00	.03	.25	.06	.36	.02	.80	.04
	9	.102	5.832	.00	.50	.55	.00	.01	.01	.03	.01	.01	.01
	10	.040	9.339	.99	.49	.44	.01	.00	.00	.00	.00	.00	.00

a. Dependent Variable: FinPer

#### 4.5.2 Results of hierarchical regression analysis on non-financial performance – (Model 1b, 2b, 3b, 4b, 5b ,6b and 7b)

##### **Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	SME_age, SME_size <sup>b</sup>		. Enter
2	RecSel <sup>b</sup>		. Enter
3	TraDev <sup>b</sup>		. Enter
4	ComInfo <sup>b</sup>		. Enter
5	ComRew <sup>b</sup>		. Enter
6	JobDes <sup>b</sup>		. Enter
7	PerApp		. Enter

a. Dependent Variable: NonFinPER

b. All requested variables entered.

##### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.016 <sup>a</sup>	.000	-.013	1.00651379	.000	.019	2	150	.981
2	.312 <sup>b</sup>	.097	.079	.95970845	.097	15.988	1	149	.000
3	.357 <sup>c</sup>	.128	.104	.94659816	.030	5.156	1	148	.025
4	.438 <sup>d</sup>	.191	.164	.91434262	.064	11.626	1	147	.001
5	.494 <sup>e</sup>	.244	.213	.88695599	.053	10.218	1	146	.002
6	.513 <sup>f</sup>	.264	.228	.87860822	.019	3.788	1	145	.054
7	.514 <sup>g</sup>	.264	.223	.88151042	.000	.047	1	144	.829

a. Predictors: (Constant), SME\_age, SME\_size

b. Predictors: (Constant), SME\_age, SME\_size, RecSel

c. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev

d. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo

e. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew

f. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew, JobDes

g. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew, JobDes, PerApp

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.039	2	.020	.019	.981 <sup>b</sup>
	Residual	151.961	150	1.013		
	Total	152.000	152			
2	Regression	14.765	3	4.922	5.344	.002 <sup>c</sup>
	Residual	137.235	149	.921		
	Total	152.000	152			
3	Regression	19.385	4	4.846	5.408	.000 <sup>d</sup>
	Residual	132.615	148	.896		
	Total	152.000	152			
4	Regression	29.105	5	5.821	6.963	.000 <sup>e</sup>
	Residual	122.895	147	.836		
	Total	152.000	152			
5	Regression	37.143	6	6.191	7.869	.000 <sup>f</sup>
	Residual	114.857	146	.787		
	Total	152.000	152			
6	Regression	40.067	7	5.724	7.415	.000 <sup>g</sup>
	Residual	111.933	145	.772		
	Total	152.000	152			
7	Regression	40.103	8	5.013	6.451	.000 <sup>h</sup>
	Residual	111.897	144	.777		
	Total	152.000	152			

a. Dependent Variable: NonFinPER

b. Predictors: (Constant), SME\_age, SME\_size

c. Predictors: (Constant), SME\_age, SME\_size, RecSel

d. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev

e. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo

f. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew

g. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew, JobDes

h. Predictors: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew, JobDes, PerApp

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta				Tolerance	VIF

1	(Constant)	-.036	.329		-.111	.912		
	SME_size	-.006	.167	-.003	-.035	.972	.998	1.002
	SME_age	.020	.101	.016	.196	.845	.998	1.002
2	(Constant)	-.056	.314		-.179	.858		
	SME_size	-.018	.160	-.009	-.115	.909	.998	1.002
	SME_age	.036	.097	.029	.375	.708	.997	1.003
	RecSel	.312	.078	.312	3.998	.000	.998	1.002
3	(Constant)	.003	.311		.009	.993		
	SME_size	-.047	.158	-.023	-.297	.767	.992	1.008
	SME_age	.028	.096	.022	.289	.773	.995	1.005
	RecSel	.239	.083	.239	2.877	.005	.852	1.174
	TraDev	.189	.083	.189	2.271	.025	.848	1.180
4	(Constant)	.074	.301		.247	.806		
	SME_size	-.094	.153	-.046	-.613	.541	.984	1.017
	SME_age	.025	.092	.020	.269	.788	.995	1.005
	RecSel	.167	.083	.167	2.006	.047	.796	1.256
	TraDev	.076	.087	.076	.874	.384	.724	1.380
	Cominfo	.299	.088	.299	3.410	.001	.716	1.397
5	(Constant)	.120	.292		.411	.682		
	SME_size	-.142	.149	-.069	-.953	.342	.974	1.027
	SME_age	.034	.090	.028	.383	.702	.994	1.006
	RecSel	.113	.082	.113	1.377	.171	.763	1.310
	TraDev	.085	.085	.085	1.005	.317	.724	1.382
	Cominfo	.202	.090	.202	2.244	.026	.636	1.573
	ComRew	.263	.082	.263	3.197	.002	.766	1.306
6	(Constant)	.146	.290		.504	.615		
	SME_size	-.126	.148	-.062	-.851	.396	.971	1.030
	SME_age	.013	.089	.010	.143	.886	.979	1.022
	RecSel	.093	.082	.093	1.136	.258	.751	1.331
	TraDev	.051	.086	.051	.597	.551	.694	1.441
	Cominfo	.162	.092	.162	1.760	.080	.603	1.659
	ComRew	.227	.083	.227	2.719	.007	.728	1.373
	JobDes	.169	.087	.169	1.946	.054	.671	1.490
7	(Constant)	.146	.291		.503	.615		
	SME_size	-.128	.149	-.062	-.859	.392	.968	1.033
	SME_age	.014	.090	.011	.152	.879	.977	1.024
	RecSel	.094	.082	.094	1.136	.258	.751	1.331
	TraDev	.057	.090	.057	.633	.528	.627	1.594

Cominfo	.167	.096	.167	1.745	.083	.556	1.799
ComRew	.234	.090	.234	2.598	.010	.629	1.589
JobDes	.173	.089	.173	1.947	.053	.650	1.539
PerApp	-.023	.105	-.023	-.216	.829	.460	2.176

b. Dependent Variable: NonFinPer

		Excluded Variables <sup>a</sup>						
					Collinearity Statistics			
Model		Beta In	t	Sig.	Partial Correlation	Tolerance	VIF	Minimum Tolerance
1	RecSel	.312 <sup>b</sup>	3.998	.000	.311	.998	1.002	.997
	TraDev	.281 <sup>b</sup>	3.563	.000	.280	.993	1.007	.992
	Cominfo	.400 <sup>b</sup>	5.293	.000	.398	.987	1.013	.986
	ComRew	.407 <sup>b</sup>	5.387	.000	.404	.982	1.019	.981
	JobDes	.390 <sup>b</sup>	5.142	.000	.388	.990	1.010	.989
	PerApp	.354 <sup>b</sup>	4.608	.000	.353	.995	1.005	.995
2	TraDev	.189 <sup>c</sup>	2.271	.025	.183	.848	1.180	.848
	Cominfo	.328 <sup>c</sup>	4.052	.000	.316	.838	1.194	.838
	ComRew	.340 <sup>c</sup>	4.317	.000	.334	.871	1.148	.871
	JobDes	.319 <sup>c</sup>	3.988	.000	.312	.862	1.160	.862
	PerApp	.276 <sup>c</sup>	3.400	.001	.269	.857	1.167	.857
3	Cominfo	.299 <sup>d</sup>	3.410	.001	.271	.716	1.397	.716
	ComRew	.325 <sup>d</sup>	4.131	.000	.323	.862	1.160	.786
	JobDes	.288 <sup>d</sup>	3.432	.001	.272	.778	1.285	.765
	PerApp	.240 <sup>d</sup>	2.650	.009	.214	.692	1.445	.684
4	ComRew	.263 <sup>e</sup>	3.197	.002	.256	.766	1.306	.636
	JobDes	.221 <sup>e</sup>	2.554	.012	.207	.706	1.417	.649
	PerApp	.135 <sup>e</sup>	1.376	.171	.113	.568	1.762	.568
5	JobDes	.169 <sup>f</sup>	1.946	.054	.160	.671	1.490	.603
	PerApp	.014 <sup>f</sup>	.135	.893	.011	.475	2.105	.475
6	PerApp	-.023 <sup>g</sup>	-.216	.829	-.018	.460	2.176	.460

a. Dependent Variable: NonFinPer

b. Predictors in the Model: (Constant), SME\_age, SME\_size

c. Predictors in the Model: (Constant), SME\_age, SME\_size, RecSel

d. Predictors in the Model: (Constant), SME\_age, SME\_size, RecSel, TraDev

e. Predictors in the Model: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo

f. Predictors in the Model: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew

g. Predictors in the Model: (Constant), SME\_age, SME\_size, RecSel, TraDev, Cominfo, ComRew, JobDes

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions								
				(Constant)	SME_size	SME_age	RecSel	TraDev	ComInfo	ComRew	JobDes	PerApp
1	1	2.852	1.000	.01	.01	.01						
	2	.107	5.161	.00	.50	.54						
	3	.041	8.383	.99	.48	.45						
2	1	2.852	1.000	.01	.01	.01	.00					
	2	1.000	1.689	.00	.00	.00	1.00					
	3	.107	5.167	.00	.50	.54	.00					
	4	.041	8.384	.99	.48	.45	.00					
3	1	2.853	1.000	.01	.01	.01	.00	.00				
	2	1.382	1.437	.00	.00	.00	.31	.31				
	3	.619	2.147	.00	.00	.00	.69	.68				
	4	.107	5.169	.00	.50	.54	.00	.00				
	5	.040	8.417	.99	.49	.45	.00	.01				
4	1	2.853	1.000	.01	.01	.01	.00	.00	.00			
	2	1.834	1.247	.00	.00	.00	.13	.14	.14			
	3	.645	2.103	.00	.00	.00	.86	.19	.15			
	4	.522	2.338	.00	.00	.00	.00	.67	.71			
	5	.106	5.178	.00	.49	.54	.00	.00	.00			
	6	.040	8.440	.99	.49	.45	.00	.00	.01			
5	1	2.854	1.000	.01	.01	.01	.00	.00	.00	.00		
	2	2.132	1.157	.00	.00	.00	.09	.08	.09	.08		
	3	.778	1.915	.00	.00	.00	.01	.37	.00	.58		
	4	.642	2.109	.00	.00	.00	.87	.09	.18	.01		
	5	.449	2.520	.00	.00	.00	.03	.46	.73	.31		
	6	.105	5.203	.00	.49	.55	.00	.00	.00	.01		
	7	.040	8.453	.99	.50	.44	.01	.00	.00	.00		
6	1	2.857	1.000	.01	.01	.01	.00	.00	.00	.00	.00	
	2	2.555	1.058	.00	.00	.00	.05	.05	.06	.05	.06	
	3	.779	1.916	.00	.00	.00	.02	.36	.00	.53	.00	
	4	.665	2.073	.00	.00	.00	.85	.03	.06	.00	.16	
	5	.552	2.275	.00	.00	.00	.05	.10	.20	.09	.76	
	6	.449	2.522	.00	.00	.00	.03	.45	.68	.31	.00	

	7	.103	5.259	.00	.50	.54	.00	.00	.00	.02	.02	
	8	.040	8.467	.99	.49	.44	.01	.00	.00	.00	.00	
7	1	3.166	1.000	.00	.00	.00	.03	.03	.03	.03	.03	.03
	2	2.847	1.055	.01	.01	.01	.00	.00	.00	.00	.00	.00
	3	.787	2.006	.00	.00	.00	.08	.31	.00	.41	.00	.01
	4	.691	2.141	.00	.00	.00	.84	.06	.03	.03	.03	.04
	5	.569	2.359	.00	.00	.00	.00	.07	.05	.04	.90	.04
	6	.458	2.628	.00	.00	.00	.00	.24	.83	.12	.00	.04
	7	.340	3.052	.00	.00	.00	.04	.28	.04	.34	.01	.82
	8	.102	5.559	.00	.50	.55	.00	.01	.01	.03	.02	.01
	9	.040	8.913	.99	.49	.44	.01	.00	.00	.00	.00	.00

a. Dependent Variable: NonFinPer

#### 4.5.3 Results of multivariate regression analysis on Financial performance of SMEs

##### **Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	HRMp <sup>b</sup>		. Enter

a. Dependent Variable: FinPer

b. All requested variables entered.

##### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.256 <sup>a</sup>	.065	.059	.96998354

a. Predictors: (Constant), HRMp

##### **ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.929	1	9.929	10.553	.001 <sup>b</sup>
	Residual	142.071	151	.941		
	Total	152.000	152			

a. Dependent Variable: FinPer

b. Predictors: (Constant), HRMp

##### **Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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		B	Std. Error	Beta		
1	(Constant)	-1.031E-16	.078		.000	1.000
	HRMp	.256	.079	.256	3.249	.001

a. Dependent Variable: FinPer

#### 4.5.4 Results of multivariate regression analysis on Non-financial performance of SMEs

##### **Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	HRMp <sup>b</sup>		. Enter

a. Dependent Variable: NonFinPer

b. All requested variables entered.

##### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.488 <sup>a</sup>	.238	.233	.87587936

a. Predictors: (Constant), HRMp

##### **ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.158	1	36.158	47.132	.000 <sup>b</sup>
	Residual	115.842	151	.767		
	Total	152.000	152			

a. Dependent Variable: NonFinPer

b. Predictors: (Constant), HRMp

##### **Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.580E-16	.071		.000	1.000
	REGR factor score 1 for analysis 1	.488	.071	.488	6.865	.000

a. Dependent Variable: NonFinPer



#### 4.5.5 Results of multivariate regression analysis on Organizational performance of SMEs

##### **Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	HRMp		. Enter

a. Dependent Variable: OrgPer

b. All requested variables entered.

##### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.438 <sup>a</sup>	.192	.186	.90213161

a. Predictors: (Constant), HRMp

##### **ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.110	1	29.110	35.769	.000 <sup>b</sup>
	Residual	122.890	151	.814		
	Total	152.000	152			

a. Dependent Variable: OrgPer

b. Predictors: (Constant), HRMp

##### **Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	3.696E-17	.073		.000	1.000
	HRMp	.438	.073	.438	5.981	.000

a. Dependent Variable: HRMp