

INDIVIDUAL VS. BUNDLE HRM PRACTICES: EFFECTS ON SMES' PERFORMANCE

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ABSTRACT This study aims to assess the impact of HRM practices, such as recruitment and selection, training and development, communication and information sharing, compensation and reward, job design, and performance appraisal, on the performance of small and medium-sized enterprises (SMEs). We analyze these practices by examining their individual effects, as well as by strategically combining them to improve SMEs' financial, non-financial, and organizational performance. We employed a quantitative approach to conduct this study, using self-administered questionnaires. The study analyzes data collected from 153 manufacturing SMEs to explore the relationships between HRM practices and SMEs' financial, non-financial, and organizational performance. First, we find that using HRM practices individually has a limited impact on the financial and non-financial performance of SMEs. Next, we find that HRM practices, as a set of bundles, have a direct positive relationship with SMEs' organizational performance. The research findings suggest that SMEs that implement HRM practices as a bundle achieve greater performance and competitive advantage than those that apply them individually. This study makes a valuable contribution to understating the complex relationship between HRM practices and the performance of SMEs in the manufacturing industry.

KEYWORDS: *HRM practices; financial performance; non-financial performance; organizational performance; SMEs.*

1. INTRODUCTION

Companies are always striving to enhance their competitive advantage, outperform their competitors, and position themselves as the top players in their industry (Islami & Topuzovska Latkovikj, 2022). Organizational

culture also plays a key role in this process (Abduraimi et al., 2023). It is crucial for companies to remain aware of the rapidly changing dynamics of the business environment, as market stability can quickly shift to unpredictability (Islami, 2021a). As a result, SMEs that fail to adapt to this changing market trend may experience perfor-

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mance decline (Aksoy, 2017). In this vein, SMEs must invest in human resources (HR), which is the most valuable asset. Numerous studies have emphasized that human resources are a company's most essential resource (Fawcett et al., 2008), particularly for SMEs (Fernandes et al., 2006). The implementation of HRM practices is crucial in SMEs. Although SMEs rarely have HRM departments, significant decisions are typically made unilaterally by the owner or managing director (Fabi et al., 2009). Thus, the form and implementation of HRM strategies differ across SMEs and large enterprises (Taylor & Taylor, 2014). SMEs tend to rely more on informal management practices (Behrends, 2007), because of resource constraints, environmental vulnerability, and concentrated control (Harney et al. 2022), and informal practices are common in areas such as recruitment, training, communication, and performance appraisal. HRM in SMEs has been characterized as 'intuitive', developing in response to external conditions (Buisson et al., 2021). Despite the fact that SMEs typically rely on informal HRM practices, the adoption of formal HRM practices by SMEs can lead to organizational change that has the potential to boost the company's capacity for growth and expansion (Barrett & Mayson, 2007).

A thorough analysis of the research literature reveals that different types of HRM practices contribute individually and as a bundle to improving various aspects of SMEs' performance. Numerous studies have attempted to address the research gap or the so-called "black box" in corporations or SMEs. As a result, many academics have been studying the "black box" or mechanisms by which HR practices influence organizational performance (Huselid, 1995; Sheehan, 2014; Otoo, 2019), financial performance (Allen et al, 2013), and non-financial performance (Ahmad & Schroeder, 2003) of SMEs, filling the research gap on how formal HRM practices in SMEs can lead to organizational growth and improved performance (Barrett & Mayson, 2007). However, the majority of studies concentrate on either individual HRM practices or bundled practices, with scant study comparing the two methods within the context of SMEs. While some studies examine individual HRM practices, they often fail to examine how these practices interact when implemented together as a bundle.

The primary goal of this research is to address this gap by developing a framework that helps SMEs implement HRM practices both individually and collectively. In this regard, we aim to answer the following questions:

- How do individual HRM practices (recruitment and selection, training and development, communication and information sharing, compensation and reward, job design, and performance appraisal) improve financial and non-financial performance?

- How do HRM practices implemented as a bundle improve organizational performance?

To answer the first question, we investigate the causal relationship between HRM practices and SMEs' financial and non-financial performance using seven models with fifteen sub-models. The seven tested models are: (1) control variables (SME size and age), and the following independent variables: (2) recruitment and selection (R&S), (3) training and development (T&D), (4) communication and information sharing (C&I), (5) compensation and reward (C&R), (6) job design (JD), and (7) performance appraisal (PA).

It is critical to examine the relationship between individual HRM practices and SME performance to understand how specific types of HRM practices influence SME performance in the manufacturing industry. To answer the second research question, we used multivariate regression analysis to examine the causal relationship between HRM practices acting as bundles and SMEs' organizational performance.

Examining how HRM practices work individually and in bundles contributes to the existing literature on SME performance. This study offers a new perspective by simultaneously analyzing HRM practices from different perspectives, highlighting their differences, and assessing the significant impact on SME performance. Although previous studies have explored this relationship using various models (e.g., Combs et al., 2006; Allen et al., 2013; Amin et al., 2014; Obasan, 2012; Singh et al., 2017; Wang et al., 2018; Otoo, 2019; Mulolli & Boskovska, 2020; Islami, 2021a; 2021b; Islami & Mulolli, 2021; Islami & Mustafa, 2023; Islami et al., 2023), this study builds on, and significantly enhances those results.

This paper proceeds as follows. The following section investigates and discusses the connections between HRM practices and SMEs' financial, non-financial, and organizational performance. Next, we provide a brief description of the methodology and data analysis procedures. Finally, we present the findings, research implications, conclusions, and limitations.

2. DEVELOPMENT OF A THEORETICAL FRAMEWORK AND HYPOTHESES

Authors frequently advise companies to implement a range of HRM practices. They argue that there can be synergistic effects when these practices complement one another (Islami & Mulolli, 2021). HRM practices are a valuable source of competitive advantage due to the unique alignment and complementarity they offer (Barney, 1997). Implementing HRM practices, either individually or as a comprehensive bundle, significantly improves SMEs' performance and competitiveness in

the business world. Previous studies have examined HRM practices either individually (e.g., Chang & Chen, 2002; Paul & Anantharaman, 2003; Obasan, 2012; Singh et al., 2017; Zakaria et al., 2018; Wang et al., 2018; Ismail et al., 2019; Mulolli & Boskovska, 2020; Islami & Mulolli, 2021; Islami & Mustafa, 2023) or as a group (e.g., Combs et al., 2006; Allen et al., 2013; Amin et al., 2014; Otoo, 2019; Islami, 2021a; 2021b; Islami et al., 2023), as well as their fit with other important factors (Islami, 2021b). Consequently, we propose HRM through the lens of six practices, specifically recruitment and selection, training and development, communication and information sharing, compensation and reward, job design, and performance appraisal.

We also take a comprehensive approach to assessing SME performance:

a) Financial performance: measured through five elements - an increase in return on investment, a rise in product and service sales, an increase in return on sales (ROS), an increase in our company's profit, and a reduction in manufacturing costs.

b) Non-financial performance: measured through six criteria - an improvement in overall product quality, an increase in customer responsiveness, an increase in customer satisfaction with the service, an increase in product delivery speed, an increase in delivery dependability, and a growth in the company's market share.

2.1. HRM practices on financial and non-financial performance of SMEs

Recruitment and selection (R&S) processes play a critical role in the success of SMEs as they help attract employees who align with the company's values and interests (Zheng et al., 2009). Effective recruitment and selection provide businesses with a competitive advantage and strengthen organizational performance (Chen & Cheng, 2012). Several empirical studies have consistently shown that recruitment and selection practices have a significant positive effect on both the financial and nonfinancial aspects of the performance of SMEs. Gamage (2014) found a significant relationship between effective recruitment and selection and positive HR outcomes, which in turn enhance the operational and financial performance of manufacturing SMEs in Japan. Obasan (2012) found that the use of formal and organized recruitment and selection procedures significantly improved the performance of SMEs, based on a sample of 100 businesses.

Thus, we present the following hypotheses:

H_{1a}: *Recruitment and selection have a positive relationship with financial performance of SMEs*

H_{2a}: *Recruitment and selection have a positive relationship with non-financial performance of SMEs*

Training and development (T&D) processes are a method for improving employees' talents, knowledge, and traits (Zheng et al., 2009). T&D plays a significant role on improving overall organizational performance (Khan et al., 2011) and has been shown to positively affect company performance Mulolli et al. (2020). For SMEs, attracting and training high-quality employees is crucial, since limited managerial resources demand significant effort and dedication to reach high service quality (Gamage, 2014). Many authors and studies have highlighted the significant benefits of T&D for SMEs, both in terms of financial and non-financial outcomes. Beaver and Hutchings (2005) found that introducing different training programs enhances learning and improves the overall skills of employees. It is believed that implementing training programs can lead to improved performance in SMEs. In addition, Mulolli and Boskovska (2020) revealed that T&D positively affects SME's financial performance. Thus, we present the following hypotheses:

H_{1b}: *Training and development have a positive relationship with financial performance of SMEs*

H_{2b}: *Training and development have a positive relationship with non-financial performance of SMEs*

Communication and information sharing (C&I) are essential for facilitating the sharing of knowledge and information among employees and departments within a company (Arslan, 2017). Participation in C&I activities or knowledge-sharing activities within SMEs is important as it fosters creativity and innovation, ultimately resulting in enhanced performance (Ngah & Jusoff, 2009). A study of Malaysian SMEs revealed a positive correlation between specific HRM practices and organizational performance, with C&I and selection playing key roles in achieving positive outcomes (Zakaria et al., 2018). Vlachos (2008) discovered a positive relationship between information sharing and market share in Greek manufacturing companies with a minimum of 5 years of operation.

Thus, we present the following hypotheses:

H_{1c}: *Communication and information sharing practices have a positive relationship with financial performance of SMEs*

H_{2c}: *Communication and information sharing practices have a positive effect on the non-financial performance of SMEs*

Compensation and rewards (C&R) are described as both monetary and non-monetary benefits intended to motivate employees to perform effectively in the organization (Youndt et al., 1996). C&R is a system that a company provides to employees in exchange for their willingness to execute various roles and respon-

sibilities within the company (DeNisi & Griffin, 2001). Equitable C&R strategies can motivate employees and improve their effectiveness and efficiency (Singh et al., 2017). Numerous authors and studies have provided evidence to support the claim that C&R has a positive influence on the overall performance of SMEs (Mulolli et al., 2015; Singh et al., 2017; Wang et al., 2018; Islami, 2021a). Paul and Anantharaman (2003) also demonstrated that C&R directly influences non-financial performance.

Thus, we present the following hypotheses:

H_{1d} : *Compensation and rewards have a positive relationship with financial performance of SMEs*

H_{2d} : *Compensation and rewards have a positive relationship with non-financial performance of SMEs*

Job design (JD) refers to the systematic arrangement of tasks, activities, and responsibilities within a work unit in an organization (Opatha, 2002). JD focuses on the activities, duties, and tasks employees must complete and organizing how these tasks are structured and scheduled (Morgeson & Humphrey, 2008). Job design has a substantial impact on many elements of SMEs. Wood et al. (2012) found high-involvement management and enriched work design influenced three performance indicators: job satisfaction, job-related anxiety, and comfort. We can observe the impact of enhanced JD on performance through three key measures: financial performance, labor productivity, and quality. Ismail et al. (2019) also confirmed that JD significantly influences organizational performance.

Thus, we present the following hypotheses:

H_{1e} : *Job design has a positive relationship with financial performance of SMEs*

H_{2e} : *Job design has a positive relationship with non-financial performance of SMEs*

Performance appraisal (PA) is described as a formal system of review and evaluation of individual or team task performance (Mondy, 2010). PA evaluates employees' effectiveness and efficiency (Islami et al., 2018). Effective implementation of PA, aligned with specific objectives, can positively impact job satisfaction, employee satisfaction, employee motivation, and ultimately, the overall quality of working life (Islami & Islami, 2019). Research widely acknowledges significant, financial and non-financial benefits of PA for SMEs. Sabin et al. (2018) found a substantial and significant relationship between PA and organizational performance. Other studies found a positive relationship between PA and the non-financial performance of SMEs (Islami & Mulolli, 2021; Islami & Mustafa, 2023). Similarly, Chang and Chen (2002) reported a substantial relationship between PA and company financial performance.

Thus, we present the following hypotheses:

H_{1f} : *Performance appraisal has a positive relationship with financial performance of SMEs*

H_{2f} : *Performance appraisal has a positive relationship with non-financial performance of SMEs*

2.2. Non-financial performance and financial performance of SMEs

Businesses use non-financial performance measurements to assess the effectiveness or scope of their activities (Warren & Reeve, 2006). The performance measurement literature review underscores the benefits of non-financial measurements, emphasizing their close alignment with a company's strategy (Shank & Govindarajan, 1993). According to Li et al. (2006), competitive advantage arises from capabilities such as lower prices, higher quality, higher dependability, and shorter delivery times, which set a company apart from their competitors (p. 111). When SME managers apply the right strategies at the right time, it provides the organization with the chance to implement meaningful changes, outpace competitors, or even surpass them in favorable aspects within the market (Islami, 2015). In terms of the relationship between non-financial performance and financial performance, research has shown that non-financial performance serves as a leading indicator of financial performance (Bititci et al., 2013). According to Hoque (2005), companies that effectively measure non-financial performance tend to achieve better financial performance. Numerous research studies have shown that companies utilizing non-financial performance measures tend to outperform other companies in terms of financial performance (Huelsbeck et al., 2011; Zhang et al., 2013; Pavlov et al., 2017).

Thus, we present the following hypothesis:

H_3 : *Non-financial performance has a positive relationship with financial performance of SMEs*

2.3. HRM practices and organizational performance of SMEs

The impact of individual HRM practices on company performance is generally considered weaker than that of bundled or system-based HR practices (De Kok & Hartog, 2006). Fundamentally, the synergistic effects surpass the cumulative influence of multiple practices (Jiang et al., 2012). By incorporating bundled HRM practices, SMEs can create a coherent and integrated approach to managing their human capital. Despite their limited resources, SMEs can significantly improve their performance and achievements by implementing effective HRM practices. Many authors and studies have highlighted the impact of HRM practices on the

organizational performance of SMEs (e.g., see Allen et al., 2013; Amin et al., 2014; Islami, 2021b). Combs et al. (2006) conducted a comprehensive meta-analytic evaluation, which demonstrated that high-performance work systems (HPWS) had a greater impact on organizational performance than individual HRM practices. Similarly, Otoo (2019) found that five HRM practices - recruitment and selection, career planning, employee participation, training and development, and performance appraisal, positively affect the overall organizational performance.

Thus, we present the following hypothesis:

H₄: *HRM practices have a positive relationship with the organizational performance of SMEs.*

3. RESEARCH METHODOLOGY

This study adopts a quantitative method with a positivist approach. The study employs a cross-sectional research design and utilizes large-scale questionnaires to investigate potential cause-and-effect relationships between research variables. The data were analyzed using IBM SPSS Statistics v.26.

The sample for our study was drawn from the Kosovo Agency of Statistics (KAS), which maintains an official list of SMEs in Kosovo. From the pool of ten thousand registered SMEs, computer-generated random sampling was applied, with each SME assigned a unique numerical identifier. A total of 300 companies were selected based on two key eligibility criteria: (1) employment size of 10–249 full-time employees (consistent with the EU's SME classification), and (2) availability of up-to-date contact information (Mulolli, 2024). The data was collected through an online questionnaire, with SMEs invited to participate in the survey via mail, telephone, or online channels. A range of statistical tests was applied to explore different aspects of the data and to validate the study's hypotheses. These included descriptive statistics, tests of convergent and discriminant validity, t-tests, ANOVA, correlation matrices, hierarchical linear regression, and multivariate linear regression. This methodological approach aligns with the procedures used in Mulolli's (2024) PhD thesis.

3.1. The conceptual framework and research model

To clarify the study's theoretical foundation, this section introduces the conceptual framework and research model. Figure 1 shows the relationships between the variables in the present study and outlines the research framework. The conceptual diagram illustrates the study's hypotheses, showing the proposed relationships between variables. This text also guides the testing process aimed at understanding the rela-

tionship between variables. The objective is to develop a typology or model that depicts the typical interconnections between variables in the current framework. The current study's conceptual framework encompasses four primary variables: a) HRM practices; b) financial performance; c) non-financial performance; and d) organizational performance of SMEs. The variables under consideration comprise multiple constructs or dimensions, each formed by a set of items.

The questionnaires was designed using an interdisciplinary approach, considering a relational perspective, focusing on two key tools: HRM practices and SME performance. These instruments represent two different strategic perspectives within the company's context. When existing literature did not provide valid and consistent measures, new items were developed based on the author's understanding of the concepts, observations from company visits, and interviews with senior-level managers and academics. Appendix 1 displays the constructs and measurements used in the present study.

Validated scales were adopted from prior studies to measure HRM practices, non-financial performance, and financial performance. Sources included: (a) Ahmad and Schroeder (2002), Amin et al. (2014), Arslan (2017), Iqbal (2015), Islami (2021a, b), Islami and Mulolli (2024a, b), Lee et al. (2010), Otoo (2019), and Singh (2004) for HRM practice; (b) Alves and Lourenço (2022), Islami (2021a, b), Huo et al. (2014), and Mulolli et al. (2024) for non-financial performance; and (c) Flynn et al. (2010), Gölgeci and Kuivalainen (2020), Islami (2021a, b), Huo et al. (2014), and Qi et al. (2011) for financial performance. 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 (Islami, 2021a, b; Islami, & Mulolli, 2024b). The participants provided their responses on a Likert-type scale with five points, ranging from 1 ("not at all") to 5 ("to an extreme extent"), (e.g., Abduraimi et al., 2024; Islami, & Mulolli, 2024b). The questionnaire was first prepared in English and reviewed by a highly experienced Kosovar management professor before being translated into Albanian to ensure its reliability. Then, an English professor and an English-speaking HRM professor back translated it before being translated into Albanian. The back-translated version was compared to the original English version to identify any inconsistencies and the Albanian items were adjusted to match their English equivalents.

3.2. Data

The study's sampling frame was acquired from the Kosovo Agency of Statistics (KAS) registry. KAS, founded in 1948, is Kosovo's official national statistics

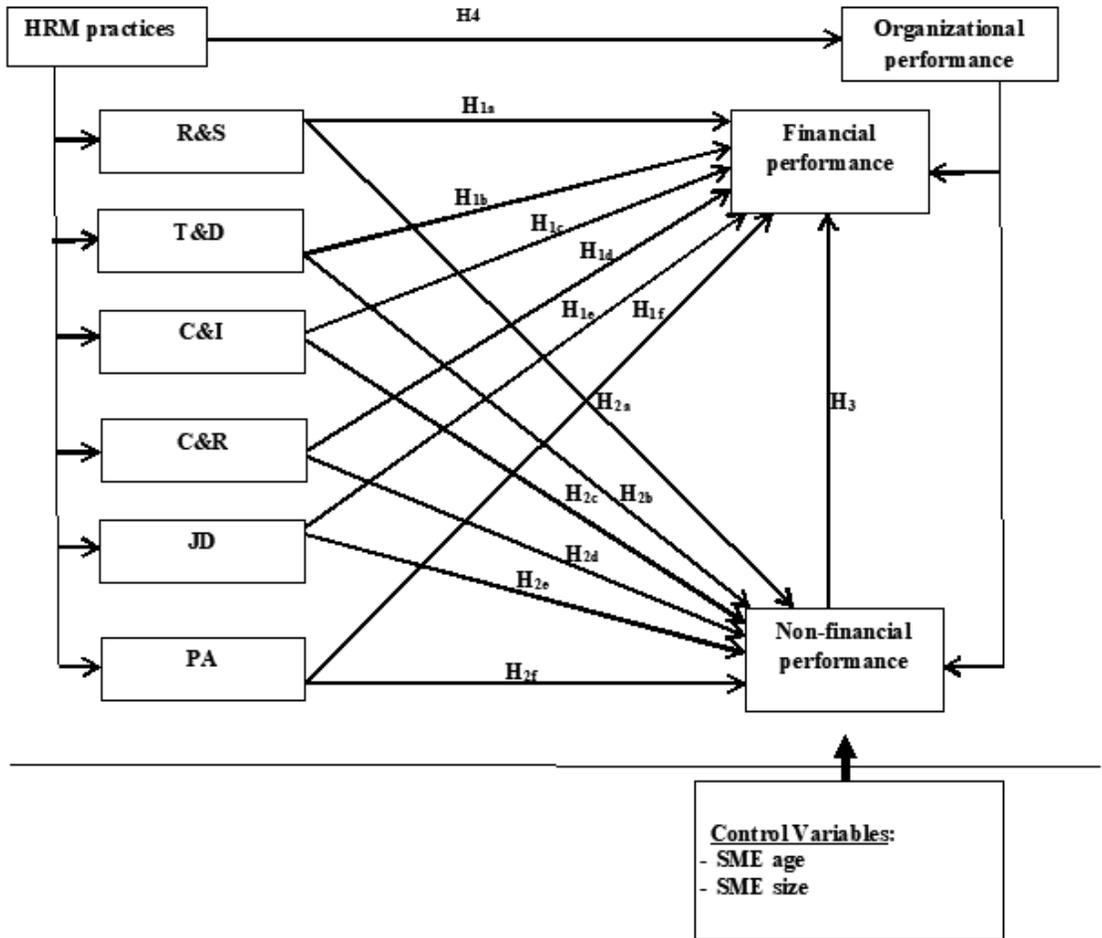


FIGURE 1. Conceptual framework of the study used to test the variables.

bureau. Based on our selection criteria, we randomly selected 300 companies from a pool of ten thousand SMEs registered with KAS. The questionnaires were completed by high- and middle-level managers with broad responsibilities in SMEs. These managers provided authoritative responses to questions about HRM practices, as well as the financial and non-financial performance of SMEs. The survey relied on the subject approach, based on respondents' self-evaluation. The data was collected between March and May 2023.

The cover letter that accompanied the questionnaires effectively communicated the study's objectives, ethical considerations, data confidentiality, and potential contributions to the participants. Implementing follow-up phone calls and mailings, as suggested by Frohlich (2002) and Islami (2021a) resulted in a noticeable increase in the response rate. The final

sample consisted of 153 responses, representing a 51% response rate. This indicates satisfactory participation. Strategies were implemented to minimize possible non-response bias that could have occurred throughout the data gathering process. Following Podsakoff et al. (2003), the robust response rate suggests that the sample is representative of the surveyed companies. However, caution is required when generalizing to the broader SME population due to the limited sample size.

Table 1 summarizes the key characteristics of the manufacturing SME sample. Most respondents were from the construction and food sectors. The majority (61%) employed fewer than 49 workers, 48% reported over 20 years of business experience, and 27.5% of participants were SME owners. Half of the SMEs reported annual revenues between €1 million and €10 million in 2022.

TABLE 1 Characteristics of sample SMEs (N = 153)

| Characteristics | | Number | Percent (%) |
|------------------------------------|--|--------|-------------|
| Industry sector | | | |
| a) Food | | 30 | 19.6 % |
| b) Textile | | 11 | 7.2 % |
| c) Construction | | 42 | 27.5 % |
| Chemical | | 4 | 2.6 % |
| d) Other | | 66 | 43.1 % |
| Number of employees | | | |
| 10–49 | | 94 | 61.4 % |
| 50–249 | | 59 | 38.6 % |
| Company age | | | |
| ≤10 | | 35 | 22.9 % |
| 11–20 | | 45 | 29.4 % |
| >20 | | 73 | 47.7 % |
| Role in SMEs | | | |
| 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 % |
| Annual revenue (2022 value) | | | |
| ≤ €1 million | | 64 | 41.8 % |
| €1 million–10 million | | 76 | 49.7 % |
| >€10 million | | 13 | 8.5 % |

SOURCE: The first author's doctoral dissertation

3.3. Construct validation

The exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were conducted to assess the validity and reliability of the first-order variables. The data analysis followed several steps. To establish scale unidimensionality, exploratory factor analysis (EFA) was conducted in order to establish the research constructs. The underlying dimensions were

identified using a principal component factor analysis with varimax rotation. For convenience, Appendix 1 only displays loadings greater than 0.50 (>.50) (Hair et al., 2019).

A factor analysis of HRM practices (HRMp) using the 30 questions that assess the six factors (first-order constructs) was initially conducted. An early factor analysis revealed that components RecSel_1, ComInfo_4, and ComRew_5 had a low loading on their re-

TABLE 2 Means, standard deviations and reliability of the first-order constructs of (a) HRM practices, (b) organizational performance of SMEs

| Construct | # Items | Cronbach's alpha (reliability) | Mean | St. Dev. |
|--|---------|--------------------------------|-------|----------|
| (a) HRM practices | | | | |
| 1. Recruitment and selection (R&S) | 4 | .653 | 4.098 | .852 |
| 2. Training and development (T&D) | 5 | .787 | 3.571 | 1.120 |
| 3. Communication and information (C&I) | 4 | .632 | 4.239 | .896 |
| 4. Compensation and reward (C&R) | 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) Organizational performance of SME | | | | |
| 1. Non-financial performance (NFP) | 6 | .852 | 4.438 | .688 |
| 2. Financial performance (FP) | 5 | .746 | 3.620 | 1.036 |

SOURCE: The first author's doctoral dissertation

TABLE 3 Convergent and discriminant validity of the first-order constructs.

| Construct | CR ^a | AVE ^b |
|-----------|-----------------|------------------|
| R&S | .863 | .621 |
| T&D | .865 | .567 |
| C&I | .784 | .581 |
| C&R | .858 | .603 |
| JD | .781 | .520 |
| PA | .884 | .604 |
| Construct | CR | AVE |
| NFP | .893 | .584 |
| FP | .851 | .538 |

SOURCE: The first author's doctoral dissertation

^a Composite reliability. SOURCE: The first author's doctoral dissertation ^b Average variance extracted.

spective factors. After deleting these three items, the twenty-seven remaining items were factor analyzed, and the findings showed that all items loaded on their respective factors with loadings greater than the recommended cut-off value of .45 (the majority of items loaded above 0.60). The data's adequacy was confirmed by conducting the KMO and Bartlett tests, as indicated by the results presented in Appendix 1. The study of the organizational performance of small and medium-sized businesses with two factors (first-order constructs) used 11 items at first. All of them passed the low-loading test, and as you can see in Appendix 1, they all loaded on their respective factors, with most

loadings above .70. The KMO and the Bartlett test results confirmed the data's adequacy.

The next step involved computing the reliability test for each construct. The reliability of HRM practices and the organizational performance of SME was tested using Cronbach's alpha. Table 2 reports the number of items, reliability values, means, and standard deviations. Following Shi et al. (2012), acceptable alpha values range between 0.6 and 0.8. All constructs exceeded the threshold of 0.6, confirming their reliability.

The CFA measurement models were then utilized to assess first-order construct validity (Gölgeci & Kuivalainen, 2020). The results showed that the

TABLE 4 Correlation matrix of the main variables used in hierarchal regression (N = 153)

| Variables | R&S | T&D | C&I | C&R | JD | PA | FP | NFP | SAge | SSize |
|-----------------------|--------|--------|--------|--------|--------|--------|--------|-------|------|-------|
| R&S | 1 | | | | | | | | | |
| T&D | .381** | 1 | | | | | | | | |
| C&I | .388** | .478** | 1 | | | | | | | |
| C&R | .335** | .226** | .439** | 1 | | | | | | |
| JD | .354** | .407** | .472** | .393** | 1 | | | | | |
| PA | .370** | .521** | .591** | .545** | .509** | 1 | | | | |
| FP | .172* | .145 | .179* | .114 | .195 | .289 | 1 | | | |
| NFP | .310* | .279** | .395** | .399** | .388** | .353** | .443** | 1 | | |
| SME age ^a | .018 | .082 | .112 | .131 | .31 | .060 | .114 | -.002 | 1 | |
| SME size ^b | -.042 | .024 | .009 | -.031 | .096 | .043 | .173* | .016 | .039 | 1 |

SOURCE: The first author's doctoral dissertation

*p < 0.05; **p < 0.01.

^aLog of number of years since establishment.

^bLog of number of employees

TABLE 5 Correlation matrix of the main variables used in multivariate regression (N = 153)

| Variables | HRMp | OrgPer (OP) | SME age | SME size |
|-----------------------|--------|-------------|---------|----------|
| HRMp | 1 | | | |
| OrgPer (OP) | .438** | 1 | | |
| SME age ^a | .100 | .066 | 1 | |
| SME size ^b | .026 | .172 | .039 | 1 |

SOURCE: The first author's doctoral dissertation

*p < 0.05; **p < 0.01.

^aLog of number of years since establishment.

^bLog of number of employees

CR and AVE values for all constructs exceeded the recommended thresholds of 0.7 and 0.5 confirming convergent validity (Bagozzi & Yi, 2012).

Table 3 summarizes the convergent and discriminant validity evaluations for the first-order constructs.

4. HYPOTHESES TESTING

Tables 4 and 5 display the correlations between the main constructs. The correlation between variables was significant and below the 0.7 limit. The study found that the variance inflation factors (VIFs) of the

variables associated with HRM practices and SME performance were less than 10. This means that multicollinearity is not a concern (Hoejmose et al., 2013).

A hierarchical multiple regression analysis was conducted to investigate the direct effects of: HRM practices on financial performance; HRM practices on non-financial performance; non-financial performance on financial performance; and a multivariate regression analysis was used to investigate the direct effects of HRM practices as a bundle on organizational performance of SMEs. Seven models, with fifteen sub-models, were built to test the study's hypotheses. The control variables SME size and SME age were in-

cluded in Model I. The independent variable R&S was added in Model II. The independent variable T&D was added in Model III. The independent variable C&I was added in Model IV. The independent variable C&R was added in Model V. The independent variable JD was added in Model VI. The independent variable PA was added in Model VII. The independent variable NFP was added in sub-Model 7c. The regression findings are presented in Table 6, 7, and 8.

Model I tests the relationship between the control variables and financial and non-financial performance of SMEs. Sub-Model 1a reveals a strong and positive link between SME age and 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 ($p > .10$). Sub-Model 1b, which examines the link between control variables and non-financial performance, shows that SME age is non-significant and negatively related to non-financial performance ($p > .10$). Although SME size has a positive link with non-financial performance, it does not reach statistical significance ($p > .10$).

Model II measures the direct impact of R&S on financial and non-financial performance of SMEs. In Sub-Model 2a, where the R&S variable is added to Sub-Model 1a, the results show that R&S is positively and significantly related to financial performance ($p < 0.05$). In this vein, Sub-Model 2a provides evidence to support H_{1a} ($H_{1a} \uparrow$). Sub-Model 1a's explanatory power improves significantly, as evidenced 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 R&S plays a significant role in the financial performance of the manufacturing SMEs. In Sub-Model 2b, R&S variable was added to Sub-Model 1b, the results show that recruitment and selection is positively and significantly related to non-financial performance ($p < 0.001$). In this vein, Sub-Model 2b provides evidence to support H_{1b} ($H_{1b} \uparrow$). The inclusion of R&S 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 R&S plays a significant role in non-financial performance of the manufacture SMEs.

Model III tests the relationship between T&D and financial and non-financial performance of SMEs. In Sub-Model 3a, the T&D variable was added to Sub-Model 2a, the results show non-significant positive effect for T&D ($\beta = .076$, $p > 0.10$) on financial performance. Thus, hypothesis H_{1c} was not supported ($H_{1c} \downarrow$). Sub-Model 3b measures the direct effect of T&D on non-financial performance, this variable was added to Sub-Model 2b, which marginally changed the explanatory power of Sub-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 T&D has a significant positive influence on non-financial performance ($\beta = .189$, $p < 0.05$), thus supporting H_{2b} ($H_{2b} \uparrow$).

Model IV examines the impact of C&I on both the financial and non-financial performance of SMEs. In Sub-Model 4a, the C&I variable was added to Sub-Model 3a. The results additionally show that C&I has a non-significant positive influence on financial performance ($\beta = .102$, $p > .10$), thus H_{1c} was not supported ($H_{1c} \downarrow$). In Sub-Model 4b the C&I variable was added to Model 3b, the F-test for the change in adjusted R^2 shows a substantial improvement in Sub-Model 3b's explanatory power ($R^2 = 6.4\%$, $F > 6.963$, $p < 0.01$) and it is therefore clear that C&I plays a significant role in non-financial performance of manufacturing SMEs. Additionally, the result shows that C&I has a significant positive influence on non-financial performance ($\beta = .299$, $p < 0.01$). Therefore, H_{2c} is accepted ($H_{2c} \uparrow$).

Model V measures the direct effect of C&R on financial and non-financial performance of SMEs. In Sub-Model 5a, the C&R variable was added to Sub-Model 4a it. The results also indicate that C&R has a non-significant positive influence on financial performance ($\beta = .017$, $p > .10$). Thus, hypothesis H_{1d} was not supported ($H_{1d} \downarrow$). In Sub-Model 5b, which introduces the C&R variable to Sub-Model 4b, the F-test for adjusted R^2 ($R^2 = 5.3\%$, $F > 7.869$, $p < 0.01$) revealed a marginally significant change in Sub-Model 4b explanatory power. Furthermore, the results reveal a significant and positive influence of C&R on non-financial performance ($\beta = 0.263$, $p < 0.01$). Therefore, hypothesis H_{2d} is accepted ($H_{2d} \uparrow$).

Model VI examines the impact of JD on financial and non-financial performance of SMEs. In Sub-Model 6a, the JD variable was added to Sub-Model 5a, the regression results show that JD has a non-significant positive influence on financial performance ($\beta = .098$, $p > .10$). Therefore, hypothesis H_{1e} was not supported ($H_{1e} \downarrow$). In Sub-Model 6b, the JD variable was added to Sub-Model 5b, changing its explanatory power as evidenced by the F-test for the change in adjusted R^2 ($R^2 = 1.9\%$, $F > 7.415$, $p < 0.10$). Additionally, the results indicate that JD has a marginally significant influence on non-financial performance ($\beta = .169$, $p < 0.10$). In this vein, Sub-Model 6b provides evidence to support H_{1e} ($H_{1e} \uparrow$).

Model VII tests the relationship between PA and financial and non-financial performance of SMEs as well as the impact of non-financial performance on financial performance. In Sub-Model 7a, the PA variable was added to Sub-Model 6a. This improved its explanatory power, as evidenced 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 PA plays a significant role in

TABLE 6 Results of hierarchical regression analysis on financial performance (N = 153) ^a

| Dependent Variable | Financial Performance (FP) | | | | | | | | | | | | | | | |
|-----------------------------------|----------------------------|------------------------|----------------------|------------------------|---------------------|------------------------|---------------------|------------------------|--------------------|------------------------|--------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | Model 1a | | Model 2a | | Model 3a | | Model 4a | | Model 5a | | Model 6a | | Model 7a | | Model 7c | |
| | β | (t-value) ^b | β | (t-value) ^b | β | (t-value) ^b | β | (t-value) ^b | β | (t-value) ^b | β | (t-value) ^b | β | (t-value) ^b | β | (t-value) ^b |
| SS ^c | .108 | (1.346) | .104 | (1.320) | .099 | (1.245) | .091 | (1.143) | .089 | (1.114) | .094 | (1.170) | .105 | (1.331) | .134 | (1.862) [*] |
| SA ^d | .168 | (2.104) ^{**} | .176 | (2.226) [*] | .173 | (2.187) [*] | .172 | (2.179) [*] | .173 | (2.177) [*] | .163 | (2.034) [*] | .153 | (1.953) [*] | .148 | (2.078) [*] |
| R&S | | | .178 | (2.252) [*] | .149 | (1.742) [*] | .124 | (1.406) | .121 | (1.334) | .109 | (1.197) | .105 | (1.176) | .062 | (.761) |
| T&D | | | | | .076 | (.882) | .037 | (.400) | .038 | (.405) | .018 | (.189) | -.060 | (-.616) | -.087 | (-.972) |
| C&I | | | | | | | .102 | (1.090) | .095 | (.961) | .072 | (.703) | -.003 | (-.032) | -.081 | (-.843) |
| C&R | | | | | | | | .017 | (.187) | -.004 | (-.043) | -.097 | (-.995) | -.205 | (-2.257) [*] | |
| JD | | | | | | | | | | .098 | (1.019) | .054 | (.556) | -.026 | (-.294) | |
| PA | | | | | | | | | | | | .296 | (2.586) ^{***} | .307 | (2.947) ^{**} | |
| NFP | | | | | | | | | | | | | | .461 | (5.609) ^{***} | |
| R ² | .041 | | .073 | | .078 | | .085 | | .085 | | .092 | | .132 | | .289 | |
| Adjusted R ² | .029 | | .054 | | .053 | | .054 | | .048 | | .048 | | .084 | | .244 | |
| Change in adjusted R ² | | | .032 | | .005 | | .007 | | .000 | | .007 | | .040 | | .157 | |
| p-value for R ² change | .042 | | .026 | | .379 | | .278 | | .852 | | .310 | | .011 | | .000 | |
| Model F | 3.235 ^{**} | | 3.906 ^{***} | | 3.119 ^{**} | | 2.736 ^{**} | | 2.271 [*] | | 2.095 [*] | | 2.742 ^{**} | | 6.448 ^{***} | |

SOURCE: The first author's doctoral dissertation

^a The coefficients are standardized regression coefficients.

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

^c Log of number of employees.

^d Log of number since SME establishment.

Note that for the change in adjusted R² and F-test change in adjusted R², Model 2a is compared with Model 1a.

financial performance of the manufacture SMEs. Additionally, the results show that PA has a significant positive influence on financial performance ($\beta = .296$, $p < 0.05$), thus supporting H_{1f} ($H_{1f} \uparrow$). In Sub-Model 7b, the PA variable was added to Sub-Model 6b, based on the regression results PA has a non-significant negative influence on non-financial performance ($\beta = -.023$, $p > .10$), thus H_{2f} is rejected ($H_{2f} \downarrow$). Sub-Model 7c was added to Sub-Model 6a in order to measure the direct effect of non-financial performance variable on financial performance. This significantly improved its explanatory power, as evidenced by the F-test for the change in adjusted R² ($R^2 = 15.7\%$, $F > 6.448$, $p < 0.001$). The regression results show that non-financial performance is positive and significantly related to financial performance ($p < 0.001$), thereby providing strong evidence for H_3 ($H_3 \uparrow$), as shown in Table 6.

We conducted a multivariate regression analysis to evaluate the influence of the independent variable

on the dependent variable, specifically the *organizational performance of SMEs*. Table 8 presents the regression analysis. The regression analysis reveals that the independent variable, *organizational performance of SME*, accounts for 18.6% of the dependent variable. The F value is 35.769 (sig. 0.001), indicating that the model possesses statistical significance at the 0.05 level of significance. The independent variable *HRM practices* has a strong positive relationship with the dependent variable *organizational performance of SME*. It predicts organizational performance with an accuracy of 43.8% ($b = 0.438$ and $p = 0.000$). This suggests that a 1% change in the application of HRM practices will result in a significant 43.8% impact on organizational performance. Based on the findings, *HRM practices* are positively and significantly connected to *organizational performance of SME*, providing strong support for the H_4 ($H_4 \uparrow$), as shown in Table 8.

TABLE 7 Results of hierarchical regression analysis for non-financial performance (N = 153) ^a

| Dependent Variable | | Non- Financial Performance (FP) | | | | | | | | | | | | |
|-----------------------------------|----------|---------------------------------|----------|------------------------|----------|------------------------|----------|------------------------|----------|------------------------|----------|------------------------|----------|------------------------|
| Variables | Model 1b | | Model 2b | | Model 3b | | Model 4b | | Model 5b | | Model 6b | | Model 7b | |
| | β | (t-value) ^b | β | (t-value) ^b | β | (t-value) ^b | β | (t-value) ^b | β | (t-value) ^b | β | (t-value) ^b | β | (t-value) ^b |
| SS ^c | -.003 | (-.035) | -.009 | (-.115) | -.023 | (-.297) | -.046 | (-.613) | -.069 | (-.953) | -.062 | (-.851) | -.062 | (-.859) |
| SA ^d | .016 | (.196) | .029 | (.375) | .022 | (.289) | .020 | (.269) | .028 | (.383) | .010 | (.143) | .011 | (.152) |
| R&S | | | .312 | (3.998)*** | .239 | (2.877)** | .167 | (2.006)* | .113 | (1.377) | .093 | (1.136) | .094 | (1.136) |
| T&D | | | | | .189 | (2.271)* | .076 | (.874) | .085 | (1.005) | .051 | (.597) | .057 | (.633) |
| C&I | | | | | | | .299 | (3.410)*** | .202 | (2.244)* | .162 | (1.760)* | .167 | (1.745)* |
| C&R | | | | | | | | | .263 | (3.197)** | .227 | (2.719)** | .234 | (2.598)** |
| JD | | | | | | | | | | | .169 | (1.946)* | .173 | (1.947)* |
| PA | | | | | | | | | | | | | -.023 | (-.216) |
| R ² | .000 | | .097 | | .128 | | .191 | | .244 | | .264 | | .332 | |
| Adjusted R ² | -.013 | | .079 | | .104 | | .164 | | .213 | | .228 | | .084 | |
| Change in adjusted R ² | | | .097 | | .030 | | .064 | | .053 | | .019 | | .040 | |
| p-value for R ² change | .981 | | .000 | | .025 | | .001 | | .002 | | .054 | | .011 | |
| Model F | .019 | | 5.344** | | 5.408** | | 6.963*** | | 7.869*** | | 7.415** | | 2.742** | |

SOURCE: The first author's doctoral dissertation

^a The coefficients are standardized regression coefficients.

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

^c Log of number of employees.

^d Log of number since SME establishment.

Note that for the change in adjusted R² and F-test change in adjusted R², Model 2a is compared with Model 1a.

TABLE 8 Regression analysis for the dependent variable *Organizational performance of SMEs*, (N = 153)

| Model | R ² | ΔR^2 | β | b | S.E | F | t | p |
|------------|----------------|--------------|---------|-------|------|--------|-------|-------|
| (Constant) | .192 | .186 | | 3.696 | .073 | 35.769 | .000 | 1.000 |
| HRMp | | | .438 | .438 | .073 | | 5.981 | .000 |

SOURCE: The first author's doctoral dissertation

Note: b = Unstandardized Coefficients, SE = standard error of variable,

B = standardized coefficients, t = t-statistic, p = significance level. R² = square, ΔR^2 = adjusted R square.

The multivariate regression analysis demonstrates a statistically significant and favorable relationship between SMEs' implementation of bundle HRM practices and organizational performance. This finding

supports and demonstrates that changes in HRM practices can exert a substantial influence on the performance of small and medium-sized companies.

TABLE 9 Hypotheses test results

| Hypotheses - (Path) | Results |
|--|------------------------------|
| <i>Direct effects</i> | |
| H_g : HRM practices → Organizational performance of SME | Supported |
| H_{1a} : R&S → Financial performance | Supported |
| H_{1b} : T&D → Financial performance | Rejected |
| H_{1c} : C&I → Financial performance | Rejected |
| H_{1d} : C&R → Financial performance | Rejected |
| H_{1e} : JD → Financial performance | Rejected |
| H_{1f} : PA → Financial performance | Supported |
| H_{2a} : R&S → Non-financial performance | Supported |
| H_{2b} : T&D → Non-financial performance | Supported |
| H_{2c} : C&I → Non-financial performance | Supported |
| H_{2d} : C&R → Non-financial performance | Supported |
| H_{2e} : JD → Non-financial performance | Supported |
| H_{2f} : PA → Non-financial performance | Rejected |
| H₃ : Non-financial performance → Financial performance | Supported |
| <i>Control paths</i> | <i>Coefficient (t-value)</i> |
| SME size → Financial performance | .108 (1.346)* |
| SME age → Financial performance | .168 (2.104)* |
| SME size → Non-financial performance | -.003 (-.035) |
| SME age → Non-financial performance | .016 (.196) |

SOURCE: The first author's doctoral dissertation

5. DISCUSSION AND RESEARCH IMPLICATIONS

5.1. Theoretical contributions

The current research study investigated the relationship between HRM practices and their impact on both financial and non-financial performance, as well as SMEs' organizational performance. The goal of this study was to expand and enrich previous studies' strategic literature by shedding light on the intricate interplay between HRM practices and multiple dimensions of SME performance. By examining the relationships between HRM practices and financial and non-financial performance as individual aspects and organizational performance as a holistic approach, this study expands our theoretical comprehension of the ways in which HRM impacts the performance of SMEs. The results indicated that HRM practices as a bundle had a significant and positive impact on SMEs' organizational performance, whereas HRM practices as individ-

ual practices had a partially positive relationship with SMEs' financial and non-financial performance.

The results of this study are consistent with prior findings on the organizational performance of small and medium-sized businesses (see Huselid, 1995; Tsai et al., 2010; Allen et al., 2013; Amin et al., 2014; Otoo, 2019), their financial performance (see Arunprasad, 2017; Mulolli & Boskovska, 2020; Islami, 2021a, b; Zakaria et al., 2018; Manresa et al., 2019), and their non-financial performance (see Ahmad & Schroeder, 2003; Lee et al., 2010; Islami et al., 2023). The study offers significant insights into the management literature, making it a valuable resource for future research. Incorporating the role of strategic instruments in organizational success highlights the theoretical significance of the research and enhances the perception of strategic management. This integration not only broadens the theoretical framework but also deepens our understanding of how these instruments impact SMEs' outcomes.

5.2. Empirical contributions

This study presents empirical evidence on the direct impact of different HRM practices on the financial and non-financial performance of SMEs. The HRM practices examined include recruitment and selection, training and development, communication and information sharing, compensation and reward, job design, and performance appraisal.

Additionally, the study explores the overall effect of bundling these HRM practices on SME performance. This contributes to the theoretical understanding of how specific and bundled HRM practices impact organizational outcomes in smaller companies. This study has implications for managers because it lays the groundwork for developing a strategy model based on combining strategic instruments. The goal is to help small businesses grow by using HRM practices correctly as a group, which could have a positive effect, or to examine what happens to companies' financial and non-financial performance when they use individual HRM practices.

5.3. Managerial implications

The study's managerial implications show that certain SMEs highlight the necessity of recognizing and properly integrating a set of HRM practices, which can lead to improved organizational performance. The combined effect of HRM practices working together has a greater influence on organizational performance.

Understanding the synergistic effects of these practices allows managers to select and implement a combination of HRM practices that match the company's strategic goals while also improving organizational performance. Therefore, managers should consider a variety of HR practices when strategizing the implementation of a set of HRM practices.

In the recruitment process, they should select highly skilled candidates who match the job requirements; enhance employee skills and minimize resistance to implementing organizational tasks by organizing suitable training programs; improve communication by informing employees that the company is sharing information about its circumstances, goals, and strategies; design job duties that involve employees in purposeful work-related activities that are in line with the organization's goals; use performance appraisal systems to develop, motivate, and evaluate employees by examining their attitudes and behaviors, setting clear objectives, providing feedback, and finding areas for improvement or recognition; and foster a culture of ongoing employee learning.

Second, when examined separately, specific HRM practices such as training and development, communication and information sharing, compensation and reward, and job design did not show a significant re-

lationship with financial performance. This finding suggests that SMEs in the manufacturing industry may view investment in HRM practices as an added expense that increases the company's financial burden. It is important for managers to acknowledge the valuable benefits that well-implemented HRM practices can offer to small and medium-sized enterprises. Investing in HRM practices is not merely an additional expense. Rather, it should be recognized as a means to enhance return on investment, augment sales, enhance profitability, and accomplish other financial performance objectives.

Third, the study reveals a noteworthy relationship between specific HRM practices and non-financial performance in SMEs within the manufacturing sector. When HRM practices are properly aligned with the organization's strategy, they can have a significant and measurable impact on different aspects of non-financial performance. As a result of this alignment, the study suggests that companies can achieve several positive outcomes, such as improvements in product quality, increased responsiveness to customers, higher customer satisfaction, faster product delivery, enhanced delivery dependability, and increased market share growth. Managers must regularly evaluate the impact of HRM practices on both financial and non-financial performance metrics.

Fourth, the study findings highlight the critical importance of HRM practices in the manufacturing industry, where attracting and retaining skilled talent is a key driver of company success. In this sector, skilled workers, along with advanced technology, provide the cornerstone of competitive advantage. Therefore, managers in the manufacturing industry must adopt an industry-specific strategic approach to HRM practices. The findings also provide valuable insights into the ways in which specific HRM practices contribute more effectively to company performance. By assessing the impact of HRM practices within the context of industry characteristics, managers can measure the effectiveness of HRM practices and identify areas for improvement by implementing effective evaluation practices, which in turn leads to continuous improvement in organizational performance.

6. CONCLUSION

This study employs an interdisciplinary approach to thoroughly examine the direct effects of HRM practices (individually or from a bundle perspective) on SMEs' performance, including financial, non-financial, and organizational performance.

The study addresses three research questions: (a) Do SMEs that implement HRM practices individu-

ally experience improved financial performance? (b) Do SMEs that implement HRM practices see individual improvements in non-financial performance? (c) Do SMEs that implement a bundle of HRM practices achieve better organizational performance? We developed a comprehensive, valid, and reliable instrument for assessing research variables. We put the instrument through rigorous statistical tests, such as convergent validity, discriminant validity, reliability, construct validity, hierarchical regression analysis, and multivariate regression analysis.

This study presents empirical evidence that individual HRM practices have a partial impact on the financial and non-financial performance of SMEs. Our hierarchical regression analysis has determined that T&D, C&I, C&R, and JD have a non-significant positive effect on financial performance, whereas R&S and PA have a positive and significant effect on the financial performance of SMEs. On the other hand, R&S, T&D, C&I, C&R, and JD have a positive and significant effect on non-financial performance, whereas PA has a non-significant role in SMEs' non-financial performance.

HRM practices, as a set of bundles, have a direct positive relationship with SMEs' organizational performance. The research findings suggest that SMEs that use HRM practices as a bundle have a greater impact on SME performance and competitive position than SMEs that use HRM practices individually.

The findings of this study greatly enhance our understanding of how HRM practices impact the performance of SMEs. Additionally, it offers valuable insights and practical guidance for organizational managers, particularly those in HR roles. Furthermore, this study provides a significant academic contribution (Mustafa et al., 2022), especially in the field of comprehending the relationship between HRM practices (from an individual or bundled perspective) and their impact on the performance of SMEs in the manufacturing sector in Kosovo, as well as in the broader region and beyond.

6.1. Limitation and future research

Although this research study has made significant contributions, it does have some limitations. The limitations also create opportunities for future research studies.

First, the study employed subjective measures to assess HRM practices, financial and non-financial performance, and organizational performance. The current design of this study may limit causal inference among measures of HRM practices and financial and non-financial performance indicators. Utilizing performance data from the previous year helps improve the current analysis. However, future research could

use longitudinal or experimental approaches to gain a better understanding of the long-term relationships between HRM practices and SME performance.

Second, we used a quantitative research design to analyze the data collected through structured questionnaires. Future studies should incorporate both quantitative and qualitative data. The inclusion of both qualitative and quantitative approaches would enhance the depth and value of the findings and interpretations (Remenyi et al., 2005).

Third, the study is limited by its relatively small sample size of 153 SMEs. Considering a population of 10,000 SMEs, the recommended threshold for a representative sample typically exceeds 370 SMEs. Although the findings provide useful implications, the limited sample may not fully represent the broader SME population, thereby restricting the generalizability of the results. Future research should aim to validate and expand upon these findings by employing a larger and more representative sample of SMEs, which would strengthen the robustness and generalizability of the results of this study.

Fourth, this study only investigated the direct link between HRM practices, financial and non-financial performance, and SMEs' organizational performance. Future research could explore mediating relationships between various factors, such as the impact of innovation and employee performance, on the relationship between HRM practices and organizational performance. Exploring these mediating effects would provide deeper insights into how HRM practices influence the performance outcomes of SMEs.

Fifth, this study does not explicitly address the sociological aspect, particularly the interplay between strategic and administrative HRM and organizational culture. These concepts are implicitly included in the study, but they are not thoroughly examined. For instance, the strategic HRM approach is reflected in the analysis of bundled HRM practices and their impact on organizational performance, particularly in terms of gaining a competitive advantage. Similarly, administrative HRM and organizational culture are addressed indirectly by examining individual HRM practices such as voluntary or legally mandated initiatives, routine operational tasks, and reward systems that promote stability or foster creativity, ultimately influencing SMEs' financial and non-financial performance. Future research could address this gap by investigating the triadic relationship between strategic HRM, administrative HRM, and organizational culture, examining whether these factors have a direct or mediating effect on SME performance.

Sixth, this study focused on SMEs, recognizing their distinct role in the business environment. The current study did not cover the incorporation of HRM

practices in a wider range of organizations, including large corporations, micro-companies, startups, and non-profit organizations. Examining HRM practices across various organizational types could provide valuable insights into the distinct challenges and opportunities they encounter.

Seventh, this study's findings may be limited to the Kosovar context. The effectiveness of HRM practices and performance measures can vary significantly depending on factors such as industry, company size, and geographical location. Future research could explore how HRM practices influence performance outcomes in different industries, company sizes, and countries. Studying and comparing HRM-performance relationships across different cultures and contexts would greatly improve our understanding.

REFERENCES

1. Abduraimi, P. B., Mustafi, M., & Islami, X. (2023). The role of organizational culture on employee engagement. *Business: Theory and Practice*, 24(1), 109122. <https://doi.org/10.3846/btp.2023.17241>
2. Abduraimi, P. B., Bilalli, M., Islami, X., & Maçani, F. (2024). Does internal organization communication enhance employee engagement?. *Economic Studies*, 33(3), 144–165.
3. Ahmad, S., & Schroeder, R. G. (2002). The importance of recruitment and selection process for sustainability of total quality management. *International Journal of Quality & Reliability Management*, 19(5), 540–550. <https://doi.org/10.1108/02656710210427511>
4. Ahmad, S., & Schroeder, R. G. (2003). The impact of human resource management practices on operational performance: recognizing country and industry differences. *Journal of Operations Management*, 21(1), 19–43. [https://doi.org/10.1016/S0272-6963\(02\)00056-6](https://doi.org/10.1016/S0272-6963(02)00056-6)
5. Aksoy, M. (1988). *Benzene carcinogenicity* (pp. 113–151). CRC Press
6. Allen, M. R., Ericksen, J., & Collins, C. J. (2013). *Human Resource Management, Employee Exchange Relationships, and Performance in Small Businesses*. *Human Resource Management*, 52(2), 153–173. <https://doi.org/10.1002/hrm.21523>
7. Alves, I., & Lourenço, S. M. (2022). The use of non-financial performance measures for managerial compensation: evidence from SMEs. *Journal of Management Control*, 33(2), 151–187. <https://doi.org/10.1007/s00187-022-00337-8>
8. Amin, M., Khairuzzaman Wan Ismail, W., Zaleha Abdul Rasid, S., & Daverson Andrew Selemani, R. (2014). The impact of human resource management practices on performance. *The TQM Journal*, 26(2), 125–142. <https://doi.org/10.1108/tqm-10-2011-0062>
9. Arslan, S. (2017). HRM and firm performance: an investigation of Turkish mid-size IT firms (Doctoral dissertation, Aston University). <https://publications.aston.ac.uk/id/eprint/31753/>
10. Arunprasad, P. (2017). Inevitable knowledge strategy: A paradigm shift in strategic HRM practices to augment firm's performance. *Employee Relations*, 39(5), 753–774. <https://doi.org/10.1108/ER-01-2016-0006>
11. Bagozzi, R. P., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the Academy of Marketing Science*, 40(1), 8–34.
12. Barney, J. B. (1997). Gaining and sustaining competitive advantage. Addison-Wesley Pub. Co.
13. Barrett, R., & Mayson, S. (2007). Human resource management in growing small firms. *Journal of small business and enterprise development*, 14(2), 307–320.
14. Beaver, G., & Hutchings, K. (2005). Training and developing an age diverse workforce in SMEs: The need for a strategic approach. *Education+ Training*, 47(8/9), 592–604.
15. Behrends, T. (2007). Recruitment practices in small and medium size enterprises. An empirical study among knowledge-intensive professional service firms. *Management Revue*, 55–74.
16. Bititci, U. S., Firat, S. U. O., & Garengo, P. (2013). How to compare performances of firms operating in different sectors?. *Production Planning & Control*, 24(12), 1032–1049. <https://doi.org/10.1080/09537287.2011.643829>
17. Buisson, M. L., Gastaldi, L., Geffroy, B., Lonceint, R., & Krohmer, C. (2021). Innovative SMEs in search of ambidexterity: a challenge for HRM!. *Employee Relations: The International Journal*, 43(2), 479–495. <https://doi.org/10.1108/ER-04-2020-0176>
18. Chang, P.L., and Chen, W.L. (2002). The effect of human resource management practices on firm performance: Empirical evidence from high-tech firms in Taiwan. *International Journal of Management*, 19(4), 622–631.
19. Chen, Y. G., & Cheng, J. N. (2012). The relationships among recruitment channels, understanding of prospective job, job performance, and turnover intention among Taiwanese kindergarten teachers. *Social Behavior and Personality: An International Journal*, 40(1), 93–103. <https://doi.org/10.2224/sbp.2012.40.1.93>
20. Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel psychology*, 59(3), 501–528.
21. De Kok, J., & Den Hartog, D. (2006). Is human resource management profitable for small firms. *Scales Research Reports H200621*.
22. DeNisi, S.A. and Griffin, W.R. (2001), *Human Resources Management*, Houghton Mifflin Company, New York, NY.
23. Fabi, B., Raymond, L., & Lacoursière, R. (2009). Strategic alignment of HRM practices in manufacturing SMEs: a Gestalts perspective. *Journal of Small Business and Enterprise Development*, 16(1), 7–25.
24. Fawcett, S. E., Magnan, G. M., & McCarter, M. W. (2008). Benefits, barriers, and bridges to effective supply chain management. *Supply chain management: An international journal*, 13(1), 35–48.
25. Fernandes, K. J., Raja, V., & Whalley, A. (2006). Les-

- sons from implementing the balanced scorecard in a small and medium size manufacturing organization. *Technovation*, 26(5-6), 623-634.
26. Flynn, B. B., Huo, B., & Zhao, X. (2010). The impact of supply chain integration on performance: A contingency and configuration approach. *Journal of Operations Management*, 28(1), 58-71. <https://doi.org/10.1016/j.jom.2009.06.001>
 27. Frohlich, M. T. (2002). Techniques for improving response rates in OM survey research. *Journal of Operations Management*, 20(1), 53-62. [https://doi.org/10.1016/S0272-6963\(02\)00003-7](https://doi.org/10.1016/S0272-6963(02)00003-7)
 28. Gamage, A. S. (2014). Recruitment and selection practices in manufacturing SMEs in Japan: An analysis of the link with business performance. *Ruhuna Journal of Management and Finance*, 1(1), 37-52.
 29. Gölgeci, I., & Kuivalainen, O. (2020). Does social capital matter for supply chain resilience? The role of absorptive capacity and marketing-supply chain management alignment. *Industrial Marketing Management*, 84, 63-74. <https://doi.org/10.1016/j.indmarman.2019.05.006>
 30. Hair, J. F., Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th Edition). Cengage Learning EMEA, British Library, United Kingdom.
 31. Harney, B., Gilman, M., Mayson, S., & Raby, S. (2022). Advancing understanding of HRM in small and medium-sized enterprises (SMEs): critical questions and future prospects. *The International Journal of Human Resource Management*, 33(16), 3175-3196.
 32. Hoejmose, S., Brammer, S., & Millington, A. (2013). An empirical examination of the relationship between business strategy and socially responsible supply chain management. *International Journal of Operations & Production Management*, 33(5), 589-621. <https://doi.org/10.1108/01443571311322733>
 33. Hoque, Z. (2005). Linking environmental uncertainty to non-financial performance measures and performance: a research note. *The British Accounting Review*, 37(4), 471-481.
 34. Huelsbeck, D. P., Merchant, K. A., & Sandino, T. (2011). On testing business models. *The Accounting Review*, 86(5), 1631-1654.
 35. Huo, B., Qi, Y., Wang, Z., & Zhao, X. (2014). The impact of supply chain integration on firm performance: The moderating role of competitive strategy. *Supply Chain Management: An International Journal*, 19(4), 369-384. <https://doi.org/10.1108/scm-03-2013-0096>
 36. Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of management journal*, 38(3), 635-672.
 37. Iqbal, S. (2015). Employees' perceptions of human resource management practices and knowledge sharing behaviour: a dissertation presented in partial fulfilment of the requirements for the degree of Doctor of Philosophy in human resource management (HRM) at Massey University, Palmerston North, New Zealand (Doctoral dissertation, Massey University).
 38. Islami, X. (2021a). The relation between human resource management practices, supply chain management practices and competitive strategy as strategic instruments and their impact on organizational performance in manufacturing industry. *Doctoral dissertation, Faculty of Economics, Ss. Cyril and Methodius University, Skopje*.
 39. Islami, X. (2021b). How to integrate organizational instruments? The mediation of HRM practices effect on organizational performance by SCM practices. *Production & Manufacturing Research*, 9(1), 206-240. <https://doi.org/10.1080/21693277.2021.1978007>
 40. Islami, X. (2015). The Process and Techniques to overcome the Resistance of Change Research based in the Eastern Part of Kosovo. *International Journal of Multidisciplinary and Current Research*, 3(6), 1122-1130.
 41. Islami, X., & Islami, V. (2019). Performance appraisal and the quality of working life. *European Journal of Management Issues*, 27(1-2), 10-20. <https://doi.org/10.15421/191902>
 42. Islami, X., & Mulolli, E. (2021). Linking HRM practices to operational performance in the emerging economy. *FEB Zagreb 12th International Odyssey Conference on Economics and Business*, 3 (1), 891-901, Zagreb, Croatia.
 43. Islami, X., & Mulolli, E. (2024a). Do training and development, internal communication and information sharing, and job design boost the innovation of SMEs?. *Cogent Business & Management*, 11(1), 2413912. <https://doi.org/10.1080/23311975.2024.2413912>
 44. Islami, X., & Mulolli, E. (2024b). When and How Does Innovation Augment the Effect of HRM on SME Performance?. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 27(1), <https://doi.org/10.1177/23939575241301477>
 45. Islami, X., & Mustafa, N. (2023). The Role of Internal Human Resource Orchestration on Firm Performance. *Journal of Information and Organizational Sciences*, 47(1), 39-63. <https://doi.org/10.31341/jios.47.1.3>
 46. Islami, X., Mulolli, E., & Mustafa, N. (2018). Using Management by Objectives as a performance ap-

- praisal tool for employee satisfaction. *Future Business Journal*, 4(1), 94-108. <https://doi.org/10.1016/j.fbj.2018.01.001>
47. Islami, X., & Topuzovska Latkovikj, M. (2022). There is time to be integrated: The relationship between SCM practices and organizational performance-The moderated role of competitive strategy. *Cogent Business & Management*, 9(1), 2010305. <https://doi.org/10.1080/23311975.2021.2010305>
 48. Islami, Xh., Latkovikj, M. T., Drakulevski, L., & Popovska, M. B. (2023). Does competitive strategy moderate the linkage between HRM practices and firm performance? *Management: Journal of Contemporary Management Issues*, 28(1), 45-63. <https://doi.org/10.30924/mjcmi.28.1.4>
 49. Ismail, S., Mohamed, B., & Abdullah, D. (2019). The Impact of High-Performance Work Systems (HP-WSs) on Organizational Performance by the Roles of Job Design. In Proceedings of the International Conference on Creative Economics, Tourism and Information Management – ICCETIM. 242-248. <https://doi.org/10.5220/0009867902420248>
 50. Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of management Journal*, 55(6), 1264-1294.
 51. Khan, R. A. G., Khan, F. A., & Khan, M. A. (2011). Impact of training and development on organizational performance. *Global Journal of Management and Business Research*, 11(7), 62-68.
 52. Lee, F. H., Lee, T. Z., & Wu, W. Y. (2010). The relationship between human resource management practices, business strategy and firm performance: evidence from steel industry in Taiwan. *The International Journal of human resource management*, 21(9), 1351-1372. <https://doi.org/10.1080/09585192.2010.488428>
 53. Li, S., Ragu-Nathan, B., Ragu-Nathan, T. S., & Rao, S. S. (2006). The impact of supply chain management practices on competitive advantage and organizational performance. *Omega*, 34(2), 107-124. <https://doi.org/10.1016/j.omega.2004.08.002>
 54. Manresa, A., Bikfalvi, A., & Simon, A. (2019). The impact of training and development practices on innovation and financial performance. *Industrial and Commercial Training*, 51(7/8), 421-444. <https://doi.org/10.1108/ict-04-2019-0035>
 55. Mondy, R.W. (2010), Human Resource Management, 11th ed., Pearson/Prentice Hall, Upper Saddle River, NJ.
 56. Morgeson, F.P. & Humphrey, S.E. (2008). Job and team design: Toward a more integrative conceptualization of work design. *Martocchio, J.J. (Ed.) Research in Personnel and Human Resources Management (Research in Personnel and Human Resources Management, Vol. 27)*, Emerald Group Publishing Limited, Leeds, (pp. 39-91). [https://doi.org/10.1016/S0742-7301\(08\)27002-7](https://doi.org/10.1016/S0742-7301(08)27002-7).
 57. Mulolli E. (2024). The Impact of Human Resource Management Practices to Financial and Non-Financial Performance of SMEs in Manufacturing Industry (Doctoral dissertation, Faculty of Economics, Ss. Cyril and Methodius University, Skopje).
 58. Mulolli, E., & Boskovska, D. (2020). The Role of Human Resource Management Practices on Financial Performance in Firms. *Int. J. of Multidisciplinary and Current research*, 8.
 59. Mulolli, E., Boskovska, D., & Islami, Xh. (2020). The competitive role of human resource management strategies on SMEs in a transitional economy. *International Journal of Multidisciplinary and Current Research*, 8(4), 521-529.
 60. Mulolli, E., Islami, X., & Hashani, M. (2024). Enhancing SME performance through innovation: evidence from a transition economy–Kosovo. *Business, Management and Economics Engineering*, 22(2), 401-420. <https://doi.org/10.3846/bmee.2024.21800>
 61. Mulolli, E., Islami, X., & Skenderi, N. (2015). Human resource management practices and SMEs performance: study based in Kosovo. *International Review of Management and Business Research*, 4(4), 1171-1179.
 62. Mustafa, N., Bajrami, A., & Islami, X. (2022). Electronic services management in local governance—evidence from a transitional economy. *International Journal of Sustainable Development and Planning*, 17(2), 615-621. <https://doi.org/10.18280/ijstdp.170226>
 63. Ngah, R., & Jusoff, K. (2009). Tacit knowledge sharing and SMEs' organizational performance. *International journal of economics and finance*, 1(1), 216-220.
 64. Obasan, K. A. (2012). The impact of understanding human resources management on small business performance in Nigeria: An empirical juxtaposition. *International Journal of Business and Management Tomorrow*, 2(2), 456-564.
 65. Opatha, H. (2002). Performance evaluation of human resources (1st ed.). Colombo: Author publication.
 66. Otoo, F. N. K. (2019). Human resource management (HRM) practices and organizational performance. Employee Relations: *The International Journal*, 41(5), 949-970. <https://doi.org/10.1108/er-02-2018-0053>
 67. Paul, A. K., & Anantharaman, R. N. (2003). Impact of people management practices on organizational performance: analysis of a causal

- model. *The International Journal of Human Resource Management*, 14(7), 1246-1266. <https://doi.org/10.1080/0958519032000145648>
68. Pavlov, A., Mura, M., Franco-Santos, M., & Bourne, M. (2017). Modelling the impact of performance management practices on firm performance: interaction with human resource management practices. *Production Planning & Control*, 28(5), 431-443.
 69. Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
 70. Qi, Y., Zhao, X., & Sheu, C. (2011). The impact of competitive strategy and supply chain strategy on business performance: the role of environmental uncertainty. *Decision Sciences*, 42(2), 371-389. <https://doi.org/10.1111/j.1540-5915.2011.00315.x>
 71. Remenyi, D., Williams, B., Money, A. and Swartz, E. (2005), *Doing Research in Business and Management: An Introduction to Process and Method*, 1st ed., Sage Publication, London
 72. Sabiu, M. S., Kura, K. M., Mei, T. S., Raihan Joarder, M. H., & Umrani, W. A. (2018). *The Mediating Role of Ethical Climate in the Relationship Between Performance Appraisal and Organizational Performance*. *International Journal of Public Administration*, 1-12. <https://doi.org/10.1080/01900692.2018.1498105>
 73. Shank, J. K., & Govindarajan, V. (1993). *Strategic cost management: the new tool for competitive advantage*. Simon and Schuster.
 74. Sheehan, M. (2013). Human resource management and performance: Evidence from small and medium-sized firms. *International Small Business Journal*, 32(5), 545-570. <https://doi.org/10.1177/0266242612465454>
 75. Singh, K. (2004). Impact of HR practices on perceived firm performance in India. *Asia Pacific Journal of Human Resources*, 42(3), 301-317. <https://doi.org/10.1177/103841104048170>
 76. Singh, R., Rigsby, J., & Ramgulam, N. (2017). A study of Small and Medium-Sized Enterprises (SMEs) in Trinidad: Formal human resource management practices and the performance of SMEs. *Journal of Eastern Caribbean Studies*, 42(2), 53-80.
 77. Taylor, A., & Taylor, M. (2014). Factors influencing effective implementation of performance measurement systems in small and medium-sized enterprises and large firms: a perspective from Contingency Theory. *International Journal of Production Research*, 52(3), 847-866.
 78. Tsai, C. J., Edwards, P., & Sengupta, S. (2010). The associations between organisational performance, employee attitudes and human resource management practices: An empirical study of small businesses. *Journal of general management*, 36(1), 1-20.
 79. Vlachos, I. (2008). The effect of human resource practices on organizational performance: evidence from Greece. *The international journal of Human resource management*, 19(1), 74-97. <https://doi.org/10.1080/09585190701763933>
 80. Wang, T., Thornhill, S., & Zhao, B. (2018). Pay-for-performance, employee participation, and SME performance. *Journal of Small Business Management*, 56(3), 412-434.
 81. Warren, C., and Reeve, J. (2006) *Financial and Managerial Accounting*. 9th Edition. Mason: South-Western College Pub.
 82. Wood, S., Van Veldhoven, M., Croon, M., & de Meuzes, L. M. (2012). Enriched job design, high involvement management and organizational performance: The mediating roles of job satisfaction and well-being. *Human relations*, 65(4), 419-445. <https://doi.org/10.1177/0018726711432476>
 83. Youndt, M. A., Snell, S. A., Dean Jr, J. W., & Lepak, D. P. (1996). Human resource management, manufacturing strategy, and firm performance. *Academy of management Journal*, 39(4), 836-866. <https://doi.org/10.5465/256714>
 84. Zakaria, N., Mohd Fauzi, W. I., Abdullah, N. A. C., & Yusoff, R. Z. (2018). The link between HRM practices and performance in Malaysian SMEs. *International Journal of Supply Chain Management (IJSCM)*, 7(6), 118-126.
 85. Zhang, C., Pan, F., & Lin, T. W. (2013). Market competition and the use of performance measures in Chinese firms. *Journal of Corporate Accounting & Finance*, 24(3), 65-70.
 86. Zheng, C., O'Neil, G., & Morrison, M. (2009). Enhancing Chinese SME Performance through Innovative HR Practices. *Personnel Review*, 38(2), 175-194. <https://doi.org/10.1108/00483480910931334>

APPENDIX 1

Instruments for HRM practices and SME performance

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

Note: ^a The cutoff values suggested by Hair et al. (2019)

| | | |
|--|--|------|
| tices (KMO test = 0.832; Bartlett test: Approx. $\chi^2 = 282.21$, $df = 15$, Sig. = .000) | | |
| To what extent did your company use the following statement in the last year, (evaluate from 1 – “not at all”, 2 – “slightly”, 3 – “neutral”, 4 – “to a moderate extent”, 5 – “to an extreme extent”). | | |
| <i>Recruitment and selection (RecSel)</i> | | |
| (RecSel_1)* | Our company applies the form of recruitment through online job portals, recruitment websites, agencies, or social media. | * |
| (RecSel_2) | Our company makes a great effort to select the right person for every position | .943 |
| (RecSel_3) | Our company makes a great effort to select the right person for every position | .707 |
| (RecSel_4) | Attitude/desire to work in a team are used as criteria in employee selection. | .888 |
| (RecSel_5) | Selecting employees who can provide ideas to improve the manufacturing process | .555 |
| <i>Training and development (TraDev)</i> | | |
| (TraDev_1) | Our employees are provided with on-job training. | .881 |
| (TraDev_2) | Activities of the training program provided meet the needs of the employees. | .812 |
| (TraDev_3) | Providing formal training programs to teach new hires the skills they need to do their jobs. | .788 |
| (TraDev_4) | Training needs are identified through a formal performance appraisal mechanism | .681 |
| (TraDev_5) | Our company provides e-learning and training opportunities, as well as participation in workshops for employees. | .560 |
| <i>Communication and information sharing (ComInf)</i> | | |
| (ComInf_1) | We inform personnel about their performance. | .760 |
| (ComInf_2) | Our company facilitates employees to acquire required information easily at any time. | .784 |
| (ComInf_3) | Employees of our company openly discuss their experiences in order to learn from each other. | .530 |
| (ComInf_4)* | People in our company frequently share information based on their experience with task difficulties. | * |
| (ComInf_5) | Our company uses technology and tools to facilitate communication and information sharing among employees. | .671 |
| <i>Compensation and reward (ComRew)</i> | | |
| (ComRew_1) | Compensation is decided on the basis of competence or ability of the employee. | .696 |
| (ComRew_2) | Job performance is an important factor in determining the incentive compensation of employees. | .786 |
| (ComRew_3) | In our company, incentive systems (rewards and bonuses) encourage people to work towards achieving the company's goals. | .796 |
| (ComRew_4) | The compensation for all employees is directly linked to his/her performance. | .823 |
| (ComRew_5)* | The company offers other forms of non-monetary compensation, such as training and development programs, recognition, participation in social events. | * |
| <i>Job design (JobDes)</i> | | |
| (JobDes_1) | The duties of every job are clearly defined in our company. | .499 |
| (JobDes_2) | Job design involves a lot of teamwork with cross-functional teams and networks. | .657 |

| | | |
|--|--|-----------------------------|
| HRM Practices (KMO test = 0.832; Bartlett test: Approx. $\chi^2 = 282.21$, $df = 15$, Sig. = .000) | | |
| To what extent did your company use the following statement in the last year, (evaluate from 1 – “not at all”, 2 – “slightly”, 3 – “neutral”, 4 – “to a moderate extent”, 5 – “to an extreme extent”). | | |
| <i>Recruitment and selection (RecSel)</i> | | <i>Loadings^a</i> |
| (RecSel_1)* | Our company applies the form of recruitment through online job portals, recruitment websites, agencies, or social media. | * |
| (RecSel_2) | Our company makes a great effort to select the right person for every position | .943 |
| (RecSel_3) | Attitude/desire to work in a team are used as criteria in employee selection. | .707 |
| (RecSel_4) | Selecting employees who can provide ideas to improve the manufacturing process | .888 |
| (RecSel_5) | Selecting employees based on their overall fit with the company, is used as a selection criterion . | .555 |
| <i>Training and development (TraDev)</i> | | |
| (TraDev_1) | Our employees are provided with on-job training. | .881 |
| (TraDev_2) | Activities of the training program provided meet the needs of the employees. | .812 |
| (TraDev_3) | Providing formal training programs to teach new hires the skills they need to do their jobs. | .788 |
| (TraDev_4) | Training needs are identified through a formal performance appraisal mechanism | .681 |
| (TraDev_5) | Our company provides e-learning and training opportunities, as well as participation in workshops for employees. | .560 |
| <i>Communication and information sharing (ComInf)</i> | | |
| (ComInf_1) | We inform personnel about their performance. | .760 |
| (ComInf_2) | Our company facilitates employees to acquire required information easily at any time. | .784 |
| (ComInf_3) | Employees of our company openly discuss their experiences in order to learn from each other. | .530 |
| (ComInf_4)* | People in our company frequently share information based on their experience with task difficulties. | * |
| (ComInf_5) | Our company uses technology and tools to facilitate communication and information sharing among employees. | .671 |
| <i>Compensation and reward (ComRew)</i> | | |
| (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 company, incentive systems (rewards and bonuses) encourage people to work towards achieving the company’s goals. | |
| (ComRew_4) | The compensation for all employees is directly linked to his/her performance. | |
| (ComRew_5)* | The company offers other forms of non-monetary compensation, such as training and development programs, recognition, participation in social events. | * |
| <i>Job design (JobDes)</i> | | |
| (JobDes_1) | The duties of every job are clearly defined in our company. | .499 |
| (JobDes_2) | Job design involves a lot of teamwork with cross-functional teams and networks. | .657 |
| (JobDes_3) | Our company emphasizes employees’ job rotation and flexible work assignments across different work areas. | .658 |
| (JobDes_4) | Our company offers flexibility in terms of working hours and location. | .721 |
| (JobDes_5) | Employees are independent in performing their job duties. | .682 |
| <i>Performance appraisal (PerApp)</i> | | |
| (PerApp_1) | Performance of the employees is measured on the basis of objective quantifiable results. | .792 |

POJEDINAČNE NASPRAM KOMBINIRANIH PRAKSI UPRAVLJANJA LJUDSKIM RESURSIMA: UČINCI NA USPJEŠNOST MALIH I SREDNJIH PODUZEĆA

SAŽETAK

Cilj ove studije je procijeniti utjecaj praksi upravljanja ljudskim resursima, kao što su zapošljavanje i odabir, osposobljavanje i razvoj, komunikacija i dijeljenje informacija, naknade i nagrade, dizajn posla i ocjenjivanje učinka, na učinak malih i srednjih poduzeća. Navedene prakse se prakse evaluiraju ispitivanjem njihovih pojedinačnih učinaka, kao i učinaka njihovih strateških kombinacija na financijske, nefinancijske i organizacijske rezultate malih i srednjih poduzeća. Za provođenje ovog istraživanja korišten je kvantitativni pristup te su podaci prikupljeni uz pomoć anketnih upitnika. Kako bi se istražili odnosi između praksi upravljanja ljudskim resursima i financijskih, nefinancijskih i organizacijskih rezultata malih i srednjih poduzeća, analizirani su podatci prikupljeni od 153 proizvodna poduzeća. Dokazano je da pojedinačno korištenje praksi upravljanja ljudskim resursima ima ograničen utjecaj na financijske i nefinancijske rezultate malih i srednjih poduzeća., dok prakse upravljanja ljudskim resursima, korištene kombinirano, imaju izravan pozitivan odnos s organizacijskim rezultatima. Rezultati istraživanja sugeriraju da mala i srednja poduzeća koja implementiraju prakse upravljanja ljudskim resursima kombinirano, postižu bolje rezultate i višu razinu konkurentске prednosti od onih koji ih primjenjuju pojedinačno. Ova studija daje vrijedan doprinos razumijevanju složenog odnosa između praksi upravljanja ljudskim resursima i rezultata malih i srednjih poduzeća u proizvodnoj industriji.

KLJUČNE RIJEČI: *prakse upravljanja ljudskim resursima; financijska uspješnost; nefinancijska uspješnost; organizacijska uspješnost; mala i srednja poduzeća.*