

The Nexus Between Human Resource Management Practices and Innovation Performance in Organizations

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Abstract

This study aims to investigate the impact of Human Resource Management Practices (HRMP) on improving Performance in the SMEs. This study focused on four main HRM components: recruitment and selection, training, performance appraisal and compensation. This study investigates the relationship between human resource management practices and organizational innovation performance. This quantitative study utilized a survey instrument distributed online to SMEs located at Selangor and Kuala Lumpur. The respondents included 105 individuals working at various managerial levels in these organizations. Data analyses were conducted using SPSS software version 22. The findings revealed that. The results indicates that compensation (C) has a substantial and positive effect on organizational innovation performance (OIP). Similarly, Recruitment and selection also positively and significantly impact OIP. Training shows a positive and significant effect on OIP. While, performance appraisal, does not have a significant impact on OIP. As a result, SMEs can establish policies and strategies directed towards a shift in their organizational, incentives structures. Additionally, performance appraisal does not have a significant impact on OIP. A possible explanation could be that the introducing a new emphasis on the performance appraisal to re-evaluate performance appraisals to align with innovation goals.

1. Introduction

The impact of globalization has heightened competition in manufacturing activities and transformed the business environment, leading to changes in organizational processes, products, techniques, and services. This transformation from conventional activities to improved performance is referred to as organizational innovation performance (OIP) (Ministry of Higher Education of Malaysia, 2012). To achieve such a level of performance, enterprises must regard their human capabilities as crucial assets that need to be retained (Tan and Nasuridin, 2011; Al-bahussin and El-Garaihy, 2013; Noordin and Karim, 2015). Innovation initiatives heavily depend on the knowledge and expertise of employees, which are critical inputs in the creation and innovation process (Chen and Huang, 2009). Kong, Chadee, and Raman (2011) asserted that human resource knowledge is a valuable asset for enterprises. Successful human resource management, which improves the knowledge, skills, attitude and behaviors of the staff, is the key for enterprises to gain and keep their advantage in competitions (Wujarso et al., 2021). Literature on organizational innovation suggests that human resources is a promising area of research and should receive more attention (Thawabieh, 2019). Thus, organizations must manage their human resources as a key factor in gaining a competitive advantage and ensuring survival. HRM practices play a crucial role in OIP by

providing suitable practices that enhance employees' knowledge and expertise, leading to the identification of opportunities.

Innovation has become a powerful tool in today's business world, challenging individuals to think outside the box and develop new ideas, processes, products, and markets that can transform their businesses into innovative entities (Rahim et al., 2015). Tabassi, Ramli, and Bakar (2012) believe that the ability to innovate is a critical factor in maintaining a competitive edge. Innovation also significantly contributes to economic growth through the creation of new businesses and product developments. Studies conducted by Wijaya et al. (2022), found that the relationship between human resource competence and the performance of SMEs was influenced by human resource competency factors, namely, knowledge, skills, and the ability to improve business performance. Moreover, innovative human resource practices have been shown to have a significant impact on organizational commitment, a crucial factor in driving innovation (Knezović et al., 2020). Business organizations aiming for substantial and sustainable growth can greatly benefit from innovative practices (Ahlstrom et al., 2005; Christensen et al., 2003; Tabassi et al., 2012). Organizational innovation performance (OIP) has been extensively studied in developed countries, particularly the USA and EU (Lundvall et al., 2003). However, in developing countries like Malaysia, research on innovation is still in its early stages (Tan and Nasurdin, 2011; Zakaria et al., 2015; Rahim et al., 2015). It is crucial to investigate the challenges faced by organizations in developing countries like Malaysia in practicing innovation.

Human resource management (HRM) is a vital issue because it is a key source for achieving competitive advantage. HRM can convert other resources like money, machines, methods, and materials into outputs (Yeganeh and Su, 2008). Some researchers argue that managing people is more challenging than managing technology, as competitors can imitate technological resources, but human resources are unique. Enterprises that effectively manage and control the expertise embedded within their employees' minds can create more value and gain a competitive advantage (Zakaria and Hashim, 2015). Successful human resource management, which improves the knowledge, skills, attitude and behaviors of the staff, is the key for enterprises to gain and keep their advantage in competitions (Jiang & Zheng, 2022). Organizations that are able to effectively manage their human resources are more likely to achieve higher levels of innovation and improved organizational performance (Ye et al., 2022). Research on HRM practices has been extensive, with some referring to certain sets of HRM practices as best practices (Pfeffer, 1998; ECO Canada, 2009). HRM practices are related to enhancing OIP through their impact on employees' activities (Chen and Huang, 2009; Tan and Nasurdin, 2011). Enterprises can use HRM practices to provide employees with higher skills and create resources to develop and improve OIP. However, Hooi and Ngui (2013) revealed that Malaysian SMEs lack plans for managing human capital and are not focused on human capital development. Given the importance of human capital management in enhancing competitive advantage, it is necessary to examine the role of HRM practices in reflecting OIP, particularly in SMEs. In summary, human capital, with its expertise, skill sets, and knowledge, is a valuable asset for organizations. This study attempts to investigate how organizations manage and control the expertise and knowledge of their human capital effectively and whether they can create better value and achieve superior competitive improvement.

1.1 Problem Statement

The lack of effective human resources (HR) practices in Small and Medium Enterprises (SMEs) in Malaysia is a prevalent issue that impacts their overall growth, sustainability, and competitiveness. The lack of HRM practices due to several reasons such as limited financial resources, informal HR system, lack of trainings and professional skills. Small and Medium Enterprises (SMEs) play a crucial role in Malaysia's economic development. They are the backbone of the economy, contributing significantly to employment, GDP, and overall national progress. The Ministry of Higher Education of Malaysia (2012) acknowledged that Malaysia is at a middle-income level, and inactivity could hinder achieving Vision 2020 unless there is a significant push toward higher performance. One reason SMEs struggle to survive in industry is their lack of competitiveness in a dynamic environment. The Malaysian government has been focused on SME development since the 1970s, with significant initiatives like the 2nd Industrial Master Plan (IMP2) in 2005 and the 3rd IMP from 2006 to 2020, aligning with Vision 2020 to become a developed country (Hazlina Ahmad et al., 2013). The SME Master Plan envisions creating globally competitive SMEs that enhance innovation and promote competition (SME Corporation Malaysia, 2016). SMEs are contributing 32.7% to the country's overall GDP in 2012 (SME Corp, 2014) and playing a crucial role in employment.

Existing research has explored the relationship between various dimensions of innovative HR practices, such as the extent to which these practices are implemented, their perceived importance for achieving organizational goals, and the level of satisfaction with their implementation (Koster & Benda, 2020; Moustaghfir et al., 2020). In developing countries, there is increasing recognition of the critical role of SMEs as economic drivers (Tajasom et al., 2015). Scholars have explored how performance impacts the sustainability of entities within the rapidly evolving business landscape of the 21st century (Brunswick and Ehrenmann, 2013; Kong et al., 2011; Ramlan et al., 2007). Competitive pressures have encouraged organizations to be proactive in diagnosing HR problems

and to adopt more innovative HR practices since these were no longer a matter of trend, but rather of survival (Thawabieh, 2019).

Emerging economies have also seen a growing interest in the relationship between HRM and innovation, with studies in the context of China highlighting the positive influence of various HRM practices on innovation performance (Di et al., 2023). However, there is a lack of studies on Malaysian SMEs compared to large manufacturing companies. Previous research has focused on specific HRM practices like training, performance appraisal, recruitment, and selection but has not given sufficient attention to employee participation and career development, which can impact OIP (Chen and Huang, 2009; Tan and Nasuridin, 2011; Zakaria, 2012; Zareai et al., 2013). Given the smaller staff size in SMEs compared to large manufacturing companies, finding suitable replacements is challenging, making employee retention crucial.

This study aims to fill the gap in the Malaysian SME sector by evaluating these HRM practices, providing valuable insights into their impact on organizational innovation performance. The findings will guide managers in designing robust innovation mechanisms to improve the performance of the Food and Beverage Industry of Malaysia SMEs sector. Several studies support the relationship between human resource management (HRM) practices and organizational innovation performance (OIP) across various sectors (Tan and Nasuridin, 2011; Zakaria, 2012; Zareai et al., 2013). Tan and Nasuridin (2011) explained the relationship between HRM practices such as recruitment and selection, performance appraisal, compensation, and career development and innovation performance through the resource-based view (RBV) theory in large manufacturing companies in Malaysia. Studies by Lousã et al., 2020; Moustaghfir et al., 2020 found that high-performance work systems, which include comprehensive employee recruitment and selection procedures, extensive training and development activities, performance-based compensation, and extensive employee involvement, are positively related to both incremental and radical innovation. This study will investigate the relationship between human resource management practices (recruitment and selection, training, compensation, employee participation, performance appraisal, and career development) on organizational innovation performance for the growth of Malaysian SMEs.

2. Literature Review

2.1 Human Resource Management (HRM)

Mathis and Jackson (2010) believe that human resources are the most valuable asset to an organization. This is because other resources such as technology are highly imitable, whilst human resource and the knowledge that is embedded in it are one of a kind (Gao, 2011). Human resource management (HRM) is defined as a process or practice that constitutes developing existing knowledge, expertise and productivity for personal or team benefit over the course of a certain period (Todaro and Smith, 2010). According to Ahmad, S. (2021), human resource management strategies that are effective enable to enhance employee knowledge, skills, attitudes, and behaviors are critical for organizations seeking to gain and maintain a competitive edge in the marketplace.

2.2 Human Resource Management Practices

HRM practices such as recruitment, selection, training, compensation, and performance management play a vital role in shaping employee competence, commitment, and creativity, which in turn influence organizational innovation and performance (Hamid, S., 2019). HRM was initially defined by Leonard Nadler (1995) as a set of pre-determined practices designed to create behavioral change at a certain time. The definition of HRM later shifted into the contexts of the individual, teamwork, or organization (McLean et al., 2003). Empirical studies conducted to examine that correlation demonstrated that HRM practices are linked to a set of organizational performance (Kehoe, 2009; Ogunyomi and Bruning, 2016). The current study examines HRM as a set of practices for promoting knowledge and increasing innovative performance at an organizational level.

2.2.1 Recruitment and Selection

The challenges for human resource management have become greater today due to the complexity in which organizations work and function. The human factor or intellectual capital has emerged as a key component for the future success of an organization. Research in HRM has focused on questions that seek answers to how HRM practices can contribute to organizational performance. Recruitment and selection play a crucial role in the success of small and medium-sized enterprises (SMEs), especially in the dynamic and competitive environment of the modern world. SMEs often compete with larger companies for talent. Effective recruitment strategies help to attract candidates who can make an important contribution to the company's growth. A sound selection process ensures that the roles and skills of candidates are a good match, leading to improved efficiency and productivity. The use of modern recruitment tools such as applicant tracking systems (ATS) and AI-driven platforms can reduce costs while maintaining effectiveness. The significance of recruitment and selection in HRM and its progression into a strategic role is strongly influenced by the development of HRM as a strategic business partner. The strategic

positioning of HRM, on equal footing with organizational strategic initiatives at top levels is seen as a catalyst towards putting HRM policies as integral components in sustaining competitiveness. Over the past 20 years the significance of knowledge, skills and abilities (KSAs) towards organization performance has become more recognized (Breaugh & Starke, 2000).

2.2.2 Training

Training plays a pivotal role in the success of small and medium-sized enterprises (SMEs), enabling them to remain competitive, innovative, and resilient in a fast-changing business environment. According to Gupta and Cawthon (1996) argued that small organizations, especially managers required the most training. Therefore, training is an essential tool for developing employees and the organizations. According to Hill and Stewart (2000), on case study research into human resource development within three SMEs firms, investigated employers' attitudes towards learning, examined the link between career structures and training in organizations of all sizes. Evidence from this study found that small organizations lacked of career structure which did not guarantee promotion and training.

2.2.3 Performance Appraisal

Performance appraisal in medium-sized enterprises (SMEs) is crucial for evaluating employee contributions, aligning individual performance with organizational goals, and driving overall business success. HRM Practices are essential for SMEs for long term survival. HRM Practices such as training and development, career planning, self-directed learning, employee motivation have led towards a better performance, higher creativity and innovation, retaining, staff, better service, equality and enrich human capital.

According to (Subramaniam, C., Shamsudin, F. M., & Ibrahim, H., 2011). Performance appraisal enhanced organizational performance. Jassim, R. K. (2007) asserted that employees need to be evaluated by their managers or supervisors to ensure their employees' performance has been achieved through their work targets to accomplish organizational goals. The implementation of performance appraisal in organization enables employers and employees to review their past performance and prepare themselves to plan for the future organizational performance improvement (Jassim, R. K., 2007; Leede, J. d., & Looise, J. K., 2005).

2.2.4 Compensation

Compensation in medium-sized enterprises (SMEs) is a critical factor that influences employee motivation, retention, productivity, and the overall competitiveness of the business. Compensation in medium-sized enterprises (SMEs) in Malaysia plays a vital role in shaping the workforce's motivation, retention, and productivity while balancing the constraints of limited budgets. SMEs, which account for nearly 98.5% of total business establishments in Malaysia, face unique challenges and opportunities when structuring compensation to attract and retain skilled employees in a competitive and evolving labor market. In SMEs, it is believed that the practice of compensation policy or reward system give a major impact on organizational performance. Carlson, D. S., Upton, N., & Seaman, S. (2006) found that compensation was one of the most critical practices of business performance. It can be a powerful message to the employees about what they are expected to do in the organization Vlachos, I. P. (2008) and Jassim, R. K. (2007) also proved that the compensation policy had a significant effect on several classifications of firm performance, including firm-specific, market-related and overall firm performance.

2.3 Organizational Innovation Performance (OIP)

Organizational Innovation Performance (OIP) in SMEs (Small and Medium Enterprises) in Malaysia is a critical area of study, especially given the nation's emphasis on innovation as a driver of economic growth under its Vision 2030 and related development plans. Measuring organizational innovation performance (OIP) is crucial for understanding current innovation capabilities and identifying areas for improvement (Gamal et al., 2011). It helps address weaknesses, promote innovation policies, spread awareness of its importance, and foster a culture of innovation (Cembrero Gomez, 2013; Lau, 2010; Mirela and Sergiu, 2012).

Landry et al. (2002) highlighted innovation as a key driver in academic, social, and political life, though understanding the concept remains challenging due to varying definitions and perspectives (Landry et al., 2002; Szymtkowski, 2005). Jaskyte and Dressler (2005) further explored innovation as the initial use of knowledge and its relativity to specific firms, while noting its significance in economic development (Jaskyte and Dressler, 2005; Van Looy et al., 2006). Innovation broadly encompasses creating and implementing new ideas for commercial gains (Wan Ismail, 2007), though its broad acceptability has resulted in various definitions (Chmielewska, 2016). A study by Khan, S. (2021) found that organizational innovation is a multifaceted concept that involves the generation, development, and implementation of new ideas or behaviors. These innovative activities can take various forms, such as the introduction of new products, services, production processes, organizational structures, or management approaches that are new to the organization or the market. Innovative organizations are able to

adapt to changing market demands, develop new capabilities, and improve their overall competitiveness (Le et al., 2021). Damanpour (1996) was one of the earliest researchers to define innovation, examining the effect of different organizational variables on various types of innovations, including administrative, technological, and ancillary innovations. Richardson and Thompson (1999) later described innovation as the generation and implementation of new ideas, processes, products, or services.

Researchers define innovation based on the relationship between the organization and innovation, often categorizing it as either a process or an outcome. Damanpour (1996) and Lau (2010) introduced innovation as improvements or creations in administrative or technical sectors. Administrative innovations involve changes in organizational processes, such as job rotation and incentive systems, while technological innovations involve new tools, techniques, devices, or systems, such as iPads and intelligent devices, which were revolutionary at the time. This broad categorization encompasses a wide range of innovations within an organization (Tan and Nasuridin, 2011).

Besides, a study by Král' & Jánošková (2021) stated that innovation is often described as a multifaceted process that involves the generation, development, and implementation of new ideas or behaviors. This process can be divided into two key stages which is initiation and implementation. Additionally, innovation is often described as a process composed of initiation and implementation stages, with the first phase ending with idea generation and the second ending with idea implementation, highlighting the critical role of employees in the innovation process (Chen and Huang, 2009). While the existing literature often portrays innovation as a two-stage process of initiation and implementation, some researchers as noted by Jöhnk et al. (2020), argue that this conceptualization oversimplifies the complex and iterative nature of innovation. Innovation may not always follow a linear progression, but can involve repeated cycles of idea generation, experimentation, and refinement. The innovation process may also involve parallel or overlapping stages, where elements of initiation and implementation occur simultaneously.

According to Dziallas & Blind (2019), existing frameworks for evaluating organizational innovation performance often focus on assessing the various components of the innovation process, including the inputs (e.g., resources, capabilities), the processes (e.g., idea generation, experimentation, implementation), and the outputs or outcomes (e.g., new products, services, or business models). These multidimensional frameworks provide a comprehensive view of an organization's innovation capabilities and performance. Lau (2010) suggested that surveys on innovation levels or new idea legitimacy from respected sponsors can be beneficial. Cembrero Gomez (2013) noted that some governments have implemented empowerment initiatives to encourage creativity among employees and better serve citizens and stakeholders, emphasizing the need for a flexible environment that adapts to changes and recognizes creative contributions. This study defines innovation as creating and implementing new ideas or improving existing goods to enhance organizational benefits and evaluates managers' perceptions of how innovation is encouraged and supported within their organizations.

2.4 The Relationship Between HRM Practices and OIP

According to Brewster (2001), there is a difference in HRM between countries. This diversity is based on culture, patterns of ownership as well as institutional elements which a nation or country selects. Furthermore, they explained that the practices considered proper in a culture are less proper in another culture. Hence, they indicated the differences in HRM practices among the nations and suggested that cultural, structural and institutional elements impact on how HRM is done in the world. In fact, researchers explain some issues such as socio, cultural and political in work environment related to practices. Human resource management practices are the basic tool that the firm can impact and shape skill sets, attitudes as well as behavior of people to do their work and hence attain organizational goals (Collins and Clark, 2003; Ismail *et al.*, 2010). HRM practices that foster employee competence, commitment, and creativity have been found to positively influence a firm's innovation capabilities and outcomes. (Lousã *et al.*, 2020). Studies have shown that HR practices such as recruitment and selection, training and development, compensation and rewards, and performance management can enhance employees' knowledge, skills, motivation, and behaviors, enabling them to contribute to the organization's ability to generate, develop, and implement innovative ideas (Thawabieh, 2019). Chen and Huang (2009) examined the correlation between HRM practices and OIP in 146 large Taiwanese manufacturing companies. It was indicated that HRM practices influence innovative endeavors as it drives the discovery and utilization of organizational expertise and knowledge. Various prior studies have also elucidated on the relationship between HRM practices and OIP (Kong *et al.*, 2011; Laursen and Foss, 2003; Ogunyomi and Bruning, 2016; Tan and Nasuridin, 2010; Vanhala and Ritala, 2016; Zareai *et al.*, 2013).

In another study that was conducted by Maier *et al.* (2014), it was explained that in order to ensure competitiveness and success, the managers of organization need to accept innovation. However, a major director for innovative performance is human resources. Based on this statement, they proposed a framework that explained a relationship between human resource and OIP and justified that there is a significant relation between these two variables in Romania (Maier *et al.*, 2014). HRM practices enhance organizational innovation

performance. Organizations need the ability of employees to produce creative ideas and innovative methods for developing new goods. Human capital knowledge contributes to the enhancement of distinctive organizational competencies. Human capital knowledge contributes to the enhancement of distinctive organizational competencies (Linda et al., 2020). However, the relationship between HRM and innovation appears to be influenced by various moderating and mediating factors, such as organizational structure, leadership style, and knowledge management processes (Cabrales et al., 2009; Soumyaja & Sowmya, 2020). Most of the aforementioned studies show that there is a relationship between specific HRM practices (such as recruitment and selection, training, etc.) and OIP in developed country and inside the large sector. Therefore, there is a gap between some other HRM practices such as career development, and employee participation and OIP in small sector (such as SMEs) and in developing country (Malaysia).

3. Methodology

Scientific research includes both inductive and deductive approaches. Inductive research focuses on theory building through exploratory and qualitative techniques, while deductive research emphasizes theory testing using explanatory techniques to establish relationships among constructs (Kennedy III et al., 2000; Zikmund et al., 2012). The current research follows a deductive approach, beginning with general knowledge from existing theories and empirical studies and working towards substantiating or contributing to theory. This study constructs general themes and structural relationships, which are then verified or falsified through empirical evidence, moving from theory to empirical findings to test how well aspects of the empirical world fit the defined theory or concept (Gerring, 2012). Previous research has shown that HR practices such as extensive recruitment and selection, comprehensive training, performance-based compensation, and high employee involvement are positively associated with various innovation outcomes, including product, process, and administrative innovation (Shipton et al., 2006; Thawabieh, 2019; Koster & Benda, 2020).

The research design employs a cross-sectional correlation to address the hypotheses, allowing simultaneous observation of two or more variables to determine their correlation (Uzzell et al., 1995; Busk, 2005; Ripolles Meliá et al., 2010). A non-experimental quantitative and statistical approach is utilized to determine the factors affecting the organizational innovation performance (OIP) of Malaysian SMEs, focusing on human resource management (HRM) practices. Quantitative tools are used for data processing, involving numerical analysis (Gelo et al., 2008; Onwuegbuzie et al., 2009). This method is chosen for its effectiveness in identifying quantifiable attitudes and behaviors, relying on questionnaires rather than interviews for data collection (Creswell, 2009; Zikmund et al., 2012). The quantitative approach enabled the researchers to systematically analyze the relationships between the key variables, including human resource management practices, organizational innovation performance, and potential moderating and mediating factors such as organizational structure, leadership, and knowledge management (Prado et al., 2020). The use of a quantitative approach allows the researchers to move from theory to empirical findings in a structured manner, testing how well the defined theoretical concepts and relationships align with the observed patterns in the empirical data (Mohajan, H., 2020).

The unit of analysis is at the organizational level, focusing on management level. The research sample includes senior and middle management and managers from 6 Food and Beverages companies at Kuala Lumpur and Selangor. These managers are crucial for improving organizational innovation performance. A questionnaire was used as the research instrument, distributed online for flexibility and cost efficiency. This method ensures minimal response error and delivers representative results (Szolnoki and Hoffmann, 2013). This method of data collection helps to minimize response error and delivers representative results that accurately capture the perspectives of the target population (Ringo et al., 2022). Existing literature confirms the positive and significant relationship between HRM practices and organizational innovation performance (Sukaris et al., 2021; Ringo et al., 2022; Octaviani & Sunardi, 2022). The survey includes sections on HRM practices and organizational innovation performance, with responses measured using a 5-point scale.

4. Data Analysis and Finding

The research aim of the current study is investigating the correlation between human resource management practices (HRM) and organizational innovation performance. The results are presented in the form of either descriptive or inferential statistics. In descriptive statistics, statistical methods such as frequency percentage, mean, and standard deviation are used to study the variables. The correlations between the variables are studied by applying the statistical software IBM SPSS version 22 and also used to present the descriptive statistics of each construct. The research hypotheses are tested by using inferential statistics. The study surveyed a sample of 105 individuals working at various managerial levels in these organizations SMEs located at Selangor and Kuala Lumpur. The respondents included senior and middle managers who hold decision-making roles related to innovation and HR practices, making them knowledgeable informants for this study.

The results indicate that compensation (C) has a substantial and positive effect on organizational innovation performance (OIP), with a standardized coefficient (B) of 0.448 and a significance level of $p < 0.05$. This effect is

greater than that of other human resource management (HRM) practices examined in the study. Recruitment and selection also positively and significantly impact OIP, with a B of 0.334 and $p < 0.05$. Training shows a positive and significant effect on OIP, indicated by a B of 0.29 and $p < 0.05$. However, performance appraisal, with a B of 0.067 and $p = 0.682$, does not have a significant impact on OIP. The findings suggest that among the various HRM practices, compensation has the most significant influence on organizational innovation performance. This aligns with existing literature that underscores the critical role of compensation in motivating employees and fostering an environment conducive to innovation. According to Gupta and Shaw (2014), compensation serves as a direct incentive for employees to engage in innovative behaviors by aligning their financial interests with the organization's goals.

Recruitment and selection also show a significant positive impact on OIP. This is consistent with the idea that selecting individuals with the right skills, attitudes, and potential for innovation can enhance an organization's innovative capacity (Lepak & Snell, 2002). Effective recruitment and selection processes ensure that the organization attracts and retains talent that can drive innovative performance. Training is another HRM practice that significantly affects OIP. This finding is in line with studies by Noe (2017), which emphasize that continuous training and development opportunities equip employees with the necessary skills and knowledge to contribute to innovation. Training programs that focus on creativity, problem-solving, and new technologies can directly enhance an organization's innovation capabilities.

In contrast, performance appraisal does not significantly influence OIP in this study. This may be due to the nature of traditional performance appraisal systems, which often focus more on assessing past performance rather than encouraging future innovation (DeNisi & Murphy, 2017). As such, organizations might benefit from revising their performance appraisal systems to better support and recognize innovative efforts and outcomes.

5. Conclusion and Recommendations

The study investigates the relationship between human resource management (HRM) practices and organizational innovation performance (OIP) within the F&D industry at Kuala Lumpur and Selangor. This research introduces employee participation and career development as additional HRM practices to fill existing gaps and contribute to the body of knowledge. The goal is to understand how these practices influence OIP and provide insights for enhancing competitive advantages.

Recruitment and selection involve hiring employees with the right skills and characteristics to boost organizational innovation. The study found that recruitment and selection significantly and positively impact OIP ($\beta = 0.334$, $P < 0.01$). This suggests that flexible, skilled employees enhance innovation performance, consistent with findings from Dohm (2000), Kehoe (2009), and Laursen and Foss (2003). Methods such as formal tests and interviews, along with internal and external recruitment strategies, help select suitable candidates, thereby improving OIP.

Training activities aimed at improving problem-solving abilities and job-specific skills were found to positively and significantly affect OIP ($\beta = 0.29$, $P < 0.01$). This aligns with previous research by Al-bahussin and El-Garaihy (2013) and Chen and Huang (2009). Training enhances employees' capabilities, fostering innovation. The third sub-hypothesis (H1c) focuses on compensation, which also showed a positive and significant relationship with OIP ($\beta = 0.448$, $P < 0.01$). Fair and equitable compensation motivates employees to engage in innovative projects, supporting findings by Francis et al. (2011) and Tan and Nasurdin (2011). Investment in compensation systems can lead to better organizational performance and innovation.

The study found that performance appraisal did not significantly affect OIP ($\beta = 0.067$, $P = 0.682$), contradicting previous studies (Chen and Huang, 2009; Jaw and Liu, 2003). This suggests that Malaysian SMEs may not effectively use performance appraisals to enhance innovation. The Ministry of Higher Education of Malaysia emphasizes the need for SMEs to shift perspectives and enhance HRM practices to achieve high-income industry status. This study highlights the importance of recruitment and selection, training, and compensation as critical HRM practices that positively impact OIP in the F&D industry of the Malaysian SME sector. These findings suggest that focusing on these areas can significantly enhance innovation performance and competitive advantage.

In conclusion, this study suggests that SMEs managers and owners must be aware of innovation and technology adoption risk and legal and regulatory environment risk because it has been proven to affect company performance. As a result, the Malaysian government could introduce more incentives and programmes that focus on improving the performance of SMEs. The study discussed the significant role of SMEs in contributing to economic growth. However, they face numerous challenges in running their businesses. This study can help policy makers to outline the strategies and future direction to develop new policies, programmes and projects for a coherent and comprehensive SME development.

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Conflict of Interest

Authors declare that there is no conflict of interests regarding the publication of the paper.

Author Contribution

The authors confirm contribution to the paper as follows: **study conception and design:** Fadillah Ismail, Yasmeen Bano; **data collection:** Yasmeen Bano; **analysis and interpretation of results:** Fadillah Ismail, Yasmeen Bano; **draft manuscript preparation:** Fadillah Ismail. All authors reviewed the results and approved the final version of the manuscript.

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