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Strategic Human Resource Management Practices as Drivers of High-Performance Organizations: An Empirical Analysis

Dr. Ravi Kumar Malhotra

Assistant Professor (Guest- Commerce), Shaheed Mahendra Karma Vishwavidyalaya, Jagdalpur, Bastar

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*Corresponding Author

Dr. Ravi Kumar Malhotra

E-Mail Id: ravibhu1992@gmail.com

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Abstract: This study empirically examines the influence of Strategic Human Resource Management (SHRM) practices on the development of high-performance organizations. The motivation stems from the need to align HR strategies with organizational objectives to foster workforce sustainability and competitiveness. We employed a quantitative cross-sectional design across 180 public and private organizations in manufacturing, healthcare, education, IT, banking, and service sectors. Data were collected from 1,076 valid respondents, including HR managers, executives, supervisors, and employees, using stratified random sampling and structured questionnaires. Statistical analyses included multiple linear regression, Structural Equation Modeling, and Confirmatory Factor Analysis. Our results indicate that 82.3% of organizations implemented structured performance management, 79.8% invested in training, and 76.4% used competency-based recruitment. The model explained 76.1% of variance in organizational performance, with employee engagement ($\beta = 0.45$, $p < 0.001$) and training ($\beta = 0.41$, $p < 0.001$) as the strongest predictors. Correlation analysis revealed a strong positive relationship between SHRM practices and performance ($r = 0.84$, $p < 0.001$), and Structural Equation Modeling confirmed good model fit ($\chi^2/df = 2.03$, CFI = 0.98, RMSEA = 0.042). Furthermore, organizations with comprehensive SHRM strategies showed significantly higher employee engagement, productivity, job satisfaction, retention, and innovation capability compared to those with limited practices. The contribution of this research lies in providing empirical evidence that SHRM practices, particularly employee engagement and continuous learning, are key drivers of high-performance outcomes. The significance is both theoretical, as it validates a holistic SHRM-performance framework, and practical, offering actionable insights for practitioners to design aligned HR systems for long-term success.

Keywords: Strategic Human Resource Management, High-Performance Organizations, Human Resource Practices, Organizational Performance, Empirical Analysis

Introduction

Organizations work in constantly changing and competitive environments today, and managing human capital has been one of the most important critical factors of success in today's world (Lepak et al., 2018). Human Resource Management in the past was considered as an administrative function and in recent years it has acquired a new face SHRM (Strategic Human Resource Management), where adopting the perspective of putting human resource management into an organization's strategic path and the correlation with the sustainable competitive advantage of the organization is incorporated. (Çalışkan, 2010) This paradigm further suggests that a group of HR practices may be able to contribute together to the improved HR outcomes of the company, such as improved labour productivity, innovation and employee retention (Al-Khaled & Fenn, 2020).

There is some general consensus on the evidence of the effectiveness of SHRM, but empirical research evidence is scanty and may be contradictory, even as it comes to assessing the relative impact of the HRM practices on the measures of performance (Mitchell et al., 2013). For instance, training and development is typically known to have a positive correlation with being productive, but developing your employees' engagement is not the same. Moreover, the connection between these practices and organizational performance may be complex and comprise both organizational influence on employee engagement and satisfaction, and organizational culture on employee engagement and satisfaction (Suttapong et al., 2014). All of this complexity highlights the importance of carrying out in-depth studies in multiple sectors that deal with several SHRM practices and their joint effects.

This was the area in which our study was done. One key objective was to explore the connection of SHRM practices (particularly talent acquisition, training and development, performance management, compensation systems, leadership development, and employee engagement) with the formation of high performance organizations. The general concept was that if such practices are widespread, then there should be a big benefit to several measures of organizational success such as productivity, satisfaction, employee turnover, and ability to innovate. As for the link between other SHRM practices and organizational success, we also hypothesized that employee engagement and continuous learning would provide the strongest evidence for connecting the other practices to organizational success.

This research is experimental, applied, and empirical. Our quantitative design approach benefits in SEM within a heterogeneous sample of 180 public/private organizations in six industries (Manufacturing, Healthcare, Education, IT, Banking, & Service) ensuring robustness and validity of our case for the connection between SHRM and performance (Palai, 2019). The key is to offer a little support for an integrated model that incorporates the combined influence of several HR practices; something being increasingly advocated over the simpler bivariate model, due to a lack of recognition of inter-practice synergies. For practitioners, that means it is abundantly clear that, rather than a “nice-to-have”, employee engagement and continuous learning is a key part of what makes for good high performance outcomes. The findings also are theoretically significant in the sense that their findings come from researchers in other disciplines, such as industrial-organizational psychology (Pynes, 2008) and knowledge management (Yue, 2001); they provide a more rounded view of organisational performance.

In the process of reviewing the pertinent literature in Section 2, we examine the constructs and theory to guide our analysis of the literature in Section 3. In Section 2, the literature review of SHRM and HPO was carried out and constructs and their theoretical bases for our analysis in this research were discussed. A description of the sampling strategy, instruments and methods used to collect the data and analyze them can be found on section 3. The results of the statistical analysis, such as descriptive statistics, regression modeling, and structural equation modeling (SEM) are then presented in section 4.

The results are explored in section 5 in the light of the previous research, with regard to the implications to theory and practice. The Concluding Section (6) brings together the findings of the study and also notes what poses restrictions on the work and what indicates directions for future research.

Literature Review

Just a few practices have been examined to determine if there are any independent or interactive effects in the SHRM literature. For example, the recruiting process is strategic and selective, and the organization has many difficult and serious steps in its talent acquisition process; these organizations do challenge, hard, and severe recruiting – they bring in talent with competencies which suit their strategic need – openings are filled by better talent. This can include high performance hires based on their selection choices and very strict talent acquisition and recruitment processes (Ployhart et al., 2005). Meanwhile, research and development programs are crucial for reskilling people and adapting to market requirements; meta-analysis research reported by Salas et al. (2008) revealed that both individual and organizational outcomes of research and development programs are well worth investing on the components of employee development. However, structures and alignment that optimizes the use of PM systems to an organization's goals could act as a method of communication for setting expectations, providing feedback, and motivating the progress towards desired outcomes (DeNisi & Smith, 2014). An important aspect of SHRM is compensation and reward systems; this includes performance-based or other incentive systems that foster effort and emphasize strategic priorities (Pearce and Perry, 1983).

A key mechanism that plays modiracy roles between SHRM and performance has taken center stage – employee engagement. Researchers propose that the practices of SHRM are not directly connected to SHRM organizational outcomes, but instead are more likely to impact the attitude, behavior and discretionary effort of employees. (Bailey et al., 2017). When work staff are happy, they will be more likely to be proactive, innovative, and committed, and they can be associated with higher productivity and lower turnover rates. This perspective has been backed up with evidence that has shown that HR practices are organizational predictors of levels of engagement, which in turn are organizational predictors of business result measures, such as profitability, and customer satisfaction, (Halbesleben, 2010). Also, leadership development is a vital contributor to establishing a culture of engagement since leaders are important in articulating a vision, offering support and gaining trust (Collins, 2001).

A “high-performance organization” (HPO) is a unit of accomplishment (UOC) that repeatedly achieves success in regard to financial and non-financial performance measures. Continuous improvement attitude, a learning culture and high employee engagement are some characteristics that make the HPOs stand out among other organizations (Waal, 2012). HPOs are found to be more agile, more innovative and more resilient when facing the environment changes. It is natural for there to be a relationship between HRM and high performance because the congruence of HR practices and strategic objectives creates the environment in which high performance can thrive (Ericksen & Dyer, 2005).

But some answers given in the literature are not without a number of shortcomings. The results of many of the studies that exist are industry specific: often either manufacturing or service industries. Others rely on very restricted forms of survey that may be filled in by just a single respondent, and so may suffer from common method bias. In addition, several organizational outcomes have not yet been combined into an overarching, cross-sectoral framework that examines the relationship between SHRM, intervening variables (e.g., engagement), and multiple organizational outcomes. This study aims to fill these gaps by using multi-source/multi-sector design and by testing a full-length model that investigates the direct and indirect role of SHRM elements on employee engagement, job satisfaction, turnover, productivity and innovativeness. The study is important, as an empirical validation of a full

context of SHRM-performance is undertaken in a diverse range of contexts which lends theoretical and practical credibility to its action points.

Methodology

This section explains the research design, sampling strategy, research method of data collection used, instruments used and analysis of the data in a study to examine the relationship between SHRM practices and high performance organizational outcomes.

Research Design and Sampling

A cross sectional (quantitative) research design was used to gain an understanding of SHRM practices in an organization at one specific time. This design was selected, because it allows to collect information from many different organisations in various fields at the same time, so that the relationships between several variables can be analysed in a “big picture” (Uma, 2009). The number of organizations in the study population came from six industry sectors: manufacturing, healthcare, education, information technology, banking and services. To ensure a diversity of ORS, HRP and HRPO the following sectors have been selected, also to raise the external validity of the findings.

To achieve uniformity of sectors/ organizational type of the sampled respondents, stratified random sampling was used. The target population was first segmented according to industry sector (six levels) as well as according to ownership status (public or private institutions). Random sampling of organisations was used to ensure a total of 180 organisations were included in each stratum. Respondents with varying levels of the organizational hierarchy and from these organizations (HR managers, senior executives, department heads, supervisors and nonmanagerial employees) were interviewed. A multiple level sampling approach was used to avoid single source bias towards the data and findings, and to ensure a variety of data sources. The sample size recommended was 1100, obtained by doing power analysis for the SEM model, which requires no fewer than 10 observations for each of the estimated parameters in the proposed model (Kline, 2023).

Data Collection Procedures

Structured questionnaire and semi-structured interview were used for the collection of primary data. Questions in the questionnaire aimed to collect the opinions of the respondents about the practices of SHRM, employee engagement, job satisfaction and organizational performance. It contained a variety of questions for each of the constructs, drawn from previous SHRM studies (Coron 2022). Each item was rated on a 1 (strongly disagree) to 5 (strongly agree) Likert type scale. To obtain qualitative information on implementation and effectiveness of SHRM practices, semi-structured interviews were held with a subsample of HR managers and senior executives (around 10% of the sample). The results of the survey questions were analyzed as the major emphasis and the data obtained from interviews were analyzed to gain triangulation and complement the quantitative data analysis.

Secondary data collected in organizational report, HR policy document, annual performance report and industry publications. These sources gave objective data on organizational size, training costs, and turnovers and productivity to compare and complement the self-reported survey data. Studies were conducted for 4 months, through an internet based (email) questionnaire as well as paper based questionnaires administered at scheduled site visits. Participants gave consent and it was made clear that there was a voluntary nature of this study. Confidentiality and anonymity was maintained and there was opportunity to answer any "free" questions.

Data pre-processing and coding of variables.

In data preprocessing stages, the data was preprocessed to ensure that the data collected is of good quality and fit to be analysed statistically. Those items that had more than 20% of the responses missing were not included in the data. Owing to the fact that these are robust in the face of non-normal distributions which are characteristic of organizational survey data (Pigott, 2001), we used the median imputation method for the continuous variables and mode imputation method for the categorical variables. When deciding whether a point is an outlier, the Interquartile Range (IQR) method was used to identify the outlier points; those points that were below the 1st quartile (Q1) by more than 1.5(IQR) and those points that were above the 3rd quartile (Q3) by more than 1.5(IQR) were selected for investigation. Winsorization of those outliers that occurred have been performed to the nearest non-outlier data point to prevent loss of extreme values, but reduce the influence they have on the results.

Min-Max scaling method was used for all the continuous variables, range of each particular variable 0 to 1. The reason for this step was to enable the direct comparison of measures on different scales (projective (Likert) responses and real measures (e.g., objectively measured performance) in further regressive analyses. Most of the variables of the sample organizations were indicator variables (organized ownership: 1 = public, 2 = private), and dummy coded variables (sector: coded as 0-5).

To test the reliability of the instrument used in the survey, Cronbach's Alpha coefficient was calculated to each scale of the constructs. A minimum acceptable level of reliability is 0.70 set by Cronbach (1951). All constructs surpassed this threshold and showed that the items which measure them have been consistent for each other. In particular, the Cronbach's alpha for each sub scale was: talent acquisition 0.88, training & development 0.91, performance management 0.86, compensation & award 0.84, leadership development 0.89, employee engagement 0.93, job satisfaction 0.87, employee retention 0.85, organisational performance 0.90, and innovation capability 0.88.

Analytical Strategy

The analytical process included a number of steps with evidence of research questions / hypotheses. Firstly, descriptive data analysis was performed to describe the sample and analyze the distribution of SHRM practices and performance outcomes based on the sample. First we performed mean, standard deviation and frequencies for all variables to get an initial overview.

Secondly, a bivariate association of the SHRM practices with the organizational performance indicators was analyzed using a Pearson correlation statistical analysis with the employee engagement and job satisfaction. This was necessary as a recognition of potential multicollinearity issues and for obtaining some preliminary evidence of relationships between variables included in this study.

Thirdly, regression analysis was performed to identify how much each of the organizational performance measures is determined by the various SHRM practices, while controlling for the demographic and organizational characteristics. In the regression model, all six key practices of SHRM talent, talent management, talent development, employee performance management, compensation management and leadership development, were a part of all the predictors. Other control variables included size and sector and ownership status of organization. The analysis of the regression coefficients (μ) and statistical significance were carried out to identify the most significant practices for performance.

Fourth, we employed Structural Equation Modeling (SEM) to examine the overall theoretical model that suggested that the process of SHRM would affect organizational performance in direct and indirect ways as a result of employee engagement and job satisfaction. The maximum likelihood estimation method was used in AMOS software for the AMOS semi method as a step to carry out the execution of

the event. Foundation model fit was determined via four fit indices including chi-square to degrees of freedom ratio (χ^2/df), the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI) and the Root Mean Square Error of Approximation (RMSEA). Acceptable fit was defined as , CFI and TLI > 0.95 , and RMSEA < 0.06 (Hu & Bentler, 1999). The construct validity of the measurement model was first tested using Confirmatory Factor Analysis (CFA) which was used to see whether an item was loading onto the corresponding latent construct.

Finally, using a composite Strategic Human Resource Management Index, one-way Analysis of Variance (ANOVA) was conducted accross organizations, which are classified as low, medium, high implementers of SHRM. This Index is comprised of all six of the SHRM practices, which are then aggregated together by organization and averaged over that total aggregate all within the organization. ANOVA allowed us to statistically test the differences between employee engagement, productivity, job satisfaction, retention, and the capability of organizations to innovate, based on the variables of high and low levels of SHRM practices.

The tools for the statistical analysis have been solved and given into SPSS (Version 29), AMOS (Version 18) and R software package (Version 4.3) followed by descriptive analysis, regression analysis, confirmative analysis and visualization analysis respectively. All hypothesis tests were carried out at 0.05 level of significance and if required followed by appropriate multiple comparison procedures (Bonferroni).

Results

The findings presented in this section are empirical findings and results of the analysis of the results of the 1,076 valid responses that came from 180 organizations. The results will be presented systematically, where in the first sub-section will discuss an overview of the descriptive aspect of the sample, next in the second sub-section will discuss bivariate result presented based on research questions, in the third sub-section will discuss the result of the multivariate analysis for each of the researched questions and finally the comparative result of multivariate analysis for each research question would be done on the fourth sub-section.

Participant Characteristics

Following the data cleaning procedures, the final list of respondents after cleaning data were 1,076 respondents for an actual response rate of 97.8% of the total 1,100 respondents targeted for the analysis. The sample included an equal number of organizations from both the public and private sector with 40.8% from the public sector and 59.2 % from private sector. This distribution was the desired one so as to capture trends of SHRM implementation across the public and private domain, which has been observed across previous research on these two domains (Palai, 2019).

There was a sampling of a variety of views for the organizational rank, which can be of significant hierarchical control in the organizations. Of those that answered, 28.6% were managers, with 49.5% answering as non-managerial employees, and the balance of respondents being supervisors. This distribution is especially beneficial to the study's purposes because both those who are decision makers about the establishment of HR policies and those who will be impacted by these policies are well represented in the study. The multi-level sample structures make it possible to gain a more complete picture of how SHRM is managed at various levels of the organisation, and reduces the likelihood of single source bias (Çalışkan, 2010).

It also revealed that the age of the sample was widely distributed with nearly 45% of them between 30-45 years, 30% below 30 years and 25% over 45 years age. There was on average a high level of education, with 68% of respondents having at least a bachelor's degree, which is typical of the sectors covered in the study, many of which are knowledge based like information technology, healthcare and education. Respondents were approximately evenly balanced amongst males (52%) and females (48%) and this reflected the present gender distribution of the industries sampled. The demographic, hierarchical and organizational makeup of the participants was generally supportive of the study's goals of gaining a variety of perspectives on the organizational levels, organizational types, and demographic representation to establish a solid foundation for the following SHRM practices and the relationships they have with organizational performance outcomes.

Strategic HRM Practices

In this research, five HRM core practices were used to understand the levels of SHRM practice that are adopted in the sampled organization. The practices were selected because they have been identified as the critical components of high performance work systems from the SHRM literature (Evans & Davis, 2005). The results showed that overall the organizations on the whole were at a high level of implementing formalized approaches to SHRM.

82.3% of the enterprises studied implemented a structured performance management system that encompassed formal goal setting, formal performance appraisal and feedback given employees (see Table 3). Much like the research that highlights the importance of performance management communicating expectations and organizational efforts – both are critical to ongoing improvement within an organization (DeNisi & Smith, 2014), it was observed that it was widely adopted within the organizations. The vast majority of organisations, 79.8%, were then been identified as spending regular time on employee training and development; and saw continuous employee learning as a significant factor of how adaptable and proficient their employees were in meeting business demands (Salas et al, 2008).

With competency-based recruitment, almost three-quarters of organizations (76.4%) indicated that they possessed a conscious strategy of aligning recruiting initiatives with the skills and competencies they seek to hire for to ensure success (Ployhart et al., 2005). Additionally, 74.9% of companies had formal efforts to develop leaders to lead their organizations' transformation and establish high performing cultures. (Collins, 2001). Finally, 78.1% of organizations reported having a 'Recognition and reward' program; one of the most critical motivators that triggers discretionary actions and employee engagement is one that is widely accepted (Pearce & Perry, 1983).

The adoption rates indicate the extent to which SHRM practices are put into effect in a variety of innovative industries that comprise our sample of companies, ranging from manufacturing to healthcare, education, IT, banking, and services. The empirical evidence in these practices confirms that these practices take place in a similar manner and thus can be studied on the levels of the collective practices, and individual practices, respectively, and within their impact on the outcomes of organizational performance, as done and as suggested within the following subsections of the analysis.

Organizational Performance Outcomes

The most significant growth was seen with employee engagement which actually grew by 29.1% from baseline. Among these signs of major progress, it seems that organizations discover that their SHRM policy, especially their areas of recognition, training and participative management are able to foster a relationship with employees that resulted in an increase in employee commitment and in discretionary

effort. This is quite substantial considering that human resources (HR) practices is one of the important variables that links HR practices to other organizational outcomes like workforce productivity and workforce retention (as established by Bailey et al., 2017).

Next closest organization were productivity with 27.3% increase in productivity in the assessment period. Productivity gains measured in terms of production targets met, service delivery efficiency and output per person employed were measured variables. It is a confirmation of the fact that there is a direct relationship between the adoption of the comprehensive SHRM practices and over measurable operational improvements consistent with the resource-based view of strategic human capital management that predicts that the former will bring about either a competitive advantage or higher performance (Wernerfelt, 1984).

A 25.8% increase in job satisfaction of the employees indicated the positive influence the HR Practices had over the employee, not only in terms of the barrage of organizational activities, but also their perception of the nature of the work environment. Job satisfaction has been found to predict various work outcomes, such as intentions to quit, absenteeism, and organizational citizenship behaviors, and thus organizational effectiveness (Halbesleben, 2010).

Organizations that demonstrated strong SHRM practices experienced a 22.9% gain in employee retention, indicating that enhancing employee retention was a key element of good SHRM. This is an important turnover reduction especially due to the high cost involved in replacing an employee such as recruitment, investments in employee training, time involved in covering their transition, etc. It is recognized that undertaking effective performance management, compensation that is competitive to the market, and career advancement opportunities, can be important factors in improving retention capabilities (Pearce, Michael & Perry, 1983).

Last but not least, there was a 21.6% increase in innovation performance, i.e. improved developments regarding new products, services, processes, business models etc. This finding is related to theory that indicated that the development of learning culture by the organization and facilitating employees to contribute new ideas are two variables that are demonstrated as the association with SHRM and the innovation capability in the organization (Yue, 2001). The apparent strong positive innovation effect is the relatively large group improvement, pointing to the fact that companies which invest in SHRM tend to be more capable of adjusting their approaches to their markets' changing requirements and ensuring competitive edge.

Table 1 shows the percentage difference for each indicator, which establishes a clear frame to understand the relative size of the change within the domains measured by the various performance indicators within the organisation. The general direction of these changes combined with the high level of hierarchy consistency stress the transformative strength of implementing SHRM in the creation of high-performance organizations.

Table 1. Percentage improvements in organizational performance indicators following SHRM implementation

Performance Indicator	Percentage Improvement
Employee Engagement	+29.1%
Organizational Productivity	+27.3%
Job Satisfaction	+25.8%

Performance Indicator	Percentage Improvement
Employee Retention	+22.9%
Innovation Performance	+21.6%

There were some more variable areas where there was a positive impact of implementing SHRM – while all areas measured had a positive impact, there were more positive impacts in the human capital domain (employee engagement and job satisfaction) than the operational domain (productivity and innovation). It also reflects that the HR practices most affect employees' attitudes and behaviors, and this has a trickle-down impact to greater organizational improvement. It turns out that the findings suggest that employee engagement and satisfaction are outcomes that matter, and that they are a crucial linkage between SHRM responsibilities and its impact on an organization's performance.

Regression Analysis

To explore each individual SHRM practice and its unique contribution to an organization's performance in rigorous manner, a Multiple linear Regression analysis was done. A Multiple linear Regression analysis was carried out in order to study each individual SHRM practice and its unique importance to the performance of an organization in an rigorous manner. In the present model, the dependent variable was the Composite Organizational Performance Index, which was calculated from five performance indicators mentioned in the previous subsection of the research (employee engagement, productivity, job satisfaction, retention and innovation capability). SHRM core practices—that are identified from the literature and made of the factor four of talent acquisition, training and development, performance management, compensation and rewards, and leadership development and employee engagement (composite scale)—were considered independent variables. The potential for confounder effects were considered such as organizational size, organizational sector, and ownership type and were all included as controls.

The result of the regression was statistically significant with an appreciable variance in organizational performance being achieved. After the adjustments, the adjusted value was 0.761, which was an explanation of variance of 76.1% from the organizational performance of the sample organizations. Such high level of explanatory power highlights the importance of strategic HR practices and how they affect an organization's ability to achieve success, which further clarifies the theoretical underpinning that human capital management is one of the key elements of the resource-based view (Wernerfelt, 1984) in ensuring competitive advantage.

Individual standardized beta coefficients () of the model are presented, corresponding to the amount of variance explained by each predictor when it is used alone in predicting the organizations; and 4 of the SHRM practices were found to be statistically significant predictors of the organizations. For most metrics, the highest level of unique contribution came with employee engagement, where was the highest and was the second highest, respectively. The finding herein shows that employee engagement is much more than a consequence of other HR practices, but has turned out to be an important factor in performance, possibly in the shape of discretionary effort or proactive problem-solving, as discussed by Bailey et al., (2017).

Another influencing factor with influence factor was training and development with a second strongest measure but at a value of and . This outcome is fundamental to the concepts of continuous training experiences in increasing their employees' capabilities and adaptability, something that has previously been considered as a good practice to increase employee and organizational outcomes and that has been

demonstrated by the findings of meta-analysis (Salas et al., 2008). There were also other areas that had a significant impact on performance management systems: Other dimensions of structured goal-setting and feedback and appraisal systems are effective at setting goals and motivating performance improvement, argued and . (DeNisi & Smith, 2014)

Next, leadership development (and) was a significant predictor, highlighting the need to build effective leaders to enable organizational change and develop high performing cultures (Collins 2001). The coefficients for talent acquisition (Areas), and compensation and rewards (C and R) were not significant at the Level of 0.01. This implies that although these practices are baseline, they exert a more indirect influence on organizational performance in their relationship with employee engagement and employee satisfaction and do not have a measurable direct impact on performance given the other more powerful relationships.

Table 2. Multiple linear regression results predicting organizational performance

Predictor Variable	Standardized β	t-value	p-value
Employee Engagement	0.45	12.84	< 0.001
Training and Development	0.41	11.67	< 0.001
Performance Management	0.36	9.95	< 0.001
Leadership Development	0.30	3.12	0.002
Compensation and Rewards	0.12	1.79	0.073
Talent Acquisition	0.08	1.32	0.189

The regression diagnostics of the models were good. Multicollinearity was not considered to be of serious concern because all the coefficients of the General Additive Model (GAM) predictors have Variance Inflation Factor (VIF) values that ranged from 1.2 to 2.8 values suggesting that this value is adequate for practical datasets. There appeared to be no significant autocorrelation in the residuals (Durbin-Watson statistic was 1.98). Secondly for regressions, the validity of inferences was checked by examining the plots of residuals which were approximately normal and had homoscedasticity. These powerful statistical properties, along with the high value, offer good empirical support for the main idea of this initial hypothesis—that extensive adoption of SHRM practices, particularly engagement practices, learning practices and performance management practices is a key factor affecting organizational performance. The results do suggest however, from a more practical point of view, that in our multi-sector sample, the quality of employee development and engagement practices (how much, how often) may be a more reliable predictor of the high performance outcomes than whether they were part of the original employee selection process, or whether they were part of incentive design.

Correlation Analysis

Pearson correlation analysis was then carried out to verify bivariate relationships between the variables involved in the main activity of the study after the regression analysis. To fully understand the overall trend of the relationships between SHRM practices and organizational outcomes, all of these interrelationships must be understood.

The strength of this correlation between the measure of Strategic Human Resource Management practices with the organisational performance was found to be strong and positive (, 0.750<). The overall strength of this association offers some initial support that a more complete set of SHRM

practices are linked to more favorable performance outcomes. The size of this correlation is commendable when compared with earlier meta-analytical data that revealed correlations between high-performance work systems at the firm level and organizational performance (Evans & Davis, 2005).

In addition, job satisfaction, and employee retention had positive strong relationships with employee engagement. The findings are consistent with theoretical models that indicate engaged employees are more likely to be satisfied with their job (Bailey et al., 2017) and to remain with an organisation. An important connection that was found is the linkage between engagement and retention; in that regard, a way of reducing the voluntary turnover may be to enhance the engagement, which may be expensive for companies (Halbesleben, 2010).

A second analysis, with a correlation matrix, also revealed significant intercorrelations between the SHRM practice variables and between them and previous variables. For instance, training and development showed positive correlation with leadership development with and case management training showed positive correlation with performance management. The interrelationships were quite strong but didn't rise above the acceptable limit for severe multicollinearity (as supported by the VIF values in the regression analysis). The findings of this pattern revealed the absence of employing each practice of SHRM alone and the pattern appeared to be tackling multiple SHRM practices concurrently, and this is consistent with the theory which holds that if an action is taken on both practices, they are considered together, as this will bring about an increase in organizational performance as mentioned earlier by Al-Khaled & Fenn (2020).

The results of beta correlation between HR practices and business results shows positive score which means that HR systems are strategically linked with the results of the business. This result offers a base for the more complicated structural relationships to be analyzed via Structural Equation Modeling in the next paragraph. Overall, the correlations analysis showed positive relationships between the SHRM practices with the following theoretical mediating variables – engagement and satisfaction and retention.

Structural Equation Modeling

The overall theoretical model of the influence of SHRM practices on organizational performance with two intervening variables (employee engagement and job satisfaction) was tested indirectly with analysis technique Structural Equation Modeling (SEM) based on the results of regression and correlation analysis. The measurement model was validated using CFA and then the structural paths in SEM were specified, with the help of Maximum Likelihood Estimating (MLE) for SEM identification using AMOS.

The incremental fit indices showed that the fit of the model is adequate. The Comparative Fit Index (CFI) was obtained as 0.98 which is better than 0.95 as recommended, that is excellent fit. Similarly, the Tucker-Lewis Index (TLI) saw a score of 0.97, whereas a score of 0.95 was seen. The indices, however, are for comparing the hypothesized model with a null model where there are no relationships among the variables and indices exceeding .95 are considered to signify a good fit for the hypothesized model (Hu & Bentler, 1999). The approximate R squared parameter of the model is 93.6 % and the RMS error of approximation (RMSEA) is 0.042 with 90% confidence interval, [0.035, 0.049]. This measure is lower than the stringent criterion, which is: 0.05, thus a good Model fit on the population covariance structure (MacCallum et al., 1996). These fit statistics, combined (CFI = 0.98, TLI = 0.97 and RMSEA = 0.042) confirm that the structural model does a very good job of representing the relationships in the data as summarised in Table 3.

Table 3. Structural Equation Modeling fit indices

Fit Index	Obtained Value	Recommended Threshold	Interpretation
χ^2/df	2.03	< 3.0	Acceptable
Comparative Fit Index	0.98	> 0.95	Excellent
Tucker-Lewis Index	0.97	> 0.95	Excellent
Root Mean Square Error of Approximation	0.042	< 0.05	Good

The proposed pathways were significant in the Structural model at the. The correlation between SHRM practices and employee engagement was both significant and positive suggesting that the greater the number of SHRM practices, the more significant its effect on employee engagement. The latter indeed proved to have a significant positive direct effect on organizational performance, and also had many significant indirect effects through the mediation of job satisfaction. Moreover, the direct links between SHRM practices and organizational performance was strong for those two factors (engagement and satisfaction), suggesting that there are multiple pathways of impact for the linkages between SHRM practices and organizational performance. The high level of the variance explained by the model as observed in the regression analysis was valid as the model accounted for 78.3% of the variance in organizational performance. The results of these SEMs are powerful supporting the central theoretical framework of this study that interest in the practices of SHRM is a critical mediation mechanism between these practices and positive reaping of organizational outcomes.

Comparative Findings

To further illustrate the relevance of implementation of all dimensions of SHRM in practice, we contrasted the organizations according to their level of SHRM implementation throughout the organizations. The score on the Strategic Human Resource Management Index was based on the score of the organizations, creating and analyzing two sets of organizations: top quartile and bottom quartile. This classification enabled us to test if the level of SHRM implementation is equated with any significant difference of key organizational performance outcomes.

The breakdown of the results shows that the organizations that had integrated SHRM strategies were better in all of the 5 sets of performance indicators that were compared; these benefits were statistically significant and prevalent. The percent differences between the two groups for all the outcomes measures are shown in Table 4.

Table 4. Comparative performance outcomes between organizations with comprehensive versus limited SHRM practices

Performance Indicator	Difference (Comprehensive vs. Limited)
Employee Engagement	+29.1%
Organizational Productivity	+27.3%
Job Satisfaction	+25.8%
Employee Retention	+22.9%
Innovation Capability	+21.6%

Organizations with more comprehensive SHRM practices recorded a 29.1% higher employee engagement rate than did those with less practices (Table 4). This key difference has also been supported

by a prior regression analysis and SEM analysis that employee engagement is a significant pathway by which SHRM practices relate to organizational outcomes (Bailey et al., 2017). Evidence shows that firms which invest in two key HR practices – such as performance management, training, recognition and leadership development – appear to be the ones most likely to have a psychologically engaged workforce that is motivated to support the organization's goals.

Comprehensive SHRM (with a change for the best) and other groups were directly compared, and organizational productivity increased by 27.3%, clearly indicating that there is a direct connection between key SHRM practices and productivity gains. This supports the theoretical mainstream theories such as that of Lewis and Walter (1984) who stated human capital is an integral part of the competitive advantage, that is to say organizations that carefully develop and manage their employees will have a better prospect in creating a higher level of output which will make it easier for them to compete with the other developing organizations in the same field of competition.

Among employees, those working in organizations that had well thought-out SHRM strategies had 25.8% job satisfaction of the organizations which did not, indicating that the benefits of such strategies are not limited to organization performance measures, but also to the experience of the employee. As job satisfaction rises, so do organizational citizenship behaviors and reduce turnover intentions (Halbesleben, 2010) thereby contributing to the continued health and functioning of the organization. In conclusion, by reinforcing the strong link between HR practices and its impact on employee turnover and costs, the comprehensive analysis by SHRM was able to raise overall scores in employee retention. Finally, innovativeness of the work force measured as capability – 21.6% higher for comprehensive SHRM organizations – shows that strong innovations of the work force need strong climates which can be influenced by the SHRM practices required to ensure competitive positions in future for increasingly dynamic organizations (Yue, 2001).

Discussion

The results of this study have important theoretical and practical implications. For the conceptual study, the strong positive correlation between HRM practices and organizational performance was similar to the result of previous meta analysis between practices and performance (Evans & Davis, 2005) suggesting the increased confidence of RBSF. The present study, however, considers a different lens and empirically confirms that the level of employee engagement is not just a product of an increase in tourism but rather one of the most important mediating factors (Bailey et al., 2017). The results from the comments in the SEM agreed with the experimental results supporting the direct and indirect relationships between SHRM practices and performance through engagement. The results suggest that the concept of employee engagement should become a part of the future theories of SHRM rather than just a secondary one from the performance continuum. Additionally, the lack of the direct effects in this regression model suggests that talent acquisition and compensation are perhaps one area that may need to be present as a precursor to better performance, but this effect alone (when employed at high levels) is not enough. Practitioners therefore need to focus a good deal on building a system for HR wherein the selection decisions are aligned with rewards, and opportunities for growth/planful work are aligned.

Managers and the policy community have important management implications. Training and development is also second strongest to performance with organizations being advised to take training and development more as an investment rather than an expenditure (Salas et al., 2008). Managers can, for instance, make job rotations, cross functional project designations and continuous improvement plans (cpd) which are all directly linked to the organisation's strategic plans. One outlier in the beta weights is 'employee engagement', with a score of 40 – making it clear that participatory decision

making, regular feedback systems and reward and recognition initiatives don't count as 'soft' HR and are actually important drivers of productivity and retention. Policymakers designing national workforce plans can think about offering incentives for organizations, especially SMEs that might not be able to invest in comprehensive SHRM systems, to do so. Additionally, there are sector specific learning, as only HRM practices in the healthcare and IT had significantly positive relationships with performance, bringing up new issues around the HR element of knowledge-intensive, service sectors in which employee creativity and discretion is connected directly to service quality and innovation (Yue, 2001).

This study contributes to the development of the transfer research but like other studies, has its limitations that warrant attention. This cross-sectional study does not allow drawing causal inferences from the high correlations found and the results are indicative only, rather than excluding other factors like the fact that organizations with high performance may be more inclined to invest in their SHRM implementation. Although no common method biases was found in the Harman single factor test, two measures of perception were employed, one for implementation and another for the outcomes of SHRM's implementation can cause common method bias. More credible results would be generated by objective-based performance measures (such as the information listed in financial results or patents filed). Moreover, the sample was rather diverse and drawn from various industry sectors, but was predominantly at a relatively mature level of development. Findings could not be extrapolated to smaller/fewer formalized enterprises who are just starting their journey toward adopting SHRM. Although qualitative data was collected, they were not analyzed because qualitative methods do not lend themselves to discovery of patterns. Qualitative data was gathered but discarded from the analysis because, although it is still fairly useful in discovering the shades of mean concepts—such as a particular range of organizational culture or leadership style—and the perception and implementation of SHRM in an organization, it was not fully explored in this context.

Longitudinal research spanning several years following the introduction of SHRM and SHRM performance would be of great value to help clarify the direction of cause and effect in the SHRM-performance relationship and to pinpoint any time lags. A follow-up to this study could look into how other contextual variables such as organizational culture, technological turbulence and national culture affect the success of the stated SHRM practices. Some other areas with fewer evidence and investigations include the negative impacts of high performance work systems on employee stress and work-life balance, which can have adverse effect on long-term sustainability (Topcic et al., 2016). In addition, in this study simple practice complementarities approaches were analysed, but more sophisticated practice complementarities analysis is required to break down the ideal practice bundles for the different strategic context. Finally, studies in the future should have some objective measure of performance and several sources of data to mitigate the drawbacks of perceptual measures. If the study were to be expanded to include other sectors of society or others in undeveloped economies, the boundary conditions of the SHRM that was developed in this research would be tested.

Conclusion

In our work, we empirically investigated the relationship between SHRM and the creation of a high performance organization and the results confirmed that SHRM practices have a significant impact on creating a high performance organization. The key contribution of this research is to validate and build upon the current theory stating employee engagement and continuous learning is the key vehicle for the linkage of SHRM practices to superior performance. We have offered a clear but empirical profile between HR strategy and outcomes (productivity, retention, quality innovation) that accounts for 76.1% of variance in organizational performance and that empirically confirms an excellent fit of the HR model

on the measurement of overall organizational performance. On the other hand, this study supports the main tenets of the RBV and provides an alternative hypothesis that the impact of HRM practices on outcome need not be linear, but rather prioritized, in that: engagement and development practices cause more impact than direct selection and compensation practices.

Longitudinal design should be used in future research for this phenomenon to better establish the causal link between the relationships shown, namely, if the investment of SHRM is associated with high performance or if high performance is associated with investing in SHRM? Future research should further address the impact of specific practice bundles on contextual factors such as the dynamic of the industry in which the practice is conducted and organizational context (such as organizational culture), as our results suggest that one size fits all may not be the best approach. Furthermore, not much is known about the negative effects of the use of intensive SHRM systems (for example, employee burnout or work-life conflict) and these additional factors need to be paid special attention to preserve the wellbeing of employees while striving to reach high level of performance. The identified strengths and gaps of the existing SHRM paradigm will help HR practitioners to craft new, innovative and sustainable HR practices and strategies and provide guidance and direction to future researchers studying the complicated workings of Human Capital Management.

References

- Al-Khaled, A., & Fenn, C. (2020). The impact of strategic human resource management practices on organizational performance. *2020 Second International Sustainability and Resilience Conference: Technology and Innovation in Building Designs*(51154).
- Bailey, C., Madden, A., Alfes, K., et al. (2017). The meaning, antecedents and outcomes of employee engagement: A narrative synthesis. *International Journal of Management Reviews*.
- Çalışkan, E. (2010). The impact of strategic human resource management on organizational performance. *Journal of Naval Sciences and Engineering*.
- Collins, D. (2001). Organizational performance: The future focus of leadership development programs. *Journal of Leadership Studies*.
- Coron, C. (2022). Quantifying human resource management: A literature review. *Personnel Review*.
- Cronbach, L. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*.
- DeNisi, A., & Smith, C. (2014). Performance appraisal, performance management, and firm-level performance: A review, a proposed model, and new directions for future research. *Academy of Management Annals*.
- Ericksen, J., & Dyer, L. (2005). Toward a strategic human resource management model of high reliability organization performance. *The International Journal of Human Resource Management*.
- Evans, W., & Davis, W. (2005). High-performance work systems and organizational performance: The mediating role of internal social structure. *Journal of Management*.
- Gefen, D., Straub, D., & Boudreau, M. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the Association for Information Systems*.
- Halbesleben, J. (2010). *A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences*. Work Engagement.
- Hu, L., & Bentler, P. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*.
- Kline, R. (2023). *Principles and practice of structural equation modeling*. books.google.com.
- Lepak, D., Jiang, K., Kehoe, R., & Bentley, S. (2018). Strategic human resource management and organizational performance. *Strategic Human Resource Management*.
- MacCallum, R., Browne, M., et al. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*.

- Mitchell, R., Obeidat, S., & Bray, M. (2013). The effect of strategic human resource management on organizational performance: The mediating role of high-performance human resource practices. *Human Resource Management*.
- Palai, M. (2019). A comparative study on multi-generational workforce in public and private sector banks. *Parikalpana: KIIT Journal of Management*.
- Pearce, J., & Perry, J. (1983). Federal merit pay: A longitudinal analysis. *Public Administration Review*.
- Pigott, T. (2001). A review of methods for missing data. *Educational Research and Evaluation*.
- Ployhart, R., Schneider, B., & Schmitt, N. (2005). *Staffing organizations: Contemporary practice and theory*. api.taylorfrancis.com.
- Pynes, J. (2008). *Human resources management for public and nonprofit organizations: A strategic approach*. books.google.com.
- Salas, E., DiazGranados, D., Klein, C., Burke, C., et al. (2008). Does team training improve team performance? A meta-analysis. *Human Factors: The Journal of the Human Factors and Ergonomics Society*.
- Suttapong, K., Srimai, S., et al. (2014). Best practices for building high performance in human resource management. *Global Business and Organizational Excellence*.
- Topcic, M., Baum, M., & Kabst, R. (2016). Are high-performance work practices related to individually perceived stress? A job demands-resources perspective. *The International Journal of Human Resource Management*.
- Uma, S. (2009). *Research methods for business: A skill building approach 5th edition*. ir.harambeeuniversity.edu.et.
- Waal, A. D. (2012). Characteristics of high performance organisations. *Journal of Management Research*.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*.
- Yue, C. (2001). *Singapore: Towards a knowledge-based economy*. Industrial Restructuring in East Asia.