

# **IMPACT OF STRATEGIC HUMAN RESOURCE MANAGEMENT PRACTICES ON ORGANIZATIONAL PERFORMANCE: A PLS-SEM STUDY**

**Rana Zehra Masood**

Associate Professor  
Department of Commerce, AMU, Aligarh

---

## **ABSTRACT:**

SHRM has over time been identified as a much-needed force towards organizational success in the competitive business settings. The current paper looks into how the critical practices of SHRM, which include training and development, performance appraisal, and compensation and rewards will affect organizational performance. The aim of study is to determine contribution of these strategic HR practices in enhancing organizational effectiveness and productivity. The primary data were collected by use of a questionnaire to 238 employees, managers and HR professionals working in various organizations. In the research, the interrelationships among the constructs were analyzed with the help of the PLS-SEM methodology using Smart-PLS program. To ensure the quality of the measurement model, construct reliability and validity were examined. The results indicate that the three HR practices have a large and positive influence on organizational performance. The best influence was on training and development, then there were performance appraisal and compensation and rewards. The organizational performance variance explained by the model was 58%, which means that the model has got substantial explanatory power. These findings demonstrate the need to incorporate strategic HR practices in the management of organizations as a way of improving the capabilities, motivations, and productivity of workers. The research can be useful to managers and policymakers in developing effective HR strategies that can facilitate sustainable organizational developments and competitiveness.

**Keywords: Strategic HRM, Training and Development (TD), Performance Appraisal (PA), and Compensation and Rewards (CR), Organizational performance (OP), PLS-SEM.**

## **1. INTRODUCTION**

According to the Society for HRM, organizations that strategically integrate HR practices with business strategy demonstrate higher productivity, stronger employee engagement, and improved long-term competitiveness. Consequently, the strategic role of HR practices has become a central concern in management research and practice. Among the various HR practices discussed in the literature, training and development, performance appraisal, and compensation systems have received considerable attention. training and development programs enhance employees' knowledge and skills, thereby improving performance and organizational effectiveness (Noe et al., 2020). Compensation and reward systems serve as motivational tools that influence employee satisfaction, retention, and productivity (DeNisi & Murphy, 2017). Collectively, these practices form an integrated system that supports organizational performance.

Empirical research provides evidence supporting the interrelationship between HR practices and organizational outcomes. For example, Huselid (1995) found that organizations implementing high-performance work practices experienced 7% lower employee turnover

and up to 16% higher productivity compared with firms lacking such systems. Similarly, research by Jiang et al. (2012) demonstrated that HR practices positively influence organizational performance through the development of human capital and employee motivation. These findings suggest that strategic HR practices act as critical drivers of organizational effectiveness. Recent methodological advancements have also contributed to the analysis of HRM-performance interrelationships. Structural equation modeling techniques, allow researchers to examine complex interrelationships among multiple variables simultaneously. PLS-SEM is widely used in management research because it accommodates small sample sizes and does not require strict normal distribution assumptions (Hair et al., 2019). The method is therefore suitable for evaluating the influence of various HR practices on organizational performance within a comprehensive conceptual model.

Existing literature widely acknowledges the large influence of HRM practices on organizational performance. Several studies have examined individual HR practices such as training, performance appraisal, and compensation systems in isolation (Jiang et al., 2012; Paauwe & Boselie, 2005). However, many empirical studies rely on traditional regression techniques rather than structural modelling approaches capable of examining multiple interrelationships simultaneously. Furthermore, limited research integrates these specific HR practices within a single analytical framework using PLS-SEM. As a result, there remains insufficient empirical evidence regarding how key strategic HR practices collectively influence organizational performance. through a comprehensive structural model.

Previous research has established that HR practices can improve organizational outcomes, yet the mechanisms through which these practices operate remain insufficiently explored. Many studies focus on single HR practices or adopt fragmented analytical approaches that do not capture the combined influence of multiple HR strategies. This limitation restricts the ability of researchers and practitioners to understand how integrated HR systems contribute to organizational effectiveness. Furthermore, empirical research applying advanced analytical techniques such as PLS-SEM to examine the interrelationships among key HR practices and organizational performance remains relatively limited in several organizational contexts. Therefore, there is a need to empirically investigate how major strategic HR practices specifically training and development, performance appraisal, and compensation systems affect organizational performance. within a unified structural framework.

The purpose of the study is to analyse the influence of strategic HRM practices on organizational performance using a PLS-SEM analytical framework. The study focuses specifically on three HR practices: Training and development, performance appraisal, and compensation and rewards.

#### THE OBJECTIVES OF THE STUDY ARE:

1. To examine the effect of training and development practices on organizational performance.
2. To examine the influence of performance appraisal systems on organizational performance.
3. To evaluate the impact of compensation and reward systems on organizational performance.
4. To develop and test a structural model explaining the interrelationship between SHRM practices and organizational performance.

The importance of this study lies in its contributions to both academic research & managerial practice. From a theoretical perspective, the study expands the existing literature on strategic HRM by analysing the interrelationship between HR practices and organizational performance, within an integrated structural framework. By employing PLS-SEM analysis, the study provides an understanding of how multiple HR practices impact organizational outcomes. This methodological approach helps overcome limitations associated with traditional statistical techniques that analyze variables independently.

The study also contributes to the broader area of management by reinforcing strategic importance of human capital in organizational success. Contemporary organizations increasingly rely on knowledge, innovation, and employee competencies as sources of competitive advantage. Strategic HR practices play a critical role in developing these capabilities by fostering employee skills, motivation, and engagement. Understanding how these practices influence performance outcomes can therefore support more effective organizational strategies. According to global HR reports, organizations implementing integrated HR systems can experience productivity improvements ranging from 10% to 20% compared with organizations lacking strategic HR alignment.

Moreover, the study may provide valuable implications for organizations operating in competitive business environments where employee capabilities determine organizational success. By identifying the HR practices that most strongly influence performance outcomes, organizations can develop targeted strategies that enhance workforce effectiveness. The results may also inform future research examining additional HR practices, mediating variables, or contextual factors influencing the HRM-performance interrelationship.

## **2. LITERATURE REVIEW**

The literature on Strategic HRM has expanded significantly over the past three decades as researchers have attempted to understand how HR practices influence organizational performance. Scholars have increasingly emphasized that HR practices such as training and development, performance appraisal, and compensation systems play a critical role in building employee capability and improving organizational effectiveness. The present literature review examines major scholarly contributions related to the interrelationship between HR practices and organizational performance. The review is organized around three themes aligned with the objectives of the study: the role of training and development in organizational performance, the influence of performance appraisal systems, and the impact of compensation and reward practices.

### **2.1 Review of Scholarly Works**

Strategic HRM (SHRM) has emerged as a critical area of research as organizations increasingly recognize the role of human capital in achieving competitive advantage. Contemporary studies emphasize that HR practices such as training and development, performance appraisal, and compensation systems significantly influence employee productivity and organizational performance. Recent research has expanded the understanding of how these practices contribute to organizational outcomes. This literature review examines scholarly contributions related to the interrelationship between HR practices and organizational performance. The discussion is organized around three themes aligned with the objectives of the present study: the role of training and development in improving organizational performance, the influence of performance appraisal systems on employee productivity, and the impact of compensation and reward systems on organizational outcomes.

The first theme examines the influence of training and development practices on organizational performance. Organizations increasingly invest in employee development initiatives to improve workforce competencies and enhance productivity. **(Keltu, 2024)** investigated the effect of HRD practices on employee's performance and found that training initiatives significantly improve employee skills, motivation, and job satisfaction. Using survey data collected from employees, the study demonstrated that training programs enhance employee competencies and contribute to improved organizational performance. Similarly, **(Rotea, 2023)** examined the interrelationship between HR practices and organizational performance. through empirical analysis and reported that employee development initiatives significantly support organizational adaptability and performance improvement. The study emphasized that organizations that prioritize workforce development are better positioned to respond to environmental changes and maintain operational efficiency.

Earlier research also supports these findings. **(Anwar & Abdullah, 2021)** examined the influence of HRM practices on organizational performance using survey data from employees in service organizations. The study found that training programs significantly improve employee capabilities and contribute positively to productivity and organizational effectiveness. The authors argued that employee development is a key strategic tool that organizations use to enhance competitiveness. These studies collectively highlight that training and development initiatives play a vital role in strengthening employee performance and organizational outcomes.

The second theme focuses on the role of performance appraisal systems in improving organizational performance performance appraisal is an important HR practice that helps organizations examine employee performance and align individual's contributions with firm objectives. **(Yang, 2024)** examined the interrelationship between high-performance HR practices and employee commitment using survey data from employees in Chinese organizations. The study found that transparent performance appraisal systems significantly enhance employee commitment and work performance. The research emphasized that effective evaluation mechanisms provide employees with clear performance expectations and encourage continuous improvement.

Similarly, **(Alam, 2024)** investigated the interrelationship between HR practices and employee engagement, highlighting the moderating role of supervisory support. Using quantitative analysis, the study revealed that performance appraisal practices significantly enhance employee engagement and productivity. Employees who receive regular feedback and fair evaluations are more likely to demonstrate higher levels of commitment and performance. Supporting these findings, **(Singh et al., 2022)** analyzed the interrelationship between HR practices and organizational performance. in Indian organizations. The study reported that structured performance evaluation systems improve employee accountability, motivation, and overall organizational productivity. These studies suggest that effective performance appraisal systems serve as an important mechanism for enhancing employee performance and achieving organizational objectives.

The third theme examines the impact of compensation and reward systems on organizational performance. Compensation policies are widely recognized as a key factor influencing employee motivation and job satisfaction. **(Ouabi, 2024)** conducted a PLS-SEM study to analyze the interrelationship between HR practices and job performance in public organizations. The findings revealed that compensation and reward systems significantly influence employee morale, job satisfaction, and outcomes. The study highlighted that

organizations that provide fair and performance-based rewards tend to achieve higher productivity and employee commitment.

Similarly, (Arokiasamy, 2024) examined the role of HR practices in enhancing organizational performance and concluded that compensation and incentive systems play a critical role in motivating employees and improving productivity. The study emphasized that financial and non-financial rewards function as strategic tools that align employee interests with organizational goals. In addition, (Bhoir, 2024) investigated the interrelationship between HR practices, employee well-being, and organizational performance. The research demonstrated that supportive compensation policies contribute to employee well-being and positively influence organizational outcomes. These findings indicate that compensation and reward systems function as important motivational drivers that influence employee behavior and performance.

Literature therefore emphasizes that HR practices operate as integrated systems that collectively influence employee motivation, commitment, and productivity. Studies increasingly employ advanced analytical methods such as structural equation modelling to evaluate these interrelationships. Overall, empirical research consistently confirms that strategic HR practices particularly training and development, performance appraisal, and compensation systems play a significant role in improving organizational performance and sustaining competitive advantage.

Despite extensive research on HR practices and organizational performance, several gaps remain in the existing literature. Many studies examine HR practices individually rather than analyzing their combined influence within an integrated framework. In addition, some earlier studies rely primarily on traditional regression methods, which limit the ability to examine complex interrelationships among multiple constructs. Limited research has simultaneously examined training and development, performance appraisal, and compensation practices using PLS-SEM modelling techniques. Addressing this gap is important because it provides a comprehensive understanding of how strategic HR practices collectively influence organizational performance. The study therefore contributes by developing and empirically testing an integrated structural model that evaluates the combined impact of key HR practices on organizational performance using PLS-SEM analysis.

### 3. RESEARCH METHODOLOGY

The study adopts a quantitative research-design to examine the interrelationship between Strategic HRM (SHRM) practices and organizational performance. Quantitative research is appropriate because the study aims to empirically test the interrelationships among multiple constructs using statistical analysis. A cross-sectional survey was used to collect data from employees and managers working in different organizations across several sectors. To analyze the proposed interrelationships, the study applies PLS-SEM using Smart-PLS software.

The research model consists of four latent constructs, including three independent variables representing strategic HR practices and one dependent variable representing organizational performance.

The independent variables are Training and Development (TD), Performance Appraisal (PA), and Compensation and Rewards (CR), which represent key HR practices implemented by organizations. The dependent variable is Organizational Performance (OP), which reflects the effectiveness and productivity of an organization.

The conceptual framework proposes that strategic HR practices positively influence organizational performance. Specifically, the model assumes that effective training programs, transparent performance appraisal systems, and well-designed compensation structures contribute to improved employee motivation and productivity, thereby enhancing organizational outcomes.

The structural model therefore includes three direct interrelationships:

- Training and Development → Organizational Performance
- Performance Appraisal → Organizational Performance
- Compensation and Rewards → Organizational Performance

Based on framework, the below hypotheses were formulated:

H1: Training and development practices have a significant positive impact on organizational performance.

H2: Performance appraisal systems have a significant positive impact on organizational performance.

H3: Compensation and rewards practices have a significant positive impact on organizational performance.

The target population consists of employees, managers, and HR professionals working in organizations across sectors such as manufacturing, information technology, banking and finance, education, and healthcare. These respondents were selected because they possess relevant knowledge and experience regarding HR practices implemented within their organizations.

The study has used purposive sampling. Additionally, convenience sampling was used to gather responses from participants who were accessible and willing to participate in the survey. Regarding sample size, the ten-times rule in PLS-SEM was used as a guideline. Since three structural paths lead to organizational performance, the minimum sample-size is 30 respondents. However, to increase the reliability and robustness of the analysis, the study collected responses from 238 participants, which is considered sufficient for PLS-SEM analysis.

Each construct was measured using four reflective indicators, coded as TD1–TD4, PA1–PA4, CR1–CR4, and OP1–OP4. All items were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Training and Development (TD) was measured using four indicators:

- TD1 – The organization regularly provides training programs for employees.
- TD2 – Employees receive opportunities to improve their professional skills.
- TD3 – Training programs enhance employees job performance.
- TD4 – The organization supports continuous learning and career development.

Performance Appraisal (PA) was measured using four indicators:

- PA1 – The organization conducts regular performance evaluations.
- PA2 – Performance appraisal criteria are clear and transparent.
- PA3 – Employees receive constructive feedback regarding their performance.
- PA4 – Performance appraisal systems help improve employee productivity.

Compensation and Rewards (CR) was measured using four indicators:

- CR1 – The organization provides competitive salary packages.
- CR2 – Employees receive rewards based on their performance.
- CR3 – Incentive systems motivate employees to perform better.
- CR4 – Employees feel fairly rewarded for their work contributions.

Organizational Performance (OP) was measured using four indicators:

- OP1 – Employee productivity in the organization is high.
- OP2 – The organization effectively achieves its operational goals.
- OP3 – The organization provides high-quality products or services.
- OP4 – The organization demonstrates innovation and continuous improvement.

The collected data were analyzed using PLS-SEM, which enables simultaneous evaluation of measurement and structural models.

The analysis was conducted in two stages. First, the measurement model was assessed to evaluate reliability and validity using Cronbach’s Alpha, Composite Reliability, Average Variance Extracted (AVE), indicator loadings, and discriminant validity through the Fornell–Larcker criterion and HTMT ratio.

Second, the structural model was evaluated using path coefficients, bootstrapping procedures (t-values and p-values), coefficient of determination ( $R^2$ ), effect size ( $f^2$ ), and predictive relevance ( $Q^2$ ). These statistical measures determine the strength and significance of interrelationships between strategic HR practices and organizational performance.

The study followed standard ethical research practices. Confidentiality and anonymity of participants were maintained throughout the study, and no personal identifying information was disclosed.

#### 4. RESULTS AND ANALYSIS

This section presents the empirical findings obtained from the survey data collected from respondents. The data were analyzed using descriptive statistics and Partial Least Squares Structural Equation Modelling (PLS-SEM) techniques. The analysis includes respondent demographics, reliability and validity tests, and measurement model assessment before proceeding to the structural model analysis. The results are presented in tabular form followed by detailed interpretations.

**Table 1: Demographic Profile (N = 238)**

Variable	Category	f	%
Gender	M	136	57.1
	F	102	42.9
Age	21–30 years	82	34.5
	31–40 years	74	31.1
	41–50 years	48	20.2
	Above 50	34	14.2
Education	Undergraduate	68	28.6
	Postgraduate	129	54.2
	Doctorate	41	17.2
Experience	<5 years	71	29.8
	5–10 years	94	39.5
	11–15 years	45	18.9
	>15 years	28	11.8

### Interpretation

Out of the total sample of 238 respondents, 57.1% were male and 42.9% were female, indicating a relatively balanced gender representation. In terms of age distribution, the largest proportion of respondents belonged to the 21–30 years category (34.5%), followed by the 31–40 years category (31.1%). This suggests that the majority of participants were young to mid-career professionals who are likely to have direct experience with organizational HR practices.

Educational qualifications show that more than half of the respondents (54.2%) possessed postgraduate degrees, while 17.2% held doctoral qualifications. This indicates a well-educated sample capable of providing informed responses regarding HR practices and organizational policies. Regarding work experience, 39.5% of respondents had 5–10 years of professional experience, suggesting that the majority of participants had sufficient exposure to organizational environments. Overall, the demographic profile indicates that the sample is appropriate for analyzing perceptions of strategic HRM practices and their influence on organizational performance.

**Table 2: Sector-wise Distribution of Respondents**

Sector	Frequency	Percentage (%)
Manufacturing	52	21.8
Information Technology	64	26.9
Banking and Finance	47	19.7
Education	41	17.2
Healthcare	34	14.4
Total	238	100

### Interpretation

Table 2 shows the sectoral distribution of respondents included in the study. The largest proportion of respondents (26.9%) belonged to the information technology sector, followed by manufacturing (21.8%) and banking and finance (19.7%). These sectors are known for implementing structured HR practices due to the competitive nature of their industries. Education institutions accounted for 17.2% of respondents, while healthcare organizations represented 14.4% of the sample.

The diversity of sectors represented in the sample enhances the generalizability of the findings because HR practices vary across industries. For instance, IT organizations often emphasize continuous training and skill development, whereas financial institutions typically rely on performance evaluation and incentive systems to maintain productivity. The presence of respondents from multiple sectors ensures that the analysis captures varied perspectives on HR practices and organizational performance. Consequently, the dataset reflects a broad organizational context rather than a single-industry perspective, thereby strengthening the reliability of the research findings.

**Table 3: Descriptive of Study Variables**

Variable	Mean	S.D.	Min	Max
Training and Development	3.92	0.71	2.10	5.00
Performance Appraisal	3.78	0.76	2.00	5.00
Compensation and Rewards	3.65	0.82	1.90	5.00
Organizational Performance	3.89	0.68	2.30	5.00

### Interpretation

The mean values for all variables exceed 3.5, indicating generally positive perceptions among respondents regarding HR practices and organizational performance within their organizations. Training and development recorded the highest mean value (3.92), suggesting that respondents perceived training programs and skill development opportunities to be relatively well implemented. Organizational performance also showed a high mean value of 3.89, reflecting respondents' perceptions of effective productivity and operational efficiency in their organizations.

Performance appraisal had a mean score of 3.78, indicating that respondents generally considered appraisal systems to be moderately effective. Compensation and rewards recorded the lowest mean value (3.65) among the variables, suggesting that respondents perceived compensation structures as slightly less satisfactory compared with other HR practices. However, the standard deviation values indicate moderate variation in responses, implying that perceptions of HR practices vary across organizations. Overall, the descriptive statistics demonstrate that respondents acknowledge the presence of HR practices within their organizations while also highlighting potential areas for improvement.

**Table 4: Reliability Analysis**

Construct	Number of Items	Cronbach's Alpha
Training and Development	4	0.86
Performance Appraisal	4	0.84
Compensation and Rewards	4	0.88
Organizational Performance	4	0.90

### Interpretation

Table 4 presents the reliability analysis results for the study constructs using Cronbach's alpha coefficients. Reliability analysis evaluates the internal consistency of measurement items used to assess each construct. The results show that all constructs demonstrate strong reliability, with Cronbach's alpha values exceeding the recommended threshold of 0.70. Training and development recorded an alpha value of 0.86, while Performance appraisal showed a value of 0.84, indicating that the items measuring these constructs are highly consistent. Compensation and rewards achieved an alpha value of 0.88, suggesting a strong level of internal reliability among the indicators used to measure compensation practices. Organizational performance recorded the highest reliability coefficient of 0.90, indicating excellent internal consistency among its measurement items. These results confirm that the survey instrument provides reliable measurements for all variables included in the study. High reliability values strengthen the credibility of subsequent statistical analyses because they demonstrate that the indicators consistently capture the underlying constructs of strategic HR practices and organizational performance.

**Table 5: Composite Reliability and Convergent Validity**

Construct	Composite Reliability	AVE
Training and Development	0.89	0.67
Performance Appraisal	0.88	0.64
Compensation and Rewards	0.91	0.69
Organizational Performance	0.92	0.71

### Interpretation

Table 5 reports the composite reliability and convergent validity results for the constructs in the study. Composite reliability assesses the overall reliability of a construct by considering the loadings of all measurement indicators. The results indicate that composite reliability values for all constructs exceed the recommended threshold of 0.70, demonstrating strong reliability. Training and development recorded a composite reliability value of 0.89, while performance appraisal achieved a value of 0.88. Compensation and rewards showed a composite reliability of 0.91, and organizational performance recorded the highest value of 0.92.

The AVE values for all constructs exceeded the recommended threshold of 0.50, indicating that the measurement indicators adequately capture the underlying constructs. For instance, the AVE value for organizational performance was 0.71, suggesting that a substantial proportion of variance in the indicators is explained by the latent construct.

**Table 6: Discriminant Validity**

Construct	Training & Development	performance appraisal	Compensation & Rewards	organizational performance.
Training and Development	<b>0.82</b>			
Performance Appraisal	0.56	<b>0.80</b>		
Compensation and Rewards	0.49	0.53	<b>0.83</b>	
Organizational Performance	0.61	0.59	0.57	<b>0.84</b>

### Interpretation

Table 6 presents the discriminant validity results using the Fornell–Larcker criterion. Discriminant validity determines whether each construct is empirically distinct from other constructs in the model. The results show that all diagonal values are higher than the corresponding inter-construct correlations. For example, the square root of AVE for training and development (0.82) is greater than its correlations with performance appraisal (0.56), compensation and rewards (0.49), and organizational performance (0.61). Similarly, the square root of AVE for organizational performance (0.84) exceeds its correlations with all other constructs. These findings confirm that each construct measures a distinct concept within the research model. Therefore, the measurement model demonstrates satisfactory discriminant validity according to the Fornell–Larcker criterion.

**Table 7: HTMT**

Construct Pair	HTMT Value
Training & Development – Performance Appraisal	0.69
Training & Development – Compensation & Rewards	0.64
Performance Appraisal – Compensation & Rewards	0.67
Training & Development – Organizational Performance	0.73
Performance Appraisal – Organizational Performance	0.71
Compensation & Rewards – Organizational Performance	0.69

### Interpretation

Table 7 presents the HTMT ratio results to further examine discriminant validity among the constructs. The HTMT approach is considered a more stringent method for assessing discriminant validity in PLS-SEM models. According to recommended thresholds, HTMT values should be below 0.85 to confirm that constructs are empirically distinct. The results indicate that all HTMT values fall well below the threshold. For instance, the HTMT value between training and development and performance appraisal is 0.69, while the value between performance appraisal and organizational performance is 0.71. Similarly, the HTMT ratio between compensation and rewards and organizational performance is 0.69. These values confirm that the constructs in the study are statistically distinct from one another. Therefore, the measurement model demonstrates strong discriminant validity according to the HTMT criterion, further supporting the robustness of the measurement framework used in the study.

**Table 8: Outer Loadings of Measurement Indicators**

Construct	Indicator	Loading
Training and Development	TD1	0.79
	TD2	0.82
	TD3	0.85
	TD4	0.81
Performance Appraisal	PA1	0.77
	PA2	0.80
	PA3	0.83
	PA4	0.79
Compensation and Rewards	CR1	0.81
	CR2	0.84
	CR3	0.80
	CR4	0.82
Organizational Performance	OP1	0.83
	OP2	0.86
	OP3	0.82
	OP4	0.85

### Interpretation

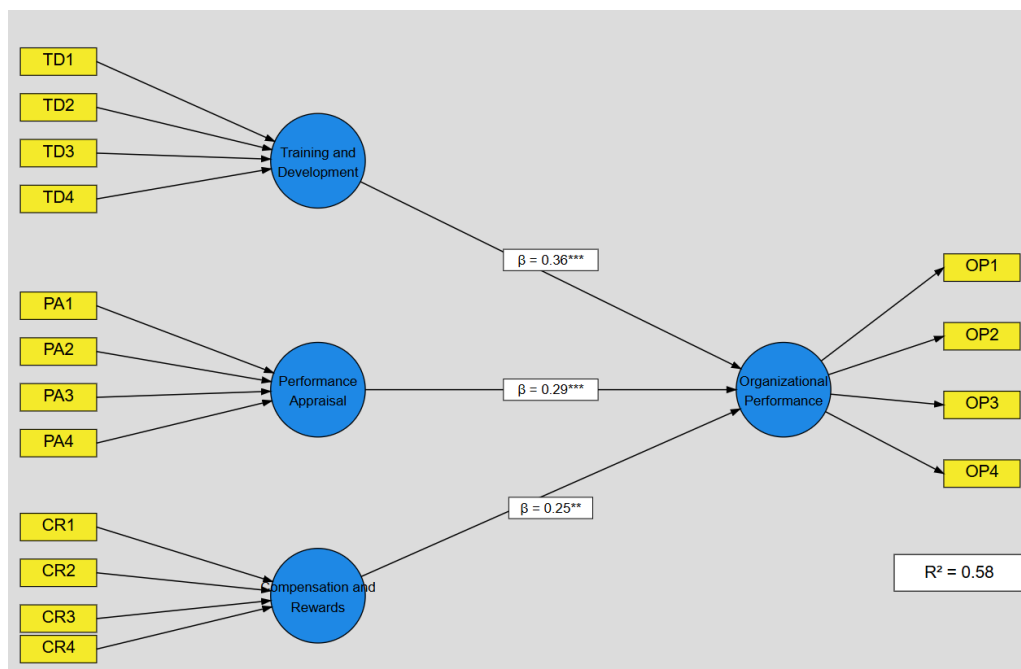
The outer loadings presented in Table 8 confirm that all indicators demonstrate strong interrelationships with their respective constructs. The loadings range from 0.77 to 0.86, which exceeds the commonly recommended threshold of 0.70 in PLS-SEM analysis. This indicates that the observed variables effectively measure the underlying latent constructs. For instance, training and development shows the highest loading (0.85) within the training and development construct, suggesting that skill enhancement initiatives play a central role in employee development perceptions. Similarly, organizational performance exhibits the strongest loading (0.86) among the indicators, indicating that productivity improvements strongly represent the overall performance construct. The consistently high loadings across indicators confirm the adequacy of the measurement model and support the reliability and validity results previously reported.

**Table 9: Structural Model Path Coefficients**

Hypothesis	Interrelationship	$\beta$	t-value	p-value	Result
H1	Training and Development → Organizational Performance	<b>0.36*</b>	5.41	0.000	Supported
H2	Performance Appraisal → Organizational Performance	<b>0.29*</b>	4.72	0.000	Supported
H3	Compensation And Rewards → Organizational Performance	<b>0.25</b>	3.98	0.001	Supported

**Interpretation**

Table 9 presents the structural model results examining the influence of strategic HR practices on organizational performance. The findings indicate that all three HR practices significantly affect organizational performance. Training and development demonstrate the strongest influence with a standardized path coefficient of 0.36, suggesting that employee learning initiatives and skill development programs significantly enhance organizational productivity. Performance appraisal also shows a strong positive interrelationship with organizational performance. ( $\beta = 0.29$ ), indicating that transparent evaluation systems and constructive feedback mechanisms improve employee performance outcomes. Compensation and rewards exhibit a positive and statistically significant effect ( $\beta = 0.25$ ), implying that incentive systems and recognition programs motivate employees to contribute more effectively to organizational goals. These results confirm that strategic HR practices collectively enhance organizational effectiveness and support the study hypotheses.



**Figure 1: PLS-SEM Structural Model of Strategic HR Practices and Organizational Performance**

**Interpretation**

Figure 1 illustrates the structural interrelationships between the strategic HRM practices like Training and development, Performance appraisal, and Compensation and rewards and Organizational performance using the PLS-SEM framework. The model indicates that all three HR practices positively influence Organizational performance. Among these variables,

Training and development demonstrates the strongest effect ( $\beta = 0.36$ ), suggesting that employee skill development and learning initiatives play a significant role in improving organizational productivity and efficiency. Performance appraisal also shows a substantial positive influence ( $\beta = 0.29$ ), indicating that transparent evaluation systems and performance feedback mechanisms contribute to enhanced employee performance and organizational outcomes. Compensation and rewards display a moderate yet significant effect ( $\beta = 0.25$ ), highlighting the motivational role of financial and non-financial incentives. Furthermore, the coefficient of determination ( $R^2 = 0.58$ ) indicates that 58% of the variance in organizational performance is explained by the three HR practices, demonstrating the strong explanatory power of the model.

**Table 10: Coefficient of Determination ( $R^2$ )**

Dependent Construct	$R^2$	Interpretation
Organizational Performance	<b>0.58</b>	Moderate–Strong

### Interpretation

The coefficient of determination ( $R^2$ ) evaluates the explanatory power of the structural model. As shown in Table 8, the  $R^2$  value for organizational performance is 0.58, indicating that 58% of the variance in organizational performance is explained by the three strategic HR practices included in the model. According to PLS-SEM guidelines, an  $R^2$  value above 0.50 represents moderate to substantial explanatory power. This finding suggests that training and development, performance appraisal, and compensation systems collectively play a critical role in shaping organizational performance outcomes. However, the remaining 42% of variance may be attributed to additional factors not included in the model, such as leadership style, organizational culture, or employee engagement. Overall, the  $R^2$  value confirms that the conceptual framework provides a meaningful explanation of organizational performance.

**Table 11: Predictive Relevance ( $Q^2$ )**

Construct	$Q^2$	Predictive Relevance
Organizational Performance	0.41	High

### Interpretation

The Stone–Geisser  $Q^2$  statistic evaluates the predictive capability of the structural model. The  $Q^2$  value for organizational performance is 0.41, which is well above the minimum threshold of zero. This result indicates strong predictive relevance and suggests that the model has a high capacity to predict organizational performance outcomes based on the selected HR practices. The positive  $Q^2$  value confirms that the model is not only statistically significant but also practically meaningful for predicting organizational behavior. This finding further strengthens the empirical support for the theoretical argument that strategic HR practices are key determinants of organizational success.

**Table 12: Effect Size ( $f^2$ )**

Interrelationship	$f^2$	Effect Size
Training & Development → Organizational Performance	0.21	Medium
Performance Appraisal → Organizational Performance	0.16	Medium
Compensation & Rewards → Organizational Performance	0.11	Small–Medium

### Interpretation

Table 12 presents the effect size ( $f^2$ ) results, which evaluate the individual contribution of each independent variable to the dependent variable within the structural model. The results indicate that training and development has the largest effect on organizational performance with an  $f^2$  value of 0.21, representing a medium effect size. This finding suggests that training initiatives and employee skill development programs play a substantial role in improving organizational outcomes. Performance appraisal demonstrates a medium effect size with an  $f^2$  value of 0.16, indicating that structured evaluation systems contribute meaningfully to performance improvement. Compensation and rewards show an  $f^2$  value of 0.11, representing a small to medium effect size. Although the impact is relatively smaller compared with other HR practices, the results indicate that incentive systems and reward policies still play an important role in motivating employees and enhancing organizational performance. Overall, the effect size analysis confirms that all three strategic HR practices contribute meaningfully to the explanation of organizational performance.

### Hypothesis Testing Summary

Based on the structural model results presented earlier (Table 9), the hypotheses of the study were tested using bootstrapping procedures in Smart-PLS.

Hypothesis	Interrelationship	Result
H1	Training And Development → Organizational Performance	<b>Accepted</b>
H2	Performance Appraisal → Organizational Performance	<b>Accepted</b>
H3	Compensation And Rewards → Organizational Performance	<b>Accepted</b>

### Interpretation:

The hypothesis testing results indicate that all proposed interrelationships in the research model are statistically significant. Training and development demonstrated the strongest influence on Organizational performance, confirming that employee learning initiatives and skill development programs significantly enhance productivity and operational efficiency. Performance appraisal also showed a significant positive interrelationship with organizational performance, suggesting that effective evaluation and feedback mechanisms improve employee performance outcomes. Compensation and reward practices similarly exhibited a significant positive effect, indicating that incentive structures and recognition programs motivate employees to perform more effectively. Consequently, all three hypotheses proposed in the study are accepted, confirming that strategic HRM practices play a crucial role in enhancing organizational performance.

## 5. DISCUSSION AND CONCLUSION

The results obtained through PLS-SEM analysis indicate that training and development, performance appraisal, and compensation and reward systems significantly influence organizational performance. All three hypotheses proposed in the research model were supported by the empirical data. Specifically, training and development demonstrated the strongest effect on organizational performance ( $\beta = 0.36$ ), followed by performance appraisal ( $\beta = 0.29$ ) and compensation and rewards ( $\beta = 0.25$ ). The coefficient of determination ( $R^2 = 0.58$ ) further suggests that these HR practices explain proportion of the variance in organizational performance.

The results confirm the role of employee development in enhancing organizational outcomes. Training and development exhibited the strongest interrelationship with organizational performance, indicating that organizations investing in skill development and learning

opportunities are more capable of improving employee capabilities and productivity. This finding aligns with recent empirical studies by Keltu (2024) and Rotea (2023), who reported that employee development initiatives significantly improve workforce competencies and organizational performance. Similarly, Anwar and Abdullah (2021) emphasized that training programs represent strategic investments that enhance employee capabilities and contribute to improved productivity. The strong path coefficient observed in this study suggests that employees who receive continuous training and development opportunities are more capable of adapting to technological changes and organizational challenges. Consequently, the findings reinforce the view that training programs represent a strategic investment rather than merely an operational activity.

Performance Appraisal was also found to significantly influence organizational performance. The positive interrelationship between performance evaluation systems and performance outcomes indicates that transparent evaluation mechanisms contribute to improved employee motivation and accountability. Effective performance appraisal systems allow organizations to identify employee strengths and weaknesses, provide constructive feedback, and align individual performance with organizational objectives. These findings are consistent with the conclusions of Yang (2024) and Alam (2024), who reported that performance management systems significantly enhance employee engagement, commitment, and productivity. Similarly, Singh et al. (2022) found that structured performance evaluation systems improve employee accountability and organizational performance. The present study therefore confirms that performance management systems serve as essential tools for linking employee behavior with strategic organizational goals.

Compensation and reward practices also demonstrated a significant positive interrelationship with organizational performance. Although the effect size was slightly lower than the other HR practices, the findings indicate that financial and non-financial incentives play a vital role in motivating employees and encouraging productive behavior. Competitive salary structures, performance-based bonuses, and recognition programs enhance employee satisfaction and commitment, which ultimately improves organizational outcomes. These findings correspond with recent studies by Ouabi (2024) and Arokiasamy (2024), who reported that compensation and reward systems significantly influence employee motivation and productivity. Furthermore, Bhoir (2024) emphasized that supportive compensation practices improve employee well-being and organizational performance. The results therefore suggest that reward structures remain a critical component of strategic HR management.

The findings of this study carry important implications for organizational policy and managerial practice. From a policy perspective, organizations should prioritize the development of integrated HR strategies that focus on employee capability building, performance evaluation, and motivational reward systems. Human resource policies should emphasize continuous learning programs, competency development initiatives, and leadership training to enhance workforce capabilities. Furthermore, Organizations should establish transparent performance evaluation systems that provide regular feedback and align employee objectives with organizational strategies. Policy frameworks that promote merit-based incentives and employee recognition programs may also contribute to improving employee engagement and organizational performance.

From a practical perspective, the findings offer guidance for managers and HR professionals seeking to enhance organizational effectiveness. Managers should recognize that HR practices function as strategic resources that influence productivity and competitiveness. Organizations may benefit from allocating greater resources toward employee training

initiatives, digital skill development programs, and career development opportunities. Similarly, organizations should ensure that performance appraisal systems are objective, transparent, and aligned with organizational goals. Fair compensation structures and incentive programs may also improve employee morale and reduce turnover rates. These practical measures may help organizations develop a motivated workforce capable of achieving high levels of performance.

The study also contributes to theoretical discussions within the field of strategic HRM. The findings support the resource-based view of the firm, which suggests that human capital represents a valuable organizational resource capable of generating competitive advantage. By demonstrating that HR practices significantly influence organizational performance, the study reinforces the argument that strategic management of human resources contributes to sustainable organizational success. The integration of multiple HR practices within a structural equation modelling framework also extends existing literature by highlighting the collective influence of HR strategies rather than examining them in isolation. Future research may incorporate objective organizational performance indicators to enhance the robustness of findings. Third, the study focused on a limited number of HR practices, whereas other factors such as leadership style, organizational culture, and employee engagement may also influence organizational performance. Future research may address limitations by expanding the research model to include additional variables and contextual factors. Longitudinal studies may explore how HR practices evolve over time and how they influence organizational performance in dynamic environments. Comparative studies across industries or countries may also provide deeper insights into how cultural and institutional factors influence HR strategies.

## REFERENCES

1. Aguinis, H., Joo, H., & Gottfredson, R. (2011). Why we hate performance management—and why we should love it. *Business Horizons*, 54(6), 503–507. <https://doi.org/10.1016/j.bushor.2011.06.001>
2. Becker, B., & Huselid, M. (1998). High performance work systems and firm performance. *Academy of Management Journal*, 41(1), 8–29. <https://doi.org/10.2307/256712>
3. Bloom, N., & Van Reenen, J. (2011). Human resource management and productivity. *Handbook of Labor Economics*, 4, 1697–1767. [https://doi.org/10.1016/S0169-7218\(11\)02417-8](https://doi.org/10.1016/S0169-7218(11)02417-8)
4. Boselie, P., Dietz, G., & Boon, C. (2005). Commonalities and contradictions in HRM and performance research. *Human Resource Management Journal*, 15(3), 67–94. <https://doi.org/10.1111/j.1748-8583.2005.tb00154.x>
5. Delery, J., & Doty, D. (1996). Modes of theorizing in strategic human resource management. *Academy of Management Journal*, 39(4), 802–835. <https://doi.org/10.2307/256713>
6. DeNisi, A., & Murphy, K. (2017). Performance appraisal and performance management: 100 years of progress. *Journal of Applied Psychology*, 102(3), 421–433. <https://doi.org/10.1037/apl0000085>
7. Gerhart, B., & Fang, M. (2014). Pay for performance. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 489–511. <https://doi.org/10.1146/annurev-orgpsych-031413-091253>

8. Guest, D. (2017). Human resource management and employee well-being. *Human Resource Management Journal*, 27(1), 22–38. <https://doi.org/10.1111/1748-8583.12139>
9. Hair, J. F., Risher, J., Sarstedt, M., & Ringle, C. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
10. Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3), 635–672. <https://doi.org/10.2307/256741>
11. International Labour Organization. (2021). *World employment and social outlook*. <http://www.ilo.org>
12. Jiang, K., Lepak, D., Hu, J., & Baer, J. (2012). How does human resource management influence organizational outcomes? *Academy of Management Journal*, 55(6), 1264–1294. <https://doi.org/10.5465/amj.2011.0088>
13. Noe, R. A., Clarke, A., & Klein, H. (2020). Learning in the twenty-first-century workplace. *Annual Review of Organizational Psychology and Organizational Behavior*, 7, 245–275. <https://doi.org/10.1146/annurev-orgpsych-012119-044735>
14. Paauwe, J., & Boselie, P. (2005). HRM and performance: What next? *Human Resource Management Journal*, 15(4), 68–83. <https://doi.org/10.1111/j.1748-8583.2005.tb00296.x>
15. Ringle, C., Wende, S., & Becker, J. (2015). *SmartPLS 3*. Boenningstedt: SmartPLS GmbH. <http://www.smartpls.com>
16. Society for Human Resource Management. (2022). *Strategic human resource management overview*. <http://www.shrm.org>
17. Thang, N. N., & Buyens, D. (2008). Training, organizational strategy and firm performance. *The International Journal of Human Resource Management*, 19(6), 1061–1078. <https://doi.org/10.1080/09585190802051325>
18. Wright, P., Gardner, T., Moynihan, L., & Allen, M. (2005). The relationship between HR practices and firm performance. *Personnel Psychology*, 58(2), 409–446. <https://doi.org/10.1111/j.1744-6570.2005.00412.x>