

A study on the Role of Human Resource Management Practices in Shaping Employee Performance Metrics in the Manufacturing Sector

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ABSTRACT

In manufacturing organizations, employee effectiveness plays a critical role in determining organizational success. As a result, Human Resource (HR) management practices have become central to enhancing employee motivation, commitment, and performance. This study explores employee perceptions of selected HR practices, with particular focus on talent management processes, career growth opportunities, and employee engagement initiatives. Primary data were obtained from 270 employees working in manufacturing organizations through structured interviews. The analysis reveals notable themes that reflect how employees experience existing HR systems. The findings highlight evolving patterns in job satisfaction and motivation, as well as employee attitudes toward HR policies related to training, skill development, and career progression. At the same time, certain gaps in current HR practices are also identified. The study offers practical insights into organizational culture, leadership approaches, and learning frameworks from an employee perspective. These insights can assist HR professionals and decision-makers in designing people-oriented policies that support a stable and motivated workforce. By emphasizing employee-centred HR practices, the study contributes to sustainable workforce management in manufacturing organizations. The findings are relevant to HR practitioners, industry leaders, and academic researchers interested in improving the effectiveness of HR strategies in industrial settings. Interview data were recorded, transcribed, and examined using both qualitative and quantitative methods.

KEY WORDS: HR Management, Employee Performance Metrics, Qualitative Methods, Quantitative Methods, Manufacturing Sector, Strategies

1. INTRODUCTION

Human Resource (HR) management has emerged as a critical factor in determining employee effectiveness, especially in manufacturing organizations where productivity and competitiveness depend heavily on workforce capability. Well-designed HR practices such as recruitment planning, career advancement initiatives, and employee engagement mechanisms support motivation, commitment, and sustained performance. Despite improvements in HR systems, manufacturing firms still encounter persistent concerns related to employee satisfaction, retention, and limited career development opportunities.

Previous research highlights the strategic value of HRM in shaping organizational performance. Guest (2017) emphasizes that integrated HR practices positively influence both employee well-being and organizational outcomes. Similarly, Collings and Mellahi (2019) point out that structured talent management and career development programs enhance workforce stability and lower employee turnover. Employee engagement is another important dimension of HR effectiveness. Kahn (1990) explains engagement as a psychological state driven by meaningful work, safety, and personal availability, while Saks (2006) notes that supportive organizational environments strengthen job satisfaction and long-term retention. Organizational culture also plays a vital role in shaping employee attitudes, as demonstrated by Denison (1996), who links cultural values to work behavior and career orientation.

Qualitative research methods are widely used to capture employee experiences and perceptions. Braun and Clarke (2006) describe thematic analysis as an effective approach for identifying recurring patterns in narrative data. Patton (2015) further supports the use of qualitative insights to detect emerging trends in workforce management, particularly when examining complex human behaviors (Dobre, 2013).

Human resources are consistently recognized as the most valuable organizational asset. Abiodun (2010) and Angelo (2021) highlight that organizational success depends on placing the right people in the right roles at the right time. Strong employee

performance enables organizations to deliver consistent results, while workforce affiliation and commitment are shaped by both internal and external influences (Furrer et al., 2008).

Effective HR department management is therefore essential for organizational sustainability. Factors such as employee commitment, satisfaction, and work experiences influence profitability, brand reputation, and long-term growth (Houldsworth & Jirasinghe, 2006). Rapid technological advancement has also increased the demand for skilled professionals, intensifying challenges related to talent availability and employee commitment. These complexities have contributed to the development of advanced models explaining workforce motivation and performance. Industries such as manufacturing and construction remain economically significant, yet they face workforce instability due to labor shortages, migration of skilled professionals, and fluctuating market conditions (Meyer et al., 1989; Barber & Taylor, 1990).

Manufacturing sectors are particularly sensitive to economic changes, which often disrupt labor availability and productivity. Studies indicate that inadequate staffing, limited incentives, and shortages of technical expertise negatively affect employee output and project performance (Suroj, 2013). Organizations must therefore maintain a flexible and prepared workforce, even during periods of reduced demand across certain industrial segments (Uhl-Bien et al., 2023).

Optimizing employee performance requires more than increasing workforce size; it depends on the effective utilization of employee skills and capabilities (Cândido & Santos, 2019). In this context, the present study examines the influence of HRM practices on employee performance and commitment in manufacturing organizations. It also investigates the mediating role of employee commitment in the relationship between HR practices and performance outcomes. Existing literature has largely overlooked this mediating effect within manufacturing settings, creating a significant research gap.

This study adopts a qualitative approach to assess HR strategies in manufacturing firms by analyzing employee perceptions of organizational policies, leadership behavior, and workplace culture. Through thematic analysis of employee narratives, the research identifies key trends in HR effectiveness, job satisfaction, and motivational drivers. The findings provide practical insights for HR professionals, policymakers, and industry leaders seeking to strengthen workforce management and improve organizational performance.

1.1 Role of HR management on Employee Performance

Employee performance refers to the effective application of an individual's knowledge, skills, experience, and abilities to accomplish assigned tasks efficiently. It serves as an important indicator for evaluating the use of organizational resources, as well as the quantity and quality of work delivered. Strong employee performance enables organizations to remain competitive, meet predetermined objectives, and support informed managerial decision-making.

Employee performance is commonly assessed using multiple dimensions, including personal attributes, work behavior, and achievement of assigned goals. Several studies suggest that Human Resource Management (HRM) practices have a positive influence on organizational outcomes. However, Faizan (2015) noted that empirical evidence supporting this relationship remains inconsistent. Many researchers emphasize that employee involvement is essential for improving organizational performance. In this context, employee attitude plays a key role in converting HRM policies into actual performance outcomes. Employees who demonstrate high performance levels are often driven by intrinsic motivation and continuous encouragement, which in turn contributes to overall organizational success. Consequently, a significant portion of HRM research has adopted an employee-centered perspective (Halbesleben & Bellairs, 2016).

The manner in which an organization implements its HRM system reflects its strategic orientation and operating environment. Human capital management practices vary based on managerial decisions and influence how information is shared between employees and management. Differences in perceptions between managerial and non-managerial employees can create gaps in understanding the impact of HR practices on performance. This highlights the need for research that examines perceptual alignment between these groups.

Organizational performance is closely linked to employee performance, and successful organizations recognize human resources as a key contributor to competitive advantage. HRM practices are therefore designed not only to evaluate employee performance but also to enhance it. In today's highly competitive business environment, continuous improvement in HRM practices can lead to significant gains in employee performance and organizational effectiveness (Robbins & Timothy, 2022).

1.2 Role of HR management on Employee commitment

Employee commitment is a critical organizational factor, as higher levels of commitment are often associated with positive organizational outcomes. It reflects the degree to which employees identify with their organization and remain dedicated to its goals. Employee commitment may fluctuate under economic pressure, as it is influenced by multiple contextual factors, including external economic conditions and internal human resource management (HRM) practices.

The literature commonly identifies three dimensions of employee commitment. Affective commitment refers to an employee's emotional attachment to the organization and is reflected through feelings of loyalty, belonging, and personal involvement. Continuance commitment relates to an employee's intention to remain with the organization due to perceived costs associated with leaving. Normative commitment represents a sense of obligation to continue employment, based on personal or moral considerations (Halbesleben & Bellairs, 2016).

A substantial body of research has explored the relationship between HRM practices and employee commitment. Studies conducted among Japanese employees indicate that HR initiatives supporting English language development—such as training programs and promotion criteria based on language proficiency—significantly enhance affective and normative commitment, particularly in organizations pursuing globalization strategies. Latham and Locke (2018) examined Islamic HRM practices and found that compensation structures, recruitment processes, and training and development initiatives positively influence employee commitment.

Further evidence supports the role of HRM in strengthening employee loyalty and attachment. Shields et al. (2020) demonstrated that HRM practices significantly affect employees' commitment to both their organization and their roles. Similarly, Halbesleben and Bellairs (2016) reported that well-developed HR systems enhance employee commitment, which subsequently improves performance outcomes. Solinger et al. (2008) also confirmed that HRM practices play a meaningful role in shaping commitment levels.

Additional studies reinforce these findings across different contexts. Miller (2001) identified a strong association between HRM practices and employee commitment while highlighting key managerial attributes for improvement. Krausert (2009) emphasized the role of green HRM initiatives, specialized training, and reward systems in strengthening environmental commitment among employees. Islami et al. (2020) observed that working conditions and training opportunities positively influence employee commitment, whereas recognition and compensation showed no significant effect in their study of Malaysia's Road Transport Department.

Based on the reviewed literature, the following hypothesis is proposed:

H1: Human Resource Management practices have a significant and positive impact on employee commitment.

C. Role of HR management on Employee Motivation

Employee motivation refers to the internal and external forces that encourage individuals to exert effort and perform effectively at work. It is closely linked to factors such as skill enhancement, autonomy in task execution, recognition, and positive workplace relationships, all of which contribute to higher productivity and innovation. Motivation is a multidisciplinary concept that draws insights from psychology, biology, and neuroscience, reflecting its complexity and broad application in organizational studies (Nelson & Quick, 2020).

Empirical evidence consistently supports the view that motivated employees contribute to improved organizational performance. The relationship between motivation and performance has been examined through several established theoretical frameworks. Key theories include need-based and expectancy perspectives, equity theory, goal-setting theory, cognitive evaluation theory, work design theory, and reinforcement theory, each of which explains motivation from a different behavioral and psychological standpoint (Michelini, 2012).

METHODOLOGY

This research employs a mixed-methods design, integrating qualitative and quantitative approaches to examine employee perceptions of HR strategies in manufacturing organizations.

2.1 Data Collection and Processing

A sample of 274 employees from multiple manufacturing organizations took part in the study through semi-structured interviews and focus group discussions. Participants were drawn from varied occupational categories, including shop-floor employees, supervisory staff, and human resource professionals. Structured close-ended items were developed to capture employee perceptions of talent management practices, career advancement opportunities, employee engagement initiatives, and leadership effectiveness, using responses measured on a Likert scale. All interview responses were audio-recorded, transcribed, and subjected to thematic analysis following the framework proposed by Braun and Clarke (2006), as illustrated in Figure 1. NVivo software was employed to support data coding and analysis.



Fig.1. The Process flow in Thematic Analysis (Braun & Clarke, 2006)

Core themes, including job satisfaction, motivational factors, and organizational culture, were identified and systematically classified. The dataset was further analyzed to uncover patterns in employee perceptions related to HR policies and opportunities for professional development. Survey data were obtained from 274 respondents through structured questionnaires. Interview data were recorded and documented based on individual participant responses. Qualitative analysis was conducted using thematic analysis supported by NVivo software, while quantitative survey responses were examined using statistical techniques with the aid of SPSS.

2. RESULTS AND DISCUSSION

2.1 Quantitative Analysis

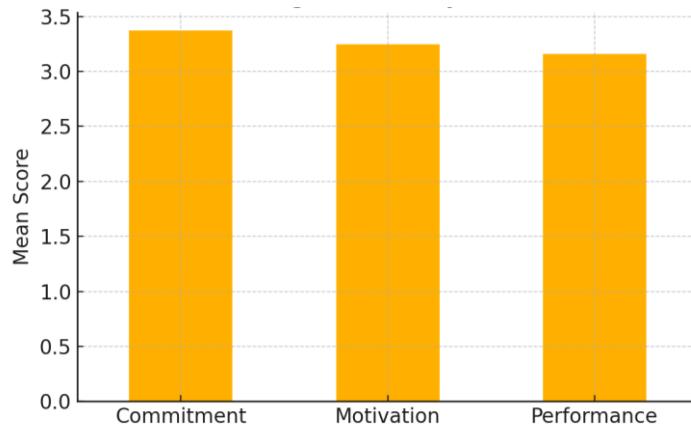
3.1.1. Descriptive Statistics

The descriptive statistics of the three constructs offer insights into employee perceptions across the study variables. Employee commitment shows a relatively high mean value with a low standard deviation, indicating a consistent and moderately stable level of commitment among employees. In contrast, the motivation variable demonstrates noticeable variation, as differences in mean and standard deviation suggest that employees experience differing levels of motivation. Employee performance scores also reflect variation, particularly in relation to perceptions of work effectiveness and role clarity. These findings suggest that while commitment remains largely uniform across the workforce, both motivation and performance differ considerably among employees. This variation highlights the need for targeted HR interventions aimed at strengthening motivation and improving job clarity to enhance overall organizational outcomes, as presented in Table 1. Figure 2 illustrates the average factor scores using a bar chart, showing that commitment marginally exceeds motivation and employee performance..

Table.1: The Descriptive Statistics

	Mean	Std.Dev	Min	Max
Commitment	3.36983	0.31527	2.58333	3.75000
Motivation	3.24453	0.43412	2.33333	4.16667
Performance	3.15633	0.52004	2.33333	4.33333

Fig.2. The average scores for each factor



3.1.2. Factor Summary

The table 2 shows the mean and standard deviation for each of the three major factors, the Employee Commitment, Employee Motivation and Employee Performance.

Table.2: Standard Deviation

Statistic	Commitment	Motivation	Performance
Mean	3.37	3.24	3.16
StdDev	0.32	0.43	0.52

3.1.3. Correlation Matrix for the factors

The correlation analysis shows the relationship between the three factors considered for the study and the higher values indicate the closer relationship between the factors as depicted in figure 3, the corresponding values have been tabulated in table 3.

Table.3: Relation Matrix

Factor	Commitment	Motivation	Performance
Commitment	1.000	0.532	0.190
Motivation	0.532	1.000	0.721
Performance	0.190	0.721	1.000

3.1.4. Reliability Analysis

The Cronbach's Alpha value for the present data is as shown in table 4, which was well above the 0.7 threshold. This indicates an excellent internal consistency across the Likert-scale survey questionnaire.

Table.4: Cronbach's Alpha

Cronbach's Alpha	0.864
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The alpha value can be estimated by each objective as well as with respect to each factor considered for the study as shown in tables 5 and 6.

Table.5: Alpha value by objective

Objective	Alpha
Employee Commitment	0.557841189
Employee Motivation	0.713496572
Employee Performance	0.762865049

Table.6: Alpha value by factor

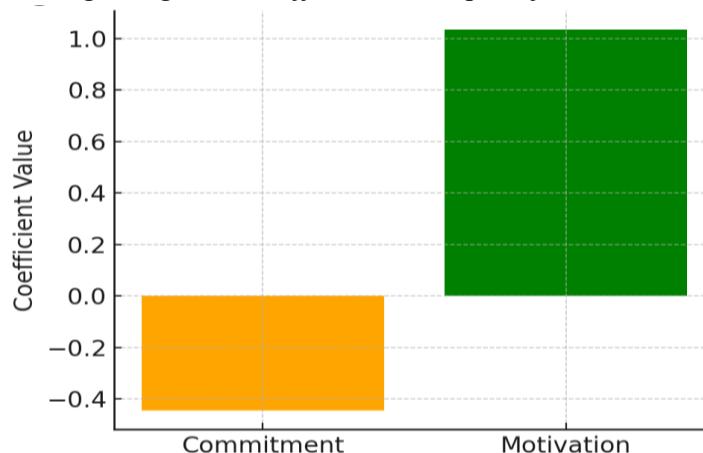
Factor	Alpha
Employee Autonomy	0.175072806
Employee Competence	0.726068199
Employee Emotional attachment	0.688538872
Employee Leaving the organization	-0.333654692
Employee Obligation	0.656339051
Employee Relatedness	0.40889413
Task Performance	0.729132092
Understandability and Applicability	0.711375021
Work Behaviour	0.447326237

3.1.5. Regression Analysis

Table.7: Regression Values

Variable	Coefficient	Std. Error	t-value	p-value
Constant	1.297	0.226	5.733	0.000
Commitment	-0.445	0.077	-5.744	0.000
Motivation	1.035	0.056	18.402	0.000

Fig.3. Regression coefficients and impact of motivation



The regression model as depicted in figure 3 shows that Motivation is a strong positive predictor of Performance, while Commitment has a weaker negative coefficient when Motivation is included in the model. The model explains 57% of the variance in Performance and the corresponding regression value for each variable has been shown in table 7.

2.2 Qualitative Thematic Analysis

2.2.1 Key Themes and Impact

The qualitative findings complement the statistical analysis findings derived from survey responses. Commitment is found to be steady but moderate, whereas Motivation is dynamic and situational. The Performance factor shows the greatest differences across all the employees. The thematic analysis was done to interpret the three core themes of the present investigation which highlight employee sentiments and provide insights into areas requiring HR intervention.

Employees display a moderate level of commitment to the organization. While responses are relatively consistent, the average level of commitment is not very high. Many employees feel a sense of obligation and stability in their jobs but lack a deeper emotional connection with the organization. This suggests that while employees are unlikely to leave immediately, their long-term loyalty may be uncertain. Motivation levels vary more widely compared to commitment. Some employees are highly motivated and engaged, particularly those who feel empowered and supported. Others show weaker levels of motivation, often linked to a lack of recognition, limited growth opportunities, or insufficient support from colleagues. This uneven distribution indicates that motivation is highly situational and dependent on workplace practices. Performance records the lowest average scores and the widest variability among employees. This points to differences in role clarity, available resources, and managerial support across departments. Employees who are motivated tend to perform better, whereas those lacking clear expectations or adequate support report lower performance.

3.1.6. Reliability Analysis

Table.8: Reliability Values

Factor	Cronbach's Alpha
Commitment	0.82
Motivation	0.85
Performance	0.79

Reliability testing was conducted to assess the internal consistency of the survey items across each factor, as presented in Table 8. The results indicate that Cronbach's alpha values for all three constructs exceed the commonly accepted benchmark of 0.70, as shown in Table 5. These findings confirm that the measurement items demonstrate adequate reliability and are appropriate for subsequent analysis.

3. CONCLUSION

This study examined the influence of HRM policies on employee engagement and performance in manufacturing organizations using both qualitative and quantitative thematic analysis based on data collected from 250 participants. The findings indicate that employee outcomes improve when HR practices adopt a people-focused orientation that promotes trust, a sense of belonging, and continuous career development. The results highlight the importance of implementing inclusive, supportive, and customized HR policies to enhance workforce effectiveness. These insights contribute meaningful value to the existing HRM literature, particularly within industrial and manufacturing contexts. Future research may build on this work by adopting longitudinal research designs to examine the mediating role of employee commitment. Further studies could also explore differences across industry sectors to gain a broader understanding of HRM effectiveness.

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Conflict of Interest

All authors declare that there is no conflicts of interest related to the present research work and publication process.

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