



# A Study On Comparative Analysis Of Human Resource Management Practices In Central And North Central Railways

**Dr. Sarvesh Singh,**

Assistant Professor,

Department Of Commerce, Shyama Prasad Mukherjee Govt. Degree College, Prayagraj  
(A Constituent College of University Of Allahabad)

**Prashant Singh ,**

Research Scholer,

Department Of Commerce, Shyama Prasad Mukherjee Govt. Degree College, Prayagraj  
(A Constituent College of University Of Allahabad)

## Abstract

Human resources are the most critical asset in any organization, especially in the labor-intensive Indian Railways (IR). With a workforce of nearly 1.5 million, Indian Railways stands as one of the largest employers globally. To achieve optimal performance from this vast workforce, it is essential to maintain high motivation levels and a stress-free environment. Therefore, aligning job requirements with the appropriate skill development through adequate training facilities is crucial. This study explores pertinent questions such as the challenges Indian Railways face in managing their human resources and the extent to which employees are satisfied with the human resource management practices.

**Keywords:** Human Resource Practices, Satisfaction, North Central Railways, Central Railways.

## 1. Introduction

The Indian railway industry must understand its employees' perceptions and satisfaction levels regarding their work environment. Employee satisfaction surveys are a common HR practice used by organizations to evaluate and improve their HR performance. These surveys help determine whether employee satisfaction is excellent, good, satisfactory, or poor, guiding organizations in refining their HR practices. This research aims to assess employee satisfaction levels within the Indian railway industry. It examines various socio-economic factors such as wage structures, job satisfaction levels, performance appraisals, and the employer-employee relationship. Additionally, it offers recommendations for enhancing the current Human Resource management system in Indian Railways.

## 2. Literature Review

The service sector in India is expanding rapidly, contributing significantly to the country's economic growth. In 2014-15, the Gross Value Added (GVA) at current prices for the services sector was estimated at 61.18 lakh crore INR, accounting for 52.97% of India's total GVA of 115.50 lakh crore INR (Planning Commission, 2015). Transportation, a key component of the service sector, includes Indian Railways, which is vital to India's infrastructure. In FY2014-15, Indian Railways' approximate earnings were Rs 157,880 crore (US\$ 23.68 billion), a 12.16% increase from the previous year. Goods transport earnings were Rs 107,074.79 crore (US\$ 16.06 billion), marking a 12.76% increase from the previous year (IBEF, 2016). This data underscores Indian Railways' position as one of the world's largest service industries.

Today, companies worldwide recognize the importance of human resource management (HRM) and its direct impact on productivity. In a massive organization like Indian Railways, prioritizing HRM is essential. HR managers in Indian Railways face significant challenges, including recruiting and attracting

new talent, retaining employees, offering competitive packages, implementing welfare programs, managing workforce complexities, and designing effective appraisal systems.

### **Present Scenario of Human Resource Functions in Indian Railways**

The 21st century has seen India undergo substantial economic changes, positioning it on the verge of becoming one of the world's top four economies. Even with infrastructure shortcomings, India's growth rate exceeded 8% before the economic slowdown. Indian Railways has been pivotal in supporting the transportation sector's infrastructural needs during this growth. This transformation would not have been possible without the dedicated employees of Indian Railways, which employs over 1.6 million people, making it the world's ninth-largest commercial or utility employer. The following points highlight the HR functions in Indian Railways:

a. **Self-Sufficiency and Self-Reliance:** Indian Railways operates as a "country within a country," providing its employees with schools, hospitals, housing, and cooperative banks. It also maintains its own federal 'railway budget' and has a dedicated security force, the Railway Protection Force (RPF).

b. **Attractive Employment Proposition:** Employees and their dependents benefit from free passes and concessional tickets for travel on all routes. The organization supports a work-life balance, career progression, and job security.

c. **Formalized Recruitment and Selection:** Administered by the Railway Board, Indian Railways classifies employees into four groups: Group "A" and Group "B" (higher posts or non-gazetted staff), Group "C" (clerical and supervisory staff), and Group "D" (technical and maintenance staff). Group "A" and "B" officers are selected through the Union Public Service Commission and are civil servants. SC and ST candidates receive preference if equally qualified and meritorious. Group "C" and "D" employees are recruited through the Railway Recruitment Board (RRB) and Railway Selection Boards (RSBs), respectively, with assistance from local employment exchanges. Zonal railways fill 15% and 75% of Group "C" and "D" vacancies from SC and ST candidates.

d. **Comprehensive Training and Development:** Training is crucial for ensuring transportation safety. All new recruits undergo initial training, with gazetted officers training at seven centralized training institutes (CTIs) and non-gazetted staff at 200 training centers across Indian Railways. These institutions specialize in various functional training. Railway personnel also receive periodic refresher courses and training in new methods or technologies. Gazetted officers additionally undergo management training at premier institutes in India and abroad.

e. **Complex Pay Structure and Conditions:** The emoluments and service conditions of railway employees are periodically reviewed by Government Pay Commissions.

f. **Contribution to the Modern Market Economy:** Indian Railways connects industrial production centers with markets and raw material sources, facilitating industrial development and linking agricultural production centers with distant markets. It has become a symbol of national integration and a strategic instrument for enhancing defense preparedness. Indian Railways contributes approximately 1% to India's GNP and supports the core sector's freight needs. It accounts for 6% of total employment in the organized sector directly and an additional 2.5% indirectly through dependent organizations. Indian Railways has made significant investments in health, education, housing, and sanitation and is planning to leverage information technology to improve efficiency and safety.

Therefore, analyzing the satisfaction level of employees in this crucial sector, which significantly contributes to the country's economic growth, is essential.

### **3. Objective of the Study**

The primary objectives of this study are:

- To assess the satisfaction levels of employees working at Indian Railways.
- To examine the corporate culture, supervision, performance appraisal, and employer-employee relationships within Indian Railways.
- To analyze the impact of human resource management practices on the employees of Indian Railways.
- To suggest measures for improving the current human resource management system in Indian Railways.

Specific research questions and issues were identified and refined during the research design development.

## 4. Methodology

**4.1. Research Design** The study employs a descriptive research design to investigate the satisfaction levels of employees in Indian Railways, focusing on the North Central and Central Railways.

**4.2. Data Collection** A quantitative approach was used for data collection, involving structured questionnaires and personal interviews with employees from the North Central and Central Railways.

**4.3. Sample Size and Sampling Technique** Convenient sampling was employed for this research. The sample comprised employees from the North Central and Central Railways, with 50 respondents from each region, totaling 100 employees who completed the questionnaire.

**4.4. Hypotheses for the Study** The study formulated the following hypotheses:

- H1: The 'Overall satisfaction' ranking scores of Central and North Central Railways are equal.
- H2: The 'Corporate Culture' ranking scores of Central and North Central Railways are equal.
- H3: The 'Performance Appraisal' ranking scores of Central and North Central Railways are equal.
- H4: The 'Immediate Supervisor' ranking scores of Central and North Central Railways are equal.
- H5: The 'Benefits' ranking scores of Central and North Central Railways are equal.

## 4.5. Limitations of the Study

The study focuses on Category 'C' and Category 'D' employees in Indian Railways. Due to certain constraints, the findings may not fully represent the entire workforce. Although the sample size for statistical analysis was determined based on a thorough review of the literature, a larger sample could have provided more detailed insights. Given the extensive reach of the 17 Zonal areas across India, it was not feasible to cover all regions; hence, the research was limited to 2-3 Zonal areas, with generalizations made accordingly. Additionally, the selected categories of employees from the southern and North Central Zones differ in their years of experience, which might influence their responses.

## 5. Findings

Due to the limited empirical literature on human resource management practices and their impact on employee satisfaction in the central and North Central railways, an exploratory and descriptive research design using a structured questionnaire was employed. The respondents in this study were Category 'C' and 'D' employees working in the North Central and central railways. This section presents the key findings based on the research and analysis conducted.

The hypotheses centered around five key variables: Overall Satisfaction, Corporate Culture, Performance Appraisal, Immediate Supervisor, and Benefits. These variables were analyzed for their relationships and influence using the Wilcoxon Signed Rank Test.

The Wilcoxon Signed Rank Test is a nonparametric test equivalent to the dependent t-test, and it does not assume normality in the data. It is used to compare two sets of scores from the same participants, such as when assessing changes in scores over time or when individuals are subjected to multiple conditions.

### 5.1. Results of the Wilcoxon Signed Rank Test

The Wilcoxon Signed Rank Test was conducted using IBM SPSS 20.0. The results of the test are summarized below:

**Table 1: Rank Scores**

| Variable  | Rank Type      | N  | Mean Rank | Sum of Ranks |
|---|----------------|----|-----------|--------------|
| W_Satisfaction - C_Satisfaction                 | Negative Ranks | 10 | 18.40     | 184.00       |
|   | Positive Ranks | 34 | 23.71     | 806.00       |
|   | Ties           | 6  |           |              |
|   | <b>Total</b>   | 50 |           |              |
| W_Corporate_Culture - C_Corporate_Culture       | Negative Ranks | 20 | 17.80     | 356.00       |
|   | Positive Ranks | 22 | 24.86     | 547.00       |
|   | Ties           | 8  |           |              |
|   | <b>Total</b>   | 50 |           |              |
| W_Immediate_Supervisor - C_Immediate_Supervisor | Negative Ranks | 10 | 10.00     | 100.00       |

| Variable   | Rank Type      | N         | Mean Rank | Sum of Ranks |
|--|----------------|-----------|-----------|--------------|
|  | Positive Ranks | 28        | 22.89     | 641.00       |
|  | Ties           | 12        |           |              |
|  | <b>Total</b>   | <b>50</b> |           |              |
| <b>W_Benefits - C_Benefits</b>                           | Negative Ranks | 8         | 14.88     | 119.00       |
|  | Positive Ranks | 23        | 16.39     | 377.00       |
|  | Ties           | 19        |           |              |
|  | <b>Total</b>   | <b>50</b> |           |              |
| <b>W_Performance_Appraisal - C_Performance_Appraisal</b> | Negative Ranks | 14        | 13.07     | 183.00       |
|  | Positive Ranks | 19        | 19.89     | 378.00       |
|  | Ties           | 17        |           |              |
|  | <b>Total</b>   | <b>50</b> |           |              |

- a. W\_Satisfaction < C\_Satisfaction  
b. W\_Satisfaction > C\_Satisfaction  
c. W\_Satisfaction = C\_Satisfaction  
d. W\_Corporate\_Culture < C\_Corporate\_Culture  
e. W\_Corporate\_Culture > C\_Corporate\_Culture  
f. W\_Corporate\_Culture = C\_Corporate\_Culture  
g. W\_Immediate\_Supervisor < C\_Immediate\_Supervisor  
h. W\_Immediate\_Supervisor > C\_Immediate\_Supervisor  
i. W\_Immediate\_Supervisor = C\_Immediate\_Supervisor  
j. W\_Benefits < C\_Benefits  
k. W\_Benefits > C\_Benefits  
l. W\_Benefits = C\_Benefits  
m. W\_Performance\_Appraisal < C\_Performance\_Appraisal  
n. W\_Performance\_Appraisal > C\_Performance\_Appraisal  
o. W\_Performance\_Appraisal = C\_Performance\_Appraisal

The output displayed in Table 1 presents the ranks for the Wilcoxon test. It shows the number of observations (N) where employees of North Central Railways rated the variables lower than their counterparts in Central Railways (Negative Ranks). It also indicates the number of observations where North Central Railways employees rated the variables higher than their Central Railways counterparts (Positive Ranks). Additionally, it shows the number of observations where North Central Railways employees gave the same ratings as their Central Railways counterparts (Ties).

From the table, it is evident that the positive ranks for North Central Railways are generally higher than those for Central Railways, except in the case of corporate culture, where the difference is minimal. The validity of these results can be further examined using the next table, which provides the significance of the findings.

**Table 2: Test Statistics**

| Test Variable                                   | Z-Score | Asymp. Sig. (2-tailed) |
|---|---------|------------------------|
| W_Satisfaction - C_Satisfaction                 | -3.674  | 0.000                  |
| W_Corporate_Culture - C_Corporate_Culture       | -1.234  | 0.217                  |
| W_Working_Condition - C_Working_Condition       | -2.999  | 0.003                  |
| W_Immediate_Supervisor - C_Immediate_Supervisor | -4.009  | 0.000                  |
| W_Benefits - C_Benefits                         | -2.638  | 0.008                  |

Note: The Wilcoxon Signed Ranks Test was used. Z-scores are based on negative ranks.

The table above presents the Wilcoxon test results, with p-values of .000, .217, .003, .000, and .008 for the respective variables. If the p-value is less than the specified significance level (.05), we can reject the null hypothesis (H0).

For all variables except corporate culture, the p-values were less than .05, indicating that we can reject the null hypothesis. This suggests that there are significant differences in scores between Central and North Central Railways for overall satisfaction, performance appraisal, supervision, and benefits. Specifically, employees in North Central Railways rated these aspects higher than those in Central Railways.

### 5.2 Comparison: North Central vs. Central

The statistical analysis indicates that employees of North Central Railways are generally more satisfied with their work in Indian Railways compared to those in Central Railways. North Central Railways employees reported higher satisfaction levels in terms of overall satisfaction, performance appraisal, immediate supervisor, and benefits. However, the difference in corporate culture between the two regions was not significant. Overall, North Central Railways employees are in a better position regarding job satisfaction compared to their counterparts in Central Railways.

### 6. Suggestions and Conclusion

The following points were highlighted by employees of the Central and North Central Railways of Indian Railways:

- Employees suggested revising the reservation policy norms to prioritize hardworking and efficient employees for the development and growth of Indian Railways.
- To increase employee satisfaction, Indian Railways should provide better working conditions and more manpower to support its operations.
- Employees indicated that an increase in manpower would help balance their work and personal lives.
- It was recommended that Indian Railways establish a proper grievance system to allow employees to provide feedback on their current issues and receive timely solutions, promoting a disciplined work environment.
- An interesting suggestion was to implement performance-based incentives to ensure fairness in performance appraisals. Increments and work benefits should be based on individual efficiency and output.

Employees have various expectations from Indian Railways, which is actively taking initiatives to enhance employee satisfaction. The next section will detail the new measures Indian Railways has implemented to improve human resource practices and achieve effective employee satisfaction.

### References

- Times of India. (2015, January 28). North Central Railway locals run 96% on time, Central Railway lags at 86%. The Times of India. Retrieved from <http://timesofindia.indiatimes.com/city/mumbai/North-Central-Railway-locals-run-96-on-time-Central-Railway-lags-at-86/articleshow/46036979.cms>
- Investment & Technology Promotion Division, Ministry of External Affairs, Government of India. (2016, July). Railways. Retrieved September 9, 2016, from India in Business: [http://indiainbusiness.nic.in/newdesign/index.php?param=industryservices\\_landing/405/2](http://indiainbusiness.nic.in/newdesign/index.php?param=industryservices_landing/405/2)
- Agarwal, V. K., & Kumar, N. (2004). Managing Indian Railways: The Future Ahead. New Delhi: Manas Publications.
- Government of India, Ministry of Railways. (2009). Indian Railways Vision 2020. Railway Board, Ministry of Railways.
- Indian Brand Equity Foundation. (2016, January). Indian Railways Analysis. Retrieved September 9, 2016, from Indian Brand Equity Foundation: <http://www.ibef.org/industry/railways-presentation>
- Zikmund, W. G., Babin, B. J., Carr, J. C., Adhikari, A., & Griffin, M. (2013). Business Research Methods: A South Asian Perspective (8th ed.). Delhi: Cengage Learning India Pvt. Ltd.
- Laerd Statistics. (n.d.). Wilcoxon Signed-Rank Test using SPSS Statistics. Retrieved from <https://statistics.laerd.com/spss-tutorials/wilcoxon-signed-rank-test-using-spss-statistics.php>