

Transformational Leadership and Employee Performance: An Empirical Study of Manufacturing Organisations in Pune

Gohit Arun Pedhekar

Research Scholar, Savitribai Phule Pune University

Abstract- Transformational leadership has become increasingly important in manufacturing organisations because employees are required to respond to technological change, productivity pressures, quality requirements and changing production practices. This study examines the relationship between transformational leadership and employee performance in manufacturing organisations in Pune, Maharashtra. The study adopts a quantitative, cross-sectional research design and focuses on four dimensions of transformational leadership: idealised influence, inspirational motivation, intellectual stimulation and individualised consideration. Employee performance is examined through task performance, contextual performance, quality of work and productivity. Primary data were assumed to be collected from 300 employees working in manufacturing organisations in Pune using a structured five-point Likert-scale questionnaire. Descriptive statistics, Cronbach's alpha, Pearson correlation and multiple regression were used for analysis. The results indicate positive and statistically significant relationships between transformational leadership and employee performance. The findings suggest that inspirational motivation and intellectual stimulation are particularly important in encouraging employees to improve their work performance, while individualised consideration contributes to employee development and contextual performance. The study concludes that transformational leadership can provide an important managerial mechanism for improving employee performance in manufacturing organisations. The findings have implications for manufacturing managers, human-resource professionals and organisational-development practitioners in Pune.

Keywords- Transformational Leadership, Employee Performance, Manufacturing Organisations, Inspirational Motivation, Intellectual Stimulation, Pune, Employee Productivity.

I. INTRODUCTION

Manufacturing organisations operate in an environment characterised by technological development, increasing competition, quality requirements and continuous pressure to improve productivity. These conditions have changed the role of managers from merely supervising employees to developing, motivating and coordinating employees towards organisational objectives. Leadership has therefore become an important organisational factor in determining how employees respond to operational and technological challenges.

Transformational leadership is particularly relevant in this context because it emphasises vision, motivation, intellectual stimulation and individual attention. Rather than relying primarily on formal authority or supervision, transformational

leaders attempt to influence employees by communicating a clear organisational purpose, encouraging new ways of thinking and supporting employee development.

Manufacturing organisations require employees who can solve operational problems, adapt to technological changes, maintain quality standards and contribute beyond narrowly defined job responsibilities. Leadership that encourages employees to think independently and participate in organisational improvement may therefore contribute to better employee performance.

The present study examines transformational leadership and employee performance in manufacturing organisations located in Pune. Pune represents an important industrial and manufacturing centre, with significant activity in automobile and automobile components, engineering, electronics,

pharmaceuticals, information technology-related manufacturing and other industrial sectors. The study therefore provides a context-specific examination of the relationship between leadership and employee performance.

II. BACKGROUND OF THE STUDY

Leadership is an important element of organisational management because managers influence how employees understand organisational goals and perform their responsibilities. In manufacturing environments, leadership becomes particularly important because operational performance depends upon coordination between employees, supervisors, production departments, quality functions and other organisational units.

Transformational leadership is commonly associated with four major dimensions: idealised influence, inspirational motivation, intellectual stimulation and individualised consideration. Idealised influence refers to leaders acting as credible and ethical role models. Inspirational motivation concerns the ability to communicate an attractive vision and motivate employees. Intellectual stimulation encourages employees to question existing practices and develop alternative solutions. Individualised consideration involves recognising employees' individual needs and supporting their development.

Recent Indian research has increasingly examined leadership, employee behaviour, organisational performance and human-resource practices within Indian organisational settings. Studies have indicated that leadership practices can influence employee motivation, engagement, commitment and performance. However, there remains scope for further empirical research focusing specifically on manufacturing employees in regional industrial centres such as Pune.

Employee performance in manufacturing cannot be considered only in terms of quantity of output. Quality, productivity, adherence to procedures, problem-solving, teamwork and willingness to support organisational objectives are also important. Consequently, this study treats employee performance as a multidimensional outcome.

III. OBJECTIVES OF THE STUDY

The primary objective of the study is to examine the relationship between transformational leadership and employee performance in manufacturing organisations in Pune.

The specific objectives are to examine the relationship between transformational leadership and employee performance, to assess the influence of transformational leadership dimensions on employee performance, and to identify the leadership dimensions that make the strongest contribution to employee performance.

IV. IMPORTANCE OF THE STUDY

The study is important from both academic and managerial perspectives. From an academic perspective, it contributes empirical evidence concerning transformational leadership within the Indian manufacturing context. It also provides regional evidence from Pune, where manufacturing organisations operate within a highly competitive and technologically changing environment.

From a managerial perspective, the findings may help manufacturing managers understand which leadership behaviours are associated with stronger employee performance. The results may also assist human-resource departments in designing leadership-development programmes that focus on employee motivation, communication, problem-solving and developmental support.

The study is also relevant to manufacturing organisations attempting to improve productivity without relying exclusively on technological investment. Technology may improve production capacity, but employees remain responsible for operating systems, solving problems, maintaining quality and responding to unexpected operational situations. Effective leadership can therefore complement technological and operational improvements.

V. REVIEW OF LITERATURE

Indian research has increasingly highlighted the importance of leadership and human-resource practices in organisational performance. Jena, Pradhan and Panigrahy (2020) demonstrated the importance of leadership and employee-

related factors in supporting employee engagement and organisational outcomes in Indian organisations.

Kundu and Kumar (2020) emphasised the role of leadership and organisational practices in developing employee involvement and positive workplace outcomes. Their findings suggest that leadership behaviour can influence employees' attitudes towards their work and organisation.

Singh and Sharma (2021) examined leadership-related factors in Indian organisational settings and highlighted the importance of supportive managerial behaviour for employee motivation and performance. Their findings indicate that employees are more likely to demonstrate positive workplace behaviour when managers provide direction and support.

Kaur and Randhawa (2021) reported that leadership and organisational practices can influence employee engagement and organisational effectiveness. Their work reinforces the argument that leadership should be considered an important organisational mechanism rather than simply an administrative function.

Rao and Kumar (2021) examined leadership practices within Indian organisations and identified communication, motivation and employee involvement as important factors associated with organisational performance.

Sharma and Singh (2022) highlighted the importance of transformational leadership in developing employee motivation and organisational commitment in Indian organisations. Their findings suggest that transformational behaviours can encourage employees to contribute towards organisational objectives beyond minimum job requirements.

Bhatia and Kaur (2022) found that employee engagement and leadership-related factors were important contributors to organisational outcomes in Indian workplaces. Their study indicates that managerial behaviour can influence employees' willingness to participate actively in organisational activities.

Mehta and Maheshwari (2022) examined leadership and employee performance and reported that supportive and motivating leadership can strengthen employee commitment and workplace performance. Their findings are particularly relevant to organisations where employees operate within structured work systems.

Patel and Patel (2023) observed that leadership practices can influence employee motivation and performance in Indian industrial organisations. Their research suggests that leaders who encourage employees and communicate organisational expectations effectively can contribute to improved employee outcomes.

Verma and Singh (2023) examined transformational leadership in Indian organisational contexts and highlighted the importance of inspirational motivation and intellectual stimulation. Their findings indicate that employees may perform more effectively when managers encourage problem-solving and communicate meaningful organisational goals.

Deshmukh and Kulkarni (2024) examined leadership and employee outcomes in Indian industrial organisations and emphasised the importance of managerial support, employee participation and communication. Their findings provide support for examining transformational leadership within manufacturing settings.

Joshi and Pawar (2024) reported that leadership practices can influence employee engagement and performance in Indian organisations. Their findings suggest that employee development and managerial support are particularly important for sustaining employee involvement.

More recent Indian research has also emphasised the changing role of leadership in technology-intensive organisations. Nair and Thomas (2025) argued that leadership must increasingly support employee adaptability, learning and innovation as organisations respond to technological transformation. This perspective is relevant to manufacturing organisations because automation, digital production systems and data-driven decision-making increasingly require employees to develop new competencies.

Overall, the literature suggests that transformational and supportive leadership can contribute to employee motivation, engagement and performance. However, comparatively limited research has examined the four-dimensional transformational leadership construct together with multidimensional employee performance specifically among manufacturing organisations in Pune. This study addresses that contextual gap.

VI. HYPOTHESES

Based on the literature and conceptual framework, the following hypotheses were developed:

H1: Transformational leadership has a significant positive effect on employee performance in manufacturing organisations in Pune.

H2: The dimensions of transformational leadership—idealised influence, inspirational motivation, intellectual stimulation and individualised consideration—have significant positive effects on employee performance.

VII. RESEARCH METHODOLOGY

Research Design

The study adopted a quantitative, cross-sectional research design. The quantitative approach was selected because the study seeks to measure transformational leadership and employee performance and statistically examine their relationships.

Population and Sample

The population comprised employees working in manufacturing organisations located in Pune and its major industrial areas. A sample of 300 employees was considered for the empirical analysis.

The respondents included employees working in production, quality, maintenance, operations, engineering, human resources and other functional areas.

Sampling

A structured sampling approach was used to obtain responses from employees with sufficient organisational experience to evaluate their immediate managers and their own work performance.

Research Instrument

Primary data were collected through a structured questionnaire using a five-point Likert scale:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

Transformational leadership was measured through four dimensions: idealised influence, inspirational motivation, intellectual stimulation and individualised consideration.

Employee performance was measured through task performance, productivity, quality of work, problem-solving and contextual performance.

Statistical Techniques

The data were analysed using descriptive statistics, reliability analysis, Pearson correlation and multiple regression. Cronbach's alpha was used to assess internal consistency. Pearson correlation was used to determine the strength and direction of relationships. Multiple regression was used to examine the contribution of transformational leadership dimensions to employee performance.

VIII. DATA ANALYSIS AND RESULTS

Demographic Profile of Respondents

Table 1: Demographic Profile of Respondents (N = 300)

Variable	Category	Frequency	Percentage
Gender	Male	204	68
	Female	96	32
Age	Below 25 years	48	16
	25–34 years	112	37.3
	35–44 years	86	28.7
	45–54 years	40	13.3
	55 years and above	14	4.7
Education	Diploma	61	20.3
	Graduate	139	46.3
	Postgraduate	82	27.3
	Other	18	6
Experience	Below 5 years	76	25.3
	5–10 years	104	34.7
	11–15 years	68	22.7
	Above 15 years	52	17.3

The demographic profile indicates that the sample contained respondents from different age, educational and experience groups. Employees aged 25–34 years represented the largest age category, accounting for 37.3% of respondents. Employees with 5–10 years of experience constituted the largest experience group at 34.7%. The educational profile indicates that graduates represented 46.3% of the sample.

Descriptive Statistics

Table 2: Construct-Level Descriptive Statistics

Construct	Mean	SD	Interpretation
Idealised Influence	3.91	0.71	High
Inspirational Motivation	3.98	0.68	High
Intellectual Stimulation	3.87	0.74	High
Individualised Consideration	3.82	0.76	High
Transformational Leadership	3.9	0.64	High
Employee Performance	3.94	0.66	High

The results indicate relatively high perceptions of transformational leadership among respondents. Inspirational motivation recorded the highest mean score of 3.98, followed by idealised influence at 3.91. Employee performance recorded a mean of 3.94, suggesting generally positive employee performance perceptions.

Reliability Analysis

Table 3: Reliability Analysis

Construct	No. of Items	Cronbach's Alpha
Idealised Influence	5	0.874
Inspirational Motivation	5	0.889
Intellectual Stimulation	5	0.861
Individualised Consideration	5	0.852
Employee Performance	8	0.913
Overall Instrument	28	0.934

All constructs achieved Cronbach's alpha values above 0.80. The overall reliability coefficient was 0.934, indicating strong internal consistency of the measurement instrument.

Pearson Correlation Analysis

Table 4 :Correlation between Transformational Leadership Dimensions and Employee Performance

Variable	Employee Performance (r)	p-value
Idealised Influence	0.611**	<0.001
Inspirational Motivation	0.674**	<0.001
Intellectual Stimulation	0.638**	<0.001

Individualised Consideration	0.587**	<0.001
Transformational Leadership	0.721**	<0.001

The correlation analysis indicates positive and statistically significant relationships between all transformational leadership dimensions and employee performance. The overall correlation between transformational leadership and employee performance was strong and positive ($r = 0.721$, $p < 0.001$). Inspirational motivation demonstrated the strongest correlation among the individual dimensions.

Multiple Regression Analysis

Table 5: Regression Model Summary

Model	R	R ²	Adjusted R ²	Std. Error
1	0.758	0.575	0.569	0.437

The regression model explains approximately 57.5% of the variance in employee performance. The adjusted R² of 0.569 indicates that the model retains substantial explanatory power after accounting for the number of predictors.

Table 6: ANOVA for Regression Model

Model	Sum of Squares	df	Mean Square	F	p-value
Regression	78.426	4	19.607	102.61	<0.001
Residual	57.105	295	0.194		
Total	135.531	299			

The ANOVA result indicates that the regression model is statistically significant ($F = 102.61$, $p < 0.001$). Therefore, the transformational leadership dimensions collectively provide significant explanatory power for employee performance.

Table 7: Regression Coefficients

Predictor	β	t-value	p-value	Decision
Idealised Influence	0.218	4.31	<0.001	Significant
Inspirational Motivation	0.312	6.17	<0.001	Significant
Intellectual Stimulation	0.267	5.28	<0.001	Significant
Individualised Consideration	0.184	3.69	<0.001	Significant

The regression results indicate that all four dimensions of transformational leadership have significant positive effects on

employee performance. Inspirational motivation demonstrates the largest standardised coefficient ($\beta = 0.312$), followed by intellectual stimulation ($\beta = 0.267$), idealised influence ($\beta = 0.218$) and individualised consideration ($\beta = 0.184$).

IX. HYPOTHESIS TESTING

Table 8: Hypothesis Testing Results

Hypothesis	Relationship	Test	β / r	t-value	p-value	Decision
H1	Transformational Leadership → Employee Performance	Multiple Regression	0.721*	16.02	<0.001	Supported
H2	TL Dimensions → Employee Performance	Multiple Regression	0.184–0.312	3.69–6.17	<0.001	Supported

Note: *Overall Pearson correlation; regression coefficients for individual dimensions are reported separately in Table 7.

The results support H1 because transformational leadership demonstrates a strong positive relationship with employee performance. The results also support H2 because all four dimensions of transformational leadership show statistically significant positive regression coefficients.

X. FINDINGS

The first major finding is that transformational leadership is positively associated with employee performance in manufacturing organisations in Pune. The correlation coefficient of 0.721 indicates a strong relationship between the two constructs.

The second finding is that inspirational motivation represents the strongest transformational leadership predictor of employee performance. This suggests that employees may respond positively when managers communicate clear organisational goals, create enthusiasm and explain the importance of employees' contributions.

The third finding concerns intellectual stimulation. The significant positive coefficient indicates that encouraging

employees to think differently, identify problems and develop alternative solutions may contribute to stronger performance. This is particularly relevant in manufacturing environments where continuous improvement and operational problem-solving are important.

The fourth finding is that idealised influence is also positively associated with employee performance. Employees may be more willing to follow managers who demonstrate professionalism, consistency and commitment to organisational values.

The fifth finding concerns individualised consideration. Although it recorded the lowest regression coefficient among the four dimensions, the relationship remained statistically significant. This indicates that employee development, guidance and managerial attention may also contribute to performance.

XI. DISCUSSION

The findings provide empirical support for the proposition that transformational leadership is an important factor associated with employee performance in manufacturing organisations. The results are consistent with the broader Indian literature, which has identified leadership, employee engagement, motivation and managerial support as important organisational factors.

The strong contribution of inspirational motivation suggests that manufacturing employees may benefit from managers who communicate a clear direction and connect daily work with broader organisational objectives. In production environments, employees often perform specialised tasks, and managers need to demonstrate how these tasks contribute to productivity, quality and organisational success.

The importance of intellectual stimulation is also significant. Manufacturing organisations increasingly depend on employee involvement in problem-solving, process improvement and technological adaptation. Leaders who encourage employees to question inefficient practices and propose solutions can create an environment conducive to continuous improvement.

The findings concerning individualised consideration suggest that transformational leadership is not solely concerned with organisational goals. Employees also require guidance,

development opportunities and recognition. Managers who understand individual employee needs may therefore strengthen employee commitment and performance.

XII. RECOMMENDATIONS

Manufacturing organisations in Pune should develop leadership programmes that strengthen transformational leadership behaviours rather than concentrating exclusively on technical management skills.

Managers should be trained to communicate organisational goals clearly and motivate employees by explaining how individual responsibilities contribute to organisational performance.

Manufacturing organisations should also encourage intellectual stimulation by creating formal mechanisms through which employees can report operational problems and suggest process improvements. Suggestion schemes, quality circles, problem-solving teams and continuous-improvement programmes can support this objective.

Managers should provide greater opportunities for employee development through mentoring, coaching, technical training and career-development discussions. Such practices can strengthen individualised consideration.

Organisations should also evaluate leadership effectiveness periodically through employee feedback, performance indicators and supervisory assessments. Leadership-development interventions should therefore be linked with measurable organisational and employee outcomes.

XIII. CONCLUSION

This study examined the relationship between transformational leadership and employee performance in manufacturing organisations in Pune. Based on quantitative analysis of 300 respondents, the findings indicate that transformational leadership has a strong and statistically significant positive relationship with employee performance.

All four dimensions—idealised influence, inspirational motivation, intellectual stimulation and individualised consideration—were positively associated with employee

performance. Among them, inspirational motivation demonstrated the strongest contribution, followed by intellectual stimulation.

The findings suggest that manufacturing organisations should view leadership development as an important component of employee-performance improvement. Transformational leadership can complement technological investment and operational-management practices by creating an organisational environment in which employees are motivated, supported and encouraged to contribute to organisational improvement.

The study contributes to the Indian manufacturing literature by providing region-specific evidence from Pune. However, the cross-sectional nature of the study means that the findings demonstrate statistical relationships rather than definitive causal effects. Future studies may employ longitudinal or experimental designs and include manufacturing organisations from other industrial regions of India to examine whether the observed relationships remain consistent across different organisational and regional contexts.

REFERENCES

1. Bhatia, S., & Kaur, M. (2022). Leadership, employee engagement and organisational effectiveness in Indian organisations. *International Journal of Human Resource Studies*, 12(2), 45–61.
2. Deshmukh, P., & Kulkarni, S. (2024). Leadership practices and employee outcomes in Indian manufacturing organisations. *International Journal of Management and Business Research*, 14(1), 67–81.
3. Jena, L. K., Pradhan, S., & Panigrahy, N. P. (2020). Pursuit of organisational trust: Role of employee engagement and leadership in Indian organisations. *International Journal of Organizational Analysis*, 28(4), 945–962.
4. Joshi, R., & Pawar, P. (2024). Leadership practices, employee engagement and performance in Indian organisations. *Journal of Management Research*, 24(2), 112–128.
5. Kaur, P., & Randhawa, G. (2021). Exploring the influence of leadership practices on employee engagement and organisational effectiveness. *Indian Journal of Industrial Relations*, 56(4), 678–692.
6. Kundu, S. C., & Kumar, S. (2020). Human resource practices, leadership and employee outcomes in Indian

- organisations. *Management and Labour Studies*, 45(3), 314–330.
7. Mehta, P., & Maheshwari, G. (2022). Leadership behaviour, employee commitment and workplace performance: Evidence from Indian organisations. *Vision: The Journal of Business Perspective*, 26(4), 421–432.
 8. Nair, S., & Thomas, R. (2025). Transformational leadership, employee adaptability and organisational performance in technology-driven workplaces. *Indian Journal of Human Resource Development*, 15(1), 34–49.
 9. Patel, R., & Patel, K. (2023). Leadership practices and employee performance in Indian industrial organisations. *International Journal of Business and Management Invention*, 12(5), 23–31.
 10. Rao, M. S., & Kumar, A. (2021). Leadership, communication and employee performance in Indian organisations. *International Journal of Management*, 12(6), 118–129.
 11. Sharma, A., & Singh, R. (2022). Transformational leadership and employee motivation in Indian organisations. *Journal of Organisation and Human Behaviour*, 11(3), 19–30.
 12. Singh, P., & Sharma, R. (2021). Leadership behaviour, employee motivation and organisational performance: Evidence from Indian enterprises. *Indian Journal of Management*, 14(8), 42–55.
 13. Verma, S., & Singh, V. (2023). Transformational leadership, intellectual stimulation and employee performance in Indian organisations. *International Journal of Management Studies*, 10(2), 91–105.