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Impact of Transformational Leadership on Employee Engagement and Job Satisfaction in the Information Technology Sector: A Survey Study

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Abstract

Leadership is widely regarded as a critical driver of organizational outcomes, yet the processes through which particular leadership styles influence employee attitudes require continued examination, especially in knowledge-intensive settings. This study examined the impact of transformational leadership on employee engagement and job satisfaction among employees in the information technology sector in India. A quantitative, cross-sectional survey design was adopted, and data were collected from 285 IT professionals using validated measures of transformational leadership, employee engagement, and job satisfaction. The data were analysed using descriptive statistics, Pearson correlation, and multiple linear regression. The results revealed significant positive relationships between transformational leadership and both engagement and job satisfaction, and between engagement and job satisfaction. Regression analysis indicated that transformational leadership and employee engagement together explained a substantial proportion of the variance in job satisfaction, with engagement emerging as the stronger predictor, and the pattern of results was consistent with engagement partially mediating the influence of leadership on satisfaction. The findings suggest that transformational leadership enhances job satisfaction partly by fostering employee engagement. The study recommends the development of transformational leadership capabilities and engagement-oriented human resource practices, and discusses implications for managers, human resource practitioners, and organizations operating in competitive technology markets.

Keywords: - Transformational Leadership, Employee Engagement, Job Satisfaction, Information Technology, Survey Research

I. INTRODUCTION

Leadership has long been regarded as one of the most consequential influences on organizational effectiveness, shaping how employees think, feel, and behave at work (Yukl, 2013). Among the many approaches to leadership that scholars have proposed, transformational leadership has attracted sustained attention for its capacity to inspire and elevate followers beyond their immediate self-interest toward collective goals (Bass, 1985). Transformational leaders articulate a compelling vision, model desirable values, stimulate followers intellectually, and attend to their individual needs, and in doing so they are thought to raise motivation, commitment, and performance (Bass & Avolio, 1994). As organizations confront rapid change and intensifying competition, understanding how such leadership shapes employee attitudes remains a question of both scholarly and practical importance.

This question is particularly salient in the information technology sector, a knowledge-intensive industry characterised by demanding project work, high employee mobility, and a persistent challenge of retaining skilled professionals. In such settings, the attitudes of employees toward their work, notably their engagement and job satisfaction, are closely tied to organizational success, influencing productivity, innovation, and retention (Harter et al., 2002). Where leadership can positively shape these attitudes, it offers a valuable lever for managing talent in a competitive labour market. Yet much of the influential evidence on transformational leadership derives from Western contexts, and its operation among Indian technology professionals warrants dedicated examination.

The Indian information technology industry provides a distinctive backdrop for this inquiry. It employs a large, young, and highly educated workforce, operates under demanding client expectations and tight project timelines, and experiences attrition rates that are among the highest of any sector. In this environment, leadership is not a peripheral concern but a central determinant of whether organizations can sustain the motivation and loyalty of their employees. Examining how transformational leadership functions here therefore addresses a matter of genuine strategic consequence, while also testing whether relationships established elsewhere hold in a different economic and cultural setting.

A further consideration concerns the mechanisms through which leadership affects satisfaction. Rather than influencing job satisfaction directly, transformational leadership may operate partly through employee engagement, the energetic and absorbed involvement in one's work that mediates between organizational conditions and outcomes (Kahn, 1990). Clarifying whether engagement helps to transmit the effects of leadership on satisfaction can refine both theory and practice, indicating where managerial attention is most productively directed.

Attention to mediating mechanisms reflects a broader maturation in leadership research, which has moved beyond documenting associations between leadership and outcomes toward explaining the processes that produce them. Knowing that transformational leadership relates to satisfaction is useful, but knowing that it does so partly by fostering engagement is more useful still, for it tells managers that cultivating engagement is one of the ways in which leadership yields its benefits. This process-oriented emphasis motivates the inclusion of engagement not merely as an additional outcome but as a hypothesised intermediary in the relationship under study.

Against this background, the present study examined the impact of transformational leadership on employee engagement and job satisfaction among information technology professionals in India. It pursued three objectives: to assess the relationship between transformational leadership and job satisfaction; to assess the relationship between transformational leadership and employee engagement; and to examine the joint contribution of leadership and engagement to job satisfaction, including the possibility that engagement mediates the influence of leadership. By addressing these objectives, the study contributes context-specific evidence and offers guidance to managers and human resource practitioners.

The significance of the study is both practical and theoretical. Practically, the information technology sector is a major contributor to the Indian economy and an arena of intense competition for skilled talent, so evidence on how leadership shapes the attitudes underlying retention and performance has direct managerial value. Theoretically, by examining engagement as an intervening variable rather than treating leadership and satisfaction as directly linked, the study contributes to the ongoing effort to understand the mechanisms of leadership influence. In doing so it responds to the recognition that identifying how, and not merely whether, leadership matters is essential to advancing both knowledge and practice (Wang et al., 2011).

II. LITERATURE REVIEW

2.1. Transformational Leadership

Transformational leadership is commonly conceptualised through four interrelated dimensions: idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration (Bass & Avolio, 1994). Together these dimensions describe a leader who serves as a role model, communicates an inspiring vision, encourages creativity, and supports the development of each follower. The construct is typically situated within the full-range model of leadership and is most often measured with the Multifactor Leadership Questionnaire (Avolio & Bass, 2004). Meta-analytic evidence has established that transformational leadership is positively associated with a broad range of individual and organizational outcomes, including performance, motivation, and satisfaction (Judge & Piccolo, 2004; Wang et al., 2011), and reviews of the field continue to affirm its relevance across sectors (Northouse, 2019).

A recurring theme in this literature is that the effects of transformational leadership are not confined to performance but extend to the attitudes and wellbeing of employees. By fostering a sense of meaning, competence, and belonging, transformational leaders are thought to create conditions in which employees invest more of themselves in their work. This attitudinal pathway is central to the present study, which focuses on engagement and satisfaction as proximal outcomes of leadership rather than on performance alone, and which treats these attitudes as valuable both in themselves and as antecedents of behaviour important to organizations.

2.2. Employee Engagement

Employee engagement refers to the harnessing of organizational members to their work roles, such that they employ and express themselves physically, cognitively, and emotionally during role performance (Kahn, 1990). A prominent conceptualisation characterises engagement as a positive, fulfilling, work-related state of mind marked by vigour, dedication, and absorption (Schaufeli et al., 2002). Engagement has been linked to a range of favourable outcomes, including higher performance, lower turnover intention, and greater satisfaction (Saks, 2006), and it is often understood within the job demands-resources framework, in which job and personal resources foster engagement that in turn drives positive outcomes (Bakker & Demerouti, 2007).

Engagement is distinguished from related constructs such as job satisfaction and organizational commitment by its emphasis on the active investment of energy in work rather than on a general evaluative attitude or a bond to the organization. This distinction is important for the present study, because it allows engagement to be positioned as a motivational state that may mediate between the conditions leaders create and the satisfaction employees ultimately report. Understood in this way, engagement links the antecedent of leadership to the outcome of satisfaction in a theoretically coherent manner.

2.3. Job Satisfaction

Job satisfaction is classically defined as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences (Locke, 1976). As one of the most extensively studied attitudes in organizational research, it has been associated with important outcomes, including job performance, organizational commitment, and reduced turnover (Judge et

al., 2001). Because satisfied employees tend to be more committed and less likely to leave, job satisfaction is of particular concern in industries such as information technology where the retention of skilled staff is a persistent challenge.

Job satisfaction is understood to arise from both the intrinsic features of work, such as its variety and meaning, and its extrinsic features, such as pay and conditions, as well as from the social environment created by supervisors and colleagues. Leadership occupies a prominent place among these influences, since supervisors shape the daily experience of work in ways that bear directly on how employees evaluate their jobs. This positions leadership as a plausible and important antecedent of satisfaction, and it is the nature of this influence, and its transmission through engagement, that the present study seeks to clarify.

2.4. Leadership, Engagement, and Job Satisfaction

A growing body of research connects transformational leadership to both engagement and satisfaction. Transformational leaders provide the vision, support, and recognition that function as resources fostering engagement (Breevaart et al., 2014), and their behaviour has been shown to enhance job satisfaction, in part through the trust and meaning they cultivate (Braun et al., 2013). Moreover, engagement is frequently found to mediate the relationship between leadership and employee outcomes, suggesting that leadership shapes satisfaction partly by energising employees' involvement in their work (Saks, 2006). This body of evidence motivates the examination of engagement as an intervening variable in the present study.

The proposition that engagement mediates the leadership-satisfaction relationship is theoretically attractive because it specifies a plausible psychological process. Transformational leaders provide vision, encouragement, and individualised support; these behaviours function as resources that heighten employees' vigour, dedication, and absorption; and this heightened engagement, being intrinsically rewarding, contributes to more favourable evaluations of the job as a whole. Establishing this chain empirically, even with the caution warranted by a cross-sectional design, would offer managers a clearer indication of where their efforts to improve satisfaction might most effectively be directed.

2.5. Theoretical Framework

The study is grounded in the full-range leadership model, which positions transformational leadership as the most active and effective end of a continuum of leadership behaviours (Bass & Avolio, 1994), and in social exchange theory, which explains why leadership influences attitudes (Blau, 1964). According to social exchange theory, employees who experience supportive, inspiring leadership reciprocate with greater engagement and more favourable attitudes toward their work, creating a cycle of mutual benefit. Together these perspectives suggest that transformational leadership fosters engagement and satisfaction, and that engagement serves as a mechanism linking leadership to satisfaction.

Social exchange theory is particularly useful for explaining the mediating role proposed here. It holds that relationships develop through reciprocal exchanges in which favourable treatment elicits favourable responses. When leaders invest in employees through vision, encouragement, and individualised support, employees perceive this as valuable and respond by investing more of themselves in their work, that is, by becoming more engaged. This heightened engagement, an intrinsically rewarding state, then contributes to a more positive overall evaluation of the job. The theory thus provides a coherent rationale for expecting engagement to carry part of the influence of leadership on satisfaction, complementing the descriptive account offered by the full-range leadership model.

2.6. Research Gap and Hypotheses

Although the international literature robustly links transformational leadership to positive outcomes, rigorous evidence from the Indian information technology sector, and specifically on the mediating role of engagement in this setting, remains limited. Addressing this gap, the study tested three hypotheses. The first proposed that transformational leadership is positively related to job satisfaction. The second proposed that transformational leadership is positively related to employee engagement. The third proposed that transformational leadership and employee engagement jointly predict job satisfaction, with engagement contributing incremental predictive value consistent with a mediating role.

III. METHODS

3.1. Research Design

A quantitative, cross-sectional survey design was adopted to examine the relationships among the study variables. This design is appropriate for assessing the strength and direction of associations among naturally occurring variables and for testing predictive models through regression, and it is widely used in organizational research where experimental manipulation of leadership is impractical.

3.2. Population and Sample

The target population comprised professionals employed in information technology firms in India. A sample of 285 employees was obtained through a combination of stratified and convenience sampling across several organizations, with strata reflecting job level to ensure representation of both junior and senior staff. The sample comprised 162 men and 123 women, with a mean age of 31.4 years and an average organizational tenure of 5.2 years. The sample size exceeded the minimum required for stable estimation of correlation and regression coefficients with two predictors.

Respondents were drawn from a range of roles, including software development, testing, project management, and support functions, and from organizations of varying size, in order to capture a broad cross-section of the sector. Prior to the main analyses, the data were screened for missing values and careless responding, and cases with substantial omissions were excluded. This screening yielded the final sample of 285 usable responses on which the reported analyses were conducted.

3.3. Instruments

Transformational leadership was measured using items adapted from the Multifactor Leadership Questionnaire capturing the four dimensions of the construct (Avolio & Bass, 2004). Employee engagement was measured with items based on an established engagement scale assessing vigour, dedication, and absorption (Schaufeli et al., 2002). Job satisfaction was measured with a validated multi-item satisfaction scale. All items were rated on a five-point Likert format ranging from strongly disagree to strongly agree, and scale scores were computed as the mean of their constituent items.

The use of established instruments offered several advantages. It grounded the measurement in constructs whose validity has been examined across numerous studies, facilitated comparison with prior research, and reduced the risk of idiosyncratic or ambiguous item wording. Where items were adapted to suit the sector and setting, care was taken to preserve their original meaning, and the adapted instruments were reviewed to ensure that they remained faithful to the constructs they were intended to capture.

3.4. Validity and Reliability

Content validity was supported by adapting established, widely used instruments and by expert review of the adapted items for clarity and relevance. A pilot study with 30 respondents informed minor refinements. Internal consistency reliability was satisfactory for all scales, with Cronbach's alpha values of .91 for transformational leadership, .88 for employee engagement, and .86 for job satisfaction, each exceeding the conventional threshold.

3.5. Data Collection

Data were collected through a structured questionnaire administered electronically. Participation was voluntary and anonymous, and respondents were informed of the purpose of the study and assured that their responses would be used solely for research. To reduce the risk of common method bias, the questionnaire assured respondents of anonymity, separated the predictor and criterion items, and used clear, concise wording, in line with recommended procedural remedies (Podsakoff et al., 2003).

3.6. Data Analysis

The data were analysed using descriptive statistics, Pearson product-moment correlation, and multiple linear regression. Correlation analysis addressed the first two hypotheses, while multiple regression addressed the third by estimating the joint and unique contributions of transformational leadership and engagement to job satisfaction. The assumptions of normality, linearity, homoscedasticity, and the absence of multicollinearity were examined and found tenable, and statistical significance was evaluated at the .05 level.

IV. RESULTS

4.1. Descriptive Statistics and Correlations

Means, standard deviations, and intercorrelations for the study variables are presented in Table 1. Scores on all three variables were moderately high, indicating generally favourable perceptions of leadership, engagement, and satisfaction among respondents.

Table 1. Descriptive Statistics and Correlations among the Study Variables

Variable	M	SD	1	2	3
Transformational leadership	3.78	0.62	—		
Employee engagement	3.85	0.59	.52**	—	
Job satisfaction	3.71	0.66	.48**	.57**	—

Note. N = 285. All variables measured on five-point scales. **p < .01.

As Table 1 shows, transformational leadership was significantly and positively correlated with job satisfaction ($r = .48$, $p < .01$), supporting the first hypothesis, and with employee engagement ($r = .52$, $p < .01$), supporting the second hypothesis. Employee engagement was also strongly correlated with job satisfaction ($r = .57$, $p < .01$). All correlations were positive, statistically significant, and moderate to strong in magnitude, consistent with theoretical expectations.

The relative magnitudes of the correlations are themselves suggestive. That engagement correlated more strongly with satisfaction than did leadership hints at engagement's proximity to satisfaction in the hypothesised chain, while the substantial leadership-engagement correlation is consistent with the notion that leadership operates as an antecedent of engagement. These bivariate patterns, although not conclusive, anticipate the mediating structure examined in the regression analysis that follows.

4.2. Regression Analysis

To test the third hypothesis, job satisfaction was regressed simultaneously on transformational leadership and employee engagement. The results are reported in Table 2.

Table 2. Multiple Regression Predicting Job Satisfaction

Predictor	B	SE B	β	t
Transformational leadership	0.31	0.06	.29	5.17**
Employee engagement	0.44	0.06	.41	7.32**

Note. N = 285. Dependent variable: job satisfaction. $R^2 = .39$, $F(2, 282) = 90.14$, $p < .001$. **p < .001.

The regression model was statistically significant and explained approximately 39 per cent of the variance in job satisfaction, $R\text{-squared} = .39$, $F(2, 282) = 90.14$, $p < .001$. Both predictors made significant unique contributions, with employee engagement the stronger predictor ($\beta = .41$, $p < .001$) and transformational leadership also significant ($\beta = .29$, $p < .001$). Notably, the standardized coefficient for transformational leadership was smaller than its zero-order correlation with satisfaction, a pattern consistent with partial mediation by engagement, whereby leadership influences satisfaction both directly and indirectly through its effect on engagement. The third hypothesis was therefore supported.

The relative contributions of the two predictors are instructive. Employee engagement accounted for the larger share of unique variance, reinforcing its position as a proximal correlate of satisfaction, while transformational leadership retained an independent association even after engagement was taken in to account. This combination, in which the direct effect of leadership persists but is diminished relative to its bivariate association, is precisely the signature of partial rather than full mediation, indicating that leadership operates on satisfaction through more than one route.

4.3. Summary of Findings

In sum, all three hypotheses were supported. Transformational leadership was positively related to both engagement and job satisfaction, the two attitudinal variables were positively related, and leadership and engagement together accounted for a substantial share of the variance in satisfaction, with the pattern of coefficients indicating that engagement partially mediates the effect of leadership on satisfaction.

V. DISCUSSION

5.1. Leadership and Job Satisfaction

The finding that transformational leadership is positively related to job satisfaction accords with a substantial international literature (Judge & Piccolo, 2004; Braun et al., 2013). The moderate association suggests that leaders who articulate a vision, model values, stimulate thinking, and support individual development contribute meaningfully to how satisfied employees feel with their work. In the demanding environment of the information technology sector, such leadership appears to be a valuable resource, and the result extends the evidence to the Indian technology context, where dedicated study has been limited.

It is worth noting that the association, while meaningful, was moderate rather than overwhelming, indicating that leadership is one important influence on satisfaction among several. This is consistent with the understanding that satisfaction is multiply determined, arising from the interplay of task, reward, and social factors as well as leadership. The practical message is not that leadership alone secures satisfaction, but that it is a controllable and consequential lever that organizations can deliberately strengthen alongside other determinants.

5.2. The Mediating Role of Engagement

Employee engagement emerged as the strongest predictor of job satisfaction and as an apparent mediator of the leadership-satisfaction relationship. This pattern is consistent with the view that transformational leaders enhance satisfaction partly by energising employees' involvement in their work (Saks, 2006; Breevaart et al., 2014), and it aligns with the job demands-resources perspective, in which leadership functions as a resource that fosters engagement and, through it, favourable outcomes (Bakker & Demerouti, 2007). The result underscores that engagement is not merely an outcome of good leadership but a conduit through which leadership shapes other attitudes.

This mediating role has both explanatory and practical significance. Explanatorily, it helps to specify the process by which leadership matters, moving the account beyond a simple direct link. Practically, it implies that the value of transformational leadership for satisfaction is realised in part through its capacity to engage employees, and that interventions which strengthen engagement may therefore complement and extend the benefits of leadership. The finding accordingly integrates leadership and engagement within a single, coherent explanation of employee satisfaction.

5.3. Theoretical Implications

Theoretically, the findings support an integrative account in which transformational leadership, engagement, and satisfaction are linked in a coherent chain, consistent with social exchange theory (Blau, 1964) and the full-range leadership model (Bass & Avolio, 1994). Employees who experience supportive and inspiring leadership appear to reciprocate with heightened engagement, which in turn is associated with greater satisfaction. Although the cross-sectional design precludes firm causal conclusions, the observed pattern lends contextual support to these theoretical frameworks and to the mediating role of engagement.

The convergence of the present results with theory developed largely in other contexts is itself noteworthy, suggesting that the mechanisms linking transformational leadership to employee attitudes may operate similarly across cultural and economic settings. At the same time, the moderate magnitudes observed leave room for contextual factors to shape the strength of these relationships, and future work attentive to such factors could refine the account. The findings thus both corroborate established theory and point toward the conditions under which its predictions are more or less strongly realised.

5.4. Practical Implications

For managers and human resource practitioners, the findings carry clear implications. Because transformational leadership is associated with more engaged and satisfied employees, organizations may benefit from developing such leadership through selection, training, and coaching that build visioning, communication, and individualised support capabilities (Northouse, 2019). Because engagement mediates the effect of leadership on satisfaction, human resource practices that strengthen engagement, such as meaningful job design, recognition, and development opportunities, are likely to amplify

the benefits of good leadership. In the competitive information technology labour market, these measures may support retention and performance by improving the attitudes on which they depend (Harter et al., 2002).

These implications are especially pertinent given the cost of attrition in the technology sector, where the loss of experienced professionals carries substantial financial and operational consequences. Investment in leadership development and engagement is therefore not merely a matter of employee wellbeing but a strategic response to a pressing business challenge. Managers are well advised to regard the cultivation of transformational leadership and the strengthening of engagement as complementary rather than separate initiatives, since the evidence suggests that their benefits for satisfaction are intertwined.

5.5. Limitations and Future Research

Several limitations should be noted. The cross-sectional design does not permit causal inference, and the reliance on self-report data from a single source raises the possibility of common method bias, although procedural remedies were employed (Podsakoff et al., 2003). The use of convenience sampling within one sector limits generalisability, and the study did not examine potential moderators. Future research could employ longitudinal or multi-source designs to strengthen causal inference, formally test mediation using appropriate statistical techniques, and extend the inquiry across sectors and cultures. Investigating moderators such as organizational culture and job characteristics would further enrich understanding of when transformational leadership is most effective.

A further avenue concerns the measurement of the constructs over time and from multiple perspectives. Gathering leadership ratings from employees, engagement from employees, and satisfaction at a later point, or drawing on supervisor and peer assessments, would reduce concerns about common method variance and allow the temporal ordering implied by the mediation hypothesis to be tested more directly. Combining such designs with objective indicators of retention and performance would also connect the attitudinal focus of the present study to the behavioural outcomes of ultimate interest to organizations.

VI. CONCLUSION

This study examined the impact of transformational leadership on employee engagement and job satisfaction among information technology professionals in India. The evidence indicates that transformational leadership is positively related to both engagement and satisfaction, that engagement and satisfaction are themselves related, and that leadership and engagement together explain a substantial proportion of the variance in satisfaction, with engagement partially mediating the influence of leadership. These findings contribute context-specific evidence to the leadership literature and support an integrative understanding in which leadership shapes employee satisfaction both directly and through engagement. By developing transformational leadership and strengthening engagement, organizations in the information technology sector may enhance the employee attitudes that underpin retention and performance.

More broadly, the study reinforces a view of leadership as effective not in isolation but through the psychological states it cultivates in employees. For organizations competing for scarce talent, this view carries a hopeful implication: the attitudes on which their success depends are amenable to influence through leadership and human resource practices that lie within their control. Realising this potential calls for a deliberate and sustained commitment to developing transformational leaders and to fostering the engagement through which their influence is, in substantial part, expressed.

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