THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

A Study on the Effects of Transformational Leadership on Employee's Overall Job Satisfaction in India's Information Technology Industry

Naveen Mahadevamangalam
Research Scholar, Research and Development Centre, Bharathiar University, Coimbatore, Tamil Nadu, India
Dr. Haranath Gundluru
Assistant Professor, Department of Commerce, Yogi Vemana University, Kadapa, Andhra Pradesh, India

Abstract:
The current study contributes to the understanding of transformational leadership style impact on employee's overall job satisfaction in India's Information Technology Industry. The Multifactor Leadership Questionnaire 5X-Short form (MLQ) and Job Satisfaction Survey (JSS) instrument developed by Paul E. Spector were administered. Two hundred and ninety two professionals working in India's Information Technology industry participated in the study. The survey measured transformational leadership and employee's overall job satisfaction and results were analyzed using regression and correlation. Five hypotheses examined the relationship among transformational leadership variables idealized influence (Attributed), idealized influence (Behavior), inspirational motivation, intellectual stimulation, individualized consideration and employee's overall job satisfaction. Findings were consistent with existing literature. The study recommends that Information Technology companies should focus on cultivating transformational leadership qualities in all levels of managers to enrich the overall job satisfaction of the employees. In addition, this study also identified areas of further research.

Keywords: India's IT industry, multifactor leadership questionnaire 5x-short form (MLQ), employee's overall job satisfaction, job satisfaction survey, transformational leadership

1. Introduction

The computer software and hardware sector in India attracted cumulative foreign direct investment (FDI) inflows worth US$ 17.575 billion between April 2000 and May 2015, according to data released by the Department of Industrial Policy and Promotion (DIPP). India's IT industry amounts to 12.3 per cent of the global market, largely due to exports. Export of IT services accounted for 56.12 per cent of total IT exports (including hardware) from India. India's highly qualified talent pool of technical graduates is one of the largest in the world and is available at a cost saving of 60-70 per cent to source countries. This large pool of qualified skilled workforce has enabled Indian IT companies to help clients to save US$ 200 billion in the last five years. The concept of job satisfaction has been developed in many ways by many different researchers and practitioners. One of the most widely used definitions in organizational research is that of Locke (1976), who defines job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences".

Researchers (Avolio & Bass, 1988; Bass, Avolio, & Goodheim, 1987) have indicated that transformational leadership behaviors tend to relate positively to higher performance and greater job satisfaction among employees of business and industrial organizations. Transformational leadership behavior has been widely linked to positive consequences for individuals and organizations alike (Bass, 1998). Although many studies investigate the relationship among transformational leadership, and overall job satisfaction in different areas, little research has adequately focused on the informational technology area, especially in India. The purpose of this study then emerges as the need to identify the relationship between transformational leadership and employee's overall job satisfaction in India's Information Technology Industry.

1.1. Importance of the Study

There are a number of the studies that have examined the effects of transformational leadership on employee's overall job satisfaction. However they do not include the IT industry in India. Thus, the study may make a valuable contribution to existing literature on transformational leadership and employee's overall job satisfaction. There is limited research that focuses on Information Technology industry in India. Therefore, the study could be significant for the IT industry. All participants in the proposed study are employees in India's IT industry. The data collected from this study may provide necessary feedback to IT professionals in India.

1.2. Statement of the Problem

Informational Technology (IT) is a critical piece of any business's operations and strategic planning. There are several benefits that technology can provide to companies including Increased Productivity, Increased Collaboration, Increased Communication and Better Customer Experience. One key element of success for a company is for leaders to manage and motivate their IT employees to reach their maximum potential, and to make good technical decisions. Transformational leadership can positively affect employees' Overall Job Satisfaction. The research model herein has been developed to gain a better understanding of the predictability of employee's Overall Job Satisfaction based on transformational leadership in India's IT industry. Two instruments were used to determine the direct and indirect impact transformational leadership has on employees' Overall Job Satisfaction: (a) Multifactor Leadership Questionnaire (MLQ), and (b) Job Satisfaction Survey (JSS).

1.3. Objectives

The Research Objectives are as follows.
  i.   To determine the impact of transformation leadership on employee's overall job satisfaction in India's Information technology Industry.
  ii. To specify recommendations in the light of the findings of this study.
  iii. To identify the scope for future research.

1.4. Research Hypotheses

The study examined following 5 research hypotheses, which are presented in both the null and directional formats.
- H1: Transformational leadership (Idealized Influence (Attributed)) would be related to Overall Job Satisfaction in India's IT industry.
- H1o: Transformational leadership (Idealized Influence (Attributed)) would be not related to Overall Job Satisfaction in India's IT industry.
- H2: Transformational leadership (Idealized Influence (Behavior)) would be related to Overall Job Satisfaction in India's IT industry.
- H2o: Transformational leadership (Idealized Influence (Behavior)) would be not related to Overall Job Satisfaction in India's IT industry.
- H3: Transformational leadership (Inspirational Motivation) would be related to Overall Job Satisfaction in India's IT industry.
- H3o: Transformational leadership (Inspirational Motivation) would be not related to Overall Job Satisfaction in India's IT industry.
- H4: Transformational leadership (Intellectual Stimulation) would be related to Overall Job Satisfaction in India's IT industry.
- H4o: Transformational leadership (Intellectual Stimulation) would be not related to Overall Job Satisfaction in India's IT industry.
- H5: Transformational leadership (Individualized Consideration) would be related to Overall Job Satisfaction in India's IT industry.
- H5o: Transformational leadership (Individualized Consideration) would be not related to Overall Job Satisfaction in India's IT industry.

2. Review of Literature

Bryman (1986) described leadership as "a social influence process in which a person steers members of the group towards a goal" (p. 2). Bass (1990a) suggested that some definitions view leadership as the focus of group processes. The concept of transformational leadership was developed by Burns (1978) in his exploration of "world class leaders." He also described transformational leadership as "when one or more persons engage with others in such a way that leaders and followers one another to higher levels of motivation and morality" (Burns, 1979, p. 382). Burns and Bass (1990) define Transformational Leadership as leadership that motivates and appeals to followers' ideals and moral values to do more. Transformational Leaders look to inspire, to set direction and vision, to empower subordinates to participate and take the initiative in changing the organization. Burns (1987) and Bass (1985) along with many others believe that transformational leadership is a key to our future success.

Job satisfaction is the overall feeling an employee has about his or her job. In general, the dimensions of job satisfaction include satisfaction with pay, promotion, supervision, co-workers, and the work itself (Porter, 1974). Bass and Avolio (1994) suggested that subordinate satisfaction refers to two kinds of job satisfaction: one is subordinate satisfaction—the extent to which the job meets various individual needs, and the other is leadership satisfaction—is the employee happy with the methods used by leadership to motivate workers and accomplish the goals of an organization.

Research began to recognize the strong relation between transformational leadership and job satisfaction, by examining the relationship between the two variables. For example, Yammarino and Boss (1990b) collected leadership and outcome data using the MLQ. Their research revealed that transformational leadership and subordinate satisfactions were strongly and positively related. Bommer and Mac Kenzie (1996), and Butler, Cantrell, and Flick (1999) also used the MLQ to investigate employees in manufacturing firms. These results showed that transformational leadership had significant relation with job satisfaction and suggested that transformational leadership behaviors affect employee satisfaction through building trust in their leaders.

The review of literature indicated transformational leadership within an organization significantly affects employee's overall job satisfaction. Therefore, this study examined India's Information technology industry in order to determine if there is a relationship between the transformational leadership style and employee's overall job satisfaction.

3. Research Methodology
In this study, the two sets of instruments that were selected to collect data from the samples are Multifactor Leadership Questionnaire (MLQ) and Job Satisfaction Survey (JSS: Copyright Paul E. Spectory). Instruments were developed through previous studies and tested for supported validity and demonstrated reliability.

3.1. Reliability and Validity of Survey Instruments
Multifactor leadership questionnaire (MLQ): Transformational leadership behaviors were measured by the MLQ-5X with the permission of Mind Garden Incorporation. Through extensive examination of this instrument, the developers ascertained the reliabilities for the total items and for each leadership factors scale ranged from .74 to .94 (Bass & Avolio, 1995). All of the scales' reliability was generally high (a > .77). However, the reliabilities within each data set generally indicated the instrument was reliably measuring each of leadership variables across the data sets, with some minor deviations (Bass & Avolio, 2002). The positive correlations among the transformational leadership scales are consistent with previous studies obtained by Bass and Avolio (1990). The average inter-correlation among the transformational leadership scales is .83. Discriminant validity measures for all dimensions of the MLQ-5X were determined to range from .46 to .68; these generally exceeded the cut-off recommended in the literature (Bass & Avolio, 2002).

Job Satisfaction Survey (JSS) is a well-established instrument, which has been repeatedly investigated for reliability and validity. The nine sub-scales related moderately to well between each other, internal consistency; a score of 0.60 for co-worker to 0.91 for the total scale. Overall, an average on 0.70 for internal consistency was obtained out of a sample of 3,067 individuals. Over an 18 month time period, an internal consistency of 0.37-0.74 was calculated for a smaller sample of 43 workers. Studies using various scales for job satisfaction on a single employee, supported validity. A correlation of 0.61 for coworkers to 0.80 for supervision was calculated between five of the Job Satisfaction sub-scale and some of the Job Description Index.

3.2. Data Collection
Two instruments are used for the study. The survey was developed into an online electronic survey using www.surveymonkey.com. The amount of time to take this survey was approximately twenty minutes. The researcher sent an introductory email to IT employees working in India, requesting them to take the survey through a link. The survey was made available for thirty days and each member was allowed to respond once.

Each of participants had to read a cover page, the two questionnaires (MLQ-5X and JSS), and a demographic survey. The cover page provided an assurance of confidentiality, a statement regarding the purpose of the study, and detailed instructions about completing the questionnaires. Participants were instructed that each survey instrument was used independently and anonymously to preserve the confidentiality of responses.

4. Results and Discussion
In the study, two survey instruments were included (a) Multifactor Leadership Questionnaire (MLQ-5X) and (b) Job Satisfaction Survey, (copyright Paul E. Spectory). There were 292 surveys returned. The return rate of the study was 58.4%. Survey data was collected by the SPSS 21.0 software statistical package to process the use of descriptive statistics, simple regression analysis, and correlation analysis.

4.1. Descriptive Statistics
Descriptive statistics were used to describe the basic features of the data in the study. Descriptive statistics provided simple summaries about the sample and about the observations that have been made. Table 1 presented the mean and standard deviation for each variable.

Variable	N	Minimum	Maximum	Mean	Standard Deviations
Idealized Influence (Attributed)	292	1.00	5.00	3.4295	0.76918
Idealized Influence (Behavior)	292	1.00	5.00	3.4541	0.83659
Inspirational Motivation	292	1.00	5.00	3.6747	0.78274
Intellectual Stimulation	292	1.00	5.00	3.3075	0.74779
Individualized Consideration	292	1.00	5.00	3.2887	0.85424
Job Satisfaction	292	1.00	5.00	3.1017	0.44521

Table 1: Descriptive Statistics for Independent and Dependent Variables (n=292)

4.2. Regression
After identifying the descriptive characteristics, several linear regressions were run. Using linear regression the hypotheses were tested and the results were analyzed. Table 2 presented the Regression results for Transformational leadership on Overall Job Satisfaction. The dependent variable was Overall Job Satisfaction. The results showed that R square values for Idealized Influence

(Attributed),Idealized Influence (Behavior),Inspirational Motivation, Intellectual Stimulation and Individualized Consideration were 0.062,0.155,0.131,0.099 and 0.107 respectively. The p value was lower than .01 (significant), which meant that the null hypothesis H1o, H2o, H3o, H4o and H50 must be rejected because the R square was greater than zero, thus providing support for the alternate hypothesis H1, H2, H3, H4 and H5.

Variable	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	R	R Square	Adjusted R Square	Std. Error of the Estimate
	B	Std. Error	Beta						
(Constant) Idealized Influence (Attributed)	2.606 0.144	0.116 0.033	0.250	22.532 4.390	0.000 0.000	0.250	0.062	0.059	0.43186
(Constant) Idealized Influence (Behavior)	2.377 0.210	0.102 0.029	0.394	23.292 7.302	0.000 0.000	0.394	0.155	0.152	0.40989
(Constant) Inspirational Motivation	2.345 0.206	0.117 0.031	0.362	20.048 6.616	0.000 0.000	0.362	0.131	0.128	0.41571
(Constant) Intellectual Stimulation	2.482 0.187	0.113 0.033	0.315	22.056 5.649	0.000 0.000	0.315	0.099	0.096	0.42329
(Constant) Individualized Consideration	2.541 0.171	0.098 0.029	0.327	25.859 5.901	0.000 0.000	0.327	0.107	0.104	0.42140

Table 2: Regression results for Transformational leadership on Overall Job Satisfaction

According to above descriptions, hypotheses lo to 50 were rejected via the statistical investigation. That signified the all of hypotheses in the study were acceptable. Table 3 showed the results of hypotheses.

Hypotheses	Variables	Test Result
Hypothesis 1	Idealized Influence (Attributed) on Overall Job Satisfaction	Do Not Reject
Hypothesis 2	Idealized Influence (Behavior) on Overall Job Satisfaction	Do Not Reject
Hypothesis 3	Inspirational Motivation on Overall Job Satisfaction	Do Not Reject
Hypothesis 4	Intellectual Stimulation on Overall Job Satisfaction	Do Not Reject
Hypothesis 5	Individualized Consideration on Overall Job Satisfaction	Do Not Reject

Table 3: The Result of Regression Analysis

4.3. Correlation Analysis
Correlations between employee's overall job satisfaction and transformational leadership variables were calculated. Table 4 presented the results of correlation analysis. The researcher tested correlation coefficients to find out which factor of transformational leadership had higher relationship with employee's overall job satisfaction. Five variables of transformational leadership (idealized influence (Attributed), idealized influence (Behavior), inspirational motivation, intellectual stimulation, and individualized consideration) were individually compared to employee's overall job satisfaction. The examination found that all five variables were statistically significant to the p value less than .01.

Variable	Overall Job Satisfaction	Idealized Influence (Attributed)	Idealized Influence (Behavior)	Inspirational Motivation	Intellectual Stimulation	Individualized Consideration
Overall Job Satisfaction	1	.250[**]	.394[**]	.362[**]	.315[**]	.327[**]
Idealized Influence (Attributed)	.250[**]	1	.741[**]	.787[**]	.683[**]	.749[**]
Idealized Influence (Behavior)	.394[**]	.741[**]	1	.853[**]	.689[**]	.721[**]
Inspirational Motivation	.362[**]	.787[**]	.853[**]	1	.704[**]	.722[**]
Intellectual Stimulation	.315[**]	.683[**]	.689[**]	.704[**]	1	.709[**]
Individualized Consideration	.327[**]	.749[**]	.721[**]	.722[**]	.709[**]	1

**. Correlation is significant at the 0.01 level (2-tailed).
Table 4: Correlations among Overall Job Satisfaction and Transformational Leadership

5. Discussion of Findings

Survey data was collected by SPSS 21.0 and used descriptive statistics, simple regression analysis, and correlation analysis to test the 5 hypotheses. As indicated by the above results of the 5 regression analyses, all of the hypotheses were supported. The findings are the same as previous studies. While factors of transformational leadership were individually compared to overall job satisfaction, the strongest relationship existed between Idealized Influence (Behavior) and Overall Job Satisfaction (.394). The correlation involved that a moderate and positive relationship between Idealized Influence (Behavior) and Overall Job Satisfaction in India's IT industry. The second highest relationship was between Inspirational Motivation and Overall Job Satisfaction (.362). The third highest relationship was between Individualized Consideration and Overall Job Satisfaction (.327) and next highest relationship was between Intellectual Stimulation and Overall Job Satisfaction (0.315). The Idealized Influence (Attributed) had a lowest and positive correlation with Overall Job Satisfaction (.250).

5.1. Recommendations

For all practical purposes, the study results suggested the necessity of transformational leaders in India's Information Technology industry. Employee's overall job satisfaction is proven to be positively associated with transformational leadership. The results of this study can be used as feedback by Information Technology industry experts to look for more transformation leadership qualities in candidates, during recruitment process for middle level and top level managerial positions.

5.2. Conclusions

This study illustrated that transformational leadership theory is applicable to Indian information Technology Industry. The theories of previous studies on the effects of transformational leadership on employee's overall job satisfaction are confirmed by present study findings in Indian IT industry.

5.3. Scope for future Research

Out of three major subscales of Multifactor Leadership Questionnaires (MLQ), only the transformational leadership scale was used in the study. Transactional leadership styles and Laissez-Faire leadership styles should be compared in similar studies to investigate which leadership style might have a stronger impact on employee's overall job satisfaction.

6. References

i. Avollo B J, Bass BM and Jung DI (1999), Re-examining the components of transformational and transactional leadership using the multifactor leadership questionnaire. Journal of Occupational and Organizational Psychology, 72(4), 441–462.
ii. Bass, B.M. (1985). Leadership and Performance beyond Expectation, Free Press, New York, NY.
iii. Bass, B., & Avolio, B. J. (1994), Improving organizational effectiveness through transformational leadership, Thousand Oaks, CA: Sage.
iv. Bass, B., & Avolio, B. J. (2002), Manual for the Multifactor Leadership Questionnaire (Form 5X), Redwood City, CA: Mind Garden.
v. Bass, B., Avolio, B.J., & Goodheim, L. (1987), Biography and the Assessment of Transformational Leadership at the World-Class Level. Journal of Management, 73(1), 7-19.
vi. Bennis, W.G. and Nanus, B. (1985), Leaders, The Strategies for Taking Charge, Harper & Row, New York, NY.
vii. Bommer, W. H., & Mac Kenzie, S. (1996), Transformational leader behaviors and substitutes for leadership as determinates of employee satisfaction, commitment, trust, and organizational citizenship behaviors. Journal of Management, 22,259-298.
viii. Bryman, A, Gillingwater, D., & McGuinness, L. (1996), Leadership and organizational transformation. International Journal of Public Administration, 19(6), 849-872.
ix. Bryman, Alan (1986), Leadership and organizations. Boston: Routledge & Kegan Paul.
x. Burns, J. M. (1979), Two excerpts from leadership, Educational Leadership, 36, 380-383.
xi. Burns, J.M. (1978), Leadership, Harper & Row, New York, NY.
xii. Butler, J. K., Cantrell, R. S., & Flick, R. J. (1999), Transformational leadership behaviors, upward trust, and job satisfaction in self-managed work teams. Organization Development Journal, 77(1), 13-28.
xiii. Chien-Liang Liu (2005), The Effects of Transformational Leadership on Organizational Commitment and Job Satisfaction In Taiwan's Information Technology Industry, Thesis, Nova Southeastern University,Florida,2005.
xiv. Dubinsky, A. J., Yammarino, R J., Jolson, M. A., & Spangler, W. D. (1995, Spring), Transformational leadership: An initial investigation in sales. The Journal of Personal Selling & Sales Management", 15(2), 17-31
xv. India Brand Equity Foundation (2015), IT & ITeS Industry in India : http://www.ibef.org/industry/information-technology-india.aspx Viewed on October 12, 2015
xvi. Paul E. Spector, 1985. Job satisfaction Survey (JSS), https://www.statisticssolutions.com/job-satisfaction-survey-jss/ Viewed on October 12, 2015
xvii. Locke, E.A. (1976), The nature and causes of job satisfaction, Handbook of industrial and organizational psychology (pp.1297-1349), Chicago: Rand McNally.

xviii.   Lok P, Crawford J, The effect of organizational culture and leadership style on job satisfaction and organizational commitment. Journal of Management Development. 2004; 23(4): 321-338.

xix.   Pawar, B.S. and Eastman, K.K. (1997), The nature and implications of contextual influences on transformational leadership: a conceptual examination. Academy of Management Review, Vol. 22, pp. 80-109.

xx.   Porter, L., Steers, R., & Mowday, R. (1974), Organizational commitment, job satisfaction, and turnover among psychiatric technicians. Journal of Applied Psychology, 59(5), 603-609.

xxi.   Testa, M. R. (2001), Organizational Commitment, Job Satisfaction, and Effort in the Service Environment. The Journal of Psychology, 135(2), 226-236. http://dx.doi.org/10.1080/00223980109603693

xxii.   Tichy, N.M. and Devanna, M.A. (1986), The Transformational Leader, Wiley, New York, NY.

xxiii.   Yammarino, E. J. & Bass, B. (1990a), Long-term forecasting transformational leadership and its effects among naval offices: Some preliminary findings, West Orange, NJ: Leadership Library of America.

xxiv.   Yammarino, E. J. & Bass, B. (1990b), Transformational leadership and multiple levels of analysis. Human Relations, 43(100), 957-995.