

Transformational and Transactional leadership in the Indian Context

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Abstract – This study examines the dimensionality of transformational and transactional leadership posited by Bass [1] and their role in explaining select outcome variables and employee attitudes in the Indian context. Data was collected from a sample of 255 employees from a large multinational organization in India, using Multifactor leadership Questionnaire (MLQ 5x) [2] [3]. Results show that transformational and transactional leadership are linked with extra effort, effectiveness of the leader, satisfaction with the leader and turnover intentions. Results of hierarchical regression analysis reveal that significant proportion of extra variance in outcome variables is explained only by transformational leadership. This study finds support for two-factor Active-Passive model of leadership and provides an empirical support to the transformational and transactional leadership model in the Indian context.

Key words- Transformational leadership, transactional leadership, active leadership, passive leadership, leader effectiveness.

1. INTRODUCTION

In the modern day's context of dynamic change and turbulence, transformational leadership has been identified as a powerful source of effective leadership in a variety of organizational settings. Burns [4] introduced the concepts of transforming and transactional leadership in his treatment of political leadership. Extending the theory of Burns, Bass [1] conceptualized an integrated theory of leadership using *transformational* instead of *transforming* and proposed that transformational leaders arouse and transform the attitudes, beliefs and motives of followers to a higher level, acting as change agents. Transactional leaders, in contrast, focus on exchange of resources for valued outcomes. According to Bass, transformational and transactional leaders are distinct but not mutually exclusive, the best leaders are both transformational and transactional. The theory of Bass [1] underwent several revisions and evolved into Full-range

leadership theory (FRLT) [5] [6]. Based on the concepts of transformational leadership, transactional leadership and non-leadership, Bass and Avolio [2] [3] developed Multifactor Leadership Questionnaire to measure leadership dimensions and outcomes.

2. OBJECTIVES AND HYPOTHESES

Leadership research has evidenced the efficacy of transformational leadership in the canvass of dynamic business landscape. As indicated by research, securing and retaining human resources remains a potent issue in the current business environmental context and that transformational leadership may trigger the development of intellectual capital needed to meet organizational challenges [7] [8] [9] [10] and [11]. Many studies indicate that transformational leadership results in greater leader effectiveness and subordinate satisfaction than other leadership styles [12]. Studies also show that the enhancement of subordinates' satisfaction and trust in leadership resulted in lower employee turnover [9], higher group performance levels [13], and enhanced efforts by subordinates [14]. Systematic attempts to study the transformational and transactional leadership model of Bass [1] in the Indian context are sparse. This study examines the relationship of transformational and transactional leadership dimensions with select outcome variables in Indian context. Accordingly the following hypotheses were formulated and empirically examined:

Hypothesis-1(a): Transformational leadership will have positive relationships with extra effort of the follower, effectiveness of the leader and follower satisfaction with the leader and negative relationship with turnover intention (intention to quit) of follower.

Hypothesis-1(b): All the four dimensions of transformational leadership will have positive relationships

extra effort of the follower, effectiveness of the leader and follower satisfaction with the leader and negative relationship with turnover intention (intention to quit) of follower.

Further objective of this study was to assess the relative importance of leadership variables in explaining select outcome variables in the Indian context. Accordingly the following hypothesis was formulated and tested:

Hypothesis-2: Transformational leadership will significantly predict leadership criteria (extra effort, effectiveness of leader, satisfaction with the leader) controlling for the transactional leadership.

Another objective of this study was to examine the dimensionality of transformational and transactional leadership in the Indian context since a two factor solution – active and passive leadership – was already referred in some earlier studies. Thus the following hypothesis was tested:

Hypothesis-3: Active leadership will significantly predict leadership outcome variables (extra effort, effectiveness of leader, and satisfaction with the leader) controlling for passive leadership.

3. METHODS

Data for this study was collected from a large technology based multinational organization located at Bangalore, operating in India for over two decades with certifications of ISO 20000; CMM @ 27001; ISO 14001; SAS 70 and People CMM @ for its Indian operations.

3.1. Sample and Procedures

Respondents in the sample were selected predominantly on convenience method of sampling though care was taken to include respondents from major divisions of the company. Data was collected from 255 employees working in different divisions of the organization. The sample consisted of 141 male and 114 female respondents with an average age of 26 years and average work experience of 3 years and 8 months. This study satisfied the rules proposed by Thorndike [14] with regard to the sample size.

3.2. Measures

3.2.1. Leadership dimensions and outcome variables

The Multifactor Leadership Questionnaire (MLQ 5x-Short) developed by Bass and Avolio [2] [3] consisting of 45 items measuring transformational leadership,

transactional leadership and leadership outcome variables, was used in this study. The MLQ captures four dimensions of transformational leadership: Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized consideration; three components of transactional leadership: Contingent Reward, Management-by-Exception-Active, and Management-by-Exception-Passive; and a non-leadership dimension – Laissez-faire leadership – in 36 items. The outcome variables: Extra Effort, of the follower, Effectiveness of the leader, and Satisfaction with the leader, are measured by nine items in the questionnaire. Reliabilities for each leadership factor scale ranged from 0.74 to 0.94. Reliabilities for all the scales exceeded the standard cut-offs for internal consistency recommended in literature [3]. The Cronbach alpha reliability coefficients reported in this study are: 0.91 for the overall transformational leadership scale and ranged between 0.67 and 0.80 for transactional leadership, and 0.77 for laissez-faire leadership.

3.2.2. Intention to quit dimension

Turnover intention of employees was measured by a three-item seven-point scale developed by Camman, Fichman, Jenkins and Klesh [15]. This study reported a Cronbach alpha reliability coefficient of 0.87 for this scale.

3.3. Data analysis

The reliability of instruments used in this study was assessed by the Cronbach alpha coefficient of internal consistency. Exploratory factor analysis was carried out to understand the dimensionality of leadership constructs. Correlation and regression analysis were used to study the relationships between variables. Hierarchical regression analyses were used to examine the augmentation effects of transformational and transactional leadership.

4. RESULTS AND DISCUSSION

4.1. Leadership dimensions and their relationships

Correlations between eight leadership dimensions, their reliabilities and descriptive statistics are given in table-1.

All the transformational leadership factors and two factors of transactional leadership (contingent reward and management-by-exception-active) were significantly ($p < 0.01$) correlated with each other.

Table-1: Descriptive Statistics, Reliabilities and Correlations for Leadership Variables

Sl.	Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1.	Idealized Influence	2.60	0.74	(0.80)									
2.	Inspirational Motivation	2.75	0.77	0.79**	(0.72)								
3.	Intellectual Stimulation	2.57	0.75	0.75**	0.64**	(0.65)							
4.	Individual Consideration	2.48	0.84	0.77**	0.63**	0.71**	(0.68)						
5.	Transformational Leadership	2.60	0.69	0.93**	0.86**	0.87**	0.88**	(0.91)					
6.	Contingent Reward	2.64	0.80	0.80**	0.72**	0.70**	0.71**	0.83**	(0.72)				
7.	Management-by-Exception (Active)	2.66	0.76	0.55**	0.54**	0.45**	0.44**	0.56**	0.54**	(0.62)			
8.	Management-by-Exception (Passive)	1.66	0.94	-0.07	-0.13*	-0.09	-0.07	-0.10	-0.04	0.06	(0.66)		
9.	Transactional Leadership	2.32	0.56	0.60**	0.52**	0.49**	0.50**	0.59**	0.70**	0.74**	0.58**	(0.58)	
10.	Laissez-faire Leadership	1.38	1.07	-0.19**	-0.21**	-0.19**	-0.21**	-0.23**	-0.19**	0.01	0.69**	0.30**	(0.78)

Cronbach alpha reliabilities are reported in parentheses along the diagonal.

** p < .01.

Management-by-exception-passive was positively correlated only with laissez-faire leadership. Laissez-faire leadership was positively correlated with the overall transactional leadership and had a significant ($p < 0.01$) negative correlation with all the factors of transformational leadership and also with contingent reward dimension of transactional leadership while it was not correlated with management-by-exception-active. The reliability of all the sub-constructs is also between medium to high (0.62 to 0.80). The correlation coefficients among the components of transformational leadership were in the range of 0.63 to 0.79 and all the four dimensions clubbed together forming a measure of transformational leadership had an overall reliability coefficient of 0.91. Similarly the overall transactional leadership dimensions clubbed together had a combined reliability coefficient of 0.58. The reason for the reliability coefficient not being high for transactional leadership could be that, the management-by-exception-passive dimension is not significantly correlated with the other two dimensions – contingent reward and management-by-exception-active which provides an indication towards two factor model discussed in hypothesis 3.

4.2. Exploratory factor analysis of leadership variables

One of the objectives of this study was to examine the dimensionality of transformational and transactional

leadership in the Indian context and accordingly hypothesis-2 was formulated and tested. An exploratory factor analysis of the scores of all dimensions of transformational and transactional leadership was conducted to examine the factors underlying these eight dimensions. In the common factor analysis only 2 factors had latent root or eigenvalue greater than 1. A scree test [16] was conducted since the latent root criterion generally results in conservative estimate of the number of factors to be extracted in the case of common factor analysis in comparison with principal component analysis. Scree test is a procedure in which latent roots are plotted against the number of factors in their order of extraction, and the point at which the curve first begins to straighten out, giving the maximum number of factors to extract [17]. Two factors were extracted out of the eight dimensions from the common factor analysis. An absolute value of 0.30 is generally considered to be the minimum factor loading for interpretation [18]. Out of the eight dimensions, six dimensions (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, contingent reward and management-by-exception-active) had a factor loading greater than 0.69 on the first factor. Five dimensions had factor loadings of 0.83 to 0.93 on first factor and one dimension (management-by-exception-active) had a loading of 0.69 on the first factor. Two dimensions (management-

by-exception-passive, and laissez-faire leadership) had factor loadings of 0.92 and 0.91 on factor 2 and less than 0.20 loadings on factor one. After varimax rotation, the two factors that emerged were labeled based on the content analysis of the dimensions and findings of earlier studies [19] [20] [21]. The first factor consisting of six dimensions (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, contingent reward, and management-by-exception-active) was termed as **active leadership**. The second factor, which consisted of two dimensions (management-by-exception-passive, and

laissez-faire leadership) was termed as **passive leadership**. These two factors (active leadership and passive leadership) were used to examine their relations with outcome variables and also to test the augmentation hypothesis.

4.3. Leadership dimensions and outcome variables

The correlations between eight leadership dimensions, active-passive leadership and outcome variables of extra effort, effectiveness of the leader, satisfaction with the leader, and intention to quit are provided in table-2 below:

Table-2: Correlations of Leadership Variables with Leadership outcome variables.

Leadership Variables	Extra Effort	Effectiveness of the Leader	Satisfaction with the Leader	Intention to Quit
Transformational Leadership	0.71**	0.79**	0.75**	-0.16*
Idealized Influence	0.66**	0.75**	0.72**	-0.08
Inspirational Motivation	0.59**	0.72**	0.66**	-0.10
Intellectual Stimulation	0.61**	0.64**	0.62**	-0.16**
Individual Consideration	0.65**	0.68**	0.67**	-0.21**
Transactional Leadership	0.42**	0.50**	0.41**	0.05
Contingent Reward	0.65**	0.74**	0.66**	-0.15*
Management-by-Exception (Active)	0.46**	0.56**	0.44**	-0.03
Management-by-Exception (Passive)	-0.18**	-0.19**	-0.19**	0.24**
Laissez-faire Leadership	-0.30**	-0.29**	-0.27**	0.25**
Active Leadership	0.72**	0.81**	0.75**	-0.15*
Passive Leadership	-0.27**	-0.27**	-0.25**	0.26**

** p < .01. * p < .05.

Transformational leadership was significantly ($p < 0.01$) correlated with extra effort, effectiveness of the leader and satisfaction with the leader. All the factors of transformational leadership were significantly ($p < 0.01$) correlated with extra effort, effectiveness of the leader and satisfaction with the leader. From these results it can be seen that hypotheses 1(a) and 1(b) are accepted.

4.4. Relative importance of leadership variables

Hierarchical regression analysis was conducted to test the hypothesis that transformational leadership accounts for a greater proportion of variance in outcome variables. In the first analysis, transactional leadership was entered as predictor in step-1 and transformational leadership in step 2.

In the second analysis, the order of entry was reversed. The changes in R^2 at each step are presented in table-3. Transactional leadership accounted for 17, 25, and 17 percent of the variance in the three leadership outcomes – extra effort, effectiveness of the leader, and satisfaction with the leader respectively – when entered first, and accounted for no additional percent of variance for all the three outcome variables when entered second. Transformational leadership accounted for 50, 62 and 57 percent of the variance in the three leadership effectiveness criteria of extra effort, effectiveness of the leader and satisfaction with the leader, respectively when entered first, and accounted for an additional 33, 37 and 41 percent of the variance respectively, when entered second.

Table-3: Hierarchical Regression Analyses: Predicting outcomes from Transactional and Transformational Leadership

	Extra Effort		Effectiveness of Leader		Satisfaction with the Leader	
	R ²	ΔR ²	R ²	ΔR ²	R ²	ΔR ²
Order 1						
Step1 Transactional Leadership	0.17**		0.25**		0.17**	
Step 2 Transformational Leadership	0.50**	0.33**	0.62**	0.37**	0.57**	0.41**
Order 2						
Step1 Transformational Leadership	0.50**		0.62**		0.57**	
Step 2 Transactional Leadership	0.50**	0.00	0.62**	0.00	0.57**	0.00

** p < .01

This shows that transformational leadership explains leadership outcome variables significantly more than transactional leadership. Thus hypothesis-2 is supported. Similar steps were taken to examine the explanatory power of active and passive leadership for leadership outcomes. As can be seen from table-2, active leadership was significantly (p<0.01) positively correlated with extra effort, effectiveness of leader, satisfaction with the leader and significantly (p<0.01) negatively correlated with intention to

quit. Passive leadership was significantly (p<0.01) negatively correlated with extra effort, effectiveness of leader, satisfaction with the leader and significantly (p<0.01) positively correlated with intention to quit. To test the hypothesis that active leadership would account for a greater proportion of the variance in outcome variables than would passive leadership, hierarchical regression analyses was conducted the results of which are presented in table-4 below:

Table 4: Hierarchical Regression Analyses: Predicting Outcomes from Passive and Active Leadership.

	Extra Effort		Effectiveness of Leader		Satisfaction with the Leader	
	R ²	ΔR ²	R ²	ΔR ²	R ²	ΔR ²
Order 1						
Step1 Passive Leadership	0.07**		0.07**		0.06**	
Step 2 Active Leadership	0.54**	0.47**	0.68**	0.61**	0.58**	0.52**
Order 2						
Step1 Active Leadership	0.51**		0.66**		0.56**	
Step 2 Passive Leadership	0.54**	0.03**	0.68**	0.02**	0.58**	0.02**

* p < .05

** p < .01

In the first analysis, passive leadership was entered as predictor in step-1, and active leadership in step-2. In the second, the order of entry was reversed. The change in R² at each step in these analyses is reported in table 4. Passive leadership accounted for 7, 7 and 6 percent of the variance in the three leadership outcomes – extra effort, effectiveness of leader, and satisfaction with the leader, respectively, when entered first, and accounted for no additional percent

of the variance, for all the three outcome variables, when entered second. Active leadership accounted for 51, 66 and 56 percent of the variance in the three outcomes of extra effort, effectiveness of leader and satisfaction with the leader, when entered first, and accounted for an additional 47, 61 and 52 percent of the variance respectively, when entered second. This clearly shows that active leadership explains leadership outcome variables significantly more

than passive leadership. Thus hypothesis-3 is supported. These findings support prior research on augmentation effect of transformational leadership over transactional leadership [19] [20] [21].

5. CONCLUSION

This study supports the linkage of leadership constructs with extra effort of the followers, their perception of effectiveness of their leader, satisfaction with the leader and their turnover intentions. Results reveal that extra variance in outcomes is explained only by transformational leadership. The relevance of transformational leadership and contingent reward dimension of transactional leadership in influencing employee attitudes and effort is supported. The inspiration, concern and guidance received by employees from their superior are found to be important determinants of their satisfaction, effort and commitment to the organization. This study establishes the importance of transformational leadership in crucial employee attitudes as well as their turnover intentions, suggesting that two factor model of leadership may provide a better and comprehensive understanding of its variability. These contributions have important implications for practice and value addition to leadership literature.

6. LIMITATIONS OF THE STUDY

An important limitation of this study is the cross-sectional design, which does not examine causal relationships. The use of correlational design does not answer the question of causality between leadership factors and the outcome variables. Participation in this study was voluntary and so there might have been some self-selection bias. The single organizational context in which the hypothesized relationships were examined permitted the control of cross-industry and cross-firm variance but limited the generalizability of findings. This study included only the MLQ dimensions of transformational and transactional leadership of Bass and associates, and therefore limited the possibility of getting a totally different factor structure underlying transformational and transactional leadership in the Indian Context.

7. DIRECTIONS FOR FUTURE RESEARCH

Further research with a wider sample may provide greater support for a culture-specific model of leadership and could help to identify and train transformational leaders in the Indian context. A longitudinal research might assess the causal relationships. Efforts may be made to identify leadership dimensions in the Indian context, instead of applying the MLQ dimensions of transformational and transactional leadership identified by Bass and associates.

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