

Chapter 65

Parametric Analysis of Leadership Styles on Organizational Performance and the Mediating Role of Organizational Innovativeness

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Abstract Traditionally leadership styles has greatly emphasized on the performance of organization. In our study we explore the effects of leadership styles (Transformational, Transactional and Laissez-Faire Leadership) on the organizational performance under the mediating role of organizational innovativeness. The research indicates that does innovation effects the overall performance of an organization or not? Aspects the way the leadership style might have an impact on organization Performance but in the presence of the organization's innovativeness this relationship gets boosted up or not? A quantitative research will be used by focusing the Pharmaceutical sector in Lahore 300 questionnaires will be distributed by using stratified random sampling used in the study.

Keywords Leadership styles · Organizational innovativeness · Organizational performance

65.1 Introduction

It is found that leadership styles are much effective to improve the organizational performance. Study prove that organizational innovativeness is the most important and sustainable source to gain competitive advantages. Manager's leadership is the important factor of organization's success. The quality of manager's leadership to influence

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their subordinates by making them more satisfied, committed and in return increases productivity [11]. In organization transformational leadership style add positivity it is also report certain weaknesses such as ambiguity underlying its influences and processes [14]. Both transactional and transformational are significantly impact the performance of organizational [19]. Transformational, transactional and laissez-faire leadership styles add positively impact on the performance of organizational [18].

The aim of this research is to realize the importance of organizational performance. Firstly this study will explain three different leadership styles affecting organizational performance and secondly observing mediating role of organizational innovativeness between leadership styles and organizational performance. Previously there was no indication of observing relationship between leadership styles and organizational performance in the presence of innovativeness acting as mediator.

This article will highlight those prospective which will introduce new concepts in context of improving employee behavior towards goals achievements and organizational performance. The main theme of this article is realization of the facts that leadership is not only a personality trait but also has significant impact on organizational performance and also providing information about the human behavior.

Moreover, this particular research will be a source of contributing an idea which has not been studied together though organization performance and organization innovativeness has been studied separately but in this study it's for the very first time that all three variables are being studied together which will enable the researcher to probe out some of the findings and recommendations for the managers to learn more about effect of their style on organization performance and to device such policies which will enable them to create an atmosphere which makes the employees more committed and loyal not only towards their job but towards achieving the organization's goal.

65.1.1 Problem Statement

Leadership is an important element for an organization performance and while research for the relationship and effect of leadership styles on organizational performance, the statistical work has not been done to study the relationship between leadership styles and organization performance under the mediating effect of organizational innovativeness. Finally countries in the growing phase like Pakistan, need to know the contribution of different factors and the intensity of their impact on organizational performance that leads towards economic development.

65.1.2 Objectives

- (1) To identify the effect of Transformational leadership on the organization performance.
- (2) To identify the effect of Transactional leadership on the organization performance.

- (3) To identify the effect of Laissez fair leadership on the organization performance.
- (4) To identify the effect of Transformational leadership on the organizational performance under the effect of Organizational Innovativeness.
- (5) To identify the effect of Transactional leadership on the organizational performance under the effect of Organizational Innovativeness.

To identify the effect of Laissez fair leadership on the organizational performance under the effect of Organizational Innovativeness.

65.2 Literature Review

The following section provides a summary of the academic literature that is relevant to this study. It includes a section on leadership and its styles, organizational commitment, and organizational performance.

65.2.1 Leadership

Researcher defines leadership as an effort to persuade the group of people through the effective communication procedure to reach definite goals. Leadership is the skill to persuade followers to work toward certain objectives and goals [13]. Leadership styles have been a tough and demanding topic for organizational effectiveness. Therefore diverse leadership styles have been considered across numerous decades and in current theory which was anticipated by Bass in which three styles as Transformational, Transactional, and Laissez-Faire Leadership [2]. The theory of leadership several studies were summarized into five broad theories namely, trait, behavioral, contingency or situational approach, contemporary integrative approach, and power and influence approach. There are numerous styles of leadership such as: laissez-faire, transactional and transformational leadership [11]. Dissimilar styles were desired for different situations and every leader required recognizing when to demonstrate a particular approach. there is no a single leadership style which is best for each situation since a leader may have knowledge and ability to deals effectively in one situation but may not materialize as effectively in a diverse situation.

65.2.2 Transformational Leadership

Transformational leadership is a charismatic leadership which converts idealization into realistic actions. Transformation can be defined as a linking of organizational

approach and psychological characteristic which can lead an on the whole organizational change [15]. Moreover leaders can direct a higher level of psychological needs to groups and in return stimulate their commitment to the organization [8]. Transformational leaders also give importance to subordinate individual needs and personal development. It is helpful to build a close relationship with employees. Leaders give equal attention to each employee in different ways. They treat each individual in a fair way. Because of this biasness free leader attitude, employees feel more special, loyal and confident. To follow this leadership style, there is an attractive effect on the success of the employees [4]. They motivate employees to work with team for the team mission and goals and also the stability of this process. Leaders give confidence to employees to see outside what they already have [2].

65.2.3 Transactional Leadership

A person is defined as transactional leader who has the capacity to make subordinates consistent with existing environment and closely focuses on screening deviations and making amendments. Appreciating good performance and identifying errors in performance is also a leading role of transactional leader. One of the leading researchers indicates that transactional leader motivates the self-interest of employees towards work [9].

65.2.4 Laissez-Faire Leadership

Decentralized decision making is a key factor of Laissez-Faire Leadership style and no formal Boss-subordinate relationship exist in it [5]. Laissez-Faire Leadership style is characterized by subordinates making their own goals, set their rules and have own responsibilities for task completion. Laissez-Faire Leaders have freedom to take any decision [16].

65.2.5 Organizational Innovativeness

Organizational innovativeness (OI) is “an organization’s overall innovative capability of introducing new products and services to the market, or opening up new markets, through combining strategic orientation with innovative behavior and process” [17]. Globalization has forced companies to innovate and design. Innovation can be defined as a new idea, concept in the form of product, technology, production process or any new marketing strategy along with intellectual property [10]. Learning environment will be a big source of creating innovation [3]. Innovation is highly influenced by

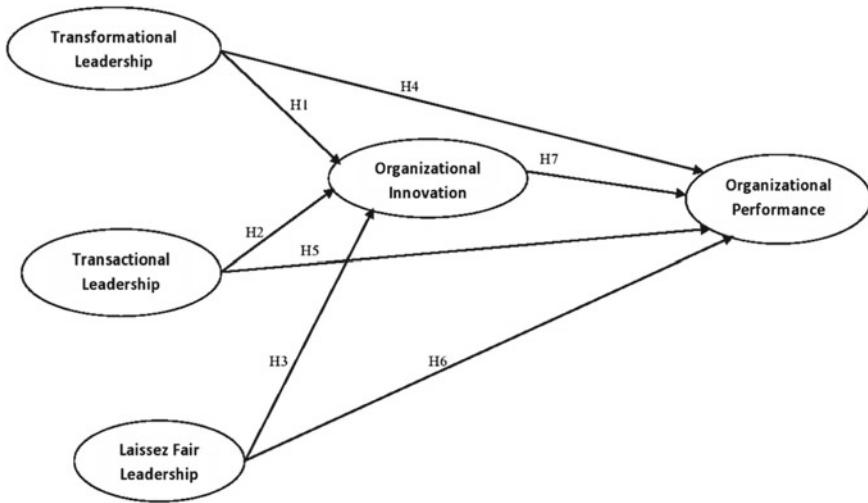


Fig. 65.1 Theoretical framework

transformational leadership style [7]. The concept of organizational innovation is different for business organization as compared to public organization in context of risk orientation [17] (Fig. 65.1).

65.3 Hypotheses and Theoretical Framework

Hypothesis 1 (H₁): Transformational leadership style has positive and significant impact on organizational innovation.

Hypothesis 2 (H₂): Transactional leadership style has positive and significant impact on organizational innovation.

Hypothesis 3 (H₃): Laissez faire leadership style has positive and significant impact on organizational innovation.

Hypothesis 4 (H₄): Transformational leadership style has positive and significant impact on organizational performance.

Hypothesis 5 (H₅): Transactional leadership style has positive and significant impact on organizational performance.

Hypothesis 6 (H₆): Laissez faire leadership style has positive and significant impact on organizational performance.

Hypothesis 7 (H₇): Organizational innovation has positive and significant impact on organizational performance.

Hypothesis 8 (H₈): Organizational innovation mediates the impact of transformational leadership style on organizational performance.

Hypothesis 9 (H₉): Organizational innovation mediates the impact of transactional leadership style on organizational performance.

Hypothesis 10 (H₁₀): Organizational innovation mediates the impact of laissez faire leadership style on organizational performance.

65.4 Methodology

This research would be quantitative in nature. In order to achieve the desired objectives, structured questionnaire will be used as a research tool for data collection. To measure the leadership styles (transformational, transactional and Laissez-Faire) and organizational Innovativeness (Product, Process and Marketing), 5 point likert scale will be used. In SPSS, multiple regression analysis, correlation analysis and factor analyses will be performed in this research. Convenient sampling technique will be used to conduct the research. Data will be collected through questionnaire from about 300 respondents. In this cross sectional study the primary data will be collected from professionals working in selected multinational companies in Pakistan, through questionnaires.

65.5 Analysis and Discussions

65.5.1 Reliability Analysis

The internal reliability for individual variable was tested by using cronbach's alpha. Nunnally [12] suggested that value of alpha equal are greater than 0.60 is sufficient for declaring items to be reliable. Table 65.1 shows values of cronbach's alpha for each variable and it may be noticed that each variable has higher reliability as each value is above 0.70.

Table 65.1 Cronbach's alpha values for each variable

Sr.	Variable	No. of items	Cronbach's alpha
1	Transformational leadership	13	0.784
2	Transactional leadership	10	0.71
3	Lassaiz faire	9	0.731
4	Organizational innovation	15	0.782
5	Organizational performance	10	0.788

65.5.2 Correlation Analysis

Correlation analysis was used to see the contribution of each leadership style on organizational innovation as well as on performance. Table 65.2 shows correlation coefficients for the relationship among all variables involved.

The results show that there is positive and significant relationship between transformational leadership and organizational performance ($r = 0.429, p = 0.000 < 0.01$). This means that transformational leadership style positively contributes towards organizational performance and by adopting this style organizational performance can be increased. It can also be shown that this leadership style is the major contributor of organizational performance. Transactional leadership style is also positively and significantly related with organizational performance ($r = 0.153, p = 0.017 < 0.05$) which shows that this leadership style can positively influence organizational performance. It can also be noticed from the results that this style is the least contributor of organizational performance. There is also positive and significant relationship between laissez faire leadership style and organizational performance ($r = 0.353, p = 0.000 < 0.01$). All the above results suggest that all the leadership styles included in this research are positively and significantly related with organizational performance. Further the results of correlation analysis show that organizational innovational is positively and significantly related with transformational leadership ($r = 0.378, p = 0.000 < 0.01$), transactional leadership ($r = 0.278, p = 0.000 < 0.01$) and laissez faire leadership ($r = 0.410, p = 0.000 < 0.01$) styles. It is found that organizational innovation can be most fostered by promoting laissez faire leadership style in the organization. Also there exists positive and significant relationship between organizational innovation and organizational performance ($r = 0.552, p = 0.000 < 0.01$).

Table 65.2 Correlations coefficients

	Transformational leadership	Transactional leadership	Laissez-faire leadership	Organizational innovation	Organizational performance
Transformational Leadership	1	–	–	–	–
Transactional Leadership	0.281 ^b	1	–	–	–
Laissez-Faire Leadership	0.373 ^b	0.416 ^b	1	–	–
Organizational Innovation	0.378 ^b	0.278 ^b	0.410 ^b	1	–
Organizational Performance	0.429 ^b	0.153 ^a	0.353 ^b	0.522 ^b	1
	0.000	0.017	0.000	0.000	–

^aCorrelation is significant at the 0.05 level (2-tailed)

^bCorrelation is significant at the 0.01 level (2-tailed)

65.5.3 *Multiple Regression Analysis*

Multiple regression analysis was used to test the hypotheses of this study. We developed two regression models to test the hypotheses of this article. Table 65.1 shows the results of multiple regression model in which the three leadership styles were taken as independent variables and organizational innovation was used as dependent variable. In this model the value of adjusted R^2 is 0.224 that reveals that 22.4% of the total variation in organizational innovation is explained by three leadership styles that are taken as independent variables in this model. Also the value of $F = 23.968$ is significant which shows that this regression model significantly predict the dependent variable organizational innovation. The results of the model show that transformational and laissez faire leadership styles are significant positive predictors of organizational innovation ($\beta = 0.217$, $p = 0.000 < 0.01$ and $\beta = 0.220$, $p = 0.000 < 0.01$) but transactional leadership style was not found as significant predictor of organizational innovation ($\beta = 0.075$, $p = 0.148$). So our hypotheses H_1 and H_3 are accepted but H_2 is rejected.

Table 65.2 shows the results of multiple regression model in which the three leadership styles and organizational innovation were taken as independent variables and organizational performance was used as dependent variable. In this model the value of adjusted R^2 is 0.338 that reveals that 33.8% of the total variation in organizational performance is explained by three leadership styles and organizational innovation that are taken as independent variables in this model. Also the value of $F = 31.496$ is significant which shows that this regression model significantly predict the dependent variable organizational performance. The results of the model show that transformational leadership style and organizational innovation are significant positive predictors of organizational performance ($\beta = 0.263$, $p = 0.000 < 0.01$ and $\beta = 0.4670$, $p = 0.000 < 0.01$) but transactional and laissez faire leadership styles were not found as significant predictors of organizational performance ($\beta = -0.079$, $p = 0.162$ and $\beta = 0.122$, $p = 0.039$). From this model we may see that organizational innovation is the major predictor of organizational performance. All the above results lead us to accept H_4 and H_7 but to reject H_5 and H_6 .

65.5.4 *Analysis for Mediation*

Mediation analysis was used to see the indirect effect of leadership styles on organizational performance by taking organizational innovation as mediating variable. The process written by [6] followed by the criteria of [1] was used via SPSS to test mediating role of organizational innovation.

It was found that total effect of transformational leadership on organizational performance is statistically significant ($\beta = 0.4440$, $p = 0.000 < 0.01$). The same results were found for the total effect of transformational leadership on organizational innovation ($\beta = 0.3311$, $p = 0.000 < 0.01$). The effect of organizational innovation

on organizational performance was found significant even after controlling the effect of organizational innovation ($\beta = 0.4958, p = 0.000 < 0.01$). Lastly, the effect of transformational leadership on organizational performance is significant after controlling mediator organizational innovation ($\beta = 0.2802, p = 0.0000 < 0.01$) and beta coefficient in this case has reduced to $\beta = 0.2802$ as compared to beta coefficient ($\beta = 0.4440$) in direct effect of X on Y . All the criteria proposed by Baron and Kenny [1] have been fulfilled and lead us to make conclusion that organizational innovation partially mediates the impact of transformational leadership on organizational performance. Therefore our hypothesis H_8 is accepted (Tables 65.3, 65.4, 65.5, 65.6, 65.7, 65.8).

It was found that total effect of transactional leadership on organizational performance is statistically significant ($\beta = 0.1470, p = 0.000 < 0.05$). Also the total effect of transactional leadership on organizational innovation ($\beta = 0.2259, p = 0.000 < 0.01$). The effect of organizational innovation on organizational performance was found significant even after controlling the effect of organizational innovation ($\beta = 0.6135, p = 0.000 < 0.01$). Lastly, the effect of transactional leadership on organizational performance is insignificant even after controlling mediator organizational innovation ($\beta = 0.0086, p = 0.8773 > 0.05$) and beta coefficient in this

Table 65.3 Regression coefficients

Model	β	t	Sig.
(Constant)	1.889	8.330	0.000
Transformational leadership	0.217	3.981	0.000
Transactional leadership	0.075	1.452	0.148
Laissez-faire leadership	0.220	4.261	0.000

Dependent variable: organizational innovation, $R = 0.483, R \text{ square} = 0.234, \text{adjusted } R \text{ square} = 0.224, F = 23.968, p = 0.000, p < 0.01$

Table 65.4 Regression coefficients

Model	β	t	Sig.
(Constant)	0.988	3.512	0.001
Transformational leadership	0.263	4.288	0.000
Transactional leadership	0.079	-1.404	0.162
Laissez-faire leadership	0.122	2.081	0.039
Organizational innovation	0.467	6.576	0.000

Dependent variable: organizational performance, $R = 0.591, R \text{ square} = 0.349, \text{adjusted } R \text{ square} = 0.338, F = 31.496, p = 0.000, p < 0.01$

Table 65.5 Direct and total effects

	coeff	se	t	p
$b(YX)$	0.4440	0.0610	7.3280	0.0000
$b(MX)$	0.3311	0.0526	6.2899	0.0000
$b(YM \cdot X)$	0.4958	0.0675	7.3413	0.0000
$b(YX \cdot M)$	0.2802	0.0592	4.7299	0.0000

Y = Organizational performance, X = Transformational leadership, M = Organizational innovation

Table 65.6 Bootstrap results for indirect effect of X on Y

	Effect	Boot SE	Boot LLCI	Boot ULCI
M	0.1642	0.0409	0.0981	0.2614

Y = Organizational performance, X = Transformational leadership, M = Organizational innovation

Table 65.7 Direct and total effects

	coeff	se	t	p
$b(YX)$	0.1470	0.0610	2.3930	0.0170
$b(MX)$	0.2259	0.0506	4.4637	0.0000
$b(YM \cdot X)$	0.6135	0.0681	9.0080	0.0000
$b(YX \cdot M)$	0.0086	0.0554	0.1546	0.8773

Y = Organizational performance, X = Transformational leadership, M = Organizational innovation

Table 65.8 Bootstrap results for indirect effect of X on Y

	Effect	Boot SE	Boot LLCI	Boot ULCI
M	0.1386	0.0396	0.0703	0.2262

Y = Organizational performance, X = Transformational leadership, M = Organizational innovation

case has reduced to $\beta = 0.0086$ which is near about zero. All the criteria proposed by Baron and Kenny [1] have been fulfilled and lead us to make conclusion that organizational innovation perfectly mediates the impact of transactional leadership on organizational performance. Therefore our hypothesis H_9 is accepted (Tables 65.9, 65.10).

It was found that total effect of laissez faire leadership on organizational performance is statistically significant ($\beta = .3280, p = 0.000 < 0.05$). Also the total effect of laissez faire leadership on organizational innovation ($\beta = 0.3227, p = 0.000 < 0.01$). The effect of organizational innovation on organizational performance was found significant even after controlling the effect of organizational innovation ($\beta = 0.5353, p = 0.000 < 0.01$). Lastly, the effect of laissez faire leadership on organizational performance is significant even after controlling mediator organizational innovation ($\beta = 0.1557, p = 0.005 < 0.01$) and beta coefficient in this case has reduced to $\beta = 0.1557$ as compared to beta coefficient ($\beta = 0.4440$)

Table 65.9 Direct and total effects

	coeff	se	t	p
$b(YX)$	0.3280	0.0560	5.2890	0.0000
$b(MX)$	0.3227	0.0465	6.9364	0.0000
$b(YM \cdot X)$	0.5353	0.0706	7.5847	0.0000
$b(YX \cdot M)$	0.1557	0.0555	2.8038	0.0055

Y = Organizational performance, X = Transformational leadership, M = Organizational innovation

Table 65.10 Bootstrap results for indirect effect of X on Y

	Effect	Boot SE	Boot LLCI	Boot ULCI
M	0.1727	0.0447	0.0980	0.2685

Y = Organizational performance, X = Transformational leadership, M = Organizational innovation

in direct effect of X on Y . All the criteria proposed by Baron and Kenny [1] have been fulfilled and lead us to make conclusion that organizational innovation partially mediates the impact of laissez faire leadership on organizational performance. Therefore our hypothesis H_{10} is accepted.

65.6 Conclusions

The paper describes the effect of leadership styles on organization performance with the mediating role of innovativeness. The correlation analysis results show that there is positive and significant relationship between transformational leadership and organizational performance. Therefore transformational leadership style positively contributes towards organizational performance and by adopting this style organizational performance can be increased. The multiple regression analysis results of the model show that transformational leadership style and organizational innovation are significant positive predictors of organizational but transactional and laissez faire leadership styles were not found as significant predictors of organizational performance. It is suggested that adopting the innovation as mediator can stimulate the organizational performance.

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