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IMPACT OF QUALITY CULTURE ON ORGANIZATIONAL PERFORMANCE THROUGH KNOWLEDGE SHARING AND INVESTIGATION OF TRANSFORMATIONAL LEADERSHIP AS MODERATOR IN THE BANKING SECTOR LOCATED IN ISLAMABAD/RAWALPINDI, PAKISTAN

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Abstract
The objective of this study was to investigate the impact of quality culture on organization performance through knowledge sharing. The transformational leadership was placed as moderator between quality culture and knowledge sharing. The study was carried out in twin cities i.e., Islamabad and Rawalpindi, Pakistan, targeting the manager of conventional banking sector with managers being unit of analysis. The relationship of study variables was anchored through Knowledge based view theory and knowledge sharing theory. A sample data from managers was collected of the banking sector of Islamabad/Rawalpindi. The process procedure was used to investigate the causal relationship along with mediation and moderation. The study revealed that quality culture has impact on organizational performance through knowledge sharing. In the end, some future directions and policy implications are proposed by this study.

INTRODUCTION

There has been a change in the global economy and observed a seismic change since 2020. A transition from the focus on physical assets towards a reliance on an intangible intellectual assets. In an environment which is uncertain, complex, volatile and ambiguous, very highly, the organizational performance is no more considered an outcome of financial transactions. But organizations are judged for how efficiently and effectively the internal cultural and social resources (Abou-Moghli, 2025; Migdadi, 2022) are harnessed. Sustainability being a challenge for organizations, integration of fields like total quality management (TQM) and behavioral sciences has got immense significance.

Quality Culture (QC) has got center stage in this integration. Contrary to quality control systems, being purely technical, QC is considered to be the shared values, beliefs, and norms of an organization with a priority of continuous improvement and customer satisfaction (Herminingsih & Sadikin, 2021). While scholars

have proven that high performance is resulted by a strong QC, the "black box" of how regarding process of happening needs concentrated academic enquiry. Recent scholarships recommend that culture plays a role of incubator for the knowledge-based activities, which is performance driven (Alkhuzaie et al., 2024; Zhang et al., 2025).

Moving further, in the context of this study the role of Knowledge Sharing (KS) is significantly critical. KS refers to the exchange of information and expertise on a task, which is crucial for the innovation and efficient operations (Ahmed et al., 2023). However, knowledge is sometimes considered as power, and there is reluctance among employees to share it unless backed by the organizational culture which focuses and promotes psychological safety with collective goals. Moreover, the transitional phase of culture to action would necessarily require an external player or catalyst i.e. Transformational Leadership (TL). This way transformational leaders, being a moderator, can effect of the quality culture by guaranteeing translation of values of excellence into active knowledge sharing and exchange (Gupta, 2025; Scuotto et al., 2022).

Regardless of the theoretically supported relationship between culture and performance, many organizations fail the utilization of their quality initiatives for beneficial gains. Key reason to this failure is the "implementation lacking"; being incapable enough to convert the cultural values into behavioral practices i.e., knowledge sharing (Perculeza, 2024).

Based on current literature the following three primary gaps have been identified:

i. It is evident from the scholarships that QC is obvious to affect OP, the specific contribution of KS as a channel in environments of high-quality is still unindustrialized, predominantly in the context of post-pandemic digital workplace (Abdelwhab et al., 2025).
ii. A consensus is lacking regarding how leadership styles cooperate with culture. Explicitly, whether predominantly Transformational Leadership acts as a prerequisite of triggering a quality culture for knowledge sharing? (Asad et al., 2021; Pujiastuti et al., 2024).
iii. Many studies have examined these variables in silos. There is a lack of research regarding a comprehensive moderated-mediation relationship explaining the interplay of QC, KS, TL, and OP in a single empirical research framework (Ibadi et al., 2024).

Following are the key questions to be addressed in this study:

i. Does Quality Culture (QC) positively affect Organizational Performance (OP)?
ii. Does Quality Culture has positive impact on Organizational Performance through Knowledge Sharing (KS)?
iii. Does Quality Culture and Knowledge Sharing is moderated by Transformational Leadership (TL)?
iv. Does strong moderation (Moderated Mediated) of TL between QC and OP via KS exists?

This study is aiming at the following objectives to be achieved:

i. To study the impact of Quality Culture (QC) on Organizational Performance (OP).
ii. To examine the mediation between Quality Culture (QC) and Organizational Performance (OP) through Knowledge Sharing.
iii. To probe the moderation of Transformational Leadership (TL) on the path Quality Culture (QC) and Knowledge Sharing (KS).
iv. To check the integrated moderated - mediation model to get a complete understanding of performance drivers.

This study will have a contribution to Resource-Based View (RBV) by ascertaining Knowledge Sharing (KS) as a strategic resource and Quality Culture (QC) as a dynamic capability. Moreover, an extension to Social Exchange Theory (SET) could be found after confirmation on how leadership, specifically Transformational Leadership (TL) can increase the "sharing" of knowledge in a quality-oriented framework.

For practitioners/managers, this study would pave the road to organizational excellence. It is going to suggest that only having a quality culture is inadequate; the manager must be adoptive towards transformational leadership traits to support knowledge sharing, resulting into conversion of cultural values into significant bottom-line performance.

Overall this study is focusing on banking sector targeting commercial banks operational within Rawalpindi and Islamabad. Likewise, the study variables are delimited that specified in the research model to have main focus on the behavioral aspects of quality management.

Literature Review

This part of the study will not only define variables but also highlight the "networked" relationships between them. It will follow the Resource-Based View (RBV) and Social Exchange Theory (SET) as the overarching theories. Hence, they are the two theories being theoretical foundation of this study. RBV suggests that utilizing resources like Valuable, Rare, Inimitable, and Non-substitutable (VRIN) firms would achieve competitive advantage. Therefore, in this academic writing, Quality Culture (QC) and Knowledge Sharing (KS) are being conceptualized as intangible strategic resources which lead to Organizational Performance (OP) (Migdadi, 2022; Abdelwhab et al., 2025). SET is of the view that social behavior is the output of process of exchange. In this specific relation, Transformational Leadership (TL) has the role of catalyst that ensure a high-trust environment, encouragement for employees to "exchange and share" their knowledge for getting a visionary support and intellectual stimulation through their leaders (Ahmed et al., 2023; Zhang et al., 2025).

Quality Culture and Organizational Performance

Quality Culture (QC) is a collective mindset to prioritize excellence, customer concentration and iterative improvement (Herminingsih & Sadikin, 2021). Recent empirical finding suggests that QC significantly predicts of both non-financial and financial performance. Sengke (2025) found in his study on manufacturing firms that organizations with a deeply entrenched quality culture got 25% more operational efficiency contrast to those having purely technical quality systems. Similarly, soft quality elements like cultural values and employee involvement have resulted stronger long-term effect on performance rather than the use of technical tools only (Ali & Johl, 2021). The relationship is rooted in the fact that wastes are reduced through QC by fostering a mentality of "right first time" directly impacting the bottom line (Asad et al., 2021).

H_1: Quality Culture has positive effect on Organizational Performance.

Knowledge sharing as mediator

Knowledge Sharing (KS) is considered as a process in which persons mutually exchange and share their implicit and explicit knowledge. QC by setting the base, KS is considered as active mechanism which will translate the cultural values to performance outcome. Likewise, a quality culture innately necessitates transparency and shared problem-solving. Perculeza (2024) is of the view that when quality is a shared value, the mindset “knowledge for collective good” is established against "knowledge is power" hoarding mentality. The normative pressure for employees is provided by QC in order to maintain high-quality standards through shared best practices (Wang & Hu, 2020).

Knowledge Sharing and Organizational Performance

The scholarships have found well-established link between KS and OP. Abou-Moghli (2025) reveals that faster innovation cycles and reduced error rates are facilitated by KS by augmenting organizational agility and performance.

H_2: Knowledge Sharing has significant mediation in the relationship of Quality Culture and Organizational Performance.

The Transformational Leadership (Moderator)

Leadership climate play a key role in the relationship between QC and KS because it is not always linear. Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration are four dimensions involves in Transformational Leadership (TL).

According to Gupta (2025), employees may hesitate to share complex knowledge even in the presence of a strong quality culture if there is lack of a visionary leader who facilitates psychological safety. TL plays a role of a "multiplier." The impact of QC on KS would be significantly

stronger if TL is high, because leaders stimulate of the intellectual curiosity of subordinates and reward transparency (Alkhuzaie et al., 2024; Scuotto et al., 2022). On the other hand, a quality culture would be rigid i.e., compliance only environment, in the absence of transformational behaviors where knowledge remains siloed.

H_3: Transformational Leadership significantly moderates Quality Culture and Knowledge Sharing.

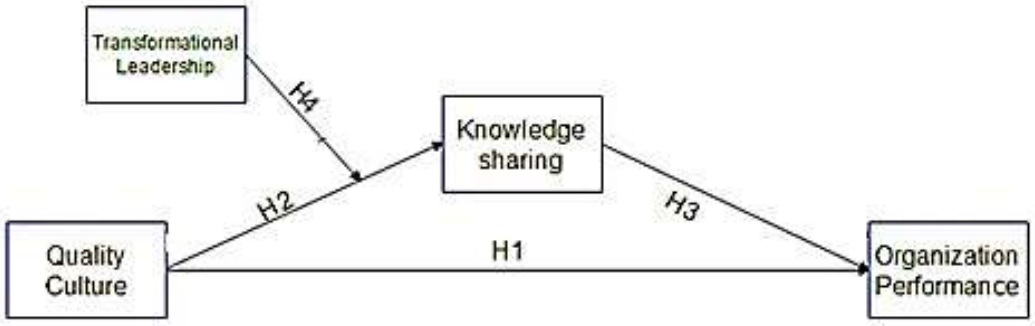
Moderated Role of Transformational leadership

A conditional process model is proposed in this study. It is hypothesized that in the presence of TL the indirect effect of Quality Culture on Organizational Performance through Knowledge Sharing) would be stronger. This integrated approach acknowledges that the prevalent leadership styles in organizations support the collective working of cultural and behavioral factors (Dwivedi et al., 2020; Ibadi et al., 2024).

H_4: The indirect effect of Quality Culture on Organizational Performance through Knowledge Sharing is positively moderated by Transformational Leadership.

Theoretical Framework (TFW)

The theoretical framework is graphical representation of variables and the relationship among these variables. (Lewis & Nelson, 1998; Podsakoff & Dalton, 1987; Sreejesh et al., 2014). This diagram is the representation of the relationships among quality culture, knowledge sharing, transformational leadership and organizational performance.



Research Design

Aim of the study

The aim of this study is to inquire the effect of quality culture (QC) on organizational performance (OP) in the banking sector of Islamabad and Rawalpindi, Pakistan. This causal study is intended to know the cause-and-effect relationship.

Collection of Data

The data was collected from managers of commercial banks, non-islamic, through questionnaire survey on the proposed variables. The questionnaire survey was entered in google form and the created form's link was shared which was filled by the respondents online.

Population

Elements are referred to the members of the population (Cooper & Schindler, 2014; Saunders et al., 2009; Sreejesh et al., 2014; W. G. Zikmund et al., 2013). The managers of private and public banks of Pakistan were elements which were to be investigated. Therefore, it is reiterated that the managers of commercial banks are the population for this research study.

Sample

Sample is known as the selection of members from the population. Moreover, subjects are also referred as the sample members. There were 330 subjects under this study and they were managers

of the commercial banking sector of Islamabad and Rawalpindi, Pakistan.

Approach for Sampling

Sampling is known as opting subjects within a population. Probability and non-probability sampling approaches are two types of approaches (Catterall, 2000; Cooper & Schindler, 2014; W. Zikmund et al., 2010). The elements of the population are, when, known it is called the probability sampling. However, for the unknown members from the population the approach would be non-probability sampling. Considering the culture in Pakistan there is an issue of valid data collection so the design of the study is based on non-probability sampling. In this regard, data collection was ensured through convenience and networking.

Study Instruments

This study was conducted through questionnaire which was adapted from were well-known established and published scales. The questions for Quality Culture were adapted from the study on Quality Culture and leadership by Schein (1992) and the response were collected at five-point Likert scale. 1 for strongly disagree and 5 for strongly agree.

Knowledge sharing questions were adapted from the study "Behavioral intention formation in knowledge sharing" conducted by Bock and Kim (2002) and questions were placed at five-point Likert scale for responses diary. Likewise, Organizational Performance questions were adapted from research work of Kaplan and Norton (1996) and questions placed at five-point Likert scale. In continuation, the variable of transformational leadership was measured based on the questions which were adapted from the seminal work of Bass (1985) and Base and Avolio (1994) at five-point Likert scale.

Characteristics of sample

The distribution of sample is presented in Table 1 based on gender, qualification and years of experience.

Table 1
Sample Characteristics

	Frequency	Percent
Gender		
Male	317	96.1
Female	13	3.9
Total	330	100.0
Qualification		
Intermediate	7	2.1
Bachelor	211	63.9
Master	78	23.6
M. Phil/M.S.	27	8.2
PhD	7	2.1
Total	**330**	**100.0**
Experience		
Less than 5 years	49	14.8
06-10 year	225	68.2
11-15 year	31	9.4
16-20 year	15	4.5
21-25 year	5	1.5
26-30 year	2	0.6
More than 30 years	3	0.9
Total	**330**	**100.0**

The total number of 330 managers whom data was incorporated in the analysis and in which males and females were 317 and 13 respectively. The distribution of managers, according to qualification, was 7 were intermediate level of education, qualification of Bachelor level were 211, 78 were having Masters, 27 were having MS/MPhil and 7 managers were qualified Ph.D. degrees.

Likewise considering the Experience, 49 managers were having less than 5 years' experience, 225 were having 06-10 years, 31 were having 11-15 years, 15 were having 16-20 years, 5 managers were having 21-25 years, 2 were having 26-30 years, and finally 3 employees were having more than 30 years of experience.

Study Results

The IBM SPSS24 was used for data analysis and through process procedure, developed by Andrew F. Hayes (2022), the regression analysis has been conducted. At first level, missing values, outliers and unengaged responses of the data were examined. The termed issues were solved through removal of the values or replacement with mean by imputation.

Descriptive Analysis

The descriptive statistics explain that Transformational Leadership (TNSL) is having an average score of 2.90, Quality Control (QC) at 3.53, Knowledge Sharing (KS) at 3.91, and Organizational Performance (OP) average score was 3.74 as shown in Table 2.

Table 2

Descriptive Statistics

	Mean	Std. Deviation
TNSL	2.9079	0.73343
QC	3.5360	0.76191
KS	3.9127	0.54724
OP	3.7468	0.60713

Note: TNSL=Transformational Leadership, QC=Quality Culture, KS=Knowledge Sharing, OP=Organizational Performance

Correlation Analysis

Correlation analysis, as per Table 3, the variables are presenting a significant and positively sufficient correlations. Quality Culture is positively and significantly associated with Transformational Leadership (r=.494, p<.01). There is positive and significant association between Quality Culture and Knowledge Sharing (r=.466, p<.01). Quality Culture is positively and significantly associated with Organizational Performance (r=.439, p<.01). Knowledge Sharing is positively and significantly associated with Organizational Performance (r=.722, p<.01). Knowledge Sharing is positively and significantly associated with Transformational Leadership (r=.358, p<.01).

Table 3

Correlation Matrix

	TNSL	QC	KS	OP
TNSL	1			
QC	.494**	1		
KS	.358**	.466**	1	
OP	.322**	.439**	.722**	1

Note: TNSL=Transformational Leadership, QC=Quality Culture, KS=Knowledge Sharing, OP=Organizational Performance

Regression Analysis

The causal relationship was examined through the process procedure (Hayes, 2022) for regression analysis. The results are displayed in Table 4. The Model no 7 was implemented for analysis. Considering the model, variable (X) bring the changes in the dependent variable (Y) which is termed as direct effect. Moreover, the independent variable (X) cause moderating variable (W), which then affects the mediating variable (M). Likewise, the mediating variable (M) changes the dependent variable (Y). A bootstrap with 5000 was performed in which PROCESS by Hayes is used for interval estimation calculation.

Table 4

Coefficients for Process Procedure

	Consequent							
	M (Knowledge Sharing)				**Y (Organizational Performance)**			
Antecedent	**Path**	**Coeff.**	**SE**	**p**	**Path**	**Coeff.**	**SE**	**p**
X (QC)	a_2	0.281	0.04	< .001	**c'**	0.104	0.034	0.002
W (TNSL)	d_2	0.123	0.041	0.003		~	~	~
Inter_1 (QC × TNSL)		0.041	0.041	0.326		~	~	~
M (KS)		~	~	~	b_2	0.733	0.047	< .001
Constant	i_{M2}	3.902	0.029	< .001	i_Y	0.878	0.187	< .001
		R^2 = .241			R^2 = .535			
		F = 34.552,			**F** = 187.874,			
		p < .001			**p** < .001			

Note: KS = Knowledge Sharing; OP = Organizational Performance. Unstandardized coefficients are reported. *** p < .001. Bootstrap samples = 5,000.

The results show that Quality Culture has a positive significant effect at Organizational Performance both directly and indirectly through Knowledge Sharing**.** Knowledge Sharing shows a substantial mediating part in the Quality Culture - Organizational Performance relationship. Although Transformational Leadership is positively associated with Knowledge Sharing, it does **not significantly moderate** the relationship between Quality Culture and Knowledge Sharing. Furthermore, the index of moderated mediation was non-significant, indicating that the indirect effect of Quality Culture on Organizational Performance via Knowledge Sharing does not differ across levels of Transformational Leadership. Thus, the findings support mediation but not moderated mediation.

Table 5

Direct and Indirect Paths

Effect Type	**Effect**	**Boot SE**	**Boot LLCI**	**Boot ULCI**
Direct Effect (QC → OP)	.104	.034	.038	.171
Indirect Effect (QC → KS → OP)	.209	.039	.137	.289
Conditional Indirect Effect (Moderated by TNSL)	.179–.226	—	.099	.323

The results in Table 5 revealed that the indirect effect explains the mediation through knowledge sharing without considering the moderator. Conditional indirect effects represent mediation

at low, medium, and high levels of transformational leadership. Bootstrap confidence intervals are based on 5,000 resamples.

Discussion

The analysis revealed that Quality Culture (QC) significantly predicted Knowledge Sharing (KS), supporting Hypothesis 1 (β = .281, p < .001). In turn, Knowledge Sharing was a strong predictor of Organizational Performance (OP), supporting Hypothesis 2 (β = .733, p < .001). The direct effect of Quality Culture on Organizational Performance was also significant (β = .104, p = .002), supporting Hypothesis 3. Mediation analysis indicated that Knowledge Sharing partially mediated the relationship between Quality Culture and Organizational Performance, confirming Hypothesis 4. However, Transformational Leadership (TNSL) did not significantly moderate the relationship between Quality Culture and Knowledge Sharing (β = .041, p = .326), and the index of moderated mediation was non-significant, indicating that the indirect effect of Quality Culture on Organizational Performance through Knowledge Sharing did not differ across levels of Transformational Leadership. Therefore, the relationship is not supported. Overall, these results suggest that Quality Culture enhances Organizational Performance both directly and indirectly via Knowledge Sharing, but the strength of this mediated effect is not contingent upon leadership style, the same is displayed in table 6.

Table 6

Hypotheses Summary

Hypothesis	Result
QC → KS	Accepted
KS → OP	Accepted
QC → OP (direct)	Accepted
KS mediates QC → OP	Accepted
TNSL moderates QC → KS	Not Accepted

Limitations, Implications, and Future Directions

There are some limitation of this study like cross-sectional and self-report design bias i.e., common method biases risk and weaker claims of causality. The convenience and network sampling approach for data collection from managers of commercial banks located in Rawalpindi and Islamabad are other limitations.

Secondly, data is highly male-skewed along with omission of some other related factors (e.g., trust, rewards etc.) which might explain the Not-accepted moderation. Even though this study suggests that knowledge sharing sufficiently supports quality culture to improve performance so institutionalization of sharing routines and incentives be adopted by banks instead of depending upon on leadership styles.

Future research can be conducted through longitudinal and objective performance data. In addition, testing can be carried out for additional moderators or mediators and other leadership styles with expanded studies, to regions and bank types. Moderation of leadership between KS and OP or QC and OP.

Conclusion

This study revealed that how Quality Culture (QC) has the impact on Organizational Performance (OP) in the banking sector through Knowledge Sharing (KS) as a mediator and Transformational Leadership (TNSL) proposed moderator between Quality Culture and Knowledge sharing. Results explains that Quality Culture significantly impact Organizational Performance, directly and indirectly through

Knowledge Sharing. This confirms that knowledge exchange plays a key as behavioral pathway by which a quality oriented culture transmitted into performance outcomes. However, the moderating hypothesis and moderated-mediation of transformational leadership are not supported. Overall, the findings show that banks looking for performance from quality initiatives should seek beyond technological quality systems and focus on institutionalizing knowledge sharing routines as a core mechanism of quality culture.

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