The Impact of Transformational Leadership of Principals on Trust and Knowledge Sharing among Faculty of Higher Educational Institutions in Bengaluru, India

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Abstract

Purpose: This research investigates the effect of transformational leadership exercised by principals on trust and knowledge sharing among faculty members in higher educational institutions in Bengaluru, India. **Data, methodology, and research design:** The study used data from 505 faculty members across ten higher educational institutions, representing small, medium-sized, and large institutions. The analysis of the results using statistical tools indicates that transformational leadership positively influences trust and knowledge sharing among faculty members. The research combines both secondary and primary data sources. Secondary data is obtained by searching databases for already published literature using relevant keywords. The primary data collection is conducted with meticulous care, employing a survey method using a pre-designed questionnaire. The methodologies are confirmatory factor analysis, composite reliability (CR), average variance extracted (AVE), discriminant validity, bootstrapping, and hypothesis testing results. **Results:** The findings suggest that nurturing transformational leadership qualities among the principals is crucial for improved faculty trust and knowledge sharing. **Conclusions:** The study concludes with practical implications for educational institutions in Bengaluru. This research reveals the vital influence of transformational leadership on trust and knowledge sharing among faculty members of higher educational institutions in Bengaluru, India.

Keywords : Transformational Leadership, Trust, Knowledge Sharing, Principal, Higher Education, Faculty

JEL Classification Code: E44, F31, F37, G15

1. Introduction

Education of the new generation has a lasting impact on developing nations and societies worldwide (Nigam et al., 2020). In a government system like India, the federal and state governments have their role in the Department of Higher Education. Though there are set rules of functioning, the success of educational institutions is heavily dependent on the knowledge and commitment of faculty members entrusted with the responsibility of educating the future generation.

Unfortunately, India's higher education system has largely failed to attract and retain qualified and dedicated faculty (Sheikh, 2017). This research investigates how Principals' transformational leadership can have a telling impact on faculty members and their work-life, with specific reference to trust and knowledge-sharing behavior. The study is titled "The Impact of Transformational Leadership of Principals on Trust and Knowledge Sharing Behavior among Faculty of Higher Educational Institutions in Bengaluru, India."

2. Literature Review

2.1 Transformational Leadership

Transformational leadership is a leadership style aimed at motivating employees. This style of leadership involves

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bringing about a clear organizational vision among the workers and inspiring them to work for the attainment of this expressed vision through creating connections with employees, understanding their needs, and helping them reach their potential, which will naturally contribute to good outcomes for an organization (Fitzgerald & Schutte, 2010). Leadership research across the past few decades has mostly focused on the transformational leadership style as the prominent model among various leadership styles. Transformational leadership theories point out a few unique leadership traits and behaviors that create and sustain trust in the leader by the followers, in this case, the employees, and more specifically to our research, the faculty members of higher education institutions. Transformational leaders exhibit their dependability to the staff by acting as examples showing admirable conduct and conveying crucial ideals and objectives that they consider important (Bass, 1985; Nübold et al., 2015).

H1: Transformational leadership has a significant impact on trust.

H2: Transformational leadership has a significant impact on knowledge sharing.

2.2 Trust

Trust is a personal attribute and an important factor that determines social connections. Trust is defined as a person's readiness to be subjected to the actions of another individual, and it is thought to be an outcome of a person's assessments of the previous behavior of another individual (Mittal, 2016). Most definitions describe trust as a personal trait that concerns the reasons and purposes of people's conduct (Mahdikhani & Yazdani, 2020). Trust is founded on a faith that the one who is trusted is predictable, honest, dependable, truthful, and will act justly (Schwepker & Good, 2013).

According to Park and Kim (2018), past studies have indicated that interpersonal trust positively influences knowledge-sharing behavior and organizational learning. When employees have a powerful interpersonal trust, it is increasingly possible that they obtain, share, and disseminate their knowledge and experience positive learning experiences. The chance that employees will share their knowledge rises as trust in coworkers grows (Ng, 2020). According to Moghavvemi et al. (2018) and Raza and Awang (2020), trust between workers is a major cause for improved knowledge-sharing habits among employees within the organization.

H4: Trust has a significant impact on knowledge sharing.

2.3 Knowledge Sharing

Knowledge sharing involves exchanging information, ideas, skills, and expertise among employees, allowing them to learn from one another. It transforms personal knowledge into organizational knowledge, fostering innovation and collaboration.

Knowledge sharing, a collective exchange of information, ideas, skills, experiences, and expertise, is driven by the active participation of employees. Their role is integral in all sectors of a company or organization, facilitating mutual learning (Park & Kim, 2018). Transformational leadership plays a crucial role in fostering a culture of knowledge sharing by promoting behaviors associated with sharing knowledge. Another perspective on knowledge sharing describes it as the process through which organizational members reciprocally exchange their knowledge resources, encompassing both tacit and explicit knowledge, resulting in the creation of new knowledge assets. This process effectively transforms individual knowledge into organizational knowledge (Masa'deh et al., 2016). Yadav et al. (2019) further define knowledge sharing as a process involving both "giving" and "receiving" knowledge, encompassing two distinct behavioral categories: knowledge contribution, which involves sharing an individual's intellectual capital with fellow employees within the organization, and knowledge gathering, which entails seeking advice and tapping into the intellectual capital of others.

3. Research Methods and Materials

3.1 Research Framework

This article introduces a conceptual framework for assessing the impact of transformational leadership, aiming to stimulate further research in higher educational institutions in Bengaluru, India. This framework outlines the variables and their interconnections. The study adopts the transformational leadership theory by Mahdikhani and Yazdani (2020), originally introduced by Burns and subsequently extended by scholars like Bass, Avolio, and others (Bass et al., 2003). According to these theories, transformational leaders employ psychological incentives to stimulate their employees' perspectives, visions, and creativity. Bass (1985) posits that transformational leaders motivate followers to attain exceptional goals. Additionally, this research incorporates the social exchange theory (Yeap et al., 2020) to elucidate the behaviors of faculty members in higher educational institutions. This theory elucidates the social dynamics between principals and faculty in Bengaluru's educational institutions concerning trust and knowledge-sharing activities.
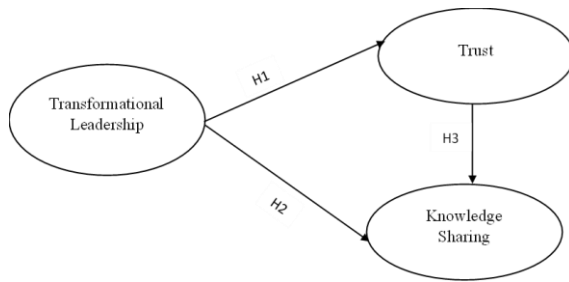
Figure 1: Conceptual Framework

H1: Transformational leadership has a significant impact on trust.
H2: Transformational leadership has a significant impact on knowledge sharing.
H3: Transformational leadership has a significant impact on organizational learning.

3.2 Research Methodology

This research uses the survey method for data collection and quantitative research methods along with statistical tools for data analysis. It involves picking a sizeable sample from a predetermined population and collecting regulated data through a questionnaire. By studying the sample, the researcher concludes the larger population (Kelley, 2003). The survey questionnaire was distributed to 505 faculty members in ten higher educational institutions in Bengaluru, India.

Quantitative research serves to establish relationships among constructs with a thorough and rigorous process. One key advantage is its speed and minimal on-site time requirement when administering surveys. Moreover, the numerical nature of the data allows for easy comparisons between different organizations or groups (Choy, 2014; Yauch & Steudel, 2003). The research employs a survey questionnaire, subjected to content validity tests using item objective congruence (IOC) and content reliability assessed through a pilot test with Cronbach's Alpha. The gathered data are subsequently analyzed using quantitative techniques to evaluate the formulated hypotheses, including confirmatory factor analysis and structural equation modeling to assess model fit.

3.3 Population and Sample Size

This research focuses on the impact of principals' transformational leadership on faculty members in Bengaluru, India, specifically within higher educational institutions. The target population comprises faculty members working in these institutions.

Ten major higher educational institutions in Bengaluru,

India, constitute the accessible population for this study. These institutions differ in the number of faculty members they employ. Therefore, they are categorized into three types: large, medium-sized, and small institutions based on their faculty size. Large institutions have over 300 faculty members, medium-sized institutions have more than 245 but fewer than 300 faculty members, and small institutions have less than 245 faculty members. Three large, medium-sized, and three small institutions were selected as sampling units for this research.

The research combines both secondary and primary data sources. Secondary data is obtained by searching databases for already published literature using relevant keywords. The primary data collection is conducted with meticulous care, employing a survey method using a pre-designed questionnaire. This questionnaire, meticulously crafted to gather the most relevant information, was distributed to selected respondents within the total population identified for this research.

The questionnaire consisted of screening questions, demographic questions, and the measurements of all variables, which were used on a scale from 1 to 5, where you can show if you strongly disagree or strongly agree. Before being distributed to a large sample, the questionnaire underwent testing through an IOC by three experts and 30 sample respondents to ensure its reliability and consistency. To evaluate the reliability and validity of our measurements, we utilized CFA and SEM (Soper, 2021) to examine the data we gathered. CA reliability, factor loading, CR, AVE, and discriminant validity guaranteed reliability and validity. The model's fitness was confirmed by examining and constructing its framework. The research hypotheses were tested, and the findings were discovered.

3.4 Sampling Technique

The first stage is judgment sampling. The second stage is quota sampling, a proportional sample size distribution for each specialty. Finally, for convenience sampling, questionnaires were issued. The questionnaire is utilized in the survey to obtain quantitative information.

4. Results and Discussion

4.1 Demographic Information

The demographic analysis of the study involving 505 faculty members from ten higher educational institutions in Bengaluru, India, reveals a fairly balanced gender distribution with 53.5% males and 46.5% females. The majority of participants fall within the 35-44 age range (39.6%), followed by the 25-34 age range (29.7%), the 45-54 age range (19.8%),

and those aged 55 and above (10.9%). Regarding educational qualifications, a larger proportion of faculty members hold a Master's degree (59.4%) compared to a Doctoral degree (40.6%). In terms of institutional size, participants are fairly evenly distributed, with 29.7% from small institutions, 39.6% from medium-sized institutions, and 30.7% from large institutions. This demographic diversity supports the investigation of the effect of transformational leadership on trust and knowledge sharing among faculty members.

Table 1: Demographic Profile

Demographic Variable	Frequency (N)	Percentage (%)
Gender		
Male	270	53.5
Female	235	46.5
Age		
25-34	150	29.7
35-44	200	39.6
45-54	100	19.8
55+	55	10.9

Demographic Variable	Frequency (N)	Percentage (%)
Educational Qualification		
Master's Degree	300	59.4
Doctoral Degree	205	40.6
Institution Size		
Small	150	29.7
Medium	200	39.6
Large	155	30.7

4.2 Confirmatory Factor Analysis (CFA)

Confirmatory Factor Analysis (CFA) was conducted in this study. All items in each variable are significant and represent factor loading to test discriminant validity. The significance of factor loading of each item and acceptable values indicate the goodness of fit (Hair et al., 2006). Factor loadings show a greater value than 0.30 and a p-value lower than 0.05. The construct reliability is greater than the cut-off points of 0.7, and the average variance extracted was greater than the cut-off point of 0.5 (Fornell & Larcker, 1981) in Table 3. All estimates are significant.

Table 3: Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source of Questionnaire (Measurement Indicator)	No. of Item	Cronbach's Alpha	Factors Loading	CR	AVE
Knowledge Sharing	Khan et al. (2019)	5	0.91	0.818-0.864	0.93	0.72
Transformational Leadership	Carroll and Ahuvia (2006)	12	0.94	0.752-0.829	0.95	0.62
Trust	Giovanis and Athanasopoulou (2017)	7	0.89	0.686-0.836	0.91	0.60

The Fornell and Larker approach was used to measure the validity of the discriminant. According to Fornell and Larcker (1981), the square root of AVE values, as represented across the diagonal, which is highlighted, must be higher than the corresponding latent variables in the respective row and column. i.e., the inter-construct correlation values must be less than the square root of AVE values of the respective construct. All the square roots of the AVE values were higher than the inter-construct correlation values. Therefore, we can state that there are no discriminant validity issues.

Table 4: Discriminant Validity

	BE	BL	BS
BE	0.848		
BL	0.724	0.787	
BS	0.712	0.764	0.774

Note: The diagonally listed value is the AVE square roots of the variables
Source: Created by the author.

Table 5 presents the bootstrapping results assessing the relationships among transformational leadership, trust, and knowledge sharing. The path coefficient from transformational leadership to knowledge sharing is 0.341, with a sample mean of 0.344 and a standard deviation of 0.170, resulting in a T statistic of 2.009 and a P value of 0.045, indicating a significant positive effect. The relationship between transformational leadership and trust is notably strong, with a path coefficient of 0.819, a sample mean of 0.820, and a standard deviation of 0.043, yielding a T statistic of 18.987 and a P value of 0.000, denoting a highly significant positive influence. Additionally, trust significantly influences knowledge sharing, evidenced by a path coefficient of 0.431, a sample mean of 0.427, and a standard deviation of 0.168, with a T statistic of 2.560 and a P value of 0.010. These results underscore the critical role of transformational leadership in fostering trust and promoting knowledge sharing within organizations.

Table 5: Bootstrapping results

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Transformational Leadership -> Knowledge sharing	0.341	0.344	0.170	2.009	0.045
Transformational Leadership -> Trust	0.819	0.820	0.043	18.987	0.000
Trust -> Knowledge sharing	0.431	0.427	0.168	2.560	0.010

4.4 Research Hypothesis Testing Result

As shown in Table 7 , the hypothesis testing results of the researchers' structural model show that factors such as information quality, system quality, perceived ease of use, perceived usefulness, and perceived enjoyment significantly affect many aspects of the learning system of normal university students. Here are the Standardized Coefficients, T-values, and test results for each hypothesis:

Table 7: Hypothesis Results of the Structural Equation Modeling

Hypothesis	(β)	t-value	Result
H1: TL→TR	0.79	24.49	Supported
H2: TL→KS	0.41	6.64	Supported
H3: TR→KS	0.41	6.86	Supported

Note: *** p<0.001, ** p<0.01, * p<0.05
Source: Created by the author

Table 7's result can be further refined to show that:

The first hypothesis proposed in the study aimed to determine the direct significant relationship between transformational leadership and trust. The bootstrapping results were considered to make statistical interpretations. From the above table, the 't' value was found to be 24.49, and the p-value was found to be 0.00. These figures indicate that the 't' value is greater than 1.96 and the p value is less than 0.01, which are the threshold values. Since the p-value is less than 0.01, the relationship is significant at a 1% significance level. This research finding enlightens us that there is a direct and significant relationship between transformational leadership and trust, thereby rejecting the H0, which states that there is no significant direct relationship between transformational leadership and trust.

The next hypothesis proposed for the study was to determine the direct significant relationship between transformational leadership and knowledge-sharing behavior. The bootstrapping results were considered to make statistical interpretations. The table above makes it clear that the t value was found to be 6.64, and the p value was found to be 0.00. These figures indicate that the t value is greater than 1.96 and the p value is less than 0.01, which are the threshold values. Since the p-value is less than 0.01, the relationship is significant at a 1% significance level. Hence, transformational leadership and knowledge-sharing behavior

have a direct significant relationship. Therefore, hypothesis H1, stating there is a direct significant relationship between transformational leadership and knowledge-sharing behavior, is accepted, and H0 is rejected.

A hypothesis was proposed to test whether construct trust influenced knowledge sharing. The bootstrapping results were considered to make statistical interpretations. From the above table, we can understand that the t value was found to be 6.86 and the p value was found to be 0.00. These figures indicate that the t value is greater than 1.96 and the p value is less than 0.01. Since the p-value is less than 0.01, the relationship is significant at a 1% significance level. Hence, a significant direct relationship exists between transformational leadership and organizational learning.

5. Conclusion and Recommendation

5.1 Conclusion and Discussion

This research reveals the vital influence of transformational leadership on trust and knowledge sharing among faculty members of higher educational institutions in Bengaluru, India. Principals who demonstrate transformational leadership qualities initiate an inspiring setting that improves faculty morale, fosters trust in the leadership as well as trust between members and helps improve knowledge-sharing behavior. The findings highlight the significance of giving leadership training, especially in transformational leadership, to principals who are educational leaders in Bengaluru. This research supplies constructive understandings for educational institutions seeking to foster a culture of trust and knowledge-sharing behavior among their faculty.

5.2 Recommendation

As seen from the relationship between transformational leadership and trust, leaders in educational settings can promote a culture of trust. This trust is the foundation for a united and cooperative faculty, leading to various collaborative efforts, from innovative teaching methods and curricula to interdisciplinary research, team-based pedagogy, and shared learning experiences. Transformational leaders in

higher education settings should prioritize fostering trust among faculty members, as it is the key to a united and cooperative educational community.

Transformational leaders can inspire faculty members to share their expertise, research findings, and teaching methodologies. Encouraging a culture of knowledge sharing can enhance the overall educational experience within the institution, fostering a continuous and mutual learning environment among faculty. Transformational leaders can drive knowledge-sharing behavior among faculty in educational institutions by setting clear goals, providing the necessary resources, and recognizing and rewarding outstanding performance. This can lead to institutions consistently delivering high-quality education.

5.3 Limitation and Further Study

The data examining the first construct, transformational leadership, reveal a consensus among respondents regarding the positive influence of transformational leadership displayed by their leaders on other variables within the study. This implies that transformational leadership is deemed an effective leadership style within higher educational institutions in Bengaluru, with potential applicability to similar institutions nationwide.

The second construct, trust, garnered favorable responses from respondents, indicating its significance in shaping faculty perceptions of leadership style. This underscores the notion that principals' transformational leadership style significantly contributes to the development of trust among faculty members in higher educational institutions across Bengaluru, and its applicability extends to other geographical locations.

The data reflects a robust agreement among respondents on the importance of knowledge sharing, affirming that an environment fostering such sharing is considered healthy and productive. It was observed that principals' transformational leadership plays a pivotal role in cultivating trust and encouraging knowledge-sharing behavior among faculty members.

References

Bass, B. M. (1985). Leadership: Good, better, best. *Organizational Dynamics, 13*(3), 26-40.
https://doi.org/10.1016/0090-2616(85)90028-2

Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology, 88*(2), 207-218. https://doi.org/10.1037/0021-9010.88.2.207

Carroll, B. A., & Ahuvia, A. C. (2006). Some Antecedents and Outcomes of Brand Love. *Marketing Letters, 17,* 79-89.
http://dx.doi.org/10.1007/s11002-006-4219-2

Choy, L. T. (2014). The Strengths and Weaknesses of Research Methodology: Comparison and Complimentary between Qualitative and Quantitative Approaches. *IOSR Journal of Humanities and Social Science*, *19*(4), 99-104.
https://doi.org/10.9790/0837-194399104

Fitzgerald, S., & Schutte, N. S. (2010). Increasing transformational leadership through enhancing self-efficacy. *Journal of Management Development*, *29*(5), 495-505.
https://doi.org/10.1108/02621711011039240

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research, 18*(1), 39-50.
https://doi.org/10.1177/002224378101800104

Giovanis, A., & Athanasopoulou, P. (2017). Consumer-brand relationships and brand loyalty in technology-mediated services. *Journal of Retailing and Consumer Services, 2*(1), 40, 287-294.
https://doi.org/10.1016/j.jretconser.2017.03.003

Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate Data Analysis* (6th ed.). Pearson Prentice Hall.

Kelley, K. (2003). Good practice in the conduct and reporting of survey research. *International Journal for Quality in Health Care, 15*(3), 261-266. https://doi.org/10.1093/intqhc/mzg031

Khan, D., Zaki, M. J., & Jason, D. (2019). The stomatal types in Sesbania bispinosa (Jacq.) *W. F. Wight seedlings. Int. J. Biol. Biotech., 16*(4), 1047-1061.

Mahdikhani, M., & Yazdani, B. (2020). Transformational leadership and service quality in e-commerce businesses: The role of trust and team performance. *International Journal of Law and Management, 62(1*), 23-46.
https://doi.org/10.1108/IJLMA-12-2018-0290

Masa'deh, R., Obeidat, B. Y., & Tarhini, A. (2016). A Jordanian empirical study of the associations among transformational leadership, transactional leadership, knowledge sharing, job performance, and firm performance: A structural equation modelling approach. *Journal of Management Development*, *35*(5), 681-705. https://doi.org/10.1108/JMD-09-2015-0134.

Mittal, S. (2016). Effects of transformational leadership on turnover intentions in IT SMEs. *International Journal of Manpower, 37*(8), 1322-1346. https://doi.org/10.1108/IJM-10-2014-0202

Moghavvemi, S., Sharabati, M., Sulaiman, A., & Klobas, J. (2018). Effect of Trust and Perceived Reciprocal Benefit on Students' Knowledge Sharing via Facebook and Academic Performance. *Electronic Journal of Knowledge Management, 16*(1), 1-20.

Ng, K. Y. N. (2020). The moderating role of trust and the theory of reasoned action. *Journal of Knowledge Management, 24*(6), 1221-1240. https://doi.org/10.1108/JKM-01-2020-0071

Nigam, D., Ganesh, M. P., & Rana, S. (2020). Review Of the Expansion Of Higher Education In India: Cardinal Concerns In The Traverse. *Journal of Critical Reviews, 7*(2).
https://doi.org/10.31838/jcr.07.02.19

Nübold, A., Dörr, S. L., & Maier, G. W. (2015). Considering the orphan: Personal identification and its relations with transformational leadership, trust, and performance in a three-path mediation model. *Leadership, 11*(2), 230-254.
https://doi.org/10.1177/1742715014522679

Park, S., & Kim, E.-J. (2018). Fostering organizational learning through leadership and knowledge sharing. *Journal of Knowledge Management, 22*(6), 1408-1423.
https://doi.org/10.1108/JKM-10-2017-0467.

Raza, I., & Awang, Z. (2020). Knowledge sharing in multicultural organizations: Evidence from Pakistan. *Higher Education, Skills and Work-Based Learning, 10*(3), 497-517. https://doi.org/10.1108/HESWBL-09-2019-0114

Schwepker, C. H., & Good, D. J. (2013). Improving salespeople's trust in the organization, moral judgment, and performance through transformational leadership. *Journal of Business & Industrial Marketing, 28*(7), 535-546. https://doi.org/10.1108/JBIM-06-2011-0077

Sheikh, Y. A. (2017). Higher Education in India: Challenges and Opportunities. *Journal of Education and Practice, 4,* 1-17. https://doi.org/10.17758/uruae.uh0317053

Soper, D. (2021). *A-Priori Sample Size for Structural Equation Models. Free Statistics Calculators.* https://www.danielsoper.com/statcalc/calculator.aspx?id=89

Yadav, M., Choudhary, S., & Jain, S. (2019). Transformational leadership and knowledge sharing behavior in freelancers: A moderated mediation model with employee engagement and social support. *Journal of Global Operations and Strategic Sourcing, 12*(2), 202-224. https://doi.org/10.1108/JGOSS-08-2017-0030

Yauch, C. A., & Steudel, H. J. (2003). Complementary Use of Qualitative and Quantitative Cultural Assessment Methods. *Organizational Research Methods, 6*(4), 465-481. https://doi.org/10.1177/1094428103257362

Yeap, S. B., Abdullah, A. G. K., & Thien, L. M. (2020). Lecturers' commitment to teaching entrepreneurship: Do transformational leadership, mindfulness and readiness for change matter?. *Journal of Applied Research in Higher Education, 13*(1), 164-179. https://doi.org/10.1108/JARHE-12-2019-0311