THE ROLE OF TRUST IN IMPACT OF LEADERSHIP ON KNOWLEDGE SHARING

Pradip Sadarangani and Ankur Arora

Indian Institute of Management Bangalore, India

Keyword: Knowledge Sharing, Leadership, Structural Equation Modeling.

Abstract: Knowledge sharing in an organization constitutes an important area of research. Many researchers have argued of the importance of knowledge as a source of sustainable competitive advantage. There has been increasing difficulty in institutionalizing knowledge developed at individual and group level within the organization. Leaders are seen as central to knowledge sharing within an organization. Following the framework of Baron and Kenny's (1986), which differentiates between moderation and mediation methodologically, use of structural equation modeling is proposed to test the moderation and mediation effects. Structural equation modeling (using LISREL) is used to examine whether trust acts as a moderator or mediator between leadership and knowledge sharing. The objective of this paper is to resolve the debate whether trust acts a moderator or mediator between leadership and knowledge sharing.

1 INTRODUCTION

This research examines the link between knowledge sharing through leadership via building trust between team members. Knowledge sharing in organizations consists of knowledge transfer and knowledge application. Information Technology (IT) and knowledge management system (databases, intranet) have played an important role in knowledge sharing. While employees and organizations unanimously agree to the need for Knowledge Management systems, the actual knowledge sharing requires leadership and building trust between the team members. Knowledge Sharing involves close interaction between human actors and knowledge management systems. Previous research on knowledge sharing has been dominated by normative measures that have focused on the technology solutions to knowledge sharing, assuming technology as an independent force without the interaction of human actors. The paper tries to explore the effect of open leadership style on knowledge sharing. The paper further looks at the influence of trust on knowledge sharing. The research determines whether trust acts as a moderator or mediator between open leadership style and knowledge sharing. Structural equation modeling (LISREL) is used to examine whether trust acts as a mediator or moderator between leadership and knowledge sharing. The paper also demonstrates the use and applications of moderators and mediators in structural equation modeling

2 KNOWLEDGE SHARING

When people strongly identify and trust the group members, they anticipate that others will not exploit the information, and the suspicion about other person not contributing enough to the exchange is less. Open Leadership style is essential to this process. For a discussion of the relationship between Transformational Leadership style see Bass 1985. Knowledge integration at group level is a complex process of power structures and trust among members. The open leadership style encourages knowledge sharing by building relationships, emotional bonds and showing genuine care for the followers. They use encouragement, relational trust and challenge to encourage knowledge sharing among themselves.

3 INDIVIDUAL LEVEL KNOWLEDGE SHARING

At an individual level (Bryant 2003), an individual solves problems, develops alternate solutions and creates new knowledge. Leaders provide the knowledge workers with motivation, support by giving him intellectually simulative assignments and thereby encouraging the individual to be innovative. They use individual consideration to motivate workers for creating knowledge, sharing of knowledge and exploitation of knowledge.

Goh (2002) in their integrative framework on knowledge management have conceptualized leadership leading to high trust leading to high collaboration between individuals leading to knowledge transfer. Open Leadership style can also lead to more collaboration by building problem seeking/ solving culture leading to higher collaboration and knowledge transfer between individuals. According to integrative framework trust can either act as moderator or mediator between leadership and knowledge sharing.

4 HYPOTHESES

4.1 Hypothesis 1

Open leadership style facilitates increase in knowledge sharing within group by building relational trust among members

4.2 Hypothesis 2

Open leadership facilitates knowledge sharing and relationship is positively moderated by trust

4.3 Hypothesis 3

Open leadership facilitates knowledge sharing and relationship is negatively moderated by trust

5 METHOD

The conceptual model and the propositions to test are hypothesized from the literature. The conceptual model for moderation is shown in Figures 1 & 2. For mediation the model is depicted in Figures 3 & 4. The latent constructs, i.e. knowledge sharing, trust and open leadership style are taken from the literature. Structural equation modeling was used to analyze primary data which had already been collected .

6 RESULTS

The three constructs are the open leadership style, trust and knowledge sharing. The open leadership style construct was measured using 5 items and trust with 6 items, whereas knowledge sharing is measured using 7 items. All the constructs were measured with 7-point Likert scales. We checked for the reliability of the constructs by looking at the Cronbach Alpha - Knowledge Sharing (0.866), Trust (0.787), and Open Leadership style (0.885) using SPSS.

7 MODERATION

In the moderation hypotheses, trust is modeled as a latent variable by partially aggregating the items (average of odd and even variables). The outcome variable, knowledge sharing was modeled as latent variable by partially aggregating the items (average of odd and even variables). Open leadership style is modeled as a latent variable by aggregating the items (average of odd and even variables). The moderator variable is modeled as interaction between trust and open leadership style. There was no evidence of moderation found with the interaction effect being non-significant with critical ratio of 1.50. The main effect of trust on knowledge sharing was significant but the main effect is inconsequential in testing the moderation (critical ratio of 3.85). The standardized path coefficients and critical ratios are given in Table 1. The chi square was significant but was not considered since it is affected by the sample size, NFI and NNFI was large (.90, 0.92) respectively. The model fit the data well and no evidence of moderation was found.
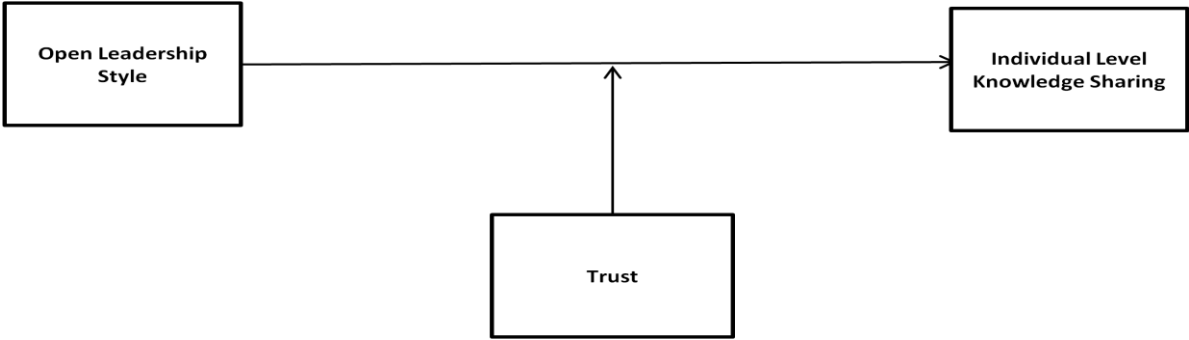
Figure 1: Trust as a moderator.

Table 1: Standardized Path Coefficients and Critical Ratios.

Relation	Standardized Path	Standard error	Critical ratio
TRUST→KS	0.79	0.21	3.85
L→KS	0.13	0.20	0.67
L* TRUST →KS	0.16	0.10	1.50

Legend
L   : Open Leadership Style
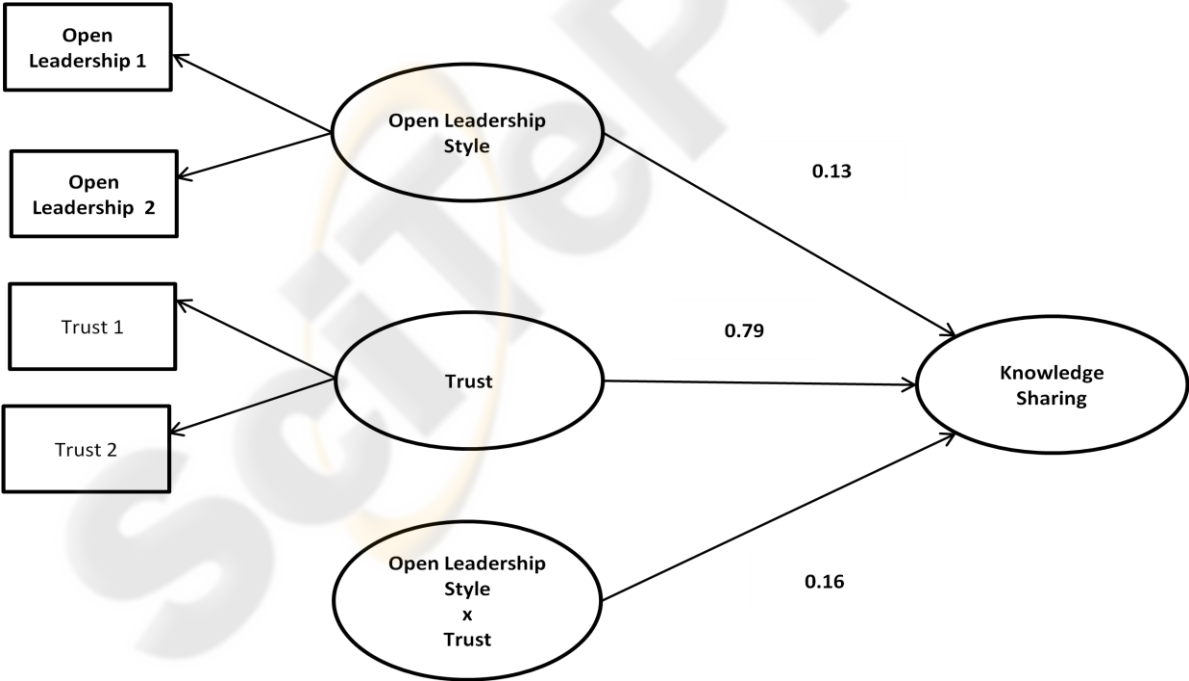KS   : Knowledge Sharing
TRUST : Trust

Figure 2: Effect of open leadership style on knowledge sharing moderated by trust.

Figure 3: Trust as a mediator.

Table 2: Unstandardized Path Coefficients and Critical Ratios.

Relation	Unstandardized Path	Standard error	Critical ratio
L→TRUST	0.69	0.14	4.94
TRUST→KS	0.60	0.16	3.88
L→KS	0.21	0.12	1.77

Legend

L   : Open Leadership Style
KS   : Knowledge Sharing
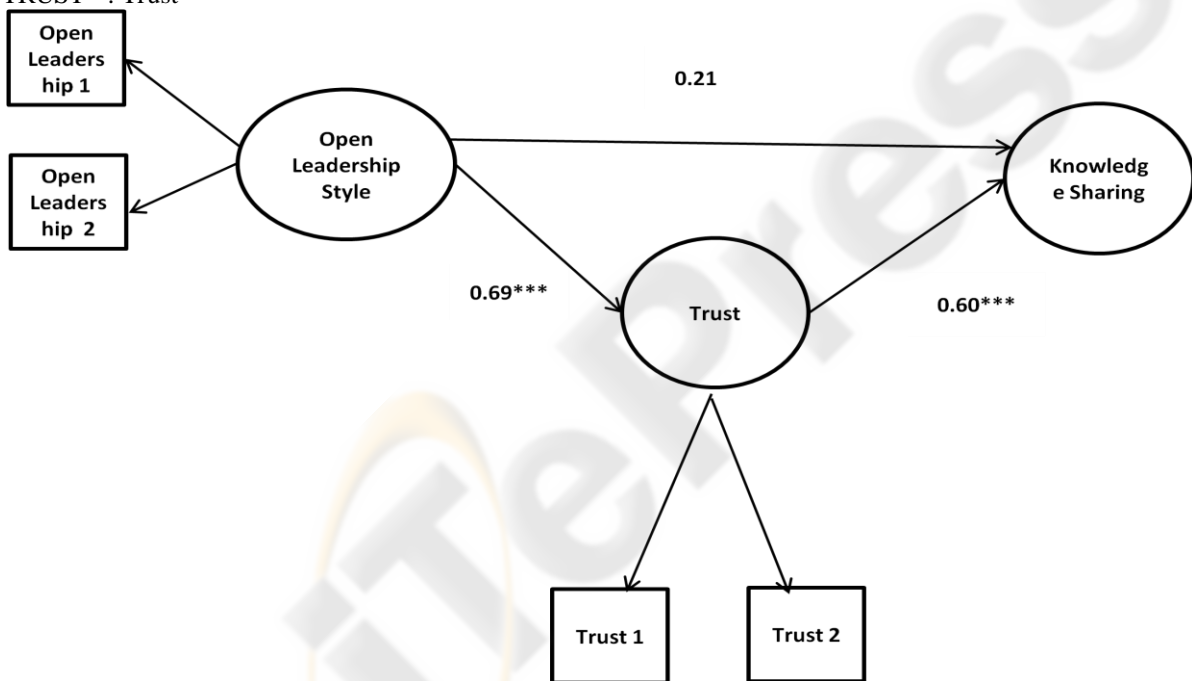TRUST   : Trust

Figure 4: Effect of open leadership style on knowledge sharing mediated by trust.

8   MEDIATION

In the mediation, the effect of leadership on knowledge sharing is through trust. Trust is modeled as a latent variable. The outcome variable, knowledge sharing was modeled as latent variable Open leadership is modeled as a latent variable. There is evidence of mediation found with the path from open leadership and trust is significant and path from trust and knowledge sharing significant while the path from the open leadership to knowledge sharing is not significant.   The unstandardized path coefficients and critical ratios are shown in Table 2.

9   CONCLUSIONS

To inform whether trust acts as a mediator or moderator between knowledge sharing and leadership, moderation and mediation were discussed

using the framework provided by Baron and Kenny (1986). Structural equation modeling was described for testing mediation and moderation using LISREL 8.54. Models of trust acting as moderator and mediator were modeled and tested. Trust acts as a mediator between leadership and knowledge sharing. The hypothesis 1 was accepted and hypothesis 2 and 3 were rejected resulting in the conclusion trust is a mediator between leadership and knowledge sharing. Our contribution to the literature is to resolve the debate whether trust acts a moderator or mediator between leadership and knowledge sharing. Trust acts as a mediator between leadership and knowledge sharing.

REFERENCES

Baron, R. and D. Kenny (1986). "The moderator-mediator distinction in social psychological research: Conceptual, strategic, and statistical considerations." Journal of Personality and Social Psychology 51(6): 1173-1182.

Bass, B. (1985). Leadership and performance beyond expectations, Free Press New York.

Bryant, S. (2003). "The role of transformational and transactional leadership in creating, sharing and exploiting organizational knowledge." Journal of Leadership & Organizational Studies 9(4): 32.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51, 1173-1182

Cortina, J. M., G. Chen, et al. (2001). "Testing Interaction Effects in LISREL: Examination and Illustration of Available Procedures." Organizational Research Methods 4(4): 324.

Hopwood, C. J. (2007). "Moderation and Mediation in Structural Equation Modeling: Applications for Early Intervention Research." Journal of Early Intervention 29(3): 262

Goh SC. (2002). "Managing effective knowledge transfer: an integrative framework and some practice implications" .Journal of Knowledge Management 6(1): 23–