



Research on the Relationship Between Employees' Informal Leadership and Interpersonal Trust Based on Experimental Analysis

XueFang Liu^(✉) and HongJiang Lv

School of Economics and Management, Southeast University, Nanjing, China
liuxfyyy@163.com, Lvhongjiang@seu.edu.cn

Abstract. As organizations become increasingly flat, informal leadership plays an increasingly important role in organizational management. How to cultivate the employees' leadership and play its positive role has become an important issue for Chinese enterprise managers. Based on social exchange theory, this study explores the relationship between employees' informal leadership and interpersonal trust. In this paper, 443 employees are selected for empirical test. The results show that employees' informal leadership has a significantly positive impact on interpersonal trust. This study theoretically analyzes the influence mechanism of employees' informal leadership on interpersonal trust, which provides a new theoretical framework for follow-up research; in practice, it also provides specific guidance for leaders.

Keywords: Employees' informal leadership · Interpersonal trust · Empirical research

1 Introduction

Due to the increasingly dynamic and complex work environment, informal leadership is believed to help work teams be more effective and adaptable in changing environments. Here, leadership is not defined by formal roles or hierarchical structures but is a mutual influence process potentially diffused among members of a team [1]. Scholars increasingly emphasize that research needs to focus on the broader leadership structure within the team, rather than just the formal leadership. Existing studies have shown that employees' informal leadership plays an important role in improving their own performance [2] and promoting team performance [1]. Teams that allow informal leadership perform better than those that do not [3]. Therefore, given the critical role that informal leadership plays in team functioning, it is very necessary to explore and the great importance of employees' informal leadership to maintain the sustainable competitiveness of the organization. Based on the above analysis, this study, starting from the social exchange theory, aims to explore how employees' informal leadership affects interpersonal trust in work teams.

2 Research Hypothesis

Empirical research results of some scholars show that employees' informal leadership has a positive impact on both their own performance [1]. Based on the Chinese context, some studies have pointed out that employees' informal leadership can enhance the organizational identity of team members and promote innovative behavior. Existing studies mainly explain how employees' informal leadership plays a positive role from the perspective of social exchange [4]. In this point, employees' informal leadership is related to more additional support from peers due to reciprocity. Specifically, because the informal leader has provided positive help such as work advice and psychological help to other team members, in return, other members trust this individual more, believing that he has strong working ability and is trustworthy. And besides, informal leaders influence the work arrangement and performance of team members through a series of active behaviors, so his peers pay attention to him and judge whether he has ability to handle affairs, and whether he is upright, reliable and fair through rational reasoning. The belief that informal leaders are competent, upright and fair is conducive to the formation of high trust.

Based on the social exchange theory, this paper believes that employees' informal leadership promotes the establishment of interpersonal trust. Specifically, employees' informal leadership promotes team members' perception of individuals' characteristics such as ability and quality, which is conducive to team members forming reliability beliefs; In addition, employees' leadership can be regarded as a kind of positive and active behavior outside the role. Since most of the leadership behaviors are spontaneous and unilateral, team members will process the behaviors according to individual cognitive structure, which is conducive to the generation of high-quality interpersonal interaction and the matching of the cognition of both sides on each other's interaction mode. Therefore, it is easier for both sides to achieve reciprocity. This sense of reciprocity will help to improve the satisfaction of both sides and promote and stabilize the sense of trust between both sides [5]. Based on the above analysis, we can draw hypothesis:

H1: Employees' informal leadership is positively related to interpersonal trust.

3 Research Design

3.1 Research Object

This study selected 443 employees from 32 enterprises engaged in machinery, new energy, electric power and other industries in China. Data were collected through questionnaires and interviews. All scales were taken from foreign maturity scales. The questionnaire consists of three parts: employees' informal leadership, interpersonal trust, the demographic characteristics variable (gender, age, education background, tenure). A total of 509 questionnaires were distributed in this study, and 443 valid questionnaires were collected. The proportion of male and female employees in the survey sample is 51.87% and 48.13% respectively. In terms of education level, the proportion of high school or below is 6.24%, that of junior college is 16.50%, that of bachelor degree is 60.76%, and that of master degree or above is 16.50%.

3.2 Research Tool

Informal Leadership. This study mainly refers to the scale of Mehra et al. (2006) to measure informal leadership, which is filled out by leaders and subordinates to obtain the informal leadership network of the whole department. Then, the informal leadership network of each employee is extracted from the overall informal leadership network data of the department.

Interpersonal Trust. This paper adopts the interpersonal trust measurement developed by Mishra (1996). The scale measures items such as “I think he/she is honest with me”, and “I think his/her behavior is stable and reliable”.

Control Variables. Given that demographic characteristics may have certain effects on individual cognition and behavior. In this study, the gender, age, tenure and education level of the employees were controlled at the individual level.

4 Empirical Results and Analysis

4.1 Descriptive Statistics

The descriptive statistics and correlation coefficient of main variables are summarized in Table 1. This caveat should be considered when interpreting the results. It is noticeable that there is a significant positive correlation between employee’s informal leadership and interpersonal trust ($r = 0.705$, $P < 0.01$), which preliminarily supports our hypothesis.

4.2 Hypothesis Test

As expected, there is a strong positive association between employee’s informal leadership and interpersonal trust (model 2, $\beta = 0.844$, $P < 0.001$). The positive and significant coefficients of employee’s informal leadership indicate that employees’ informal leadership promotes team members’ perception of his personal characteristics such as ability and quality, which is conducive to team members’ forming reliability beliefs (Table 2).

Table 1. Descriptive statistics

Variable	MEAN	STD	1	2
Employee’s informal leadership	0.289	0.250	1	0.705**
Interpersonal trust	0.522	0.301		1

*. At the 0.05 level (two tailed), the correlation was significant, **. At the 0.01 level (two tailed), the correlation was significant.

Note: The table is drawn by the author.

Table 2. Direct effect regression analysis

Variable		Interpersonal trust	
		M1	M2
Control Variable	Gender	0.019	0.025
	Age	0.030	0.017
	Education	0.017	0.004
	Team Tenure	0.031*	-0.002
Independent Variable	Employee's Informal Leadership		0.844***
Regression Results	Value of F	3.052	87.895
	ΔR^2	0.027	0.018
	Adjusted R^2	0.018	0.496
	Mean Value of VIF	<10	<10

*. At the 0.05 level (two tailed), the correlation was significant, **. At the 0.01 level (two tailed), the correlation was significant, ***. At the 0.001 level (two tailed), the correlation was significant.

Note: The table is drawn by the author.

5 Conclusions

5.1 Research Conclusion

This study examines the relationships between employees' informal leadership and interpersonal trust with 443 observations of employees in China. We extend previous studies and find that the employees' informal leadership is positively associated with interpersonal trust.

5.2 Theoretical Significance

The employees' leadership has become the focus of leadership research in recent years. Most of the previous studies focused on the antecedents of informal leadership, without considering its related consequences. Based on the effect of informal leadership, this study explores the impact of employees' informal leadership on team members' interpersonal trust. This paper reveals the mechanism by which informal leadership affects the relationship in the team.

5.3 Management Enlightenment

To make best use of informal leadership in practice, leaders should value employees' leadership and understand the importance of trust relationship among employees within the team. Informal leadership can not only effectively relieve the management pressure of formal managers, and provide more timely and flexible services for customers, but also promote the diversified development of individual employees, which is particularly important for the new generation of employees.

5.4 Limitations and Prospects

This study still has some limitations. Firstly, from the perspective of the sample, due to the limitation of manpower, this study adopts the convenient sampling method, and the samples are mainly concentrated in the same province. To increase the universality of the research conclusions, future studies can be carried out in multiple provinces and regions. Second, from the perspective of methods, all sample data in this study are cross-sectional data. To make the results more rigorous and effective, time-sharing data collection method or experimental method can be considered for future research to provide more enough causal evidence support. Third, this paper only explores the role of employees' informal leadership. Future studies can further pay attention to the power conflict between formal and informal leaders. We suggest that future research explore the interaction between formal and informal leadership.

Funding. This research is supported by the National Natural Science Foundation of China (72272032).

References

1. Zhang, C., Nahrgang, J. D., Ashford, S. J., & DeRue, D. S. 2020. The Risky Side of Leadership: Conceptualizing Risk Perceptions in Informal Leadership and Investigating the Effects of Their Over-Time Changes in Teams. *Organization Science*, 31(5): 1138-1158.
2. Chiu, C. Y., Nahrgang, J. D., Bartram, A., Wang, J., & Tesluk, P. E. 2021. Leading the team, but feeling dissatisfied: Investigating informal leaders' energetic activation and work satisfaction and the supporting role of formal leadership. *Journal of Organizational Behavior*, 42(4): 527-550.
3. Zhang, Z., Waldman, D. A., & Wang, Z. 2012. A multilevel investigation of leader- member exchange, informal leader emergence, and individual and team performance. *Personnel Psychology*, 65(1): 49-78.
4. Spisak, B. R., O'Brien, M. J., Nicholson, N., & van Vugt, M. 2015. Niche construction and the evolution of leadership. *Academy of Management Review*, 40(2): 291-306.
5. Aryee, S., Budhwar, P. S., & Chen, Z. X. 2002. Trust as a mediator of the relationship between organizational justice and work outcomes: test of a social exchange model. *Journal of Organizational Behavior*, 23(3): 267-285.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

