

The impact of the heterogeneity of the learning goal orientation between technology leaders and subordinates on feedback environment

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Abstract: For analyzing the interaction of technology leader and subordinate's learning goal-orientation on supervisor feedback environment, hierarchical regression analysis of a sample of 305 supervisor-employee dyads. The results indicate that feedback environment is moderated by subordinate learning goal orientation. When the learning goal orientation of employees is high, the leadership learning goal orientation has a great and significant positive impact on the feedback environment. When the learning goal orientation of employees is low, the consistency of the learning goal orientation between leaders and subordinates is significantly influenced on feedback environment.

Studies have shown that the learning goal orientation of technology leaders and subordinates can influence the degree of acceptance of leadership feedback by subordinates^[1], which consequently will influence the feedback environment. According to the role theory, the individual continuously and repeatedly verifies the expectation of a certain role through the social adjustment process^[2], and creates self-character content in the interaction process with the environment^[3]. A role is usually defined as a series of behaviors that an individual is expected to be in a particular social category. Therefore, based on the perspective of role theory, this study explores the interaction of leadership-subordinate learning goal orientation on leadership feedback environment. It provides a theoretical basis for the goal-oriented convergence and improvement of the feedback environment through the learning of the upper and lower levels.

Theoretical background and assumptions

Leadership Learning Goal Orientation and Leadership Feedback Environment

Previous studies have found that the target orientation affects the interpretation of the purpose of the feedback. People with a tendency to learn goals tend to view feedback as useful diagnostic information on how to correct mistakes and provide the information needed to complete the task^[2]. Leaders pursue learning goals to control their performance, which provides employees with key goal-oriented clues. Employees know that leaders will have a better understanding of their work, and leaders will improve their knowledge and skills to get better performance of their employees, and the feedback environment is the key point of providing relevant information^[4]. High-quality

feedback is considered a useful resource for employees, and learning-oriented leaders are good at improving their abilities because feedback comes from those who value learning resources. Previous studies have shown that the classification of perceivers of individual goals has a great influence on the behavior of the perceivers and the ideas of these goals. Studies on suggestion and persuasion show that the attitude of suggestion source affects the evaluation of its quality.

H1: The learning goal of leaders has positive impacts on the feedback environment of leaders.

Subordinate goal orientation in the adjustment of leadership learning goal orientation to the impact of leadership feedback environment

There exist an exchange relationship between leaders and different subordinates which stands for level of closeness, thus we should put more emphasize on the relationship between leaders and subordinates. Leaders who are learning-oriented can provide useful feedback on the employee's work process^[5], and are more willing to shape the learning and improvement environment^[6], so that employees with learning goal orientations can obtain more accurate information in the environment which can improve their self-studying ability, positive and negative feedback environment. Learning-oriented employees will regard the learning-oriented leadership as trustworthy, and all the feedback can increase their abilities. High-quality feedback has consistency and accuracy. Giving the process feedback to the employees who have learning goal orientations are considered as high quality^[7]. Employees with a learning goal orientation regard feedback as a tool to help them improve their abilities, and recognized that feedback can accelerate their personal development and feedback is effective, and then use more feedback seeking behaviors^[8].

Consistency theory in exchanges between leaders and subordinates points to the process which employee perception is consistent with leadership in the organization^[9]. Kacmar, Witt, Zivnuska and Gully research has shown that employees who are gaining more communication with leaders in the high-quality exchange relationship between leaders and employees will positively influence the leadership's positive evaluation to the employees. Based on the above points, this study made hypothesize as follows.

H2: The subordinates learning goal mediates the learning goal of leaders which has impacts on the feedback environment relatively.

As it is described above, the model of research is as following:

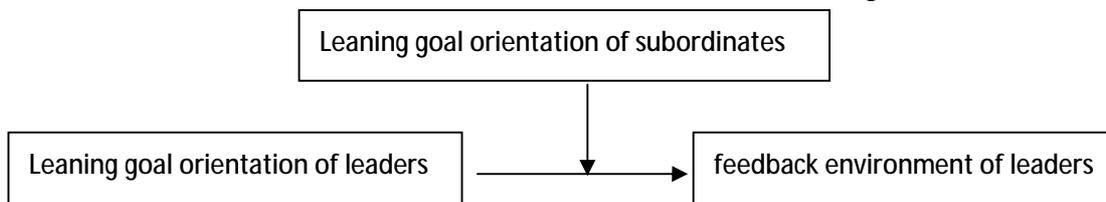


Figure1: The model of Leaders-subordinates learning goal orientation impacts on feedback environment

Research design

Sample

This study adopted 348 employees in the marketing department, technical department, and human resources department of 10 enterprises in 4 provinces. The study was completed on the spot and on-site recycling. Finally, 305 valid employee questionnaires were collected, and 24 corresponding

leadership evaluation questionnaires were used, which was 87.6% of the proportion of participating researchers.

Variable measurement

This study involves three variables, including the leadership's learning goal orientation, subordinates' learning goal orientation, the leadership feedback environment, the subordinate evaluation leadership's learning goal orientation and leadership feedback environment, and the supervisor's evaluation of subordinates learning goal orientation, all three variables were measured in Likert 5-point scale, with 1 representing complete disagreement and 5 representing complete agreement.

Leadership learning goal orientation measurement is Vandewalle's scale^[10] with a total of 4 items. Subordinate learning goal orientation measurement is similar to leadership learning goal orientation, drawing on the same scale that Vandewalle compiled in 1997. The measurement of the leadership feedback environment uses a scale compiled by Steelman, including 7 dimensions.

Research results

Initial analysis

After initial analysis, the questionnaires were well fitted, and the average variation extraction AVE (>.50) and the combination reliability CR (>.50) met the requirements, and the t value reached a significant level. On the whole, the measurement scale of each measurement scale is very good. In order to control the common method bias, this study collects data from two sources, the leader and the subordinate. By performing Harman's one-factor exploratory factor analysis, the factor with a eigenvalue exceeding 1 is refined, and the first principal component illustrated the a variation of 28.23%, which is 40% below the recommended value. The Variance Inflation Factor (VIF) values are all in the range of 2.25 to 4.12, which are less than the critical value of 10, which means that there is no bias problems for common method. When testing discriminant validity, this study used a competitive comparison model. The results show that the three-factors model is ideally fitted, that is the main research constructs all have good discriminant validity.

Descriptive statistics

The analysis results of the mean, standard deviation and correlation coefficient of the relevant variables are shown in Table 1. Perceived leadership learning goal orientation and individual learning goal orientation ($r=0.64$, $p<0.01$), leadership feedback environment ($r=0.71$, $p<0.01$), showed a significant positive correlation.

Variable	Mean	Standard deviation	1	2	3
1 leadership learning goal orientation	3.90	1.02	-		
2 individual learning goal orientation	4.15	0.81	0.64**	-	
3 leader feedback environment	2.26	0.56	0.71**	0.50**	-

Table 1 Mean, standard deviation and correlation coefficient of the relevant variables
n = 305; * $p < .05$, ** $p < .01$

Analysis of adjustment effects

Firstly, this study validates the adjusting effects the role of individual learning goal orientation. There is a positive relationship between interaction items of leadership learning goal orientation and individual learning goal-oriented with the leadership feedback environment ($b=0.09$, $p<0.01$). According to the suggestions given by West and Aiken, the relationship between leadership orientation and leadership feedback environment based on different subordinate learning orientations is analyzed. When it is perceived that the leadership learning objectives are high and the individual learning objectives are high, it is easy to form a positive feedback environment, which can promote the work efficiency of employees and the development of the enterprise; on the contrary, it will affect the development of the enterprise.

Conclusions and discussion

Basing on the literature review, this study constructs a mediation model of heterogeneity of learning goal orientation between technology leaders and subordinates based on the role theory. Also, it discussed the mediating role of leadership feedback environment. In the past, it only focused on unilateral learning goal orientation, especially leaders' learning goal orientation, while neglecting the role of heterogeneity of leadership-subordinate. Influencing the role of feedback environment of leaders, it fully explores the need for deep consistency to improve the environment. The practical significance of this research is that the research results provide a new perspective for improving feedback environments and instruction of technology to manipulate the organization, which can be influenced by the mediating factor subordinates learning goal orientation with leadership learning goal orientation.

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