

# Influence of Goal Orientation in Performance Appraisal on Staff Innovative Behavior: Mediating Effect of Innovative Climate\*

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**Abstract:** This article discusses the influence of goal orientation in performance appraisal on staff innovative behavior. Generally, performance appraisal has two kinds of goal orientation, namely evaluation orientation and development orientation. This article proposes a theoretical model in which the team innovation climate is included to examine the relationship between the goal orientation and innovation behavior. A questionnaire survey of 389 on-the-job employees proves that staff innovative behavior is negatively correlated to evaluation orientation, positively correlated to development orientation, and team innovative climate, to some extent, has a mediating effect on staff innovative behavior. Based on the preliminary theories of goal orientation, this research mainly focuses on how enterprises can promote their staff innovative ability thus enhancing better managing performance.

**Key words:** Performance appraisal; Goal orientation; Innovative climate; Staff innovative behavior

## 1 Introduction

China's economic transformation and social development have entered into a new stage, while enterprises start to enhance independent innovation. In this context, how to stimulate individual innovation, which determines the organizational innovation and the survival of an enterprise, has become a serious issue.

As a core element of human resource management, performance appraisal has been widely implemented in organizations of all types. It conducts a profound impact on staff attitude, behavior and organizational development. According to Western scholars, generally there are two kinds of goal orientation in performance appraisal, namely evaluation orientation and development orientation. The former focuses on the past performance being evaluated, and staff rewards and punishments or promotion are based on the assessment results which is of little flexibility; while the latter helps improve performance in the future, regarding the assessment results as the basis for future staff performance improvement.

Therefore, how will different goal orientation in performance appraisal influence staff innovative behavior? What is the trend and degree of this effect and its mechanism? What intermediary role does organizational innovation climate play on staff innovation behavior? Answers to these questions will undoubtedly play an active role in guiding Chinese enterprises in selection of an appropriate goal orientation to encourage innovative behaviors, enhance staff capacities and the organizations own competitive advantage.

This study will focus on the subject of how to motivate staff innovation behavior. Organization innovative climate will be introduced to the relation between goal orientation in performance appraisal and staff innovative behavior. It will also build mechanistic models which test the goal orientation, organizational innovation climate and employee innovation behavior.

## 2 Literature Review and Research Hypothesis

### 2.1 Goal orientation in performance appraisal and staff innovative behavior

As the most frequently used way to assess and promote the staff's performance appraisal, goal orientation in performance appraisal means the ultimate goal of enterprises' adopting the performance appraisal tool which the staff perceive. Like Meyer, most scholars classify performance appraisal into evaluation orientation and development orientation.

Performance appraisal on development orientation focuses on the future performance of the evaluated. By helping the staff determine their career development direction and providing performance

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feedback, it can analyze their shortcoming in work and explore their potential so that they can become more proficient and qualified for their job to promote their performance. Therefore, basing on their perception about performance appraisal on development orientation, the staff will think that performance appraisal is helping them rather than punishing them and they will pay more attention on long-term and organizational result. This enlightenment-like performance appraisal is also helpful to form a climate of trust, tolerance, innovation and cooperation, thus promoting staff's innovative behavior and innovation ability.

Performance appraisal on evaluation orientation focuses on the assessment of the evaluated. With the reflection and analyses of the performance of the staff in the given past period and the measurement of the actual performance of the performance indicators, it decides many incentive or punishment measurements, such as keeping or firing the staff, giving a salary rise or cut in pay, promotion or demotion and job mobility and so on. Because this kind of appraisal involves the measurement of staff and benefits attribution is according to it, the individual goals of the staff clash with each other. Therefore, basing on their perception about performance appraisal on evaluation orientation, the staff will think that performance appraisal is punishing them rather than helping them. This kind of performance appraisal is like settling old scores and will increase the competition pressure between the staff, thus reducing their innovative behavior and chances. According to this, this article proposes hypothesis below:

***Hypothesis 1a: staff innovative behavior is positively correlated to development orientation***

***Hypothesis 1b: staff innovative behavior is negatively correlated to evaluation orientation***

## **2.2 Team innovation climate and staff innovative behavior**

The attention and awareness of innovation of the staff are always guided by team innovation climate. According to Amiable and some like him, staff members' perception about working environment has an important influence on their innovation, basing on which they put forward the relationship between team innovation climate and innovation, for example, encouragement from leaders, autonomy, challenging work and rich resources have a positive effect on staff's innovation while discouragement from leaders and workload have a negative influence. They also point out that an organization with innovation climate will send to its staff a signal telling them the expectation of innovation. The staff member will undertake subjective initiative innovation according to the signal, thus promoting the staff's innovative behavior and facilitating the progress of innovation performance.

Although there aren't many researches about the influence of team innovation climate on staff's innovative behavior, they all show the relationship between team innovation climate and staff's innovative behavior. Scott and Bruce regard innovation support and resource support as two decomposition factors of team innovation climate. Through empirical study, they find that although there is no apparent relationship between staff's perception about resource support and individual innovative behavior, there is apparent positive correlation between perception about innovation support and individual innovative behavior<sup>[6]</sup>. Empirical study of Shalley and some like him show that encouragement and support from leaders will lead the staff to exert more of his innovative ability. According to this, this article proposes a hypothesis below:

***Hypothesis 2: team innovation climate is positively correlated to staff's innovation.***

## **2.3 The mediating effect of organizational innovative climate**

Even though the researchers have found the important relation between performance appraisal and the innovation behavior of staff, few have ever had a multi-analysis and an empirical test on how that works, to be more exact, the interaction mechanism of goal orientated performance appraisal on staff Innovative Behavior remains to be a "black box".

There is no direct test for the relationship between goal orientation in performance appraisal and the innovation behavior of staff in the existing researches, however, that relation can be shown indirectly by some similar researches. Boswell Boudreau believes that adopting development orientated performance appraisal is a way in the management of staff to stimulate their effort, enrich their experience and sharpen their technical ability, thus enhancing their job satisfaction and encouraging their innovation aspiration; he also agrees that evaluation oriented performance appraisal, by which the performances of staff are compulsorily compared with a certain standard, the performances of other staff members or their own previous performances, is usually suitable in activities such as salary management, promotion and suspension, and that it will reduce the motivation of staff and their organizational commitment in that it seldom takes staff's feelings and further development into consideration. Since individual innovation is voluntary, it is closely related to performance, job satisfaction, organizational

commitment, etc. Therefore, we can come to the deduction that the research result above may also go with individual innovation.

Different goal orientation will have different influence on the establishment of organizational innovative climate, eventually having different effects on innovation of staff members. The organizations that use the development oriented performance appraisal are ready to adopt new ideas, ultimately creating a inner climate in which staff members are more intended to learn , challenge the past, accept failures and come up with new ideas on their own initiative. As a result, staff will have more innovative behaviors. Instead, when evaluation orientation plays a more crucial role in performance appraisal, staff members, driven by short-term benefits, are reluctant to do anything innovative mainly for two reasons: first, they are afraid to make mistakes and bring about losses; second, they are more devoted to show their working techniques in order to be awarded. That can be a disadvantage to creating an innovative climate and inhibition of innovative behaviors of staff. Thereby, I have the following suppose:

**Hypothesis3a: Development oriented performance appraisal is positively correlated with the organizational innovative climate.**

**Hypothesis3b: Evaluation oriented performance appraisal is negatively correlated with the organizational innovative climate.**

**Hypothesis3c: The organizational innovative climate has a mediating effect as for the influence of goal orientated performance appraisal on innovative behaviors of staff.**

The chart below is a comprehensive presentation of the research framework of this paper concerning all the six supposes above:

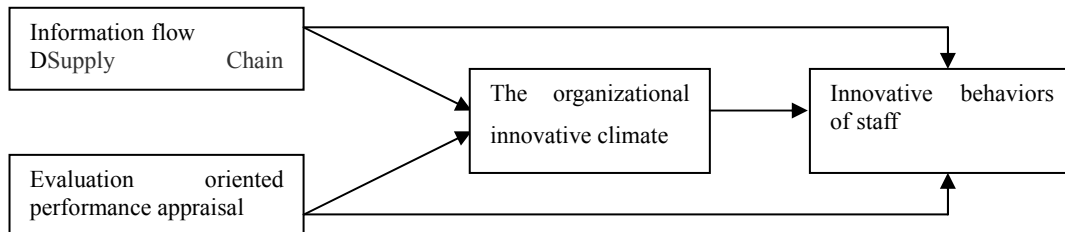


Figure 1 The Research Framework

### 3 Research Methodologies

#### 3.1 Research sample

From September 2009 to November 2009, in both Wuhan and Zhengzhou, we distributed 200 questionnaires and got back 162 effective ones. Preliminary Investigation shows those questionnaires are designed with rationality, reliability and structural characteristics.

After a series of item analysis and exploratory factor analysis and the deletion of topics, those preliminary questionnaires formed the final questionnaires. From December 2009 to February 2010, also in Wuhan and Zhengzhou, 500 final questionnaires were distributed among high-tech employees. after serious selection, we got 389 effective copies back, accounting 77.8% of the total number.

#### 3.2 Measurement of variables

Referencing Cleveland Murphy William’s goal orientation scale performance evaluation, the theory in this text divides the goal orientation in performance appraisal into two dimensions: development orientation and evaluative orientation. Then the two orientations are measured with 3 and 5 items respectively. In the aspect of organizational innovative atmosphere, inspired by Haw-Jeng Chiou’s organizational innovation scale which is adapted to the atmosphere of Chinese culture, and through the confirmatory factor analysis, in total 21 items including teamwork, learning and growth, organizational support, ability to play and the environment to support are listed. As for innovative behaviors of individuals , learning from Kleysen Street ‘innovative behavior scale preparation, a total of 12 items are listed. . All the scales use Linker’s five-point scale ,scoring from the "totally disagree"(1 point) to "completely agree "(5 points) . The control variables include staff gender, age and working life.

#### 3.3 Reliability and validity inspection

As shown in table 1, through the application of Cronbach’s coefficient to test the reliability of each variable, all the variable reliability is greater than 0.8, which indicates that the scale has good validity.

**Table 1 Reliability Coefficient of Each Variable(N=389)**

Variable	a	variable	a	variable	a
Goal of performance appraisal	0.936	Organizational innovation atmosphere	0.952	Innovative behaviors of staff	0.902
Development Orientation	0.873	teamwork	0.826		
Evaluation of orientation	0.855	learning and growth	0.835		
		Organizational support	0.875		
		Capacity to play	0.856		
		Environmental support	0.812		

According to the factor analysis of the data, all 41 items KMO value is 0.963, the test results of Bartlett ball is apparently above 0.001, indicating that factor analysis can be used on the scale to test construct validity. Application of confirmatory factor analysis verifies the validity of the scale in Table 2. The results show that the model fit the data well .

**Table2 The Questionnaire Measured the Results of Confirmatory Factor Analysis**

Questionnaire	$\chi^2/df$	RMSEA	NFI	RFI	IFI	NNFI	CFI
Goal of performance appraisal	2.346	0.074	0.968	0.957	0.981	0.978	0.983
Organizational innovation atmosphere	2.685	0.072	0.993	0.983	0.992	0.986	0.996
Innovative behaviors of staff	2.135	0.069	0.996	0.991	0.995	0.993	0.995

## 4 Research Results

### 4.1 Descriptive statistics analysis

From table 3, we can see that the correlation coefficient among the performance assessment of development orientation. organizational innovation atmosphere and staff’s innovative behaviors between each other has reached to a significant level and has primarily validated hypothesis 1a, 2 and 3a. At the same time, the correlation coefficient among the performance assessment of the evaluation orientation. organizational innovation atmosphere and staff’s innovative behaviors has also reached to a significant level, thus primarily validate the two assumptions 1b and 3b.

**Table 3 Descriptive Statistics and Correlation Coefficient (N = 389)**

Variable amount	Mean	Standard deviation	1	2	3	4	5	6
Gender	0.63	0.48						
Age	31.56	5.89	0.069					
Office term	6.68	4.35	0.014	0.821**				
Development rientation	3.758	0.721	0.049	0.347**	0.429**			
Evaluation orientation	3.156	0.683	-0.136	-0.452**	-0.564**	-0.584**		
Innovative atmosphere	4.377	0.767	0.028	0.314**	0.413**	0.727**	-0.710**	
Innovative behaviors	3.697	0.709	0.037	0.278**	0.435**	0.694**	-0.649**	0.803**

Note: \* p < 0.05, \*\* p < 0.01

### 4.2 Multivariate regression analysis

As shown in table 4, the performance assessment of and evaluation orientation influence the employees’ innovative behavior significantly, and the performance assessment of development orientation affects employees’ innovative behavior positively while the performance assessment of evaluation orientation affects employees’ innovative behavior negatively, the two assumptions 1a and 1b are further verified .

**Table 4 Regression Results of Performance Assessment’s Goal Orientation’s Effect on Innovative Behavior**

Variable amount	equation 1	equation 2
Gender	0.025	0.031
Age	-0.026	-0.034
Office term	0.452	0.239
Development orientation		0.705**
Evaluation orientation		-0.683**
AdjR <sup>2</sup>	0.086	0.736
△R <sup>2</sup>	0.086	0.821
F value	8.625**	41.237**

Note: \* p < 0.05, \*\* p < 0.01

### 4.3 Level-type multiple regression analysis

According to the intermediary effect testing procedures proposed by Baron and Kenny, one factor must satisfy three conditions to become intermediary variable: (1) each of the independent variable and the intermediary variable has a remarkable relationship with the dependent variable respectively; (2) the independent variable and the intermediary variable have a remarkable relationship; (3) after the intermediary variable's getting into the equation, the independent variable and dependent variable's relationship reduce significantly (partly intermediary function) or become no longer significant (completely intermediary function).

As table 5 below shows, we have completed four model's level-type, multiple regression analysis. Model 1 is the regression analysis of the control variable and the dependent variable. Model 2 is the regression analysis of the control variables, performance assessment's target orientation and dependent variable, and the results indicate that the performance assessment of development orientation affects employees' innovative behavior positively ( $\beta=0.539, P<0.01$ ), while the performance assessment of evaluation orientation affects employees' innovative behavior negatively. ( $\beta=-0.473, P<0.01$ ) Therefore, assumptions 1a and 1b can be achieved. Model 3 is the regression analysis of the control variables, organizational innovative atmosphere and dependent variable, the results shows that organizational innovative atmosphere has a strong positive influence on employees' innovative behavior ( $\beta=0.632, P<0.01$ ), accordingly, assumption 2 established. Model 4 is the regression analysis of control variables, performance assessment's goal orientation, organizational innovative atmosphere and dependent variable and the results shows that organizational innovative atmosphere play a partial intermediary role between the performance assessment of development orientation and employees' innovative behavior and play a complete role between the performance assessment of evaluation orientation staff's innovative behavior, so assumption 3 can be true.

**Table5 Multiple Regression Results of the Organizational Innovative Atmosphere Mediating Role**

Variable quantity	Model1	Model2	Model 3	Model 4
Gender	0.106	0.026	0.042	0.025
Age	-0.028	-0.038	-0.041	-0.041
Office term	0.216	0.205	0.131	0.134
Development orientation		0.539**		0.237**
Evaluation orientation		-0.473**		-0.147
Innovation atmosphere			0.632**	0.366**
AdjR <sup>2</sup>	0.314	0, 436	0.527	0.515
$\Delta R^2$	0.011	0.102	0.183	0.109
F value	1.617	22.346**	35.189**	21.193**

Note: \* p < 0.05, \*\* p < 0.01

## 5 Conclusions and Discussion

### 5.1 Conclusions of study

To sum up, the results of condensed theory and empirical study support the hypothesis: Development orientation of performance appraisal significantly positive affect organizational innovation atmosphere, then significantly positive affect employee innovation behavior. This explains the fact that through the partial intermediary role played by the organizational innovation atmosphere, the development orientation of performance appraisal significantly positive affects employee innovation behavior. On the contrary, evaluation orientation of performance appraisal significantly negative affects organizational innovation atmosphere, then significantly negative affect employee innovation behavior. This explains the fact that through the entire intermediary role played by the organizational innovation atmosphere, the development orientation of performance appraisal significantly negative affects employee innovation behavior.

### 5.2 Significance of study conclusions

This study, based on how individual performance appraisal affects innovative behavior of employees, has great theoretical and practical significance to the research and analysis of the intermediate mechanism about the psychological and behavioral reaction of employees.

To begin with, the inspection of the relationship between performance assessment orientation and

employees' innovative behavior in China's situation, fills this study gap. Since the individual performance assessment has always been a real problem facing all enterprises, it can not only motivate and promote staff innovative behavior, but only may reduce the staff's innovative desire and behavior, which becomes a double-edged sword to enterprises. How to utilize these two directions of performance assessment, will provide strong theoretical basis for enterprises to implement efficient individual performance management system.

What's more, The previous research focused mainly on how organizational innovation atmosphere affected employees' innovative behavior, paying little attention to the influence of innovative atmosphere as an intermediary variable to study performance assessment orientation on employees' innovative behavior. This study creatively bring organizational innovation atmosphere into performance appraisal goal orientation and employee innovative behavior, thus building an influential mechanism model from performance goal orientation to organizational innovation atmosphere to employees' innovative behavior, which we tested by evidence and experiments. This is a breakthrough and perfection of the previous theory, as well as the expansion in the field of employees' innovative activities.

Last but not least, through this empirical study, it confirms the positive influence the development orientation of performance appraisal on employees' innovative behavior and the negative influence evaluation orientation of performance appraisal on employees' innovative behavior. This will encourage enterprises to establish new performance evaluation system. In the process of doing business and management for enterprises, they should not only use performance evaluation as a tool and merely pay attention to comparative analysis of employees' assessment and distribution of interests. They should pay more attention to employee' reaction to the performance assessment to improve employees' innovation ability and work efficiency, and establish performance evaluation of staff development orientation.

### 5.3 Limitations and prospect

Although all the proposed assumptions of this study has been verified, however, owing to the subjective and objective reasons, the limitations and shortages still exist in the process of research, which deserve the notice of subsequent research.

Firstly, Samples are mainly from the central regions, so the effectiveness of research conclusions in other areas needs further inspection.

Secondly, With the constraints of time and cost conditions, using cross-section data, this research fails to adopt tracking study mode to explore the dynamic influence the performance appraisal goal orientation and organizational innovation atmosphere on innovative behavior of employees. Later research to thoroughly analyze the relationship among performance assessment goal orientation, organizational innovation atmosphere and employee' innovative behavior by tracking study is warmly welcomed.

Thirdly, because of the limitations of research conditions, this study is measured by staff self-assessment method, with all measuring index from the same questionnaire analysis, so the result will more or less be affected by deviation from the common method. In the later study, if we can do random sampling test on the spot, it will be more reliable to test and evaluate the relationship between the variables.

To draw the conclusion, this study extends the relevant theory of human resources management, and the results will provide a strong theoretical and empirical basis for enterprises on how to implement the performance assessment system on the individual basis to achieve the goal of personal motivation and organizational development at the same time. This paper proposes diagnostic recommendations for the implementation of performance evaluation on the individual basis, which provides a useful reference for enterprises to practice.

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