Path-Goal Theory-based Leadership Development Deployment Guidelines for the Middle Managers of an International University in China

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Abstract

This research aims to 1) determine the current and desired situation of the middle managers' leadership behavior and leadership performance based on path-goal theory, 2) identify the significant differences between current and desired middle managers' leadership behavior, 3) explore ideas of key managers on leadership behavior and effectiveness through interviews, and 4) develop the final leadership effectiveness development deployment strategies based on the quantitative and qualitative findings. Questionnaire surveys and focus group discussions were used to collect data to identify and determine the significant difference between leadership behaviors and leadership effectiveness. The participants in this study were 67 teachers from Heilongjiang International University in China. Data analysis used frequency, percentage, paired-sample T-test for quantitative data, and Content analysis for qualitative data. Through quantitative research, it is found that focus should be given to Directive Leadership as priority, then Supportive Leadership and Participative Leadership, Achievement Leadership, and Leadership Effectiveness. The results of qualitative data analysis shows that there are four strategies for the development of leadership behaviors and leadership effectiveness.

Keywords: directive leadership, supportive leadership, participative leadership, achievement-oriented leadership, leadership effectiveness.

Introduction

It is an urgent and important task for private colleges and universities to train high-quality employees who can meet private colleges' development and social needs. The accomplishment of this mission depends not only on the efforts of private college teachers but also on the management level of the college management service team （Chen & Laksana., 2016). Therefore, middle-level managers are an important force in private colleges and universities. Middle-level managers are important for the connection between the senior managers of private colleges and the supervisory managers to determine the implementation of strategic decisions and team stability in private colleges and universities.

Background of the Organization

The Department of Economics and Management was founded in 2003, and it has five majors and one international cooperation project, with 67 teachers and 2,100 students in HIU. The five majors are marketing, international economics and trade, human resource management, financial management, and e-commerce. An international cooperation project is to cooperate with many international universities to cultivate undergraduate and master's graduate students jointly. In the Department of Economics and Management, there are 11 middle-level managers, including the department heads, deputy directors, secretaries, professional leaders, and cooperative project leaders.

Statement of the Problem

Some middle-level managers in the Department of Economics and Management are relatively young, and their working experience at HIU is relatively short. Due to the rapid development of the Department of Economics and Management, there is an urgent need to select some people from ordinary teachers as middle managers. Although they have professional knowledge, they do not know much about theories related to organizational leadership, so in their usual leadership work, it is unclear what leadership behaviors to adopt to improve leadership effectiveness. Furthermore, due to a lack of special training on leadership, some middle managers are not clear about the contents of leadership.

Research Objectives

This research aims to:
1. Determine the current and desired situation of the middle managers' leadership behavior based on path-goal theory and leadership effectiveness.
2. Identify the significant differences between current and desired middle managers' leadership behavior based on path-goal theory; and leadership effectiveness.
3. Explore ideas of key managers on leadership behavior and effectiveness through interviews.
4. Develop the final leadership development deployment strategies based on the quantitative and qualitative findings.

Research Questions

1. What is the current and desired situation of the middle managers' leadership behavior based on path-goal theory and leadership effectiveness?
2. What are the significant differences between current and desired middle managers' leadership behavior based on path-goal theory and leadership effectiveness?
3. What are the key themes of leadership behavior and effectiveness based on interviews with key managers?
4. What can final leadership development deployment strategies be developed based on the findings?

Significance of the study

Taking the HIU Department of Economics and Management as a research case, the research aims to assess the middle managers' leadership characteristics based on the path-goal theory and use the results to co-create a leadership development model and strategies. The research results can not only be directly used as a model and evaluation tool for the recruitment, training, evaluation, and development of middle-level managers in the Department of Economics and Management but also can be applied to other departments of HIU, which will enhance the competitiveness of HIU as a private university. This result can also be used as a basis for other private universities to improve the leadership of middle-level managers, thereby promoting the rapid development of the overall private universities.

Literature Review

Theories of Leadership

People have always had a strong interest in leadership, and the academic field has never stopped research on leadership (Shao, 2014). Early researchers' research on leadership mainly focused on the characteristics, models, behaviors, contingency, and styles related to leadership. With the research on leadership theory, scholars have proposed leadership trait theory, leadership behavior theory, leadership contingency theory, leadership skills theory, and transformational leadership theory. The path-goal theory is one of the Contingency theories of leadership.

In developing future educational organizations, it is necessary to make fuller use of contingency theory and respond in different ways according to the specific problems and environments faced by the school management. (Yuanhao,2020).

Path-Goal Theory of Leadership

According to House and Mitchell (1974), When the leader has a clear goal, the leader will also, through guidance and participation, promote the sense of accomplishment of subordinates, making the organization more efficient. Northhouse (2010) pointed out that the path-goal theory explains how leaders can help their subordinates achieve their goals in specific situations. It believes that there are four kinds of leadership behaviors that can improve the motivation of subordinates： Supportive leadership behavior, Directive leadership behavior, Participative leadership behavior, and Achievement-oriented leadership behavior.

Path-Goal theory and Educational Management

The Path-Goal Theory integrates the motivation and expectancy theories into the management theory.   (House & Mitchell, 1974). Educational management means that managers follow objective teaching and management laws and maintain college education work's stability （Hongde,1991). University education administrators should improve their leadership skills. Building a high-quality education management team(Xiuzhi,2021). A leader is someone within an organization who engages in influencing the behavior of others to achieve organizational goals(House & Mitchell, 1974). According to the basic principle of the "path-

goal" theory, university leaders can divide the managed objects into different types in educational management and adopt different management methods for different groups of teachers (Ying, 2014). The appropriate management style enhances instructors' motivation (Chen, 2015). Mobilizing the enthusiasm, creativity, and intelligence of each teacher promotes the development of the school (Hu, 2012).

Leadership Effectiveness in Higher Education

 Leadership effectiveness in higher education is embodied in the leadership effectiveness of the university leadership team. (Mei, 2012). A roadmap to leadership competency development is essential (Pinyosinwat & Preudhikulpradab,2018). The essence of leadership effectiveness is the leader's capacity to influence subordinates to obtain organizational goals (Notanubun, 2021). Leadership effectiveness refers to the ability of managers to achieve management and organizational goals (Huang, 2014). Agarwal and Mukherjee (2020) found that leadership effectiveness in educational institutions has undergone fundamental changes in their management practices. Customization of leadership competency in practices is to be done appropriately to minimize the leadership competency gap at the management level (Pinyosinwat& Preudhikulpradab,2018) and then guide organizational performance improvement the realization of organizational goals (Shao, 2014). Education policymakers from all over the world have adopted various educational reforms to bring about changes in the requirements for educational leadership (Hu & Wang, 2016). Educational leaders should know how to bridge the gap between top and middle management's leadership competencies and formulate an additional proposal on a succession planning program. (Nang & Preudhikulpradab, 2021).

Research on Leadership of Middle Managers and other managers

Sripicharn et al. (2012) studied the educational leadership characteristics and practices of middle administrators of Saint Gabriel Foundation Schools in Thailand. The findings exhibit that the behaviors as traits of nice management fall into the four traits: 1) braveness, 2) innovative, 3) assured 4) caring. (Sripicharn, 2012)

Constructing a superb chief for Islamic faculties in Thailand involves two indispensable aspects: leadership practice and leadership responsibilities. （Saleemad et al.,2012）

Salee-on and Laksana (2017) found administrators' leadership competencies for effective job performance in private higher education institutions. It includes the administrators' management expertise with high-quality job performance. It also includes education and learning, research, tutoring services, and preservation of art and culture.

Theoretical Framework

Toward high-performance organization using path-goal theory and transformation theories: A case study of St. Louis School Chachoengsao. (Tengtrakul & Fernando, 2016). Leadership style, employee engagement, and overall performance effectiveness are the three elements that will lead Saint Louis School to be a better college. (Tengtrakul & Fernando, 2016).

Application of path-goal leadership theory and learning theory in a learning organization. (Farhan, 2018). This framework presents a model of learning leadership. It is mainly based on learning theory and path-goal theory, proposes specific learning leadership tools and agenda, and finally outputs learning organization (Farhan, 2018).

An investigation of path-goal theory, a relationship of leadership style, supervisor-related commitment, and gender. Emerging Leadership Journeys. (Polston-Murdoch, 2013). Four different kinds of leadership behavior are used as independent variables. First, leader gender is used as a mediating variable. Age, gender, tenure, and education were used as control variables. The final test is follower commitment to superiors (DV) (Polston-Murdoch, 2013).

Conceptual Framework

Based on the previous literature review, combined with the current leadership situation of middle managers in the Department of Economics and Management, construct the conceptual framework based on path-goal theory (Figure 4).

Figure 1

Conceptual framework
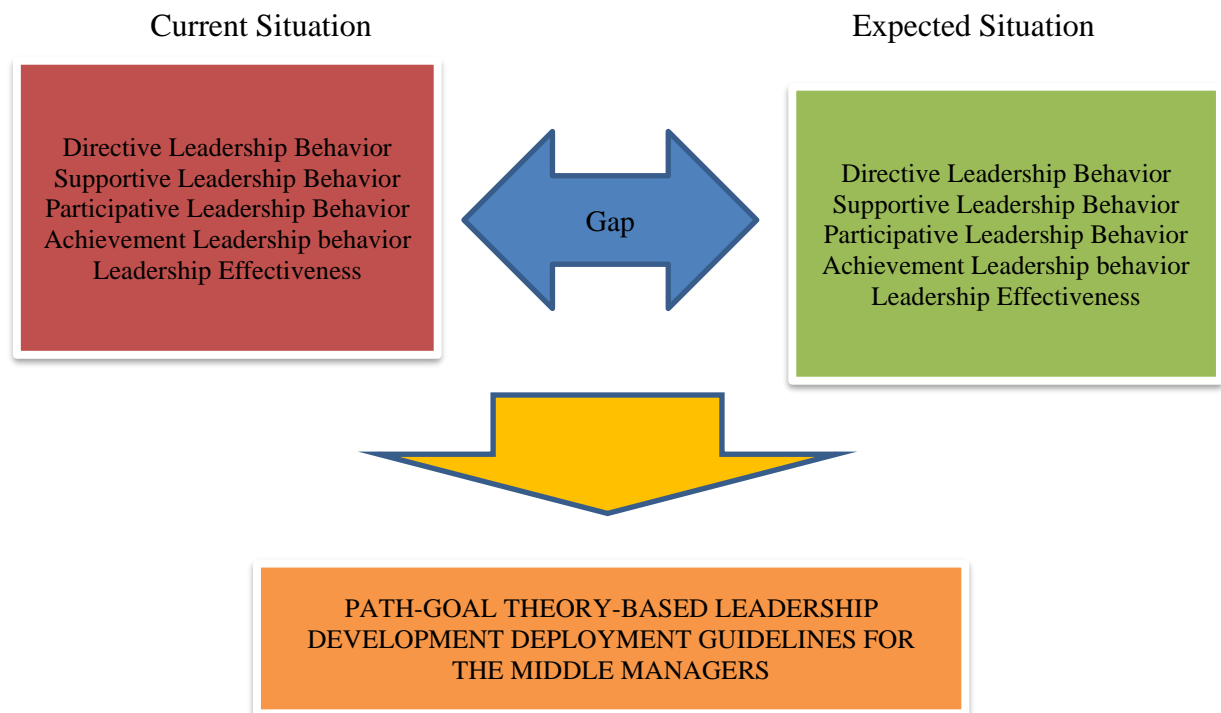
Research Hypotheses

The following are the hypotheses based on the conceptual framework of the study:

H1 There is a significant difference between the current and expected situations of Directive leadership behavior.

H2 There is a significant difference between the current and expected situations of Supportive leadership behavior.

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H3 There is a significant difference between current and expected situations of Participative leadership behavior.

H4 There is a significant difference between the current and expected situations of Achievement leadership behavior.

H5. There is a significant difference between the current and expected situations of Leadership effectiveness.

Research Methodology

Research Design

This research uses mixed methods. First, quantitative data are collected via online self-administered survey questionnaires to the Heilongjiang International University Staff's Department of Economics and Management. The respondents include all 67 teachers. The online survey was used to assess the leadership behavior and leadership effectiveness of middle managers in the economic management department. In addition, qualitative data were collected using focus group interviews—conducted in-depth interviews and exchanges with eight key managers in the organization.

Research Instruments

Quantitative Research Instrument

Quantitative research mainly uses questionnaire survey tools.

The designed online questionnaire includes two sections. The first section is the demographic data of the respondents. The second section includes questions related to the variables at the current status and expected situations as perceived by the respondents.

The questionnaire makes use of a 7-point Likert scale. There are seven levels of scores from Never to Always as the basis for evaluating current descriptions. In addition, there are seven levels of scores, from Not at all important to Extremely important, as the basis for evaluation of expected descriptions.

Qualitative Research Instrument

Focus group interview questions are as follows:

1. In your opinion, in what situations could Directive leadership behavior be suitable for improving leadership effectiveness?

2. How to use supportive leadership behaviors to improve leadership effectiveness?

3. What are the prerequisites for using participative leadership behavior to motivate subordinates to work?

4. Achievement leadership behaviors apply to which subordinates, and how to use this leadership behavior to motivate subordinates to work and improve leadership effectiveness?

5. What kind of help do you need to improve your leadership effectiveness?

Eight key middle managers participated in this focus group interview. The data of this qualitative research tool is analyzed by content analysis using three (3) coders.

Research Respondents (Population)

There are 67 teachers in the Department of Economics and Management. 11 are middle managers. Quantitative data was collected from all 67 employees. (N=67)8 people were selected as the focus interview objects (N=8 for key middle-level managers).

Data Analysis

Quantitative data analysis
1. Descriptive analysis:
a) Demographic data. Used frequency and percentage for demographic characteristics of respondents
b) Assessment of the current and desired situation based on the means and standard deviation
2. Paired Sample T-test: Assessment of the significant differences between current and desired situation.
3. Cronbach's Alpha: to determine the reliability of every question in the questionnaire via a pilot test.
4. Item Objective Congruence: to determine the validity of the research instruments.

Qualitative data analysis
Content analysis using three coders was used to generate the themes from the data obtained during the focus group discussion.
Coder1: Liyan Chen (researcher)
Coder2: Yunpeng Xin, Assistant director
Coder3: Dan Li, Corporate Human Resources Director

Mixed-Method:
The quantitative and qualitative data analysis results were juxtaposed to develop the leadership effectiveness development deployment guidelines.

Results and Discussion

Reliability Testing

All of the variables have Cronbach's Alpha value of more than 0.7. This means that all the items under each factor in the survey questionnaire are reliable, ranging from acceptable to excellent levels of internal consistency.

The Results of Item Objective Congruence

Three experts gave the IOC's opinions and suggestions. The results for SLB2, SLB3, and LE2 are all 0.333, so the researcher changed the question SLB2 to: "The supervisors do something to make it pleasant to be a member of the group." The researcher also changed question SLB3 to "The supervisor takes care of the personal feelings of his subordinates when he speaks and handles affairs." The question LE2 was removed as it was not clearly articulated and got a value less the 0.66. Other content complied with IOC standard value >0.66.

Descriptive Analysis of Demographic Data

The demographic results of this study indicate that there are 18 (27%) men and 49 (73%) women in the organization. As for age, most respondents were 40-49 years old. Among them, 4 (6%) were under 30 years old, 20 (30%) were 30-39 years old, and 32 (48) were 40-49 years old. %), 11 people (16%) over 50 years old. In terms of education level, the maximum number of Master's Degree is 49 (73%), the Bachelor's Degree has 11 (16%), and the Ph.D. has a minimum of 7 (11%). In the job title structure of the interviewees, there are 11 professors (16%), 28 associate professors (42%), 15 lecturers (22%), four teaching assistants (6%), and No title 9 people (14%). Respondents have 27 direct subordinates (40%), Colleague 27 (40%), Immediate superior 3 (4%), and mid-level managers have 10 (16%). Among the interviewees, the number of ordinary teachers is 46 (69%). Dean or Deputy Dean has three people (4%), Principal or Deputy Principal has three people (4%), and administrative staff has nine people (14%).

Descriptive Analysis of Quantitative Data

Descriptive Analysis of Current Situation

Table 1

Results of Descriptive Statistics for All Current Variables

Factors	n	Current Situation	
		M	SD
Directive Leadership Behavior （DLBA）	67	5.88	.90457
Supportive Leadership Behavior(SLBA)	67	5.94	.99563
Participative Leadership Behavior(PLBA)	67	5.79	1.1201
Achievement Leadership Behavior(ALBA)	67	5.77	.96791
Leadership Effectiveness(LEA)	**67**	**6.18**	**.87882**

Table 1 shows the mean and standard deviation of the current situation of all variables collected from the questionnaire survey data. These results show that at present, respondents perceive that Leadership Effectiveness (mean = 6.18) is "usually" observed, but Achievement Leadership Behavior (mean= 5. 77) is "usually" observed as practiced.

Table 2

Results of Descriptive Statistics for Current Directive Leadership Behavior

Factors	n	Current Situation	
		M	SD
The supervisors let subordinates know what is expected of them. (DLB1A)	67	5.67	1.248
The supervisors inform subordinates about what needs to be done and how it needs to be done.(DLB2A)	67	5.91	1.125
The supervisors ask subordinates to follow standard rules and regulations.(DLB3A)	67	6.03	1.015
The supervisors explain the level of performance that is expected of subordinates.(DLB4A)	67	5.91	1.041
The supervisors give clear explanations of what is expected of subordinates on the job.(DLB5A)	67	5.88	1.052

Table 2 shows the mean and standard deviation of the current situation of Directive Leadership Behavior collected from the questionnaire survey data. These results show that at present, respondents perceive that the supervisors ask subordinates to follow standard rules and regulations (mean = 6.03) is "usually" observed, but the supervisors let subordinates know what is expected from them (mean= 5. 67) is "usually" observed as practiced.

Table 3

Results of Descriptive Statistics for Current Supportive Leadership Behavior

Factors	n	Current Situation	
		M	SD
The supervisors maintain a friendly working relationship with subordinates. (SLB1A)	67	6.01	1.135
The supervisors exert effort to enhance the sense of belongingness of team members. (SLB2A)	67	5.96	1.160

The supervisor takes care of the personal feelings of his subordinates when he speaks and handles affairs. (SLB3A)	67	6.00	1.142
The supervisors help subordinates overcome problems that stop them from carrying out their tasks. (SLB4A)	67	5.96	1.121
The supervisors behave in a manner that is thoughtful of subordinates' personal needs. (SLB5A)	67	5.79	1.225

Table 3 shows the mean and standard deviation of the current situation of Supportive Leadership Behavior collected from the questionnaire survey data. These results show that respondents presently perceive that the supervisors maintain a friendly working relationship with subordinates. (mean= 6.01) is "usually" observed, but the supervisors behave in a thoughtful manner of subordinates' personal needs. (mean= 5. 79) is "usually" observed as practiced.

Table 4

Results of Descriptive Statistics for Current Participative Leadership Behavior

Factors	n	Current Situation	
		M	*SD*
The supervisors consult with subordinates when facing a problem. (PLB1A)	67	5.78	1.204
The supervisors listen receptively to subordinates' ideas and suggestions. (PLB2A)	67	5.91	1.239
The supervisors take action in consultation with their subordinates. (PLB3A)	67	5.76	1.244
The supervisors ask for suggestions from subordinates concerning how to carry out assignments.(PLB4A)	67	5.82	1.266
The supervisors ask subordinates for suggestions on what assignments should be made.(PLB5A)	67	5.70	1.267

Table 4 shows the mean and standard deviation of the current situation of Participative Leadership Behavior collected from the questionnaire survey data. This results show that at present, respondents perceive that the supervisors listen receptively to subordinates' ideas and

suggestions. (mean = 5.91) is "usually" observed, but the supervisors ask subordinates for suggestions on what assignments should be made. (mean= 5. 79) is "usually" observed as practiced.

Table 5

Results of Descriptive Statistics for Current Achievement Leadership Behavior

Factors	*n*	Current Situation	
		M	*SD*
The supervisors let subordinates know that they expect them to perform at their highest level.(ALB1A)	67	5.73	1.250
The supervisors y set goals for subordinates' performance that are quite challenging.(ALB2A)	67	5.67	1.064
The supervisors encourage continual improvement in subordinates' performance.(ALB3A)	67	6.03	1.101
The supervisors show that they have never doubts about subordinates' ability to meet most objectives.(ALB4A)	67	5.75	1.235
The supervisors consistently set challenging goals for subordinates to attain.(ALB5A)	67	5.69	1.117

Table 5 the mean and standard deviation of the current situation of Achievement Leadership Behavior collected from the questionnaire survey data. These results show that at present, respondents perceive that the supervisors encourage continual improvement in subordinates' performance. (mean = 6.03) is "usually" observed, but the supervisors set goals for subordinates' performance that are quite challenging."(mean= 5. 67) is "usually" observed as practiced.

Table 6

Results of Descriptive Statistics for Current Leadership Effectiveness

Factors	n	Current Situation	
		M	*SD*
Supervisors possess the required knowledge, ability, and competence necessary to complete their leadership tasks. (LE1A)	67	6.03	1.154
Supervisors complete their tasks well within a limited time. (LE2A)	67	6.18	1.029
Supervisors contribute to the smooth running of the operation of the Department of Economics and Management. (LE3A)	67	6.42	.8555
The supervisors significantly helped the improvement (including financial, material, human and spiritual conditions) of the Department. (LE4A)	67	5.99	1.066
The supervisors help to significantly improve the level of teaching and scientific research.(LE5A)	67	6.12	.9927
The supervisors have supported the significant improvement of the enrollment and social influence of the Department.(LE6A)	67	6.19	1.062
The supervisors pay attention to the development of the school's prestige.(LE7A)	67	6.30	.9695
The supervisors pay attention to the talents they train to make contribution to the development of the society.(LE8A)	67	6.19	.9884

Table 6 shows the mean and standard deviation of the current situation of Leadership Effectiveness collected from the questionnaire survey data. These results show that at present, respondents perceive that supervisors contribute to the smooth running of the operation of the

Department of Economics and Management (mean = 6.42) is "Always" observed, but the supervisors significantly helped the improvement (including financial, material, human and spiritual conditions) of the Department (mean= 5. 99) is "usually" observed as practiced.

Descriptive Analysis of Expected Situation

Table 7

Results of Descriptive Statistics for All Expected Situation Variables

Factors	n	Expected Situation	
		M	*SD*
Directive Leadership Behavior(DLBB)	67	6.29	.71029
Supportive Leadership Behavior(SLBB)	67	6.31	.85233
Participative Leadership Behavior(PLBB)	67	6.14	.91241
Achievement Leadership Behavior(ALBB)	67	6.11	.76458
Leadership Effectiveness(LEB)	**67**	**6.52**	**.70035**

Table 7 shows the mean value and standard deviation of the Expected situation of all variables in the collected questionnaire survey data. It can be seen from the table that the expected status of Leadership Effectiveness is the highest, with a mean value of 6.52, followed by the mean value of Supportive Leadership Behavior, with a mean value of 6.31. The mean value of Directive Leadership Behavior ranks third, with a mean value of 6.29. The mean value of Participative Leadership Behavior ranks fourth, with a mean value of 6.14. Finally, the mean value of Achievement Leadership Behavior is the lowest at 6.11.

The results show that respondents believe that Leadership Effectiveness is the most important, Supportive Leadership Behavior is more important, and Directive Leadership Behavior and Participative Leadership Behavior are the second most important. The improvement of Achievement Leadership Behavior will be the least.

Table 8

Results of Descriptive Statistics for Expected Directive Leadership Behavior

Factors	n	Expected Situation	
		M	*SD*

The supervisors let subordinates know what is expected of them. (DLB1B)	67	6.18	1.029
The supervisors inform subordinates about what needs to be done and how it needs to be done.(DLB2B)	67	6.33	.8419
The supervisors ask subordinates to follow standard rules and regulations.(DLB3B)	67	6.28	.9662
The supervisors explain the level of performance that is expected of subordinates.(DLB4B)	67	6.31	.9408
The supervisors give clear explanations of what is expected of subordinates on the job.(DLB5B)	67	6.33	.8237

Table 8 shows the mean and standard deviation of the expected situation of Directive Leadership Behavior. These results show that, at present, respondents perceive that the supervisors inform subordinates about what needs to be done and how to do it. (mean = 6.33) is "Extremely important" observed; at present, respondents perceive that the supervisors give clear explanations of subordinates' expectations on the job. (mean = 6.33) is "Extremely important" observed, but the supervisors let subordinates know what is expected of them. (mean= 6. 18) is "Very important" observed as practiced.

Table 9

Results of Descriptive Statistics for Expected Supportive Leadership Behavior

Factors	n	Expected Situation	
		M	*SD*
The supervisors maintain a friendly working relationship with subordinates.(SLB1B)	67	6.33	1.021
The supervisors exert effort to enhance the sense of belongingness of team members. (SLB2B)	67	6.31	1.062
The supervisor takes care of the personal feelings of his subordinates when he speaks and handles affairs. (SLB3B)	67	6.28	.9662

The supervisors help subordinates overcome problems that stop them from carrying out their tasks. (SLB4B)	67	6.36	.8995
The supervisors behave in a manner that is thoughtful of subordinates' personal needs. (SLB5B)	67	6.25	.9900

Table 9 shows the mean and standard deviation of the expected situation of Supportive Leadership Behavior. These results show that respondents perceive that the supervisors help subordinates overcome problems that stop them from carrying out their tasks (mean = 6.36) is "Extremely important" observed, but the supervisors behave in a manner that is thoughtful of subordinates' personal needs,(mean= 6.25) is "Extremely important" observed as practiced.

Table 10

Results of Descriptive Statistics for Expected Participative Leadership Behavior

Factors	*n*	Expected Situation	
		M	*SD*
The supervisors consult with subordinates when facing a problem. (PLB1B)	67	6.04	1.199
The supervisors listen receptively to subordinates' ideas and suggestions. (PLB2B)	67	6.30	1.059
The supervisors take action in consultation with their subordinates. (PLB3B)	67	6.16	.9939
The supervisors ask for suggestions from subordinates concerning how to carry out assignments. (PLB4B)	67	6.12	1.080
The supervisors ask subordinates for suggestions on what assignments should be made.(PLB5B)	67	6.09	1.011

Table 10 shows the mean and standard deviation of the expected situation of Participative Leadership Behavior. These results show that respondents presently perceive that the supervisors listen receptively to subordinates' ideas and suggestions. (mean = 6.30) is "Extremely important" observed, but the supervisors consult with subordinates when facing a problem. (mean= 6.04) is "Very important" observed as practiced.

Table 11

Results of Descriptive Statistics for Expected Achievement Leadership Behavior

Factors	n	Expected Situation	
		M	SD
The supervisors let subordinates know that they expect them to perform at their highest level.(ALB1B)	67	6.15	1.004
The supervisors set goals for subordinates' performance that are quite challenging.(ALB2B)	67	5.97	.9843
The supervisors encourage continual improvement in subordinates' performance.(ALB3B)	67	6.25	.9589
The supervisors show that they have never doubts about subordinates' ability to meet most objectives.(ALB4B)	67	6.19	.8745
The supervisors consistently set challenging goals for subordinates to attain.(ALB5B)	67	5.99	1.007

Table 11 shows the mean and standard deviation of the expected situation of Achievement Leadership Behavior. These results show that respondents presently perceive that the supervisors encourage continual improvement in subordinates' performance. (mean = 6.25) is "Extremely important" observed, but the supervisors encourage continual improvement in subordinates' performance (mean= 5.97) is "Very important" observed as practiced.

Table 12

Results of Descriptive Statistics for Expected Leadership Effectiveness

Factors	n	Expected Situation	
		M	SD
Supervisors possess the required knowledge, ability , and competence necessary to complete their leadership tasks.(LE1B)	67	6.54	.8226

Supervisors complete their tasks well within a limited time.(LE2B)	67	6.55	.8031
Supervisors contribute to the smooth running of the operation of the Department of Economics and Management. (LE3B)	67	6.57	.7828
The supervisors significantly helped the improvement (including financial, material, human and spiritual conditions) of the Department. (LE4B)	67	6.43	.8389
The supervisors help to significantly improve the level of teaching and scientific research. (LE5B)	67	6.48	.8231
The supervisors have supported the significant improvement of the enrollment and social influence of the Department.(LE6B)	67	6.52	.7854
The supervisors pay attention to the development of the school's prestige.(LE7B)	67	6.63	.6927
The supervisors pay attention to the talents they train to make contribution to the development of the society.(LE8B)	67	6.46	.8226

Table12 shows the mean and standard deviation of the expected situation of Leadership Effectiveness. These results show that, at present, respondents perceive that the supervisors pay attention to the development of the school's prestige. (mean = 6.63) is "Extremely important" observed, but The supervisors significantly helped the improvement (including financial, material, human, and spiritual conditions) of the Department. (mean= 6.43) is "Extremely important" observed as practiced.

Paired sample T-test results

Table 13

Paired sample T-test for all variables

	variables	Pairwise difference			t	df	Sig.(Bilateral)
		M	*SD*	Standard error of the mean			
Pair 1	DLBB - DLBA	.40597	.76275	.09318	4.357	66	.000
Pair 2	SLBB - SLBA	.36418	.76271	.09318	3.908	66	.000
Pair 3	PLBB - PLBA	.34925	.84016	.10264	3.403	66	.001
Pair 4	ALBB - ALBA	.33731	.73954	.09035	3.733	66	.000
Pair 5	LEB - LEA	.34515	.79686	.09735	3.545	66	.001

Table 13 The paired sample T-test table shows that the Sig. Values of the differences between the five groups of paired sample means are all less than 0.05, indicating that these mean differences are significantly different. Among them, the difference between the mean of the Pair 1 group is the largest, which is 0.40597. Supervisors should focus on improving the use of Directive Leadership Behavior in actual work. The difference between the averages of the Pair 4 group is the smallest, which is 0.33731.

Hypotheses Testing Results

According to Table 13, the five groups of paired sample test results can be analyzed as follows:

H1. The mean of DLBB - DLBA pairing difference is 0.40597, the corresponding probability P=0.000<0.05, it can be considered that "There is a significant difference between the current and expected situations of Directive leadership behavior." is supported.

H2. The mean of SLBB-SLBA pairing difference is 0.36418, the corresponding probability P=0.000<0.05, and it can be considered that "There is a significant difference between the current and expected situations of Supportive leadership behavior." is supported.

H3. The mean of PLBB-PLBA pairing difference is 0.34925, the corresponding probability P=0.001<0.05, and it can be considered that "There is a significant difference between current and expected situations of Participative leadership behavior." is supported.

H4. The mean of ALBB - ALBA pairing difference is 0.33731, the corresponding

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probability P=0.000<0.05, and it can be considered that "There is a significant difference between the current and expected situations of Achievement leadership behavior." is supported.

H5. The mean of LEB-LEA pairing difference is 0.34515, and the corresponding probability P=0.001<0.05, which can be considered as "There is a significant difference between the current and expected situations of Leadership effectiveness." is supported.

Qualitative Data Results Focus Group Interview

The answers to these questions were then coded by three experts, and finally, the conclusions from the qualitative data were unified.

In what situations could Directive leadership behavior be suitable：

When the organization encounters sudden extreme events, new staff, the performance of the Department is in urgent need of turning losses into profits, the subordinates have high enthusiasm for the work, but when the ability is very low.

How do use supportive leadership behaviors to improve leadership effectiveness?

Supervisors usually explain their decisions and goals, give positive affirmation when their subordinates perform well, pay attention to their subordinates' career development, and listen to their subordinates' opinions. Encourage employees to do their work. They often encourage and praise the progress and achievements of their subordinates and constantly improve their confidence. Supervisors also pay more attention to expanding the thinking of subordinates and encourage subordinates to try new methods. A supportive style manager often holds team meetings to brainstorm ideas. When necessary, managers should provide resources, opinions, and guarantees. Managers and subordinates participate in decision-making and share decision-making power.

There are prerequisites for using participatory leadership behavior.

1. Observe the characteristics of subordinates.

Subordinates are characterized by growing abilities but are still afraid to match their abilities with responsibilities.

2. Consider the task itself.

Supervisors need to clearly understand the exact meaning of the task and assess whether the subordinates can successfully complete the task itself.

3. Consider the relationship between team members.

An efficient team that cooperates many times, you can benefit from a democratic style of letting team members work independently.

4. Consider subordinates' maturity and willingness value.

Subordinates can complete tasks and are willing to participate in the decision-making process.

5. Consider the level of authority.

Usually by gaining the respect of employees, giving them support, and helping them participate in the decision-making process.

Achieving leadership behavior is suitable for subordinates who are strong, willing, confident, and hope to realize themselves.

Supervisors can use the following methods to motivate their subordinates to work and improve leadership effectiveness.

1. Subordinates are strong, willing, and confident. Leaders do not have to do everything

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by themselves, and they only need to delegate the responsibility for decision-making and execution to subordinates. As a result, subordinates feel that they are qualified for the job.

2. Leaders attach great importance to employees' enthusiasm and make them as perfect as possible to achieve their goals. This type of leader sets high standards for employees, hoping that they can continue developing and improving.

3. Leaders usually show strong confidence. They believe that their subordinates are capable of completing these challenging tasks. Therefore, they deliver work and corresponding power to members, let them complete project tasks independently, and motivate members through effective control, respect, and trust.

4. Leaders learn to trust, learn to express, learn to correct;

5. Reward performance and provide development opportunities.

6. The self-realization of subordinates needs to be dominant, and the leader helps subordinates feel that their efforts will eventually achieve good results.

Supervisors can improve their leadership effectiveness through two channels self-learning and organizational help.

First, the supervisor must strengthen learning, reasonably improve the knowledge structure, pay attention to self-improvement and self-improvement in innovation, adaptation, problem-solving, and coordination, and continuously improve the ability and quality.

Secondly, there can be four ways for organizations to help employees improve leadership effectiveness, including commending and rewarding employees, training, helping employees establish an organizational vision, establishing and improving the responsibility system for leadership positions, the learning system, the in-depth practice investigation and research system at the subordinates, and the system of accepting supervision by the subordinates and strengthen the self-building of the leadership team.

Conclusion and Recommendations

Summary of Findings

Identify the most important factors in the current and desired situation of leadership behavior and leadership effectiveness in the Department of Economics and Management. There are significant differences between the five variables' current status and expected values. Through the qualitative data analysis after focus group interviews in Chapter 4, we can find the main views on leadership behavior and effectiveness. Final leadership development deployment strategies can be developed based on the findings.

Figure 2

A framework for leadership development deployment strategies that promote the improvement of the leadership effectiveness of middle managers in the Department of Economics and Management in HIU using the Path-Goal theory
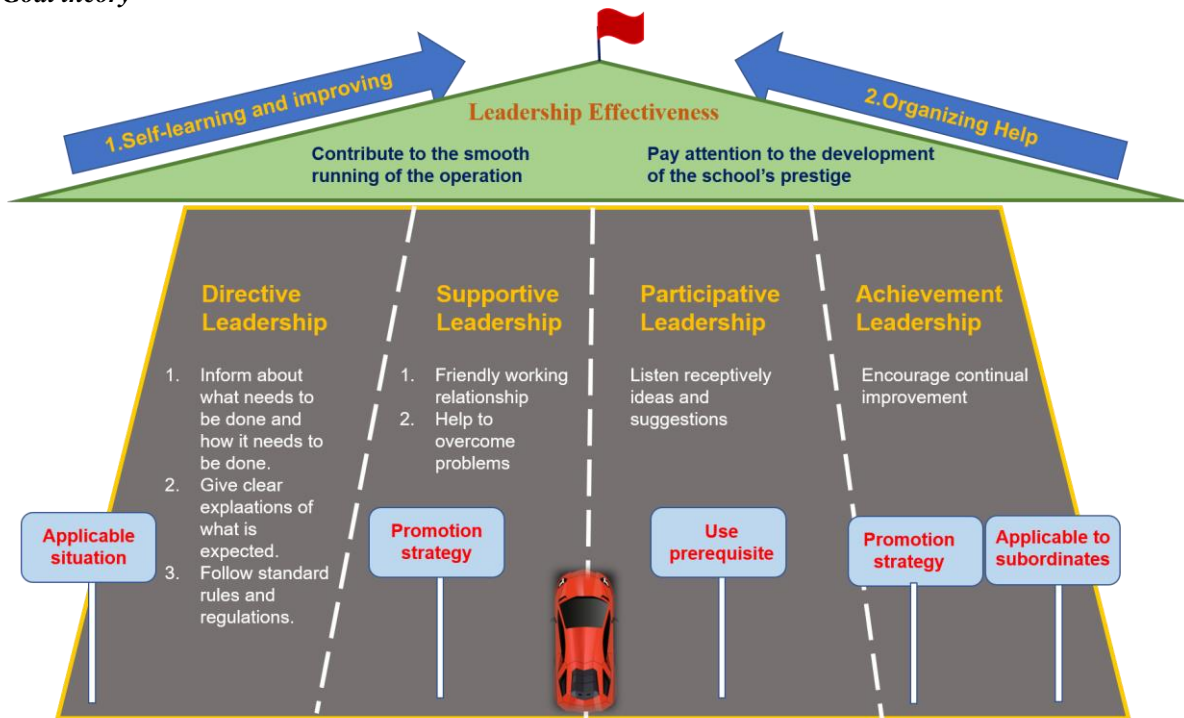
Note. Developed for this research study by the researcher, 2021.

The operationalization of the Leadership Development Deployment strategies based on the framework.

Direct Leadership Behavior
Focusing on three factors.
1. Inform about what needs to be done and how it needs to be done.
2. Give clear explanations of what is expected.
3. Follow standard rules and regulations.
Four situations can be used in direct leadership behavior.
1. Sudden extreme events.
2. Declining performance urgently needs to turn losses into profits.
3. Subordinates have high enthusiasm for work, but their ability is poor.
4. New staff.

Supportive Leadership Behavior
Focusing on two factors.
1. Friendly working relationship
 2. Help to overcome problems
The strategy used is High support and low guidance.

1. Managers usually explain the decisions and goals they have made, give positive recognition when their subordinates perform significantly, pay attention to their subordinates' career development, and listen to their opinions.
2. Encourage employees to do it. They often encourage and praise the progress and achievements of their subordinates and constantly improve their confidence. More emphasis

is placed on expanding the thinking of subordinates and encouraging subordinates to try new methods. Try to motivate your subordinates to do it yourself instead of telling them how to do it.

3. More emphasis is placed on expanding the thinking of subordinates and encouraging subordinates to try new methods.

4. A supportive style manager often holds team meetings to brainstorm ideas. When necessary, managers should provide resources, opinions, and guarantees. Managers and subordinates participate in decision-making and share decision-making power.

Participative Leadership Behavior
Focus on 1 factor.
Listen receptively to ideas and suggestions.
Consider five prerequisites that can be used in Participative Leadership Behavior.
1. Observe the characteristics of subordinates.
2. Consider the task itself.
3. Consider the relationship between team members.
4. Consider subordinates' maturity and willingness value.
5. Consider the level of authority.

Achievement Leadership Behavior
Achievement Leadership Behavior focuses on 1 factor:
Encourage continual improvement.
Applies to 2 forms of subordinates：
1. Subordinates are strong, willing, and confident.
2. The self-realization of subordinates needs to be dominant.
The strategy it uses is low support and low guidance.
1. Subordinates are strong, willing, and confident.
2. Leaders attach great importance to employees' enthusiasm and make them as perfect as possible to achieve their goals.
3. Leaders usually show strong confidence.
4. Leaders learn to trust, learn to express, learn to correct;
5. Reward performance and provide development opportunities.
6. The self-realization of subordinates needs to be dominant, and the leader helps subordinates feel that their efforts will eventually achieve good results.

Leadership Effectiveness
Leadership Effectiveness focuses on two factors.
1. Contribute to the smooth running of the operation.
2. Pay attention to the development of the school's prestige.
The strategies it uses are self-improvement and organizational help.

Recommendation based on the Findings

1. The Department of Economics and Management will implement the model created by this study.
2. Periodically assess and measure the effectiveness of model implementation.
3. In-depth study of the importance of the four key factors of leadership behavior in the model in influencing leadership effectiveness.

Suggestions for Further Studies

Future research may evaluate the degree of influence of the variables. In addition, other factors affecting leadership effectiveness that are not covered by this research should be explored for further research.

Focus on the gap between variables, then implement ODI for the gap, and examine the changes before and after ODI.

At the same time, the results of this research can also be applied to other departments of Heilongjiang International University. Moreover, if the effect is good, it can be extended to other private universities in China in the future to improve the leadership effectiveness of middle managers.

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