

# Leadership Structure of Administrative Cadres in Colleges and Universities and its Generating Factors

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**Abstract:** to analyze the problems and factors existing in the leadership structure of administrative cadres in colleges and universities, and to put forward some opinions on how to improve the leadership ability of administrative cadres in colleges and universities. Methods: this study focused on the structure and formation factors of 285 administrative leading cadres in colleges and universities by means of questionnaire survey, and by means of self-evaluation and others' evaluation. Results: first, the structure of administrative leading cadres in colleges and universities in China consists of four structures: vision, challenge, incentive and work promotion. Second, the overall level of administrative leading cadres in colleges and universities is high, but the balance index is low. Thirdly, the conscientiousness, agreeableness and leadership of administrative leading cadres have no direct predictive function. Conclusion: the most important factors for the formation of administrative leading cadres are the organizational environment and policy, including the sound selection mechanism, the working environment and policy factors in the administrative system. Secondly, the factors hindering the development of leadership, including the factors of personal ability, training and public opinion; Finally, the characteristic factor of cadres, which involves the interpersonal relationship and influence factor of cadres.

## 1. Introduction

With the rapid development of China's economy in recent years, its international status has been significantly improved, and its leading role in various world affairs has gradually emerged and been increasingly strengthened. In the process of training successors for the construction of the motherland from generation to generation, the major universities undoubtedly assume the most important responsibility of cultivating talents. The leadership of university administrative cadres plays an important role in improving the quality of the young students and promoting the orderly progress of the school's work. For the administrative cadres of colleges and universities, their leadership ability is reflected in the influence of non-power, which can make all the subjects in the college system admire or rely on them. In terms of its constituent factors, it is composed of cadres' ideological and moral character, personal authority and emotional factors. The focus of this paper will be to find out the status quo and factors of the leadership of administrative cadres in colleges and universities through localized questionnaire research.

Foreign core research on the concept of leadership focuses on the unique qualities of individuals. For this unique quality, the trait theorist regards it as a personality trait, the behaviorist as a behavior pattern, and the situational theorist as a behavior pattern adjusted according to different situations [1-2]. In recent years, under the large scope of scenario theory, researchers began to put forward charismatic, transformational and visionary theories to interpret leadership [3]. Among them, the transformational theory believes that the essence of leadership is a comprehensive concept

integrating personal charm, determination and correct motivation [4]. Domestic research on leadership is to judge the level of leadership according to the degree of matching between the measured person and this trait, but it has designed a list of different behaviors and assessment tools for different situations, and the widely used questionnaire tool is leadership practice [5]. This tool has the advantages of advanced theory and high validity. The advanced theory shows that its theory is formed according to the theory of transformational leadership. The high validity shows that the scheme has a high compatibility validity and structural validity, and has a substantial stability in the specific dynamic application [6-7].

On the whole, there are still some deficiencies in the existing researches on the formation of the concept of leadership. First, there are differences in the interpretation of its connotation and structure, and the reliability and validity tests of empirical tools are not standardized. Second, the research on leadership has not broken through the way of self-evaluation or questionnaire, but it is difficult to form a comparison between the two. Thirdly, there is a lack of empirical research on the leadership structure and its generating factors of university administrative leading cadres [8-9]. In order to make up for these defects, the research of this paper will carry out the following innovations: first, obtain the measurement structure and questionnaire applicable to the leadership of university administrative cadres by means of confirmatory factor analysis; Second, the evaluation of the leadership of administrative cadres adopts the method of combining self-evaluation questionnaire with other evaluation questionnaire. Thirdly, the characteristics of leadership of administrative cadres in colleges and universities are described in depth, and improvement measures are discussed and pointed out [10-11].

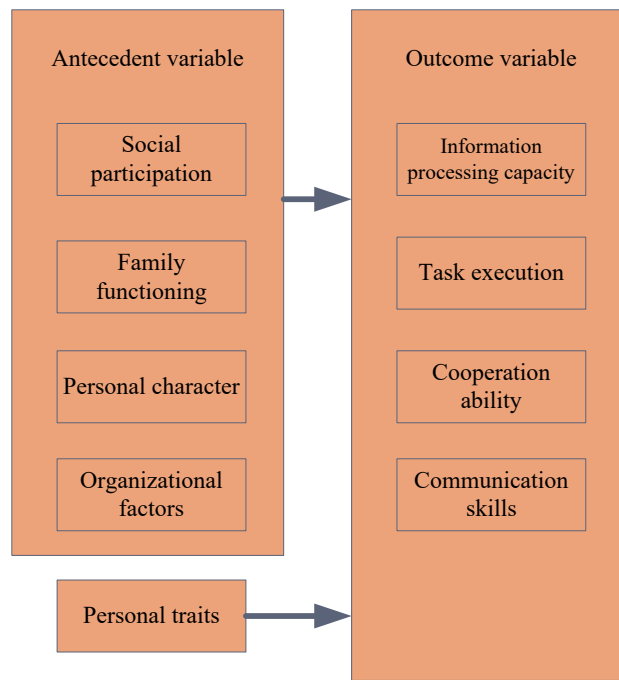
## **2. Research Design**

### **2.1 Research Purpose**

Leadership structure is a popular interdisciplinary in recent years. In the introduction, we have explained that there is no agreement on the structural dimension of the leadership of cadres in colleges and universities at home and abroad, and the research on the structure of leadership is mostly from the theoretical aspects of the discussion, the lack of empirical research. In addition, the study on antecedent variables of leadership is superficial and lacks the foresight to take organizational factors into consideration [12]. Therefore, the research of this paper is based on the existing basis, through the model structure dimension and antecedent variable dimension of university leadership structure, and then verify the influence of each factor on the leadership structure. In view of this, this paper has the following research objectives: first, the questionnaire survey is adopted to study the multidimensional structure of leadership, modify the leadership quality scale, and verify the structure and measurement tools of leadership of cadres in colleges and universities, without providing the corresponding basis for subsequent research. Second, the differences in individual and organizational characteristics of each dimension of leadership of administrative cadres are investigated, and the relationship between each dimension of leadership of administrative cadres is verified by using SPSS analysis software.

### **2.2 Leadership Structure and its Influencing Factor Relationship Model**

Through the analysis above, the antecedent variables of the leadership of university administrative cadres include four aspects: organization, individual, family and society. The leadership structure adopts the viewpoint of ideological and moral character, personal authority and emotional factors, and studies the influence factors of leadership as outcome variables. At the same time, individual trait variables were added to the research model to obtain the differences in leadership of administrative cadres with different traits in various dimensions. The resulting leadership structure and its influencing factors relationship model were shown in figure 1 below.



**Figure 1.** Model diagram of leadership structure and its influencing factors

### 2.3 Statistical Analysis Methods

The research of this paper is carried out through the questionnaire survey of 285 administrative leading cadres in colleges and universities. In the specific implementation process, the currently popular SPSS analysis software is used for sample data analysis and statistics, specifically involving internal consistency reliability test, correlation analysis and independent sample detection. The validity of the questionnaires was tested by factor analysis, and the reliability of the questionnaires was tested by internal consistency reliability. Using the independent sample test, one-way analysis of variance and comparison to investigate the differences of the leadership of administrative cadres and their different dimensions in different individual characteristics.

## 3. Experiment

### 3.1 Sources of Experimental Data

The questionnaire survey in this paper was conducted from September to November, 2019, and the respondents were administrative leaders of zhengzhou university. A total of 300 questionnaires were issued. After the questionnaire was returned, three evaluation criteria were used :(1) the same answer appeared continuously; (2) whether there is a logical conflict; (3) whether there are any missing questions, 285 valid questionnaires were finally selected, and the effective rate of the questionnaire was 95%. After the questionnaire was recovered, SPSS analysis software was used to process the data, and factor analysis and validity analysis were used to verify the scales A, B, C, D and E.

### 3.2 Experimental Operation Process

After the preliminary investigation and judgment, this paper thinks that the factor analysis method is the best method to carry out the questionnaire structure validity. Factor analysis method can test the structural validity of each scale, but the premise is that there is a high correlation between each scale, so it is decided to use KMO value to test the correlation between each question in the questionnaire. KMO represents the adequacy of sampling. When the KMO value is larger, it represents more common factors and is more suitable for factor analysis. When KMO value < range, the correlation between scales is weak, which is not suitable for factor analysis. When the KMO value is greater than 0.7, it indicates that the correlation between factors has a strong performance, which is suitable for factor analysis. Cronbach coefficient is adopted in the reliability

measurement in this paper. When the internal consistency exceeds 0.7, it indicates that the reliability of the questionnaire is good.

## 4. Discuss

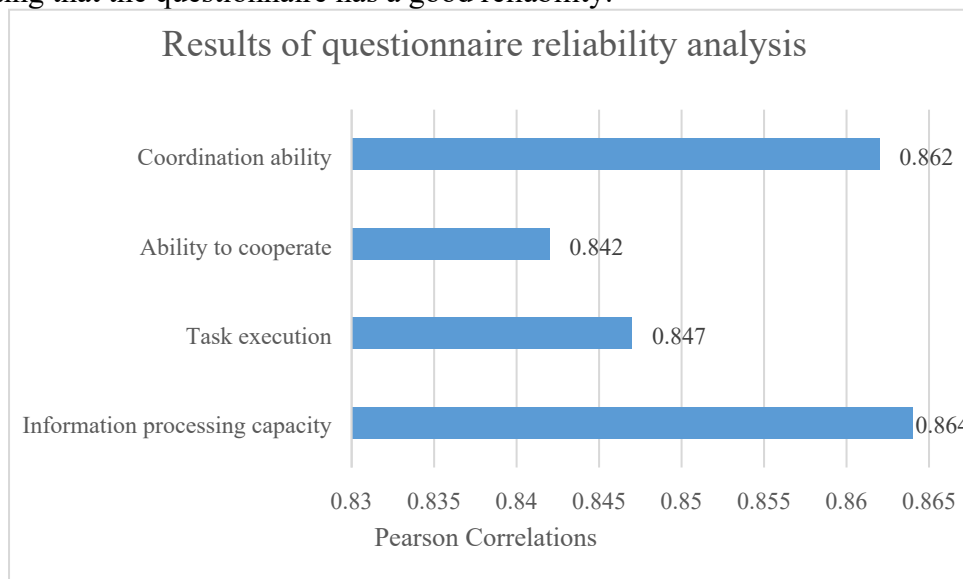
### 4.1 Structure Exploration and Reliability Analysis of Leadership Questionnaire for Administrative Cadres

The KMO value representing sample correlation was 0.763, greater than 0.7, and the probability of significant correlation was less than 0.01, indicating that the acquired sample data was suitable for factor analysis. The factor load matrix is shown in table 1 below after the factor extracted by principal component analysis is rotated.

**Table 1.** Factor load matrix

| Scale                 | A     | B     | C     | D     | E     | KMO   |
|-----------------------|-------|-------|-------|-------|-------|-------|
| Ideological and moral | 0.716 | 0.715 | 0.733 | 0.75  | 0.744 | 0.768 |
| Personal authority    | 0.742 | 0.722 | 0.732 | 0.706 | 0.717 |       |
| Emotional factors     | 0.75  | 0.742 | 0.742 | 0.724 | 0.715 |       |

It can be concluded from table 1 above that the factor load of each question is greater than 0.5, and the questionnaire is fitted into four dimensions. The four factors accounted for 70.47% of the variation, indicating that the designed questionnaire had good structural validity and could be followed by further research. In the following research, the sample reliability of this scale was collected and analyzed. The results of reliability analysis are shown in figure 2 below. It can be seen that the reliability coefficient of leadership of administrative cadres in the sample universities is 0.911, indicating that the questionnaire has a good reliability.



**Figure 2.** Questionnaire reliability analysis results

According to the survey results in figure 1, the biggest factor affecting the leadership of cadres is the information processing ability, whose coefficient of reliability is 0.864. The second is the ability to coordinate and communicate, and the reliability coefficient is 0.862. The second is the work execution ability, and the reliability coefficient is 0.847. Finally, the cooperation ability, and the reliability coefficient is 0.842.

### 4.2 Analysis of Influencing Factors of Leadership

#### (1) Personal qualities

For the university administrative leaders, whether the individual has positive, honest and trustworthy, open-minded and other good qualities is the gold standard to examine their leadership. Leading cadres must be strict with themselves, in the process of organizing affairs to strengthen

self-study, orderly development, promote the work, in their own words and deeds to establish a good image, can be recognized by others.

#### (2) Service awareness

According to the research results, the score of reliability of cadres who have never served others is generally lower than that of leading cadres who have served. What this tells us is that only by truly bringing benefits to others and safeguarding their rights can we gain their respect and trust. In order to improve or strengthen their leadership, it is very important for administrative cadres in colleges and universities to find out this problem with a keen eye and carry it out seriously in their daily work.

#### (3) Personality traits

Personality is the best judgment variable for the stability of leadership of administrative leaders in colleges and universities. In the work of the administrative system of colleges and universities, the leading cadres who are serious and do not procrastinate often have strong working ability, which further clarifies that the administrative cadres of colleges and universities should pay attention to the cultivation of their personality characteristics. Extroverted managers give people a sense of security and good conversation, so these good personality traits are also an important factor in the formation of leadership.

### Conclusion

The leadership of university administrative cadres plays an important role in improving the quality of the young students and promoting the orderly progress of the school's work. In terms of the constitution of leading cadres, it is composed of their ideological and moral character, personal authority and emotional factors. The research of this paper has drawn the following important conclusions:

(1) The biggest generating factors of administrative leading cadres are organizational environment and policies, which include sound selection mechanism, working environment in administrative system and policy factors.

(2) The factors hindering the development of leadership include the factors of personal ability, training and public opinion.

(3) The trait factor is also an integral part of the leadership of administrative cadres in colleges and universities, which involves the interpersonal relationship and influence factors of cadres.

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