

Research on the Mechanism of Organizational Hierarchy on the Work Attitude of Chinese Local Civil Servants based on Big Data

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Abstract: This paper integrates the variables of organizational hierarchy and general self-efficacy that affects civil servants' work attitudes and constructs a hypothetical model reflecting the relationship between those three variables. This paper collected questionnaire data from 2353 civil servants in China using the internet snowballing methods and built a big data database. It found through regression analysis that organizational hierarchy positively affects local government civil servants' work attitudes: the higher the organizational hierarchy, the better the work attitudes of local government civil servants; general self-efficacy plays a mediating role between organizational hierarchy and local government civil servants' work attitudes. The empirical results of this paper suggest that China needs to pay attention to the improvement of civil servants' work attitudes at the grassroots level, improve the treatment of civil servants at the grassroots level, improve the promotion mechanism of civil servants at the grassroots level, and strengthen the humanistic care for civil servants at the grassroots level, so as to enhance the general self-efficacy of civil servants and achieve the improvement of civil servants' work attitudes.


1 INTRODUCTION

The work attitude of civil servants in government departments is one of the important aspects affecting the effectiveness of service-oriented government construction, and the study of civil servants' work attitude has received extensive attention(Zhu 2017) . In 2004, the Chinese government's work report proposed for the first time that service-oriented government is the main goal of Chinese government reform. Many studies have shown that government performance is significantly influenced by the work attitudes of government civil servants (Kang 2017). Many studies have shown that government performance is significantly influenced by the attitude of government employees. Currently, Chinese local government civil servants are facing multiple political and administrative pressures, which makes it more challenging to maintain a good work attitude of local government civil servants. This

brings the government a realistic question: whether local government civil servants can maintain good work attitudes despite the increased intensity of pressure and thus maintain the level of public satisfaction with the government. Previous studies on the factors influencing civil servants' job attitudes have found that job stress significantly affects civil servants' job attitudes. However, civil servants at different organizational levels are subject to different levels of work stress, so it can be further explored whether organizational level affects civil servants' work attitudes. In the real work situation, civil servants at the grassroots and window level often face transactional stress, which lasts for a short period of time and disappears with the processing of affairs, while civil servants at the top level of the organizational hierarchy face coordination and co-ordination stress, which often follows them throughout their career. In view of this, this paper will delve into the relationship between organizational

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hierarchy and civil servants' work attitudes and its mechanism of action, to enrich the related field research. According to the general self-efficacy theory, general self-efficacy refers to individuals' evaluation of their own work ability, including work competence and work confidence, which will directly affect people's behaviours. General self-efficacy is derived from work experience, social experience, and other aspects (Dong 2010). The first is successful work experience, the second is alternative experience, the second is motivation, and the last is emotion. This paper introduces general self-efficacy in the process of discussing the influence of organizational level on civil servants' work attitudes, which has certain innovative value and exploratory nature, and provides reference value for other scholars to study the relationship between organizational level and civil servants' work attitudes, thus enriching the existing civil servants' work attitude related models, and also provides theoretical support for local governments to improve civil servants' work attitudes and build a service-oriented government..

2 LITERATURE REVIEW AND RESEARCH HYPOTHESIS

2.1 Organizational Hierarchy and Civil Servants' Work Attitudes

Stephen P. Robbins is representative of the concept of work attitude, stating that work attitude is the attitude displayed at work, which focuses on various types of employee perceptions and evaluations of the work itself and the environment (Robbins 1996). Conte and other scholars believe that job attitudes consist of job satisfaction, work engagement and organizational commitment (Conte 2005). At present, scholars generally divide job attitudes into job satisfaction, organizational commitment and work engagement and apply these three dimensions to develop relevant scales. Thus, civil servants' job attitudes refer to the attitudes shown by civil servants at all levels of local governments in the face of their jobs and work units, including three major dimensions of job satisfaction, organizational commitment, and work engagement. The April 2019 issue of "The China Quarterly" published an article titled "Serving the People: Income, Regions, and Citizen Satisfaction with Government Governance," which suggested that Chinese citizens' satisfaction with government governance is influenced by the level of government. The findings of this study suggest that satisfaction

decreases as the level of government decreases. That is, public satisfaction changes with organizational hierarchy. In addition, one of the important influencing factors in public satisfaction with government governance is the work attitude of civil servants. Many cases and news show that grassroots civil servants have worse attitudes, and often also show the worst attitudes of window civil servants. Based on this, this study proposes hypothesis 1.

H1: Organizational hierarchy positively affects local government civil servants' work attitudes.

2.2 The Mediating Role of General Self-efficacy

Judge views general self-efficacy as an evaluation of one's own abilities, including perceptions of one's ability to accomplish work tasks and organizational goals and to successfully deal with external environmental challenges, and it often affects confidence and performance (Judge 2003). Sherer notes that individuals with different social experiences and social exposure, especially those who have experienced different states of success and failure, have different perceptions of self-efficacy, resulting in cognitive differences (Sherer 1982). Based on this, this study argues that different organizations have different self-efficacy. Based on this, this study argues that the general self-efficacy of civil servants at different organizational levels also differs due to their past successes and failures, values, and cognitive levels. People at higher levels in the organization tend to have deeper experience, higher cognitive level, and richer work experience, and they tend to be able to confront failure and thus develop higher general self-efficacy. People at the lower levels of the organization tend to be more shallow, less cognitive, and have less work experience, and they tend to be unable to face up to failure, thus developing a lower sense of general self-efficacy. At the same time, the higher up in the organizational hierarchy, the more they are responsible for decision-making, so they are better able to summarize the successes of others than those at lower levels. In addition, the higher the level of responsibility, the more attentive they are to learning from their experiences, so their general self-efficacy is also higher. At the same time, the higher up in the organizational hierarchy, the stronger the emotional control they need to have in order to solve problems better and faster, so the higher up in the organization, the higher their general self-efficacy. Based on this, this study proposes hypothesis 2.

H2: Organizational hierarchy positively influences general self-efficacy.

In a study on the relationship between general self-efficacy and job attitudes, McDonald and Siegall noted that general self-efficacy has a positive relationship with job satisfaction and positively influences organizational commitment and job engagement. According to the main claims of social cognitive theory, people with higher general self-efficacy have higher self-expectations and show higher performance in pursuit of higher goals, which leads to more motivation (Wang 2014). Judge also suggests that people with higher general self-efficacy are more demanding, more courageous in the face of challenges, and less likely to be defeated by setbacks, thus achieving better job performance and need satisfaction and higher job satisfaction (Judge 2003). This leads to better job performance and demand satisfaction, and higher job satisfaction. At the same time, higher general self-efficacy leads to higher self-expectations and higher need satisfaction in the process of achieving self-expectations, which leads to greater adherence to the organization and higher organizational commitment (Zhang 2008). Most researchers believe that general self-efficacy is positively related to job satisfaction and to organizational commitment (Zelars 2001). Based on this, this study proposes hypothesis 3.

H3: General sense of efficacy positively affects the attitude of local government civil servants towards work.

In summary, this paper argues that organizational hierarchy positively affects work attitudes, organizational hierarchy positively affects general self-efficacy, and general self-efficacy positively affects work attitudes; in other words, general self-efficacy can mediate the effect of organizational hierarchy on civil servants' work attitudes, thus hypothesis 4 is proposed.

H4: General self-efficacy mediates attitudes toward work in organizational hierarchy and local government civil servants.

3 STUDY DESIGN

3.1 Data Collection

We collected the questionnaire data by internet snowballing methods. The data were collected mainly from civil servants at various levels in Sichuan, Shandong, Yunnan, and Guangdong in China. The questionnaires were distributed to civil servants among MPA students of University D in the form of

online distribution, and the distribution of this paper was assisted by the discipline inspection department of Chengdu City, Sichuan Province, in the form of internal official documents. The survey recovered 2353 valid questionnaires. Among them, 49.51% were male and 50.49% were female; the number of people aged 21-30 accounted for 37.1% of the total number; the number of people aged 31-40 accounted for 37.48% of the total number. In terms of marital status, 73.6% of the respondents were married. In terms of education level, many respondents were bachelor's degree holders, accounting for 50.36%.

3.2 Variable Operationalization

The organizational hierarchy is divided into street office or township department, county department, city department, and provincial department with reference to the section hierarchy theory. General self-efficacy refers to the General Self-Efficacy Scale developed by Schwarzer and his collaborator Jerusalem and localized operation with the work style and work characteristics of local government civil servants in China to make it more in line with civil servants' group responses (Zhang 2008). Job satisfaction refers to the job satisfaction scale developed by Kanman in 1983, and at the same time combines with the six-factor model of job satisfaction (Ling 2003). The operationalized definition of job satisfaction is summarized. Organizational commitment is based on the Affective Commitment Scale (ACS) developed by Meyer and Allen in 1997, and combined with the organizational commitment scale constructed by scholars such as Ambrose Ling in the cultural context of China, the operationalized definition of organizational commitment of local government civil servants is summarized (Ling 2001). The operationalized definition of work commitment was summarized by referring to the ten-question scale developed by Kanungo in 1982 (Kanungo 1982). The results of the reliability test showed that the Cronbach's alpha coefficient of the questionnaire as a whole and each part of the scale was greater than 0.8, indicating high reliability.

4 DATA ANALYSIS

4.1 Reliability Test

In this paper, Cronbach's alpha coefficient was used to examine the overall reliability of the questionnaire. The results showed that the questionnaire and each subscale had high reliability. Principal component

analysis in exploratory factor analysis was used to test the validity of the questionnaire. The results showed that the validity of the questionnaire was good, and correlation and regression analysis could be performed.

4.2 Descriptive Statistics

The mean values of the answers given by the respondents of each question item involved in this paper were within the interval of 3.03 to 4.05; the absolute values of skewness were below 2 and the absolute values of kurtosis were below 3. According to the viewpoint proposed by Kline, the sample data of this study belonged to normal distribution, and it was determined that the data of this study could be used to do correlation and regression analysis.

4.3 Correlation Analysis

Organizational level and job satisfaction were significantly positively correlated ($r=0.401, p<0.01$);

organizational level and organizational commitment were significantly positively correlated ($r=0.381, p<0.01$); organizational level and job engagement were significantly positively correlated ($r=0.329, p<0.01$); organizational level and general self-efficacy were significantly positively correlated ($r=0.361, p < 0.01$); general self-efficacy and job satisfaction were significantly positively correlated ($r=0.423, p<0.01$); general self-efficacy and organizational commitment were significantly positively correlated ($r=0.415, p<0.01$); and general self-efficacy and job engagement were significantly positively correlated ($r=0.355, p<0.01$). Therefore, the hypotheses that organizational level positively affects job attitude, organizational level positively affects general self-efficacy, and general self-efficacy positively affects job attitude of local government civil servants are initially valid. The results of the correlation analysis in this paper are shown in “Tables 1”.

Table 1: Correlation analysis.

	Organizational Levels	General self-efficacy
Job satisfaction	0.401**	0.423**
Organizational commitment	0.381**	0.415**
Work input	0.329**	0.355**
General self-efficacy	0.361**	/

** The correlation coefficient was significant at the significance level of 0.01 (two-tailed test)

4.4 Regression Analysis

The regression coefficient of organizational hierarchy on job satisfaction was 0.089 ($p < 0.01$), indicating that organizational hierarchy has a significant positive effect on job satisfaction. The regression coefficient of organizational hierarchy on organizational commitment was 0.068 ($p < 0.01$), indicating that organizational hierarchy has a significant positive effect on organizational commitment. The regression coefficient of organizational hierarchy and work commitment was 0.097 ($p < 0.01$), indicating that organizational hierarchy has a significant positive effect on work commitment. In summary, it was determined that organizational hierarchy has a significant positive effect on work attitudes, and therefore hypothesis 1 is valid.

In addition, the regression coefficient of general self-efficacy and organizational hierarchy was 0.083

($p < 0.01$), indicating that organizational hierarchy has a significant positive effect on general self-efficacy, and hypothesis 2 was judged to be valid.

The regression coefficient of general self-efficacy on job satisfaction was 0.280 ($p < 0.01$), indicating that general self-efficacy has a significant positive effect on job satisfaction. The regression coefficient of general self-efficacy on organizational commitment was 0.258 ($p < 0.01$), indicating that general self-efficacy has a significant positive effect on organizational commitment. The regression coefficient of general self-efficacy on work commitment was 0.187 ($p < 0.01$), indicating that general self-efficacy has a significant positive effect on work commitment. In summary, hypothesis 3 was judged to be valid. The results of the regression analysis are shown in “Table 2”. The variable names in the table are used by their acronyms.

Table 2: Regression analysis.

Models		Unstandardized coefficient		Standardized coefficient	t	VIF
		Beta	Standard error	Beta		
1	(Constant)	3.549	0.063	-	56.402	-
	JS	0.089**	0.018	0.101	4.906	1
	OC	0.068**	0.017	0.081	3.937	1
	WI	0.097**	0.015	0.129	6.317	1
	GSSE	0.083**	0.021	0.081	3.947	1
2	(Constant)	2.998	0.054	-	55.694	-
	JS	0.28**	0.017	0.323	16.549	1
	OC	0.258**	0.016	0.315	16.075	1
	WI	0.187**	0.015	0.255	12.807	1

** The correlation coefficient was significant at the significance level of 0.01 (two-tailed test)

Model 1 Dependent variable: Organizational Levels

Model 1 Dependent variable: General Self-efficacy

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4.5 Intermediation Effect Test

We use the causal stepwise regression test method to test the intermediation effect. The results are shown in “Table 3”. The variable names in the table are used by their acronyms.

Table 3: Intermediation effect test.

Independent variable	Dependent variable	Beta	Adjusted R ²
OL	JS	0.089**	0.16
OL→GSSE	JS	0.066**	0.176
OL	OC	0.068**	0.192
OL→GSSE	OC	0.047**	0.181
OL	WI	0.097**	0.166
OL→GSSE	WI	0.082**	0.184

** The correlation coefficient was significant at the significance level of 0.01 (two-tailed test)

We found that after introducing general self-efficacy as a mediating variable between organizational hierarchy and job satisfaction, the regression coefficient decreased from 0.089 to 0.061 ($p < 0.01$), indicating that general self-efficacy has a partial mediating effect between organizational hierarchy and job satisfaction. After introducing general self-efficacy as a mediating analysis between organizational hierarchy and job satisfaction, the regression coefficient decreased from 0.068 to 0.047

($p < 0.01$), indicating that general self-efficacy has a partial mediating effect between organizational hierarchy and job satisfaction. After introducing general self-efficacy as a mediating variable between organizational hierarchy and job attitudes, the regression coefficient decreased from 0.097 to 0.082 ($p < 0.01$), indicating that general self-efficacy has a partial mediating effect between organizational hierarchy and job attitudes. In conclusion, general self-efficacy has a partial mediating effect between organizational hierarchy and job attitudes, and hypothesis 4 is judged to be valid.

5 CONCLUSIONS AND DISCUSSIONS

This paper analyses the role of organizational hierarchy and general self-efficacy in influencing civil servants' work attitudes, drawing on section hierarchy theory and general self-efficacy theory. The results show that the higher the organizational hierarchy, the better the work attitudes of civil servants. At the same time, the higher the organizational hierarchy, the better the general self-efficacy of civil servants, which positively affects their work attitudes. The results of this study show that the lower the organizational hierarchy, the worse the work attitude of civil servants. Therefore, the focus of improving civil servants' work attitudes should be placed on grassroots civil servants. I, pay attention to the improvement of the work attitude of grassroots civil servants. II, improve the education and training mechanism of grassroots civil servants. III, improve the treatment of grass-roots civil servants and strengthen the humanistic care for them. Improve the promotion mechanism of grassroots civil servants' positions. V, pay attention to improving the general

self-efficacy of civil servants and realize the improvement of general self-efficacy by improving the self-confidence and emergency response ability of civil servants, to realize the improvement of civil servants' work attitude. VI, Improve civil servants' ideal beliefs and goal consciousness. VII, Enhance civil servants' sense of professional honour. VIII, Strengthen the professional competence training of civil servants.

The report of the 19th National Congress of the Communist Party of China clearly puts forward the modernization of government governance, transforming government functions, comprehensively promoting the simplification of government and deepening reform of supervision methods, and building a service-oriented government that satisfies the people. Civil servants are the key to the construction of service-oriented government, and the work attitude of civil servants is important for their work goals and organizational goals to achieve. However, news about poor attitudes of grassroots civil servants are common in real life, so it is important to explore the influence of organizational hierarchy on the attitudes of local government civil servants and make corresponding suggestions based on this to improve the work attitudes of local government civil servants.

The study of organizational hierarchy on the work attitudes of local government civil servants is innovative, and this paper proposes a new perspective to explore the work attitudes of local government civil servants, while introducing a new variable of general self-efficacy. At present, most scholars' research on general self-efficacy has mainly focused on the study of corporate employees, and less research has been conducted on the effect of general self-efficacy on civil servants' work attitudes. Therefore, this study is exploratory in nature, but there are certain shortcomings of the study due to its own subjective and objective conditions. First, the main respondents come from Sichuan, Shandong, Yunnan, and Guangdong provinces. Therefore, the uneven distribution of sample size becomes a problem. The diversity of respondents can be increased appropriately in the future. Second, this study mainly considered the influence of organizational level on the work attitude of local government civil servants. Other variables can be considered in future studies.

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