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The Impact of Competency on Work Dynamic — Evidence from Grassroots Civil Servants in China

Xiaodong Hu*, Wanyi Huang

School of Politics and Public Management, China University of Political Science and Law, Beijing, China

Abstract

In recent years, incentivising civil servants to work has been at the heart of future civil service reforms in many countries. To investigate the micro-mechanism and its boundary conditions of grassroots civil servants' competency on their individual work dynamic, this study explores the influence of grassroots civil servants' competency on work dynamic, the mediating role of occupational resilience and the moderating role of organizational fault-tolerant climate. Data were obtained from 667 grassroots civil servants in China and analyzed with regression analyses by the PROCESS macro. The results showed that competency of grassroots civil servants can significantly enhance their work dynamic; occupational resilience plays a mediating role in competency and work dynamic, specifically, occupational resilience plays a complete mediating role in the relationship between public service motivation and work dynamic, and a partial mediating role in the relationship between job autonomy and work dynamic among grassroots civil servants; the direct relationship between three sub-dimensions of competency (ability, public service motivation and job autonomy) and work dynamic of grassroots civil servants is negatively moderated by organizational fault-tolerant climate. The findings of the study provide useful insights for deepening theoretical research on the work dynamic of grassroots civil servants, and for enhancing the effectiveness of the incentive system in management practice.

Keywords

Work Dynamic, Competency, Occupational Resilience, Organizational Fault-tolerant Climate

1. Introduction

From the beginning of the 21st century to the present, reforms in developing countries have focused on improving the quality and work dynamic of public servants, establishing better recruitment and promotion systems and, ultimately, improving the delivery of public services [7, 44]. China's civil service also suffers from a variety of complexities, with a prominent problem being the increasing confusion and low work dynamic of some cadres. The issues of insufficient work dynamic and the deviation of work dynamic among grassroots

civil servants have drawn the attention of the Disciplinary Inspection Committee of the Central Committee of the Communist Party of China (CPC) and the National Supervisory Commission (NSC), which began to publicly notify the public of incidents of "irresponsibility, inaction, disorderly acts and fake acts" through its portal in 2016. The central and local governments in China have also taken a series of measures to promote civil service construction and institutional reform, with the fundamental aim of maximizing the

work dynamic of civil servants. How to stimulate the work dynamic of grassroots civil servants constitutes a key consideration in China's state governance.

In the book "The Future of Governing: Four Emerging Models", B. Guy Peters explains how the changing governance model of government, which is market-oriented, participatory, flexible and uncoordinated, requires civil servants to pay more attention to the efficiency of their work and to fully mobilize their initiative and creativity, [39] thus placing higher demands on their competency and innovation. Among them, grassroots civil servants (below the division-level), as the cornerstone of the "pyramid-shaped" civil service hierarchy, have a stake in people's well-being in terms of their quality and professionalism. Grassroots civil servants have been given higher competency requirements, however, they have revealed a lack of competency in governance practices at the same time. The lack of competency among civil servants is mainly reflected in communication ability, innovation ability, investigation and research ability, planning and coordination ability, learning ability, digital ability. [26, 32] Some research reports show that the competency of township civil servants is generally insufficient, which restricts the promotion of rural revitalization and the high-quality development of local areas. There is a certain disconnect between the overall quality of grassroots civil servants and the real needs of economic, social and cultural development in China [20].

China has always been committed to building a high-quality and professional civil service, relying on strong institutional advantages and governance traditions to motivate civil servants to develop and innovate in their professional fields, and has made new progress and achieved new results in the field of public governance. However, the phenomenon of civil servants being "unable to act, unwilling to act and afraid to act" has occurred from time to time in the process of building the civil service team due to the design and operation of the system. According to an investigation report, 71.7% of respondents often encountered inaction on the part of officials in their dealings with grassroots civil servants. [48] It is evident that the problems of grassroots civil servants' work dynamic have become an undeniable reality. To address this negative phenomenon, it is essential to explore the deep-seated reasons behind it. In March 2023, Xi Jinping, President of the People's Republic of China, emphasized at the 90th Anniversary Celebration Conference of the founding of the Central Party School and the Opening Ceremony of the Spring Semester of 2023 that "to do one's duty and start undertakings, one should not only have a firm political stance but also be highly competency." [51] This expression reveals the influential relationship between civil servants' competency and work dynamic. A survey report shows that 48.6% of civil servants attribute the main obstacle to their work dynamic to their own limited level of competency. [37] This survey data indicates that the lack of civil servants' competency is likely to be a major impediment to work dynamic.

This paper intends to explore the following questions: what is the current level of work dynamic among grassroots civil servants in China? What are the determinants of work dynamic? What kind of mechanisis exist among these factors that affect grassroots civil servants' work dynamic? In order to answer the above questions, this study is based on a questionnaire survey to objectively assess the competency of grassroots civil servants in China and to explore the mechanism of its influence on work dynamic.

2. Literature Review

Research on the work dynamic of civil servants in China has primarily focused on concrete descriptive studies, such as research on insufficient dynamic and dynamic deviation. [15]. Existing studies have explored, from different perspectives, the phenomena of insufficient work dynamic, shirking responsibilities, fear of accountability, and behavioral deviation, as well as the problem of deviation in the direction of dynamic, which is mainly manifested in the forms of "formalism" and "falsification". [10, 22, 27, 34, 36] Other studies have examined the negative impact of these manifestations, concluding that "inaction" leads to a decline in administrative efficiency and damage to the public interest, which not only undermines the credibility of the government, but also affects the effectiveness of public services. [2, 47]

The relevant research on the factors influencing the work dynamic of civil servants in China mainly focuses on the identification and quantification of the influencing factors, and the improvement of the research methods and research models. Two research reports have investigated the influencing factors of grassroots civil servants' work dynamic. One report reveals that the evaluation scores of job autonomy among grassroots cadres are relatively low, which hinders their innovative performance under the new development paradigm. [28] According to another report, "pseudo-innovation" and other formalistic and bureaucratic behaviors have become the main factors negatively affecting dynamic for entrepreneurship and initiative. [18] A study identifies the influencing factors through the questionnaire survey method and finds that factors such as salary and benefits, space for development, environmental atmosphere, work pressure, ideals and beliefs, self-worth, and institutional system all affect the work dynamic of grassroots civil servants. [30] Another study constructed a fifth generation incentive model for grassroots party and government cadres in China, and found that performance appraisal, work tasks, and public demands significantly affect the administrative dynamic, with career aspirations demonstrating a mediating effect and promotion prospects exhibiting a moderating effect. [6] The latest study uses in-depth interviews and questionnaires to study the work dynamic of civil servants in township streets, and uses the Amos structural equation model to conduct exploratory factor analysis and confirmatory factor analysis, and extracts the all-factor model of work dynamic of grassroots civil servants. Through the empirical analysis of the "small

incisions" of the sample, the total factor motivation model covering four factors, including "expansion incentive, affinity organization, self-efficacy and moderate pressure". [16] In the construction of incentive models, existing studies have primarily drawn upon theoretical foundations such as New Institutional Theory, Political Tournament Theory, Administrative Subcontracting Theory, Self-Determination Theory, Person-Organization Fit Theory, and Motivated Information Processing Theory to examine both institutional factors and individual characteristics that influence the work dynamic of grassroots civil servants.

Although institutional factors have become a hotspot for academics to explore the issue of insufficient work dynamic, from the established work dynamic incentive model and evidence from neuroeconomics, we can find that personality traits constitute a critical dimension in studies of grassroots civil servants' work dynamic, and the motivational role of self-determination should not be underestimated. [31] The idea of self-determination has been confirmed in the famous evolutionary psychology experiment of "Skinner Box Experiment", in which individuals are naturally driven to self-determination through long-term survival games and adaptive evolution, expecting to influence the outcome of outputs by taking control of their work, and obtaining fulfillment experiences in the process. [17] This individual's capacity to effectively control the environment, constructed through the experience of interacting with the environment, is called competency. [8] Under China's strategy of building a high-quality and professional civil service, a large number of effective practices of civil service competency training have actually emerged, inspiring more and more scholars to focus their attention on the deconstruction of civil service competency, [41, 45, 56] existing researches have explored competency development among civil servants across administrative hierarchies and occupational classifications. [40, 59] However, there have been relatively few studies focusing on the construction of a framework for the competency of grassroots civil servants. It should be noted that civil service competency includes but is not limited to civil service ability. The concept of competency has a broader scope which refers to a collection of key elemental indicators such as motivation, traits, self-concept, attitudes or values, knowledge or skills, among others that determine the strengths and weaknesses of employee performance. [33] The ability of civil servants refers to their proficiency in administrative procedures and strategic operations when performing public affairs management for the state and society, encompassing knowledge and skills. [50] Some scholars have focused on the important role of motivation as a competency of civil servants. [53] In addition, this study argues that job autonomy is also one of the competency characteristics of civil servants. Autonomy refers to an individual's ability to control work activities. [46] This ability to control is the freedom, independence and discretion that work gives individuals in organizing their work and deciding how it should be done. [1, 11] different from the talents

and aptitudes that the individual has on his or her own. In the Chinese context, grassroots civil servants are often engaged in transactional work and maintain close contact with the grassroots masses, requiring flexibility and adaptability in responding promptly to a variety of complex and volatile work with the masses. Without adequate autonomy, grassroots civil servants may be unable to perform their duties competently. Therefore, this study deconstructs the competency of grassroots civil servants into ability, public service motivation and job autonomy.

Work dynamic is the psychological drive for the behaviors that individuals have at work, and it is a combination of both positive and negative drives. [16] Based on Maslow's Hierarchy of Needs, positive drive comes from the need for fulfillment. The need for competency is one of the three basic needs of individuals, [3] reflecting their belief in their ability and their desire to control their external environment. The fulfillment of ability needs, motivation needs, and autonomy needs may stimulate the work dynamic of grassroots civil servants. According to Self-Determination Theory, limited satisfaction of autonomy needs and ability needs at work may lead to the weakening of grassroots civil servants' work dynamic and initiative, which in turn triggers their negative emotions and behaviors such as occupational burnout, administrative inaction and turnover intention. [55] The mechanisms by which public service motivation influences work dynamic have been confirmed by many studies [49]. It has been argued that civil servants under the orientation of public service motivation have a higher sense of identification with their work tasks and are able to recognize the significance of their work more profoundly, thus generating higher work dynamic [19]. The following hypothesis is therefore formulated:

Hypothesis 1: There is a significant positive effect of competency on the work dynamic of grassroots civil servants.

Hypothesis 1a: There is a significant positive effect of the ability of grassroots civil servants on their work dynamic.

Hypothesis 1b: There is a significant positive effect of public service motivation of grassroots civil servants on their work dynamic.

Hypothesis 1c: There is a significant positive effect of job autonomy of grassroots civil servants on their work dynamic.

The process of translating competency into creative outcomes also requires consideration of cognitive frameworks. [22] Cognitive frameworks and cognitive levels are related to an individual's ability to "bounce back" from stress and setbacks, with professionally resilient employees achieving a higher level of cognition during the recovery process, and gaining more experience and knowledge after recovery. [52] It has been suggested that self-efficacy, perceived empowerment, and support from superiors for their career development contribute to an individual's level of career resilience [35], and occupational resilience is positively correlated with individual creativity, endurance, and perseverance [9]. Other studies have empirically concluded that employees' occupa-

tional resilience positively influences behavioral decisions. [21, 25] Grassroots civil servants with stronger personal competency have better adaptability to the environment, are more likely to face various difficulties in their careers and find out ways to get out of the predicament, thus enhancing their work dynamic. The following hypothesis is therefore formulated:

Hypothesis 2: Occupational resilience mediates between competency and work dynamic.

Hypothesis 2a: Occupational resilience mediates between ability and work dynamic.

Hypothesis 2b: Occupational resilience mediates between public service motivation and work dynamic.

Hypothesis 2c: Occupational resilience mediates between job autonomy and work dynamic.

In addition to satisfying the need for competency, the institutional drive is an indispensable factor affecting the work dynamic of grassroots civil servants, and the "system of needs" has become an important source of positive drive. [16] According to Motivated Information Processing Theory, in addition to intuitive perceptions of rewards and job characteristics, individuals weigh and rationally analyze work inputs against risks and benefits to make creative behavioral decisions. This view is also supported by the Peoson-Organization Fit Theory, which states that individual attitudes and behaviors are the result of interactions between individuals and their environments. Grassroots civil servants may weigh the consequences of creative failure when they consider taking the initiative to act creatively. Organizational fault-tolerant climate as a specific organizational context has an important influence on individual innovative behaviors. The construction of governmental error tolerance and correction mechanisms can stimulate civil servants to work positively by im-

proving organizational error management practices, prompting them to reflect and learn from their mistakes, and ultimately stimulating their innovative behaviors. [58] Some research suggests that organizational fault-tolerant climate encourages innovation because it effectively dispels employees' fears and insecurities and prevents them from giving up on innovation due to fear of gain or loss and concern about success or failure. [4, 23] By emphasizing the tolerance of employees' failure, the organization can stimulate the sense of responsibility and obligation of the employees, making them inspired to be more willing to return to the organization through extra efforts, and out of loyalty and recognition of the organization, it will also make the employees show a higher level of innovative dynamic. Similarly, in public sector, if the government is tolerant of the risks or failures of civil servants in the process of trying to innovate, the civil servants will be more courageous; conversely, the phenomenon of "not daring to act" will occur. The following hypothesis is therefore formulated:

Hypothesis 3: Organizational fault-tolerant climate plays a positive moderating role between competency and work dynamic.

Hypothesis 3a: Organizational fault-tolerant climate exerts a positive moderating effect between ability and work dynamic.

Hypothesis 3b: Organizational fault-tolerant climate plays a positive moderating role between public service motivation and work dynamic.

Hypothesis 3c: Organizational fault-tolerant climate exerts a positive moderating effect between job autonomy and work dynamic.
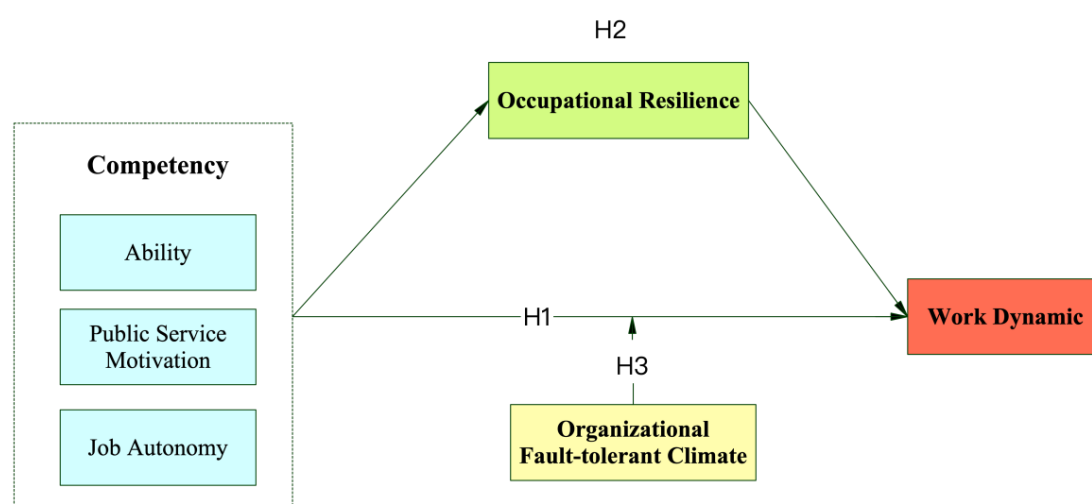
Figure 1. *Model for the hypothesized relationships.*

3. Methodology

3.1. Sample and Data Collection

This study employs a questionnaire-based survey to collect data from grassroots civil servants in China's northeastern and southwestern regions. The reasons for choosing the Northeast and Southwest regions are as follows: firstly, most of the above regions are underdeveloped regions, and the competency of their civil servants may be generally low, research attention should be devoted to competency of these grassroots civil servants; secondly, in the backward regions such as the Northeast and Southwest, there will be more room for innovation and action as long as the grassroots civil servants are "able to do", "want to do", and have resilience. The sampling method used in this study is mainly convenience sampling method and snowball sampling method, the sampling is divided into two stages, a total of 905 questionnaires were recovered, and the invalid questionnaires were eliminated through the methods of ID cleanup, elimination of illegal values and singular values, and checking the abnormal response of the test subjects, etc. Finally, 667 valid questionnaires were screened out, with an effective recovery rate of 73.70%.

3.2. Measurement

The questionnaire survey was conducted using the Competency Scale for Grassroots Civil Servants, the Work Dynamic Scale, the Occupational Resilience Scale and the Organizational Fault-tolerant Climate Scale. To prevent a tendency towards extreme scoring, all scales were scored on a six-point Likert scale ranging from 1 to 6, from "strongly disagree" to "strongly agree".

Independent variable: Competency

This study combines the systematic theories of ability, public service motivation and job autonomy to construct a competency index system for grassroots civil servants to enhance its systematicity and rationality, specifically including the following three dimensions:

Firstly, the ability measurement instrument used was adapted from the existing scales designed by Qvan Y et al, Ma L, and Duan Z et al. [5, 32, 42] The scale contains seven dimensions: personality traits (6), professional proficiency (9), occupational expertise (4), moral trait (5), service awareness (3), legal awareness (3), and digital literacy (3), with a total of 33 items.

Secondly, public service motivation was measured using Perry's authoritative scale [38], which consists of four dimensions: attraction to public policy making (4), commitment to public interest (6), compassion (5), self-sacrifice (7), with a total of 22 items.

Thirdly, the measurement of job autonomy consists of two dimensions: (1)career growth opportunities, using the scale designed by Zhang M et al, which has three items to measure the opportunities that civil servants can perceive at work [57], (2) leadership empowerment, which has five items, represented by the question "My leader gives me corresponding authority so that I can make independent decisions in my work".

Dependent variable: Work Dynamic

As a potential variable that is difficult to measure directly, dynamic needs a series of observational variables to characterize it indirectly. In the measurement of work dynamic of grassroots civil servants in China, some scholars used the work dynamic measurement scale designed by Schaufeli et al. to assess the degree of physical and mental investment and work status of grassroots civil servants in their actual work from the three dimensions of work dynamic: input vigor, dedication and concentration. [6, 15, 43] There are also scholars who measure the work dynamic of grassroots civil servants by means of superior evaluation, which makes the measurement more objective and credible and provides a novel research perspective. [16]

According to the behaviorism viewpoint, objective behavior is the manifestation of subjective psychology, so another feasible way of measurement is to reflect the psychological state through quantitative behavioral indicators. Thus the work dynamic measurement scale adopts the innovative performance dimension scale of the work performance scale designed by Han Y, which consists of 8 question items. [12]

Mediator variable: Occupational Resilience

Occupational resilience of grassroots civil servants is the ability of civil servants to achieve better work results despite being filled with various pressures inside and outside the organization or being in the midst of adversity. [13] Occupational resilience measurement scale adopts the exsiting scale designed by Minghui Wang, which contains four dimensions: occupational risk-taking propensity (5), continuous learning (5), occupational self-efficacy (5), and occupational goals (5), with a total of 20 items.

Moderating variable: Organizational Fault-tolerant Climate

Organizational fault-tolerant climate is a working atmosphere in which the organization tolerates grassroots civil servants' mistakes or even losses in their work that may be caused by their attempts at innovation. This definition precisely reflects the tolerance of mistakes in reform and innovation emphasized by the Central Committee of the Communist Party of China. The organizational fault-tolerant climate scale adopts the exsiting scale designed by Liu Q et al. The scale consists of four dimensions: superior's fault-tolerance (3), colleagues' fault-tolerance (4), institutional fault-tolerance (3), and public fault-tolerance (4), with a total of 14 items.

3.3. Reliability of Data

Reliability refers to the consistency, stability and reliability of the test results. The higher the reliability, the stronger the

consistency, the more stable and reliable the results, and the higher the credibility. Currently, the reliability test used in academic research is Cronbach's alpha. The alpha coefficient of the whole questionnaire amounted to 0.993, and the alpha coefficients of each scale ranged from 0.986 to 0.970, and the alpha coefficients of each secondary dimension factor ranged from 0.927 to 0.973, indicating that the questionnaire had high credibility and consistency. The specific reliability of the questionnaire was analyzed as shown in attenchment.

Kaiser-Meyer-Olkin (KMO) values of study variables ranged from 0.935 to 0.976. Average Variance Extracted (AVE) values ranged from 0.784 to 0.887, Composite Reliability (CR) values ranged from 0.928 to 0.973, factor loading values varied between 0.809 to 0.990, and the AVE root value for each factor was greater than the correlation coefficient of the factor, indicating good discriminant validity. These findings suggest that the scales have good structural validity, convergent validity, discriminant validity in this study.

4. Results

The hypothesis testing analysis method of this study is mainly hierarchical regression analysis by SPSS Process, and main effects, mediating effects and moderating effects are mainly tested by Model4 and Model5.

4.1. Testing Hypothesis 1 and Hypothesis 2

The simple mediation model prepared by Hayes (Model4) was first analyzed controlling for gender, age, education, grade, category, departmental hierarchy, and job training experience, and the results are shown in Table 1. Then, the bias-corrected percentile Bootstrap method was used to repeat the sampling 5000 times and 95% confidence intervals were calculated to test the mediating effect of occupational resilience.

Table 1. *Competency (dimensional dimensions) => Occupational Resilience => Work dynamic.*

	Work Dynamic		Occupational Resilience		Work Dynamic	
	β	t	β	t	β	t
Constant	-	4.899	-	7.85	-	-0.601
Gender	-0.039	-1.526	-0.035	-1.235	-0.018	-0.933
Age	0.018	0.67	0.006	0.189	0.015	0.74
Education	-0.033	-1.161	-0.039	-1.252	-0.009	-0.419
Occupational Category	-0.027	-1.002	-0.062*	-2.092	0.012	0.581
Occupational Rank	-0.072**	-2.805	-0.003	-0.117	-0.070	-3.726
Department Level	0.027	0.982	-0.001	-0.041	0.027	1.382
Experience of Serving Temporary Positions	0.007	0.256	-0.016	-0.548	0.017	0.862
Ability	0.129*	2.376	0.109	1.854	0.060	1.514
Public Service Motivation	0.244**	3.815	0.248**	3.585	0.088	1.852
Job Autonomy	0.417**	8.639	0.388**	7.442	0.172**	4.674
Occupational Resilience					0.631**	23.909
R^2	0.582		0.511		10.015	
Adjusted R^2	0.575		0.504		11.015	
F	91.290***		68.656***		207.150***	

Note: N=667, β represents the standard regression coefficient, t represents the non-standardized regression coefficient/standard error, *p<0.05, **p<0.01, ***p<0.001 (two-tailed test)

According to the results of the test of mediating effect of occupational resilience between competency (sub-dimension) and work dynamic, it can be seen that after controlling for gender, age, education, grade, category, departmental hierar-chy, and experience of serving temporary positions: (1) ability has a significant positive predictive effect on work dynamic (β=0.129, p<0.05), and H1a is established; public service motivation has a significant positive predictive effect

(β=0.244, p<0.01), H1b holds; job autonomy has a significant positive predictive effect on work dynamic (β=0.417, p<0.01), H1c holds. (2) After adding occupational resilience as a mediating variable, ability and public service motivation have no predictive effect on work dynamic, and job autonomy still has a significant positive predictive effect on work dynamic (β=0.172, p<0.01), but the coefficient declined. Using the bias-corrected percentile Bootstrap method, it was further found that the Bootstrap 95% confidence intervals for both the direct effect of ability on work dynamic and the mediating effect of occupational resilience included 0 (for the direct effect: Lower Limit of Confidence Interval (LICI) = -0.019, Upper Limit of Confidence Interval (ULCI) = 0.146; for the mediating effect: LICI = -0.043, ULCI = 0.173), indicating that occupational resilience does not mediate the relationship between ability and work dynamic, and thus H2a does not hold. The upper and lower bounds of the Bootstrap 95% confidence interval for the direct effect of public service motivation on work dynamic do not contain 0 (LICI=-0.006, ULCI=0.205), while the upper and lower bounds of the Bootstrap 95% confidence interval for the mediating effect of occupa-

tional resilience contain 0 (LICI=0.037, ULCI=0.274), suggesting that occupational resilience plays a role in the fully mediating role between public service motivation and work dynamic, and H2b holds. The upper and lower bounds of the Bootstrap 95% confidence intervals for the direct effect of job autonomy on work dynamic and the mediating effect of occupational resilience do not contain 0 (LICI=0.101, ULCI=0.246; LICI=0.156, ULCI=0.339), suggesting that occupational resilience partially mediates the relationship between job autonomy and work dynamic, and H2c holds.

4.2. Testing Hypothesis 3

The moderating effect of the organizational fault-tolerant climate on the direct effect were analyzed using Model5 in Process. This was done by conducting three separate analyses of the three sub-dimensions of competency – ability, public service motivation and job autonomy – as independent variables, controlling for demographic variables, to test whether the direct path of the model is moderated by organizational fault-tolerant climate.

Table 2. Moderating Effect Test.

	Category	Level value	Effect	SE	t	p	LLCI	ULCI
Ability=>Work Dynamic	low level (-1SD)	4.040	0.131	0.045	2.887	0.004	0.042	0.220
	average level	5.030	0.069	0.041	1.680	0.093	-0.011	0.149
	high level (+1SD)	6.020	0.007	0.045	0.154	0.878	-0.082	0.096
Public Service Motivation=>Work Dynamic	low level (-1SD)	4.040	0.153	0.053	2.873	0.004	0.049	0.257
	average level	5.030	0.078	0.053	1.462	0.144	-0.026	0.182
	high level (+1SD)	6.020	0.002	0.060	0.042	0.967	-0.115	0.120
Job Autonomy=>Work Dynamic	low level (-1SD)	4.040	0.149	0.038	3.877	0.000	0.073	0.224
	average level	5.030	0.092	0.038	2.402	0.017	0.017	0.168
	high level (+1SD)	6.020	0.036	0.045	0.802	0.423	-0.052	0.124

Note: LLCI refers to the lower limit of the 95% interval of the estimate, and ULCI refers to the upper limit of the 95% interval of the estimate

From the results of the interaction term between ability and organization's fault-tolerant interaction term, there was a significant negative predictive effect on work dynamic (β=-0.063, p=0.000), suggesting that organizational fault-tolerant climate negatively moderates the relationship between ability and work dynamic.

From the results of the interaction term between public service motivation and organizational fault-tolerant climate, there was a significant negative predictive effect on work dynamic (β=-0.076, p=0.000), suggesting that organizational fault-tolerant climate negatively moderates the relationship between public service motivation and work dynamic.

From the results of the interaction term between job autonomy and organizational fault-tolerant climate, there was a significant negative predictive effect on work dynamic (β=-0.057, p=0.001), suggesting that organization's fault-tolerance negatively moderates between public service motivation and work dynamic.

The moderating effect of the organizational fault-tolerant climate was further tested through conditional direct effect results, which showed:

When the organizational fault-tolerant climate is at a low level, the conditional direct effect of ability on work dynamic is strong, with a 95% confidence interval that does not contain

0 (Effect=0.131, Boot95% Confidence Interval (CI)=[0.042, 0.220]), When the organizational fault-tolerant climate is at a high level, the conditional direct effect of ability on work dynamic is not significant, with a 95% confidence interval that contains 0 (Effect=0.007, Boot95% CI=[-0.082, 0.096]).

When the organizational fault-tolerant climate is at a low level, the conditional direct effect of public service motivation on work dynamic is stronger, and the 95% confidence interval does not contain 0 (Effect=0.153, Boot95% CI=[0.049, 0.257]), When the organizational fault-tolerant climate is at a high level, the conditional direct effect of public service motivation on work dynamic is insignificant, and the 95% confidence interval contains 0 (Effect=0.153, Boot95% CI=[0.049, 0.257]). confidence interval contains 0 (Effect=0.002, Boot95% CI=[-0.115, 0.120]).

When the organizational fault-tolerant climate is at a low level, the conditional direct effect of job autonomy on work dynamic is stronger, and the 95% confidence interval does not contain 0 (Effect=0.153, Boot95% CI=[0.073, 0.224]), and when the organizational fault-tolerant climate is at a high level, the conditional direct effect of job autonomy on work dynamic is insignificant, and the 95% confidence interval contains 0 (Effect=0.153, Boot95% CI=[0.073, 0.224]). confidence interval contains 0 (Effect=0.036, Boot95% CI=[-0.052, 0.124]).

5. Discussion

This paper seeks to explain the key factors influencing work dynamic among grassroots civil servants in China.

First, the work dynamic of grassroots civil servants in China is located at a medium-high level, with significant differences among civil servants of different grades and categories. The measurement results show that the average work dynamic score is 5.179, indicating that most grassroots civil servants have high work dynamic. Work dynamic of junior officers is significantly higher than that of section chiefs, and work dynamic of professional technical civil servants is significantly higher than that of administrative law enforcement civil servants. Same as the results of the difference analysis of Fan B N and Sheng Z H, there is no significant difference in the level of work dynamic across gender or age groups. [22] In personnel management work, it is necessary to pay attention to different types of grassroots civil servants' portraits and implement differentiated work dynamic counter-measures and initiatives.

Second, there is a positive motivational effect of competency of grassroots civil servants on their work dynamic. This finding supports the view of the cognitive school led by Desi, which believes that the motivation to pursue self-actualization, break the shackles of self-determination, and the spirit of striving for freedom create self-motivation, providing new theoretical thinking and empirical evidence to open the black box of work dynamic mechanisms. Specifically, high ability, high motivation, and high job autonomy all lead to high work

dynamic, with job autonomy having the greatest impact on work dynamic, followed by public service motivation. The findings complement and deepen Hu X D and Houston's research on non-institutional factors affecting work dynamic. [14, 16] It implies that there is a need to strengthen the emphasis on competency development of grassroots civil servants in talent development strategies.

Third, occupational resilience constitutes a key node and intermediate mechanism in the modeling of work incentives. This finding supports and advances the research of Youssef and Luthans. [54] The finding indicates that occupational resilience is the link between public service motivation and work dynamic, and job autonomy and work dynamic, acting as a complete mediation and partial mediation, respectively. Grassroots government should focus on the implicit motivational role of occupational resilience in proactive action and guide grassroots civil servants to strengthen their intrinsic occupational resilience.

Fourth, the organizational fault-tolerant climate plays a boundary role depending on the degree of difference. The finding that organizational fault-tolerant climate negatively moderates the relationship between competency and work dynamic at low levels of fault-tolerant climate partially affirms Luo et al.'s view that organizational fault-tolerant climate has a negative effect, [29] and contrasts with the views of Li W M and Li Junrui [24]. Luo Y D et al. suggest that the organizational fault-tolerant "pocket" provides a moral excuse for mistakes or failures, which in turn leads to a series of mistakes or failures in the process of innovation, leading to the frequent occurrence of repetitive mistakes, and hindering innovation as a result. Grassroots civil servants are not excluded from this possibility in the practice of grassroots governance. According to Social Cognitive Theory, the environment and the individual interact to influence feedback behavior, and the mechanism of interaction between institutional factors and individuals is worth exploring in future research.

6. Conclusions

This study concludes that work dynamic among grassroots civil servants largely depends on improving competency. Key factors include, first and foremost, expanding job autonomy, followed by improving public service motivation, effectively improving grassroots civil servants' abilities. Occupational resilience plays a complete mediating role in the relationship between public service motivation and work dynamic, and a partial mediating role in the relationship between job autonomy and work dynamic among grassroots civil servants. Contrary to expectations, the organizational fault tolerance atmosphere plays a negative moderating role between competency and work dynamic. The fault-tolerant mechanism is a unique system rooted in the long-term practical exploration and accumulated experience of government management within the context of China's localized govern-

ance environment. Its interaction with individuals warrants further investigation in future research.

The government should actively formulate a competency-oriented talent training strategy. Design a complete authorization and empowerment system to support grassroots civil servants' independent decision-making, self-adjustment and self-discipline learning, and meet the autonomy, relationship and competency needs of grassroots civil servants.

Abbreviations

KMO	Kaiser-Meyer-Olkin
AVE	Average Variance Extracted
CR	Composite Reliability
LICI	Lower Limit of Confidence Interval
ULCI	Upper Limit of Confidence Interval
CI	Confidence Interval
SD	Standard Deviation

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Conflicts of Interest

The authors declare no conflicts of interest.

Appendix

1. Survey questionnaire

I. Personal Information

What do you think is the "base color" of civil servants? (Please select "D. Red", this question is an attention test question) [Multiple choice question] * Please be sure to choose "D. Red"

A. yellow B. green C. blue D. red

2. Your gender [single choice question]

A. man B. woman

3. Your age [single choice question]*

A. 21-25 years B. 26-30 years old C. 31-35 years old D. 36-40 years E. 41-45 years F. 46-50 years

G. 51-55 years H. 56-60 years I. Over 61 years of age

4. Your educational background [single choice question]

A. High school (vocational high school) and below B. Junior college C. Bachelors degree D. Masters degree E. Doctoral degree

5. Number of children you have [single choice question]*

A. not have B. 1 C. Two D. More than two

6. Your rank [single choice question]*

A. Clerk B. Deputy Section C. Section D. Deputy Division

E. Division F. Deputy Department G. Department H. Deputy

7. Do you have a technical title [single choice question]

A. Yes (please jump to question 8) B. None (please go to question 9)

8. Your technical title [single choice question]

A. Assistant and technician levels B. middle rank C. Associate Senior D. Principal Senior

9. You have obtained the following professional qualification certificates [fill in the blanks]

_____

10. Your occupation [single choice question]

A. Integrated management category B. Professional and technical categories C. Administrative enforcement

11. Your area [single choice]*

A. Anhui B. Beijing C. Chongqing D. Fujian E. Gansu F. Guangdong G. Guangxi H. Guizhou I. Hainan

G. Hebei K. the Heilongjiang River L. Henan M. Hubei N. Hunan O. Jiangsu P. Jiangxi Q. Jilin R. Liaoning

S. Nei Monggol T. Ningxia U. Qinghai V. Shandong W. Shanghai X. Shanxi Y. Shaanxi Province Z. Sichuan a. Tianjin

b. Xinjiang c. Xizang d. Yunnan e. Zhejiang

12. The level of your department [single choice question]

A. Central departments B. Provincial departments C. Municipal departments D. County (city, district) departments E. Townships

13. Your functional system (e.g., tax system) [fill in the blank]*

_____

14. Your length of service [single choice question]

A. 5 years or less B. 6-10 years C. 2011-2015 D. 2016-20 E. 2021-2025 F. 25-30 years G. 30-35 years H. 36-40 years I. Over 40 years

15. Your political affiliation [single choice question]*

A. the Communist Party of China B. Democratic parties (please jump to question 17) C. The public (please go to question 17)

16. Your length of the Communist Party of China membership [multiple choice question]*

A. 5 years or less B. 6-10 years C. 2011-2015 D. 2016-20 E. 2021-2025 F. 25-30 years

G. 30-35 years H. 36-40 years I. Over 40 years

17. Your major [Multiple choice question]

A. Humanities and social sciences B. science C. engineering course D. other

18. Since joining the company, how many times have you changed your position [single choice question]

A. 0 times B. 1-3 times C. 4-6 times D. 7-10 times E. 11-15 times F. 16-19 times G. 20 times or more

19. How many times have you changed departments since joining the company? [Multiple choice question]

A. 0 times B. 1-3 times C. 4-6 times D. 7-10 times E. 11-15 times F. 16-19 times G. 20 times or more

20. Have you ever had a job-hopping experience [single choice question]

A. Yes B. None

21. Have you ever studied abroad [single choice question]

A. Yes B. None

22. Have you ever participated in the Three Supports and One Assistance program [Multiple Choice Question] *

A. Yes B. None

23. How many years have you been in your current position [Multiple Choice Question]

A. Five years or less B. 6-10 years C. 11-15 years D. 2016-20 E. 2021-2025 F. 25-30 years G. 30-35 years H. 36-40 years I. Over 40 years

There are many items, it is expected to take 13-15 minutes, please fill in patiently.

24. The "Five Standards" for good officials are: firm belief, serving the people, diligence and pragmatism, courage to take responsibility, and integrity and incorruptibility. Please provide the number of characters in this standard (please select "C. 20", this question is: attention test question) [Multiple Choice Question]*

A. 10 B. 15 C. 20 D. 25

II. Competency (please score from low to high according to "1-6")

25. Ability [matrix scale questions]*

Table A1. Ability Measurement Scale.

Please read each line and check the corresponding option	strongly disagree	disagree	Relatively disagree	Relatively agree	agree	strongly agree
(1) I am willing to accept challenging work						
(2) I have a sensitive perception, thinking and reaction to the changes around me						
(3) I can correctly view the difficulties in my work and remain calm in the predicament						
(4) I am not satisfied with the status quo and strive to do things better						
(5) I have a good control over my psychology, behavior and emotions						
(6) I have my own opinions, do not yield to the pressure around me, and dare to stick to the right position						
(7) I can distinguish the urgency of affairs, so that all work can be implemented in place						
(8) I have a strong desire for knowledge and am brave enough to learn from colleagues and others						
(9) I am good at breaking the rules and coming up with new ways to solve problems reasonably						
(10) I can solve and properly deal with unconventional events encountered in my work in a timely manner						
(11) I can effectively obtain and master information related to my work						
(12) I can deeply understand the superiors working ideas and grasp the scale of work						
(13) I have good business ability and adapt to the skill requirements of the job						
(14) I can work together with my colleagues based on work needs						
(15) In order to complete the work, I can actively coordinate external relations and obtain resources						
(16) I had relevant initial job knowledge before entering the public sector						
(17) I had the relevant initial job skills before entering the public sector						
(18) I have the relevant initial job skills before entering the public						

Please read each line and check the corresponding option	strongly disagree	disagree	Relatively disagree	Relatively agree	agree	strongly agree
sector						
(19) The civil service recruitment method when I entered the public sector could select talents who met the needs of the post						
(20) I have good political awareness and moral cultivation						
(21) I am passionate and willing to contribute my intelligence and wisdom in my work						
(22) I am loyal to my job and conscientious in my work						
(23) In my work, I can be honest and trustworthy, behave in a civilized manner and strictly demand of myself						
(24) I can take the initiative to save office resources and control office expenses						
(25) I will take the initiative to conduct research related to my work						
(26) I will pay attention to listening to the opinions and suggestions of the service objects of my department						
(27) I work conscientiously and responsibly, without shirking						
(28) I have no power to seek personal gain or accept bribes						
(29) I am familiar with relevant policies and regulations, administer according to law and enforce the law strictly						
(30) I have organizational discipline and do not abuse my power						
(31) I can skillfully use information technology to carry out my work						
(32) I know very well how to use big data to improve government management						
(33) I am very familiar with the challenges that the Internet poses to public policy						
(34) I will give full consideration to the feasibility and operability of the plan and put forward a solution to the problem						
(35) I can make decisions on all issues of my department in a timely and clear manner						
(36) I will regularly evaluate and summarize the work of my subordinates						
(37) I often exchange work experience with my subordinates						
(38) I can keep track of my subordinates work progress and give necessary guidance						

26. Public Service Motivation [matrix scale questions]

Table A2. Public Service Motivation Measurement Scale.

Please read each line and check the corresponding option	strongly disagree	disagree	Relatively disagree	Relatively agree	agree	strongly agree
(1) I think it is a noble thing to serve public affairs						
(2) I pay close attention to social and policy issues						

Please read each line and check the corresponding option	strongly disagree	disagree	Relatively disagree	Relatively agree	agree	strongly agree
(3) I pay close attention to the formulation and adjustment of national policies						
(4) I would like to participate in policy discussions if possible						
(5) I can do something for the people around me without self-interest						
(6) I think public service is very important						
(7) I think it is my civic duty to provide public services to the people						
(8) I always have a strong interest in the public events around me						
(9) Even if it is against my interests, I hope to see the government implement policies that are beneficial to the people						
(10) I am very supportive of the vast majority of public policies						
(11) I also take into account the interests of people I dont know						
(12) I also feel very sad when I see the misfortune and difficulties of others						
(13) I sympathize with the poor life of the poor people						
(14) Even if there is no pay, I feel it is worth it to serve the people						
(15) I do most things not just for my own benefit						
(16) I think its more meaningful to contribute to society than to pursue personal achievement						
(17) I think people should give back to society more than they take						
(18) I think it is more important to do good deeds than to make money						
(19) I am willing to make sacrifices and contributions for the social and public interests						
(20) I can help others without regard for my own interests						
(21) I believe that when doing things, we should first consider our work responsibilities, and then consider ourselves						
(22) I believe that responsibility is heavier than Mount Tai						

27 Job Autonomy [matrix scale questions]*

Table A3. Job Autonomy Measurement Scale.

Please read each line and check the corresponding option	strongly disagree	disagree	Relatively disagree	Relatively agree	agree	strongly agree
(1) This unit has provided me with the opportunity to keep up with new trends related to my work						
(2) The unit provides me with the opportunity to learn new knowledge or improve professional skills						
(3) This unit provides me with the opportunity to improve myself at work						
(4) My superior cares a lot about my personal growth and career						

Please read each line and check the corresponding option	strongly disagree	disagree	Relatively disagree	Relatively agree	agree	strongly agree
planning						
(5) My superior will regularly check whether my work is going smoothly						
(6) My superior gives me corresponding authority so that I can make independent decisions in my work						
(7) My superior set work goals for me and asked me to ensure that they were completed						
(8) When I encounter difficulties at work, my superior gives timely help						

III. Work Dynamic (please score from low to high according to "1-6")

28. Work Dynamic [matrix scale questions]

Table A4. Work Dynamic Measurement Scale.

Please read each line and check the corresponding option	strongly disagree	disagree	relatively disagree	relatively agree	agree	strongly agree
(1) I will provide new ideas to improve the current situation						
(2) I take the initiative to support innovative ideas						
(3) I will learn new ways of working, skills or tools						
(4) I often receive praise from my superiors for innovative ideas						
(5) I can turn innovative ideas into practical applications						
(6) I will come up with some original solutions to the problem through study						
(7) I can introduce innovative ideas with a systematic approach						
(8) I can get important members of the organization to focus on innovative thinking						

29. Knowing the number of questions is quite high, you might already feel a bit angry at this point, but I still hope you can () the remaining questions; there really arent many left. Thank you again for your cooperation and support! (Please select "A continue answering with a smile," this question is: Attention Test Question) [Multiple Choice Question]*

A. He continued to answer with a smile B. Crying and continuing to answer

IV. Organizational Fault-tolerant Climate (please score from low to high according to "1-6")

30. Organizational Fault-tolerant Climate [matrix scale questions]

Table A5. Organizational Fault-tolerant Climate Measurement Scale.

Please read each line and check the corresponding option	strongly disagree	disagree	Relatively disagree	Relatively agree	agree	strongly agree
(1) My superior will not pursue the inevitable mistakes of employees in their work						
(2) My superior allows me to take risks of making mistakes in order						

Please read each line and check the corresponding option	strongly disagree	disagree	Relatively disagree	Relatively agree	agree	strongly agree
to achieve certain important work objectives						
(3) My superior will not punish me easily because of my mistakes at work						
(4) My colleagues around me will not avoid me because I make mistakes at work						
(5) When I make a mistake at work, my colleagues will help me						
(6) In the workplace, mistakes made by colleagues can be discussed and communicated openly						
(7) In order to do a better job, my colleagues and I do not mind making some small mistakes in the process						
(8) The unit has a clear system to accommodate the mistakes made by civil servants in their work						
(9) The units error-tolerant system can effectively encourage me to try boldly in my work without worrying about making mistakes						
(10) I will not be afraid to make mistakes at work because of the pressure of the system						
(11) The public is tolerant and understanding of leaders mistakes						
(12) I will not be criticized by the public for making mistakes at work						
(13) The public can rationally view and judge the mistakes made by leading cadres						
(14) I will not be afraid to make mistakes at work because of the pressure of public opinion						

V. Occupational Resilience

31. Occupational Resilience [matrix scale questions]

Table A6. Occupational Resilience Measurement Scale.

Please read each line and check the corresponding option	strongly disagree	disagree	Relatively disagree	Relatively agree	agree	strongly agree
(1) I will make a practical career development plan and work hard for it						
(2) I have a clear plan for my career development						
(3) I will set career goals that are difficult but not impossible to achieve						
(4) I will adjust my career goals according to the changes of unit strategy and structure						
(5) I am good at setting effective career goals for myself						
(6) I can quickly update my skills and knowledge according to the changes of the organization						
(7) If I know what I need to learn, I will actively seek learning opportunities						
(8) I often read or discuss to understand the development trend of						

Please read each line and check the corresponding option	strongly disagree	disagree	Relatively disagree	Relatively agree	agree	strongly agree
this field						
(9) My professional knowledge and skills have been significantly improved in the past year						
(10) If time permits, I will take the initiative to learn new professional knowledge or skills						
(11) I am willing to accept new tasks or new job opportunities						
(12) I will seek a competitive work environment						
(13) I am not worried about the negative impact of organizational restructuring and layoffs on personal development						
(14) Even if the outcome is uncertain, I am willing to take risks						
(15) If I consider changing jobs, I wont be anxious about possible failure						
(16) I can cope with changes and difficulties in my career development calmly						
(17) Even if I give up my current job, I am confident that I can find a new one soon						
(18) I can list three important achievements from my current work						
(19) I can still maintain high performance under uncertain conditions						
(20) I have the skills such as digital technology to be competent for regular jobs						

2. Reliability of Data

Table A7. Reliability of the Questionnaire Scale.

	α coefficient	Primary dimension of the scale	α coefficient	Second dimension	α coefficient
Overall questionnaire	. 993	Ability	.986	Personality Traits	0.947
				Professional Proficiency	0.973
				Occupational Expertise	.952
				Moral Trait	. 963
				Service Awareness	.941
				Legal Awareness	.941
				Digital Literacy	. 930
		Public Service Motivation	.984	Attraction to Public Policy Making	.956
				Commitment to Public Interest	.970
				Compassion	.952
				Self-Sacrifice	.968
		Job Autonomy	.972	Career Growth Opportunities	.955

α coefficient	Primary dimension of the scale	α coefficient	Second dimension	α coefficient
			Leadership Empowerment	.962
	Work Dynamic	.970		
	Organizational Fault-tolerant Climate	.975	Superior's Fault-tolerance	.927
			Colleagues' Fault-tolerance	.943
			Institutional Fault-tolerance	.959
			Public Fault-tolerance	.968
	Occupational Resilience	.983	Occupational Goals	.966
			Continuous Learning	.953
			Occupational Risk-Taking Propensity	.946
			Occupational Self-Efficacy	.946

Table A8. *KMO and Bartlett spherical test results of scales.*

scale	Reliability test		numeric value
Ability	KMO sample appropriateness measure		0.976
	Bartlett Spherical inspection	Approximate chi-square	30389.992
		df	528
		conspicuousness	0.000
Public Service Motivation	KMO sample appropriateness measure		0.973
	Bartlett Spherical inspection	Approximate chi-square	21003.102
		df	231
		conspicuousness	0.000
Job Autonomy	KMO sample appropriateness measure		0.943
	Bartlett Spherical inspection	Approximately chi-square	7040.887
		df	28
		conspicuousness	0.000
Work Dynamic	KMO sample appropriateness measure		0.935
	Bartlett Spherical inspection	Approximately chi-square	6885.156
		df	28
		conspicuousness	0.000
Occupational Resilience	KMO sample appropriateness measure		0.974
	Bartlett Spherical inspection	Approximately chi-square	18170.689
		df	190
		conspicuousness	0.000
Organizational Fault-tolerant Climate	KMO sample appropriateness measure		0.956
	Bartlett Spherical inspection	Approximate chi-square	12713.365
		df	91

scale	Reliability test		numeric value
		conspicuousness	0.000

Table A9. Convergent Validity of Ability.

Study variables	Test items	Standard load factor (Std. Estimate)	Standard error (Std. Error)	AVE	CR
Personality Traits	PT1	0.809	-	0.758	0.949
	PT2	0.864	0.036		
	PT3	0.924	0.033		
	PT4	0.897	0.034		
	PT5	0.876	0.033		
	PT6	0.849	0.034		
Professional Proficiency	PP1	0.858	-	0.803	0.973
	PP2	0.912	0.030		
	PP3	0.871	0.034		
	PP4	0.921	0.030		
	PP5	0.886	0.032		
	PP6	0.901	0.032		
	PP7	0.913	0.029		
	PP8	0.911	0.028		
	PP9	0.889	0.032		
Occupational Expertise	OE1	0.898	-	0.836	0.953
	OE2	0.933	0.026		
	OE3	0.939	0.025		
	OE4	0.886	0.027		
Moral Trait	MT1	0.906	-	0.839	0.963
	MT2	0.923	0.025		
	MT3	0.921	0.024		
	MT4	0.918	0.024		
	MT5	0.912	0.025		
Service Awareness	SA1	0.900	-	0.847	0.943
	SA2	0.930	0.023		
	SA3	0.931	0.024		
Legal Awareness	LA1	0.903	-	0.841	0.941
	LA2	0.926	0.026		
	LA3	0.922	0.026		
Digital Literacy	DL1	0.901	-	0.823	0.933
	DL2	0.897	0.034		
	DL3	0.923	0.029		

Study variables	Test items	Standard load factor (Std. Estimate)	Standard error (Std. Error)	AVE	CR
Ability	Personality Traits	0.833	-	0.758	0.949
	Professional Proficiency	0.949	0.046	0.803	0.973
	Occupational Expertise	0.875	0.048	0.836	0.953
	Moral Trait	0.946	0.041	0.839	0.963
	Service Awareness	0.956	0.044	0.847	0.943
	Legal Awareness	0.834	0.039	0.841	0.941
	Digital Literacy	0.843	0.042	0.823	0.933

Table A10. Convergent Validity of Public Service Motivation.

Study variables	Test items	Standard load factor (Std. Estimate)	Standard error (Std. Error)	AVE	CR
Attraction to Public Policy Making	APPM1	0.908	-	0.849	0.957
	APPM2	0.926	0.026		
	APPM3	0.936	0.024		
	APPM4	0.915	0.028		
Commitment to Public Interest	CPI1	0.921	-	0.846	0.970
	CPI2	0.917	0.024		
	CPI3	0.928	0.024		
	CPI4	0.906	0.028		
	CPI5	0.924	0.025		
	CPI6	0.920	0.025		
Compassion	C1	0.892	-	0.800	0.952
	C2	0.898	0.027		
	C3	0.900	0.027		
	C4	0.882	0.028		
	C5	0.900	0.029		
Self-Sacrifice	SS1	0.894	-	0.815	0.969
	SS2	0.916	0.027		
	SS3	0.896	0.029		
	SS4	0.924	0.027		
	SS5	0.911	0.031		
	SS6	0.900	0.028		
	SS7	0.880	0.027		
Public Service Motivation	Attraction to Public Policy Making	0.934	-	0.849	0.957
	Commitment to Public Interest	0.983	0.031	0.846	0.970
	Compassion	0.927	0.036	0.800	0.952

Study variables	Test items	Standard load factor (Std. Estimate)	Standard error (Std. Error)	AVE	CR
	Self-Sacrifice	0.880	0.036	0.815	0.969

Table A11. *Convergent Validity of Job Autonomy.*

Study variables	Test items	Standard load factor (Std. Estimate)	Standard error (Std. Error)	AVE	CR
Career Growth Opportunities	CGO1	0.931	-	0.875	0.955
	CGO2	0.942	0.022		
	CGO3	0.934	0.022		
Leadership Empowerment	JE1	0.913	-	0.838	0.963
	JE2	0.936	0.022		
	JE3	0.912	0.024		
	JE4	0.900	0.024		
	JE5	0.915	0.023		

Table A12. *Convergent Validity of Work Dynamic.*

Study variables	Test items	Standard load factor (Std. Estimate)	Standard Error (Std. Error)	AVE	CR
Work Dynamic	WD1	0.865	-	0.804	0.970
	WD2	0.867	0.032		
	WD3	0.862	0.030		
	WD4	0.902	0.034		
	WD5	0.928	0.030		
	WD6	0.914	0.029		
	WD7	0.923	0.029		
	WD8	0.910	0.032		

Table A13. *Convergent Validity of Organizational Fault-tolerant Climate.*

Study variables	Test items	Standard load factor (Std. Estimate)	Standard error (Std. Error)	AVE	CR
Superior's Fault-tolerance	SFT1	0.818	-	0.810	0.928
	SFT2	0.837	0.032		
	SFT3	0.853	0.029		
Colleagues' Fault-tolerance	CFT1	0.820	-	0.815	0.946
	CFT2	0.828	0.029		
	CFT3	0.874	0.030		

Study variables	Test items	Standard load factor (Std. Estimate)	Standard error (Std. Error)	AVE	CR
Institutional Fault-tolerance	CFT4	0.862	0.036		
	IFT1	0.903	-		
	IFT2	0.910	0.020	0.887	0.959
	IFT3	0.911	0.020		
Public Fault-tolerance	PT1	0.893	-		
	PT2	0.886	0.020	0.885	0.969
	PT3	0.884	0.020		
	PT4	0.897	0.019		
Organizational Fault-tolerant Climate	Superior's Fault-tolerance	0.908	-	0.810	0.928
	Colleagues' Fault-tolerance	0.907	0.036	0.815	0.946
	Institutional Fault-tolerance	0.949	0.043	0.887	0.959
	Public Fault-tolerance	0.921	0.047	0.885	0.969

Table A14. Convergent Validity of Occupational Resilience.

Study variables	Test items	Standard load factor (Std. Estimate)	Standard Error (Std. Error)	AVE	CR
Occupational Goals	OG1	0.926	-		
	OG2	0.930	0.024		
	OG3	0.916	0.026	0.850	0.966
	OG4	0.916	0.025		
	OG5	0.921	0.025		
Continuous Learning	CL1	0.906	-		
	CL2	0.899	0.027		
	CL3	0.898	0.027	0.804	0.954
	CL4	0.891	0.027		
	CL5	0.890	0.026		
Occupational Risk-Taking Propensity	ORTP1	0.838	-		
	ORTP2	0.911	0.039		
	ORTP3	0.881	0.040	0.784	0.948
	ORTP4	0.921	0.042		
	ORTP5	0.875	0.044		
Occupational Self-Efficacy	OSE1	0.906	-		
	OSE2	0.870	0.033	0.784	0.948
	OSE3	0.879	0.029		
	OSE4	0.899	0.027		

Study variables	Test items	Standard load factor (Std. Estimate)	Standard Error (Std. Error)	AVE	CR
	OSE5	0.873	0.028		
	Occupational Goals	0.914	-	0.850	0.966
Occupational Resilience	Continuous Learning	0.939	0.033	0.804	0.954
	Occupational Risk-Taking Propensity	0.967	0.036	0.784	0.948
	Occupational Self-Efficacy	0.990	0.035	0.784	0.948

Table A15. Discriminant Validity of Ability: Pearson correlations and AVE square roots value.

	Personality Traits	Professional Proficiency	Occupational Expertise	Moral Trait	Service Awareness	Legal Awareness	Digital Literacy
Personality Traits	0.871						
Professional Proficiency	0.844	0.896					
Occupational Expertise	0.761	0.868	0.914				
Moral Trait	0.704	0.849	0.763	0.916			
Service Awareness	0.715	0.849	0.762	0.902	0.920		
Legal Awareness	0.574	0.704	0.608	0.823	0.797	0.917	
Digital Literacy	0.680	0.772	0.735	0.713	0.761	0.653	0.907

Note: The diagonal number is the square root of AVE

Table A16. Discriminant Validity of Public Service Motivation: Pearson correlations and AVE square roots value.

	Attraction to Public Policy Making	Commitment to Public Interest	Compassion	Self-Sacrifice
Attraction to Public Policy Making	0.921			
Commitment to Public Interest	0.897	0.920		
Compassion	0.807	0.871	0.894	
Self-Sacrifice	0.774	0.828	0.838	0.903

Note: The diagonal number is the square root of AVE

Table A17. Discriminant Validity of Job Autonomy: Pearson correlations and AVE square roots value.

	Career Growth Opportunities	Leadership Empowerment
Career Growth Opportunities	0.936	
Leadership Empowerment	0.875	0.915

Note: The diagonal number is the square root of AVE

Table A18. Discriminant Validity of Organizational Fault-tolerant Climate differentiation: Pearson correlations and AVE square roots value.

	Superior's Fault-tolerance	Colleagues' Fault-tolerance	Institutional Fault-tolerance	Public Fault-tolerance
Superior's Fault-tolerance	0.900			
Colleagues' Fault-tolerance	0.773	0.903		
Institutional Fault-tolerance	0.831	0.795	0.942	
Public Fault-tolerance	0.747	0.780	0.868	0.941

Note: The diagonal number is the square root of AVE

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Biography

Xiaodong Hu is a professer at School of Politics and Public Management, China University of Political Science and Law; an Editorial Board Member of Journal of Public Policy and Administration; director, China Society for Human Resource Development, deputy secretary general, China Public Sector Human Resource Management; researcher, Hong Kong Institute of Entrepreneurship and Innovation; research fellow, former government performance Evaluation Center, National School of Administration. Graduated from the School of Public Management of Renmin University of China, the first batch of PHD. in public sector human resource management in China, the first batch of PHD. in "joint training" in China, the visiting scholar of Portland State University. Research Area: Organizational Strategy, human resource management, performance management, compensation management.

Wanyi Huang is a Ph.D. student at School of Politics and Public Management, China University of Political Science and Law.

Research Field

Xiaodong Hu: Organizational Strategy, Public Sector Human Resource Management, Performance Management, Compensation management, Public Management

Wanyi Huang: Public Sector Human Resource Management, Performance Management, Public Management