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ANALYSIS ON THE STATUS QUO AND INFLUENCING FACTORS OF HIGH-LEVEL TALENT FLOW IN CHINA'S LOCAL UNIVERSITIES

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Abstract

Based on the research theories and achievements of human capital, the paper adopts the target sampling method to analyze the current situation and influencing factors of high-level talent flow in 472 local universities in China. The results show that the flow of high-level talents in local colleges and universities in China presents the current situation that the proportion of flow willingness and flow frequency is inconsistent, the flow type is single, and the flow direction is unreasonable. This status quo is closely related to the willingness of high-level talents to flow, and the willingness to flow is affected by three aspects: the individual dimension, the organizational dimension and the social dimension.

Keywords: local colleges and universities; high-level talent flow; status quo; willingness to flow; influencing factors.

Research Background

As the important human resources and core human capital of local colleges and universities, high-level talents are the needs of social development. Klaus Schwab (2016) argues that: In today's society, if you want to avoid economic recession, to avoid social unrest, and to avoid the drawbacks of trade protectionism and democracy, the only way is to change from capitalism to "talent". The "ism" leaps, because "talentism" attaches importance to talents, attaches importance to developing talents, and attaches importance to the innovative spirit of talents. In the times of

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knowledge economy, countries around the world gradually believe that the prosperity and development of the national economy in the future will no longer rely solely on natural resources, but on the knowledge provided by talents (Jacob, M., Meek, V. L., 2013). The opening of China in 1978 makes more and more people learn more knowledge and skills from other countries, and these experiences led the Chinese government and organizations to compete for human resources in the global market (Rezaei Shahamak, Mouritzen Mikkel Rønnow, 2021). The development of society requires high-level talents, and high-level talents contain huge development potential. Only by knowing how to attract high-level talents and finding ways to retain high-level talents, can we gradually turn the old development model into a new one, to provide potential and inexhaustible power resources for social progress and development. It can be said that changes in the number of high-level talents directly affect the speed of social and economic development, and the allocation of high-level talents directly represents the future development prospects of the country.

At present, the drawbacks of high-level talent flow in China's local colleges and universities have become increasingly prominent. From a macro perspective, the flow of high-level talents from local universities in the western and northern regions of China and some economically underdeveloped regions is the most obvious,

mainly flowing to central and sub-central cities (Zhang Fangfang, Liu Hui, Zhang Juntao, Cheng Yi, Fiumara Giacomo, 2022), and the number of lost people is far greater than the number of inflows, which is not conducive to the development of colleges and universities in these regions; from a micro level, the loss of high-level talents in local colleges and universities has a certain negative impact on the school's discipline construction, which indirectly affects and restricts local economic development.

Literature Review

Sorokin PA (1957) first proposed the concept of "social mobility", arguing that there are two main types of social mobility: one is horizontal mobility, which refers to the movement of individuals and even social objects from a certain group to the same level The second is vertical mobility, which refers to the transformation of objects from one social class to another. Later Japanese sociologists proposed that social mobility refers to the movement of people from one group to another or from one region to another (Yamanoi Atsushi, 1990). From the perspective of affiliation, the flow of high-level talents in local colleges and universities is subordinate to social flow. Talent mobility originates from the theory of personnel mobility proposed by Slichter (1919). The words "flow" and "talent" are combined to form "talent mobility", which is understood as the change of talents in service units according to personal wishes, which is

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what we call "job-hopping" (Mobley, W. H., 1977). In response to this phenomenon, Olof Ejermo, Claudio Fassio, John Källström (2019) systematically analyzed the influencing factors of talent mobility in colleges and universities, and analyzed the relationship between mobility and job promotion, Veugelers, V. & Bouwel, LV (2015) Key Research The characteristics and influencing factors of the migration of some European scholars to the United States are discussed. For high-level talents, the country's R&D investment will affect their mobility behavior (Silvia AppelL, 2015), and mobility behavior is closely related to the living environment of individuals, and is inseparable from the sense of local belonging and identity (Ratcliffe, E. , and K. M, Korpela, 2016), it can be said that geographic preference is one of the important factors to promote the flow of high-level talents.

The flow of high-level talents in local colleges and universities discussed in this study refers to the flow of high-level talents in local colleges and universities between schools and between schools and other industries.

Research Methods

This study adopts the target sampling method, and selects 139 local colleges and universities among the 2570 local colleges and universities announced by the Chinese Ministry of Education in 2020 as the research objects. These objects involve North China, Northeast China, East China, South China, Central China, Southwest China, and Northwest China. Target sampling is carried out for the surveyed colleges and universities, and 1-5 people are sampled from each college. The design of this sample has been reviewed and supported by 9 university managers and high-level talents from local universities in China. The survey was judged to be a low-risk study, and the data collection and collation were anonymous. The respondents were informed that they could stop participating in the survey at any time, and the respondents' verbal consent was obtained before data collection. The survey will begin in July 2021 and end in January 2022. Due to the wide distribution of the surveyed subjects, the researchers were unable to conduct face-to-face contact with all the surveyed subjects, so paper questionnaires and online questionnaires were used to conduct the survey, which effectively reduced the difficulty of the survey. A total of 500 questionnaires were distributed in this survey, 18 invalid samples were excluded, and a total of 472 valid samples were obtained.

The research used SPSS21. 0 to analyze the reliability and validity of the scale. Through the test, the reliability coefficients of various indicators of the questionnaire in this study are shown in Table 1.

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Table 1. Reliability coefficient of influencing factors of high-level talent mobility willingness in local colleges and universities

Scale	Cronbach's Alpha	Number of items
Personal dimension	. 883	9
Organizational dimension	. 910	8
Social dimension	. 828	5
Overall dimension	. 953	22

Source: Compiled by this study

The test results show that the overall a coefficient is. 953, and the individual index coefficients of each dimension are above. 8, of which the personal dimension a coefficient is. 883, the organizational dimension a coefficient is. 910, and the social dimension a coefficient is. 828. The questionnaire has high reliability.

This study uses KMO test and Bartlett's sphericity test to analyze the appropriateness of factor model for the proposed questionnaire. A summary is presented in Table 2.

Table 2. KMO and Bartlett test of the overall scale

KMO and Bartlett's test		
Kaiser-Meyer-Olkin measure of sampling adequacy		. 971
Bartlett's test for sphericity	Approximate chi-square	2999. 609
	df	231
	Sig.	. 000

Source: Compiled by this study

The KMO values of personal dimension, organizational dimension and social dimension among the influencing factors of high-level talent flow in local colleges and universities obtained are respectively. 992,. 930, and. 838, and the overall KMO value is. 971. The results are shown in Table 4. The validity of the table is very good. And the Bartlett sphericity test statistic has a Sig<0. 5, the summary is shown in Table 3, indicating that the correlation between the variables is very significant, this scale is very suitable for exploratory factor analysis, and the effect is excellent.

Research Findings

The Current Situation And Problems Of The Flow Of High-Level Talents In Local Colleges And Universities

Through the investigation, it is found that the current high-level talents in local colleges and universities present different status quo and problems

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in the flow willingness, flow frequency, flow type, flow level change, and flow direction.

Inconsistency between the willingness to flow and flow frequency.

In order to understand the mobility willingness of high-level talents in local colleges and universities, this study conducted a survey on the mobility willingness of the subjects. The results found that among the 472 subjects, there were a total of 302 people who were willing to move, relatively wanted to move, and very much wanted to move. However, only 16. 95% of the people have real mobility experience, compared with the global average mobility rate of university teachers of 37. 80% and the average mobility rate of Chinese university teachers of 26. 00%, the flow of high-level talents in local universities in China The ratio is relatively low, indicating that the flow willingness and flow frequency ratio of high-level talents in local colleges and universities in China are not in harmony.

Single flow type.

For the question "Which type of mobility do you belong to?", the survey found that 392 respondents had no mobility experience, so when setting up the questionnaire, let the non-mobilized people skip answering this question. In the statistics of the survey results, In addition to displaying all the adjusted proportions, the effective proportion after removing the unfilled personnel is also added. In addition, considering that some personnel have multiple

mobile experiences, it is specially stated during the survey that those who have multiple mobile experiences should be investigated based on the last mobile experience. The survey results show that among the 80 persons with mobility experience, 62 persons' mobility belongs to the type of school-to-school mobility, accounting for 77. 50%; 18 persons' mobility belongs to the type of cross-industry mobility, and the effective rate is only 22. 50%. It shows that the selection of flow types of high-level talents in local colleges and universities mainly focuses on the flow between schools, and the flow type is relatively simple.

Unreasonable flow direction.

Regarding the question item "Compared to the geographical location of the original work unit, what is the direction of your flow?", the survey results found that 75% of high-level talents in local colleges and universities choose to move to areas with superior geographical locations, and 80% of local colleges and universities High-level mobile personnel flow to the political, economic, cultural and academic center cities. This kind of flow direction is extremely unreasonable. In the long run, it will lead to the imbalance of regional talent ratio, the imbalance of higher education resources, and even affect the national and regional development.

Influencing Factors Of High-Level Talent Flow In Local Colleges And Universities

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The factors affecting the flow of high-level talents in local colleges and universities are multi-faceted, which are the result of the interaction of three dimensions: individual, organization and society. Considering that the three dimensions of individual, organization, and society have different influence mechanisms on the flow of high-level talents in local universities, this module conducts theoretical and empirical analysis of these three influencing factors.

Descriptive statistical analysis of each variable.

Questionnaires in the module "Influence of the flow of high-level talents in China's local colleges and the answer options are set using a 5-level Likert scale, where 1 means very unaffected, 2 means not very affected, 3 means generally affected, and 4 means relatively Influence means, 5 means very influence. In descriptive statistics analysis, the median "3" is used as the basic reference standard. The specific descriptive statistics of the willingness to flow high-level talents in local universities and the personal, organizational, and social dimensions are shown in Table 3 below.

Table 3. Descriptive Statistics

		N	Minimum	Maximum	Average value		Standard deviation
		Statistics	Statistics	Statistics	Statistics	Standard error	Statistics
Willingness to flow		472	1	5	3. 18	. 056	1. 206
Personal dimension	Total personal economic income (salary, performance, research funding, allowances, benefits, etc.)	472	1	5	4. 19	. 049	1. 060
	Matching degree of profession and position	472	1	5	4. 25	. 047	1. 027
	opportunity for personal growth	472	1	5	4. 06	. 037	. 809
	Realization of self-worth	472	1	5	4. 27	. 044	. 946
	Workload and work pressure	472	1	5	4. 11	. 048	1. 051
	Spouse's job	472	1	5	3. 97	. 041	. 893
	Children's educational	472	1	5	4. 04	. 036	. 789

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		N	1	5			
	opportunities and environment						
	Parental support	472	1	5	4. 06	. 039	. 855
	Distance between relatives and friends	472	1	5	3. 91	. 041	. 889
	Unit reputation	472	1	5	3. 96	. 038	. 823
	Organizational support	472	1	5	3. 92	. 037	. 809
Organizational dimension	Academic atmosphere	472	1	5	4. 01	. 036	. 787
	Teamwork	472	1	5	4. 26	. 044	. 947
	Working Conditions and Environment	472	1	5	3. 99	. 038	. 829
	Organizational Philosophy and Culture	472	1	5	3. 97	. 034	. 743
	Unit system and assessment mechanism	472	1	5	4. 02	. 035	. 765
	Unit development prospects	472	1	5	4. 05	. 038	. 836
	Attractiveness of urban attributes (political, economic, academic and other central cities)	472	1	5	4. 05	. 038	. 823
Social dimension	Living environment such as education, medical care, transportation, etc.	472	1	5	3. 98	. 033	. 722
	Geographical location and natural ecological environment	472	1	5	4. 00	. 037	. 801
	Human environment such as history and culture	472	1	5	4. 35	. 043	. 934
	Local prices and cost of living	472	1	5	3. 93	. 039	. 842
valid N (list state)		472					

Source: Compiled by this study

It can be seen from Table 3. that:

(1) The average willingness to flow of high-level talents in local colleges and universities is 3. 81, which exceeds the median value of "3" and is at the upper-middle level.

(2) The mean values of the individual dimensions are: total personal economic income is 4. 19, the degree of matching between majors and positions

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is 4. 25, the opportunity for personal growth is 4. 06, the realization of self-worth is 4. 27, the workload and work pressure is 4. 11, the spouse's Work is 3. 97, children's educational opportunities and environment is 4. 04, parental support is 4. 06, and the distance between relatives and friends is 3. 91. In general, the averages of all personal dimensions are at the middle and upper level.

(3) The mean values of organizational dimensions are: unit prestige is 3. 96, organizational support is 3. 92, academic atmosphere is 4. 01, teamwork is 4. 26, working conditions and environment are 3. 99, organizational philosophy and culture are 3. 97, unit system and assessment mechanism is 4. 02, and the unit development prospect is 4. 05. Overall, the averages of the organizational dimensions are all at the middle and upper level.

(4) The mean values of social dimensions are: the attraction of urban attributes is 4. 05, the living environment such as education, medical and transportation is 3. 98, the geographical location and natural ecological environment are 4. 00, the human environment such as history and culture is 4. 35, and the local price and cost of living are 3. 93. On the whole, the averages of various social dimensions are at the middle and upper level.

Correlation analysis of flow willingness and personal, organizational and social dimensions.

It can be seen from Table 4 below that there is a positive correlation (0. 491**) between the personal dimension and the willingness to flow, there is a positive correlation between the organizational dimension and the willingness to flow (0. 438**), and there is a positive correlation between the social dimension and the willingness to flow Correlation (0. 502**). The above results show that there is a positive correlation ($p<0. 05$) between the individual dimension, organizational dimension, social dimension and mobility willingness, and the value of the correlation coefficient is greater than 0. 4, indicating that there is a moderate or strong relationship between these indicators and mobility willingness. related relationship.

Regression analysis of mobility willingness and personal, organizational, and social dimensions.

In this study, the willingness to flow is used as the dependent variable, and the individual, organizational, and social dimensions are used as independent variables to construct a linear regression equation. It can be seen from Table 5 that in the model summary, the R-square value is 0. 336, and the adjusted R-square value is 0. 332, indicating that the model has a high degree of interpretation of the original data, and the linear model fits well. The significance level of the F test is 0. 000, which is less than 0. 05, indicating that the regression effect is significant.

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Table 4. Correlations

	personal dimension	Organizational dimension	Social dimension	Willingness to flow
personal dimension	1			
Organizational dimension	. 516**	1		
Social dimension	. 543**	. 526**	1	
Willingness to flow	. 491**	. 438**	. 502**	1

Source: Compiled by this study

Table 5. Model Summary

Model	R	R2	Adjusted R2	F	Salience
1	. 580a	0. 336	0. 332	78. 95	0. 000

Source: Compiled by this study

It can be seen from Table 6 that the coefficient of the personal dimension is 0. 258, the significance level is less than 0. 05, the coefficient of the organizational dimension is 0. 159, the significance level is less than 0. 05, the coefficient of the social dimension is 0. 279, and the significance level is less than 0. 05, indicating that the personal dimension, organizational dimension and social dimension have a significant positive effect on mobility willingness. The size of the coefficient can reveal the degree of influence of different independent variables on the dependent variable. It can be seen that the coefficient of the social dimension is the largest, so the social dimension has the strongest influence on the willingness to flow, followed by the personal di-

mension and the organizational dimension.

Conclusion

The flow of high-level talents in China's local colleges and universities presents the current situation that the proportion of flow willingness and flow frequency is inconsistent, the flow type is single, and the flow direction is unreasonable. The emergence of this status quo is affected by three aspects: the individual dimension, the organizational dimension and the social dimension. The personal dimension includes total personal economic income, degree of matching between majors and positions, opportunities for personal growth, realization of self-worth, workload and work pressure, spouse's

work, children's educational opportunities and environment, parental support, distance between relatives and friends. Organizational dimensions include unit prestige, organizational support, academic atmosphere, teamwork, working conditions and environment, organizational philosophy and culture, unit system and assessment mechanism, and unit development prospects. The social dimension includes urban attributes, living environment such as education, medical transportation, geographical location and natural ecological environment, human environment such as history and culture, local prices and living costs.

Table 6. Coefficient a

Model		Unstandardized coefficients		Standard-ized coef-ficient	T	Salience	95. 0% confidence interval for B	
		B	Standard error	Beta			Lower limit	Upper limit
1	(Constant)	1. 197	0. 18		6. 665	0. 000		
	personal dimension	0. 26	0. 048	0. 258	5. 436	0. 000	0. 166	0. 354
	Organiza-tional di-mension	0. 148	0. 044	0. 159	3. 392	0. 001	0. 062	0. 234
	Social dimension	0. 282	0. 048	0. 279	5. 846	0. 000	0. 187	0. 377

a. Dependent variable: willingness to flow

Research Limitations And Recommendations For Future Research

This study only discusses the current situation and influencing factors of high-level talent mobility in local universities in China, and the research content is not comprehensive enough. It is expected that the research volume will be further expanded in future research.

Compliance With Ethical Standards

All procedures followed in this study were in accordance with the ethical standards of the Human Experimentation Committee (institutional and national) and the 1975 Declaration of Helsinki (the most recent revision), and informed consent was obtained from all participants.

Statement of Interests

All authors of this study declare no conflicts of interest.

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