

Evaluation of talent attraction level in Hangzhou city under the analytic hierarchy process

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Abstract: Against the backdrop of increasing competition for talent across the country, a city must develop and implement talent attraction policies that are in line with the times but not overly blind in order to maintain its competitiveness and innovation. In 2022, Hangzhou will increase its efforts in reforming the business environment as an important task to attract more outstanding high-tech enterprises and talents. This article uses the Analytic Hierarchy Process to quantitatively analyze the factors that affect the attractiveness of urban talents, and combines MATLAB to obtain the comprehensive scores of each city. At the same time, a multi-level fuzzy comprehensive evaluation model was established, and the scores before and after Hangzhou's increased reform measures were compared. The results showed that the effect of the reform measures was significant. For the specific talent type of technology-based talents, this article uses factor analysis to establish a comprehensive evaluation index system for the attractiveness of innovative talents, and combines the comparative analysis of SPSS to provide feasible solutions to effectively enhance the attractiveness of talents.

Keywords: Analytic hierarchy process, Factor analysis, MATLAB, SPSS, Feasible plan

1. Introduction

With the deepening reform of the Chinese economy and the intensification of market competition, talent competition has become an important issue for enterprise and urban development. Attracting and retaining excellent talents is crucial for enterprises and cities. For enterprises, attracting top talents can not only enhance their competitiveness, but also drive innovation and development. Enterprises need to provide a good working environment and development prospects for talents, while also considering the treatment and benefits of talents. In addition, enterprises also need to pay attention to the personal needs of talents, such as accommodation, transportation, children's education, family medical care, etc., in order to reduce the cost of talent migration. For cities, attracting excellent talents and enterprises can inject new vitality and momentum into their development. Cities need to provide good public service facilities and living environment to attract talents and businesses to settle down. In addition, cities also need to pay attention to the career development opportunities and quality of life of talents, in order to enhance the attractiveness and competitiveness of the city.

In terms of attracting talents, Hangzhou has made a lot of efforts. By improving the living environment for enterprises and individuals, Hangzhou has accumulated more resources for future development. At the same time, Hangzhou needs to further pay attention to the demand for talent and the changes in demand, in order to formulate more effective talent attraction policies.

In terms of domestic research, the Chinese government has attached great importance to talent policies, and local governments have also introduced various policies to attract talents. When exploring the factors that affect talent attraction, researchers mainly consider policy environment, economic development, public services, technological innovation, and other aspects. In recent years, the rapid development of the Chinese economy and the rise of emerging industries have provided more employment opportunities for talents, which is an important factor in attracting talents. At the same time, significant progress has been made in improving urban public service facilities and living environment in China. Some developed countries attract outstanding talents from around the world by relaxing immigration policies, providing preferential treatment, and offering good career development opportunities. Researchers pay more attention to technological innovation and R&D capacity building, as well as creating an international environment, providing multicultural and international education, medical and other facilities. In terms of attracting talents, enterprises not only provide generous salary

benefits, but also pay attention to employee benefits and career development opportunities. Most of the research on talent attraction by foreign scholars has focused on industrial agglomeration[1] and the impact of regional development[2] on talent agglomeration. The study of urban talent attraction belongs to a type of regional talent attraction research[3]. However, domestic scholars mostly use a combination of qualitative and quantitative research methods to more accurately reveal the influencing factors of urban talent attraction[4].

The evaluation index system for talent attraction in this article: Study the evaluation index system for talent attraction, including multiple aspects such as economy, society, culture, environment, and the degree to which these aspects affect talent attraction. Factors influencing talent attraction: Study various factors that affect talent attraction, such as policy environment, economic development level, public service facilities, cultural atmosphere, etc., and how these factors interact to collectively affect talent attraction. Talent mobility and talent attraction: Study the laws and trends of talent mobility, as well as the differences in talent attraction between different regions and cities, to provide a basis for formulating talent attraction strategies.

Based on screening the factors that affect the attractiveness of talents, three primary indicators are obtained: development prospects, income, and environment, and then analyzed in detail. To evaluate the attractiveness of Hangzhou to talents, an Analytic Hierarchy Process (AHP) model is established to analyze the proportion of each secondary indicator in the overall goal, obtain scores for each city (Hangzhou, Shanghai, Chengdu), and more specifically determine the attractiveness of each city to talents; In order to evaluate the level of various measures taken by Hangzhou to improve the living environment for talents and enterprises, a fuzzy comprehensive evaluation model was established to obtain the evaluation scores of Hangzhou before and after the implementation of the measures.

Taking technology-based talents as the specific talent type, 10 indicators that may affect the attractiveness of technology-based talents were selected from the 2021 statistical yearbooks of five cities, and the indicators were divided into 3 factors. The collected data was dimensionless, and the scores and proportions of each factor in the city were calculated through factor analysis. The advantages and disadvantages of attracting talents to Hangzhou were analyzed, and suggestions for improving talent attraction were given.

2. Construction of a Talent Attraction Evaluation Model for Hangzhou City

2.1 Framework of evaluation indicator system elements

Whether the ideals and desires of talents can be fulfilled, as well as whether the personal and family needs of talents can be met, all play a significant role in attracting talents. An analysis was conducted on three levels of indicators: development prospects, income, and environment. Through element analysis, data screening, expert consultation, and social surveys, a talent attraction indicator structure was constructed as shown in Table 1:

Table 1 Talent Attraction Evaluation Index System

Evaluation objectives	Evaluation of primary indicators	Evaluation of secondary indicators	Explanation of evaluation indicators
Talent attraction A	Development prospects B_1	Per Capita GDP C_1	Per capita creation of regional wealth (yuan/person)
		total volume of imports and exports C_2	2016-2020 Annual average total import and export trade volume
		Total value of the tertiary industry C_3	Total amount of tertiary industry
		economic growth rate C_4	2016-2020 average annual growth rate
	income B_2	Growth rate of housing prices C_5	2016-2020 Annual average growth rate of housing prices
		price index C_6	2016-2020 Average annual price index (based on the previous year)
		Average housing price C_7	2016-2020 Annual average housing price

B_3 environment	Average annual salary of employees C_8	2016-2020 Annual average in-service salary
	public security C_9	Number of cases accepted by the court (10000)
	traffic C_{10}	Number of public transportation passengers
	pollute C_{11}	Good air quality days
	education C_{12}	Education proportion
	medical treatment C_{13}	Number of medical institutions
	shopping C_{14}	Total Consumer Index of Residents

2.2 Analysis of the Principle of the Action of Secondary Indicators for Talent Attraction Evaluation

2.2.1 Development prospects

Talents are often attracted by the economic growth rate of cities. Cities with rapid growth have greater vitality, and enterprises are more likely to develop rapidly, thereby generating more high-quality employment opportunities. Therefore, economic growth rate is an important indicator for attracting talent. Per capita GDP represents the degree to which an individual's value is realized in a region, and talent usually places more emphasis on reflecting individual value. In cities with higher per capita GDP, personal value is more easily recognized, making it easier to retain talent. In addition, as an important import and export trade city, Hangzhou has strong economic mobility, which also helps to attract more outstanding talents.

2.2.2 Income

The average wage level in a city reflects the general income situation in the area. Talents usually value compensation very much, so good salary and benefits are more likely to attract excellent talents. When the average annual salary of employees in a city is higher, more talents may choose to join the city because they can receive better treatment. However, the impact of average housing prices, housing price growth rates, and price indices on talent attraction is opposite. The higher the values of these indicators, the poorer the attractiveness of talent. High housing prices and prices may increase the cost of living and reduce the attractiveness of talent.

2.2.3 Environment

In modern society, with abundant material resources, people have increasingly high demands for their living environment. Therefore, the air quality, water source quality, and natural environment of a city are receiving increasing attention from people. A good ecological and living environment has greater help in attracting talents to cities. In addition, as people pay more attention to health issues, they will pay attention to the distribution of medical facilities and treatment levels in cities. The more complete a city's medical facilities are, the greater its attraction to talent. At the same time, talents will also pay attention to the transportation conditions of the city. Generally speaking, the better the condition of transportation roads, the more convenient life is, and the better the living environment for talents. Public security, education, and shopping are also important indicators for measuring the living environment. A city with good social security, abundant educational resources, and convenient shopping can provide better living conditions for talents, thereby enhancing the attractiveness of the city.

2.3 Calculation and determination of weights for each indicator

The comparison of relevant elements in the entire judgment matrix is mainly based on expert opinion ratings.

2.3.1 Establishment and calculation of various judgment matrices

1) Overall objective judgment matrix (comparison of relative importance between corresponding primary indicators relative to the overall objective)

Table 2 Talent Attraction

A	B₁	B₂	B₃	W_i	λ_{max}	3.0092
B₁	1	1/2	2	0.2970	CI	0.0046
B₂	2	1	3	0.5396	RI	0.520
B₃	1/2	1/3	1	0.1634	CR	0.0088
			total	1.00		

$$\lambda_{\max} = 3.0092, CI = 0.0046, RI = 0.52, CR = 0.0088 < 0.10$$

In the three indicator systems of talent attraction, the weight of development prospects is 0.2970, the weight of income is 0.5396, and the weight of environment is 0.1634. Among them, **CR < 0.1** passes the consistency test, as shown in Table 2.

2) Evaluation of primary indicator judgment matrix (comparison of relative importance between corresponding secondary indicators relative to primary indicators)

Table 3 Development Prospects

B₁	C₁	C₂	C₃	C₄	W_i	λ_{max}	4.1621
C₁	1	5	5	3	0.5471	CI	0.0540
C₂	1/5	1	1/2	1/3	0.0796	RI	0.8900
C₃	1/5	2	1	1/4	0.1061	CR	0.0607
C₄	2/3	3	4	1	0.2673		
				total	1.0001		

$$\lambda_{\max} = 4.1621, CI = 0.0540, RI = 0.89, CR = 0.0607 < 0.10$$

Among the four indicator systems for development prospects, the weight of per capita GDP is 0.5471, the weight of total import and export trade is 0.0796, the weight of total value of the tertiary industry is 0.1061, and the weight of economic growth rate is 0.2673. Among them, CR passes the consistency test, as shown in Table 3.

Table 4 Revenue

B₂	C₅	C₆	C₇	C₈	W_i	λ_{max}	4.1331
C₅	1	1/5	1/2	1/7	0.0620	CI	0.0444
C₆	5	1	5	1/2	0.3536	RI	0.8900
C₇	2	1/5	1	1/3	0.1124	CR	0.0498
C₈	7	2	3	1	0.4719		
				total	0.9999		

$$\lambda_{\max} = 4.1331, CI = 0.0444, RI = 0.89, CR = 0.0498 < 0.10$$

In the four indicator systems of income, the weight of the housing price growth rate is 0.0620, the weight of the price index is 0.3536, the weight of the average housing price is 0.1124, and the weight of the average annual salary of employees is 0.4719. Among them, CR passes the consistency test, as shown in Table 4.

Table 5 Environment

B_3	C_9	C_{10}	C_{11}	C_{12}	C_{13}	C_{14}	W_i	λ_{\max}	6.3937
C_9	1	3	3	3	3	7	0.3737	CI	0.0787
C_{10}	1/3	1	2	1/4	1/3	3	0.0985	RI	1.2600
C_{11}	1/3	1/2	1	1/3	1/2	5	0.0944	CR	0.0625
C_{12}	1/3	4	3	1	1	5	0.2146		
C_{13}	1/3	3	2	1	1	5	0.1845		
C_{14}	1/7	1/3	1/5	1/5	1/5	1	0.0343		
						total	1		

$$\lambda_{\max} = 6.3937, CI = 0.0787, RI = 1.26, CR = 0.0625 < 0.10$$

In the six indicator systems of the environment, the weight of public security is 0.3737, the weight of transportation is 0.0985, the weight of pollution is 0.0944, the weight of education is 0.2146, the weight of medical care is 0.1845, and the weight of shopping is 0.0343. Among them, CR passes the consistency test, as shown in Table 5.

2.3.2 Hierarchical sorting and verification

Table 6 shows the overall ranking of secondary indicators based on the overall goal, in order to calculate the proportion of comprehensive evaluation indicators.

Table 6 Weights of Talent Attraction Evaluation Indicators

gradation C	B_1	B_2	B_3	Relative total target weight of each indicator
	0.2970	0.5396	0.1634	
C_1	0.5471			0.162489
C_2	0.0796			0.023641
C_3	0.1061			0.031512
C_4	0.2673			0.079388
C_5		0.0620		0.033455
C_6		0.3536		0.190803
C_7		0.1124		0.060651
C_8		0.4719		0.254637
C_9			0.3737	0.061063
C_{10}			0.0985	0.016095
C_{11}			0.0944	0.015425
C_{12}			0.2146	0.035066
C_{13}			0.1845	0.030147
C_{14}			0.0343	0.005605

The indicators and weights of gravity evaluation elements are summarized in the following table:

Table 7 Talent Attraction Evaluation Index System

Evaluation objectives	Evaluation of primary indicators	Evaluation of secondary indicators	weight
Talent attraction	Development prospects	per capita GDP	0.162489
		total volume of imports and exports	0.023641
		Total value of the tertiary industry	0.031512
		economic growth rate	0.079388
	income	Growth rate of housing prices	0.033455
		price index	0.190803
		Average housing price	0.060651
		Average annual salary of employees	0.254637
	environment	public security	0.061063
		traffic	0.016095
		pollute	0.015425
		education	0.035066
		medical treatment	0.030147
		shopping	0.005605

The attractiveness of talents is divided into 14 secondary indicators, including a per capita GDP weight of 0.162489, a total import and export trade weight of 0.023641, a tertiary industry total value weight of 0.031512, an economic growth rate weight of 0.079388, a housing price growth rate weight of 0.033455, a price index weight of 0.190803, an average housing price weight of 0.060651, an average annual employee salary weight of 0.254637, a security weight of 0.061063, and a transportation weight of 0.016095. The pollution weight is 0.015425, the education weight is 0.035066, the medical weight is 0.030147, and the shopping weight is 0.005605, as shown in Table 7.

2.3.3 Quantitative evaluation of talent attraction in Hangzhou city

In order to quantitatively evaluate the level of talent attraction in Hangzhou, a comparison was made between Shanghai and Chengdu[5]. Through calculation, it can be concluded that the urban attraction index of Hangzhou is 76.46, the talent attraction index of Shanghai is 85.65, and the talent attraction index of Chengdu is 58, as shown in Table 8.

Table 8 Comprehensive Scores of Each City

evaluating indicator	Score for each city			weight	Comprehensive score of each city		
	Hangzhou	Shanghai	Chengdu		Hangzhou	Shanghai	Chengdu
per capita GDP	100	95	55	0.162489	16.25	15.44	8.94
total volume of imports and exports	100	100	65	0.023641	2.36	2.36	1.54
Total value of the tertiary industry	50	100	40	0.031512	1.58	3.15	1.26
economic growth rate	85	59	70	0.079388	6.75	4.68	5.56
Growth rate of housing prices	85	100	65	0.033455	2.84	3.35	2.17
price index	60	85	50	0.190803	11.45	16.22	9.54
Average housing price	30	30	20	0.060651	1.82	1.82	1.21
Average annual salary of employees	85	96	70	0.254637	21.64	24.45	17.82
public security	70	90	62	0.061063	4.27	5.50	3.79
traffic	65	55	85	0.016095	1.05	0.89	1.37
pollute	80	90	75	0.015425	1.23	1.39	1.16
education	75	90	48	0.035066	2.63	3.16	1.68
medical treatment	70	90	51	0.030147	2.11	2.71	1.54
shopping	85	95	75	0.005605	0.48	0.53	0.42
				Total score	76.46	85.65	58

From the comprehensive evaluation results, Shanghai has the best overall evaluation in terms of talent attraction, ranking first at a good level. Compared with Hangzhou and Chengdu, Shanghai has obvious advantages in talent attraction. Although Shanghai's economic growth rate and transportation capacity are slightly lower than those of Hangzhou and Chengdu, overall, Shanghai's advantages are still very obvious. The talent attraction of Hangzhou and Chengdu is slightly lower than that of Shanghai, at an average level. However, Hangzhou has performed well in terms of per capita GDP and

import and export trade, which are important factors in attracting talent. Therefore, Hangzhou has significant advantages and room for growth in attracting talents in the future, as shown in Figure 1.

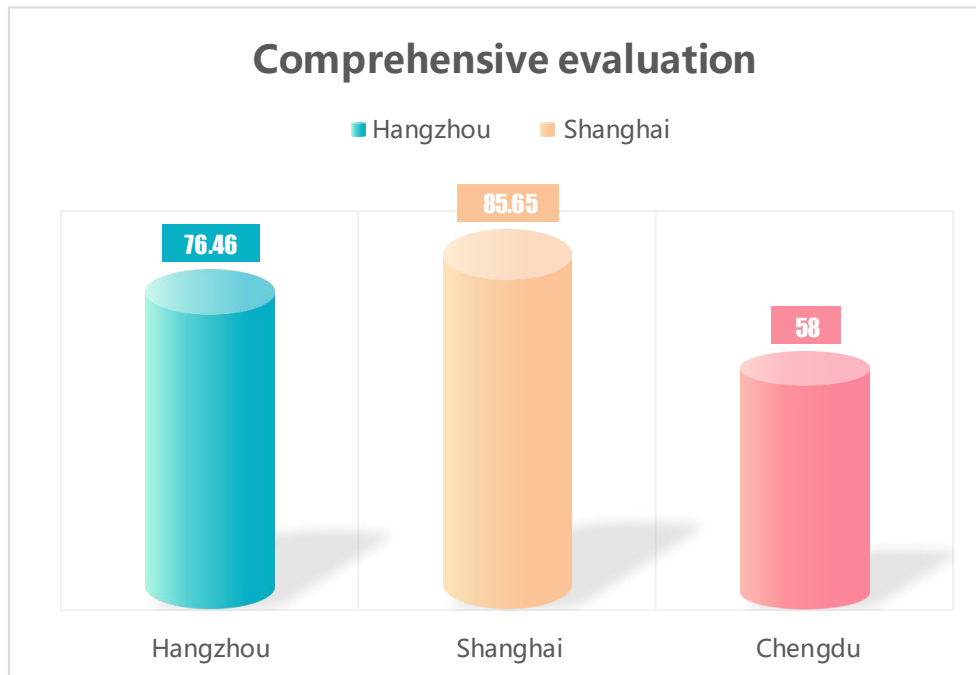


Figure 1 Comprehensive evaluation of talent attraction

In summary, Shanghai, Hangzhou, and Chengdu each have their own characteristics in terms of talent attraction. Shanghai performs the best overall, while Hangzhou has great potential in attracting talent in the future.

2.4 Evaluation of changes in talent attraction before and after implementing measures

2.4.1 Establishment and solution of a multi-level fuzzy comprehensive evaluation model.

For systems with many influencing factors and more to consider, the two-level fuzzy comprehensive evaluation method can be used to solve [6].

1) Evaluation before implementation of measures

The weight of the primary indicator is (set by experts):

$$A = [0.3 \quad 0.4 \quad 0.3] \quad (1)$$

The weight of secondary indicators is

$$A_1 = [0.4 \quad 0.1 \quad 0.2 \quad 0.3]. \quad (2)$$

$$A_2 = [0.1 \quad 0.3 \quad 0.2 \quad 0.4] \quad (3)$$

$$A_3 = [0.15 \quad 0.1 \quad 0.1 \quad 0.3 \quad 0.3 \quad 0.05] \quad (4)$$

First level fuzzy comprehensive evaluation of each sub factor set:

$$B_1 = A_1 \cdot R_1 = [0.26 \quad 0.44 \quad 0.24 \quad 0.06 \quad 0] \quad (5)$$

$$B_2 = A_2 \cdot R_2 = [0.15 \quad 0.51 \quad 0.20 \quad 0.14 \quad 0] \quad (6)$$

$$B_3 = A_3 \cdot R_3 = [0.31 \quad 0.515 \quad 0.13 \quad 0.045 \quad 0] \quad (7)$$

Draw a second level comprehensive evaluation:

$$\begin{aligned} \mathbf{B} = \mathbf{A} \cdot \mathbf{R} &= [0.3 \quad 0.4 \quad 0.3] \cdot \begin{bmatrix} 0.26 & 0.44 & 0.24 & 0.06 & 0 \\ 0.15 & 0.51 & 0.20 & 0.14 & 0 \\ 0.31 & 0.515 & 0.13 & 0.045 & 0 \end{bmatrix} \\ &= [0.2310 \quad 0.4905 \quad 0.1910 \quad 0.0875 \quad 0] \end{aligned} \quad (8)$$

2) Evaluation after issuing measures:

$$\mathbf{B} = [0.5745 \quad 0.2490 \quad 0.1380 \quad 0.0385 \quad 0] \quad (9)$$

Due to the maximum value of 0.5745 in B, the final evaluation result is good, and it is believed that the evaluation of the attractiveness of talents after implementing the measures is good.

2.4.2 Analysis of the effect of adding measures

The implementation of the Measures to Improve the Business and Employment Environment in Hangzhou has once again led to a change in expert ratings and an increase in certain numerical values. According to the final data, the evaluation results before the implementation of the measures were good, but after the implementation, the evaluation score of this measure increased to good[7]. Therefore, the effect of Hangzhou's measures to improve the business and employment environment is very obvious and effective, with an increase in the evaluation score.

3. Suggestions for enhancing the attractiveness of talents in Hangzhou city

3.1 Current Situation of Talent Attraction in Hangzhou City

Hangzhou not only ranks among the top in attracting technology-based talents among these five cities, but also enjoys a high reputation nationwide. This is due to Hangzhou's foresight and boldness in scientific research investment. Compared to other cities, the proportion of scientific research investment in Hangzhou is significantly higher, reflecting the government's high emphasis on technological innovation. This large-scale investment provides a high-quality research environment and abundant opportunities for technology-based talents. The scientific research atmosphere in Hangzhou is also an important component of its attractiveness. Here, there are first-class scientific research institutions and facilities, as well as active academic exchange activities, providing a challenging platform for technology-based talents. In such an environment, technology-based talents can access the latest technological information, engage in in-depth cooperation and communication with peers, and thus promote their own technological innovation career.

However, although Hangzhou has done quite well in attracting technology-based talents, there are still some shortcomings that need to be improved. Firstly, although the proportion of scientific research investment in Hangzhou is already high, there is still room for improvement compared to its total economic output[8]. This means that Hangzhou still has great potential to tap into scientific research investment and needs to continue to increase investment to attract more technology-based talents. Secondly, the environmental factors in Hangzhou are also one of the important factors affecting the attractiveness of technology-based talents. Although the natural environment and quality of life in Hangzhou have received high praise nationwide, there is still room for improvement in some details. For example, the transportation conditions, air quality, and public facilities in cities need to be continuously improved and optimized to enhance the satisfaction and sense of belonging of technology-based talents.

Overall, Hangzhou has significant advantages and potential in attracting technology-based talents, but it also faces some challenges and shortcomings. In order to further enhance its attractiveness, Hangzhou needs to continuously optimize environmental factors and quality of life while maintaining research investment, providing a more high-quality, livable, and challenging work and living environment for technology-based talents[9]. This will help Hangzhou maintain its leading position in the global competition for scientific and technological talents, and promote the continuous development of its scientific and technological innovation industry.

3.2 Strategies for Improving the Attraction Level of Talents in Hangzhou City

3.2.1 Optimize educational services

Education is very important for a family and children. For talents who have families and children after working for many years, choosing a city job requires considering many factors, among which education is a very important aspect. If the education level in a city is not high, the number of teachers is insufficient, the number of kindergartens and schools is insufficient, or the admission requirements are too high, it will make talents feel worried and uneasy. In order to attract more talents to join urban construction, it is necessary to address their concerns. Among them, education is a very important aspect. Cities should improve their education level, strengthen the allocation of teaching staff, increase the number of kindergartens and schools, lower admission requirements, etc., so that the children of talents can receive equal education in the city and alleviate their worries and pressures.

In addition, cities also need to provide support and guarantees in other aspects, such as a good working environment, comprehensive public services, rich cultural activities, etc., so that talents can feel the warmth and care of the city and are more willing to contribute their efforts to urban construction.

3.2.2 Deepen industrial reform and enhance innovation capabilities

The advantages and challenges of talent resources in Hangzhou are indeed worth paying attention to. Firstly, it is necessary to optimize the talent structure: Hangzhou can further optimize the talent structure to attract and cultivate more high-tech talents. By providing a better working environment, welfare benefits, and career development opportunities, we aim to attract more talents to come to Hangzhou. Secondly, cooperation between industry, academia, and research can be strengthened: cooperation with universities and research institutions can be strengthened to promote the integrated development of industry, academia, and research. Through cooperation, technological innovation and achievement transformation can be promoted, and innovation output can be improved. Further promote industrial restructuring: Hangzhou can accelerate industrial restructuring and develop high-tech industries such as artificial intelligence, biotechnology, and new energy. By guiding and supporting enterprises to increase research and development investment, we promote technological innovation and product upgrading. Next, it is necessary to create an innovative atmosphere: Hangzhou can create a stronger innovation atmosphere, encouraging enterprises and individuals to try innovation. By organizing technology competitions, innovation and entrepreneurship activities, and other means, we can stimulate people's enthusiasm and creativity for innovation. Finally, improve the innovation service system: establish a sound innovation service system, including technology transfer and transformation, intellectual property protection, financing support, and other aspects. By providing comprehensive services, reducing innovation costs and improving innovation efficiency.

In short, Hangzhou has advantages in talent resources, but efforts need to be made in industrial structure adjustment, industry university research cooperation, and innovation atmosphere creation to enhance the overall innovation capability.

3.2.3 Improve resident income and optimize urban living environment

A competitive salary level is very helpful in attracting talents, as they usually hope to pursue higher incomes. Hangzhou has a good level of economic development and sufficient funds to raise wage levels. Improving salary levels is an effective strategy to better attract outstanding talents. When choosing a job, people not only focus on development prospects, but also increasingly value the quality of life. A good living and working environment can attract a large number of talents to gather.

3.2.4 Strengthening the Quality of Basic Public Services in Hangzhou City

The improvement of the elderly care system, the soundness of medical security, and the convenience of transportation all have a profound impact on the quality of life of talents and the evaluation of future life expectations. It is crucial to implement the basic public service optimization project to adjust the supply structure of public services and better adapt to the actual needs of talents[10]. This measure will help improve the quality of life of talents, enhance their confidence and expectations for future living standards.

4. Conclusion

This article selects 14 indicators from four aspects, including development prospects, income, and

environment, to construct a talent attraction evaluation index system for Hangzhou City. The Analytic Hierarchy Process is used to comprehensively evaluate the talent attraction of Hangzhou, Shanghai, and Chengdu. The conclusion is as follows: Shanghai has the highest talent attraction, followed by Hangzhou, and Chengdu closely follows. On this basis, further focusing on technology-based talents as specific talent types, a comprehensive evaluation index system for the attractiveness of innovative talents is established through factor analysis, and the attractiveness ranking of innovative talents is obtained as Hangzhou, Hefei, Suzhou, Guangzhou, and Xiamen.

In order to enhance the attractiveness of Hangzhou to talents, the following are some policy recommendations:

1) Optimize education services: Ensure that more children of non Hangzhou migrant workers have the right to receive equal education in this city. This can be achieved by providing high-quality educational resources, developing fair educational policies, and strengthening communication with parents.

2) Deepen industrial reform and enhance innovation capability: carry out industrial structure adjustment, accelerate the development of some high-tech industries, in order to enhance overall innovation capability. The government can increase support for innovative enterprises and talents, encourage enterprises to strengthen technological research and innovation, and provide more innovation opportunities and platforms for talents.

3) Increase resident income and optimize urban living environment: By increasing resident income and improving urban living environment, provide better living conditions for talents. The government can formulate reasonable salary policies, raise the minimum wage standard, and increase investment in urban infrastructure and public services to enhance the livability and attractiveness of the city.

4) Strengthen the quality of basic public services in Hangzhou: Promote the improvement project of basic public services, and match the supply structure of public services with the actual demand for talents. This includes strengthening the construction of public service facilities such as healthcare, elderly care, education, and improving service quality, providing better living security and public service support for talents[10].

These policy suggestions will help enhance the attractiveness of Hangzhou to talents, attract more talents to come to Hangzhou for development, and inject new vitality and momentum into the economic and social development of Hangzhou[10].

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