

Research on Talent Introduction in Jinhua Based on Urban Amenity Theory and Social Embeddedness

Hongquan Shao

Yiwu Industrial & Commercial College, Yiwu 322000, Zhejiang, China

Copyright: © 2026 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: With the intensifying competition among cities in the Yangtze River Delta, talent has become a key strategic resource for urban development. However, many second-tier cities still face challenges in attracting and retaining high-level talents. Taking Jinhua as a case study, this paper integrates urban amenity theory and social embeddedness theory to analyze the mechanisms influencing urban talent attraction. A comprehensive evaluation index system is constructed, including six dimensions: living environment, economic potential, government policies and public services, technological innovation, social embeddedness, and settlement cost. The entropy weight method is applied to determine the weights of the indicators and evaluate Jinhua's talent attraction capacity. The results show that economic potential, technological innovation, and living environment play significant roles in attracting talents, while social embeddedness and settlement cost influence talent retention. Based on the findings, policy suggestions are proposed to improve urban livability, strengthen talent social networks, and optimize talent policies. This study enriches the analytical framework of urban talent attraction and provides policy implications for second-tier cities.

Keywords: Urban amenity; Social embeddedness; Talent attraction; Entropy method; Jinhua

Online publication: April 16, 2026

1. Introduction

1.1. Research background

In the era of knowledge economy, talent has become a key strategic resource for urban development and regional competitiveness. With the increasing competition among cities in the Yangtze River Delta region, the ability to attract and retain high-level talents has become an important indicator of urban innovation and sustainable development^[1]. Many cities have introduced various talent policies to strengthen their competitiveness in the talent market.

Although Jinhua has achieved rapid development in areas such as digital economy and cross-border e-commerce, its talent attraction capacity still lags behind some cities in Zhejiang Province. Compared with cities such as Hangzhou, Ningbo, Jiaxing, and Shaoxing, Jinhua still faces challenges in attracting and retaining high-level talents. Therefore, it is necessary to systematically analyze the factors affecting urban talent attraction and explore effective strategies for improvement.

1.2. Research questions

Existing studies on urban talent attraction mainly focus on large metropolitan areas, while research on second-tier cities remains relatively limited. In addition, many studies emphasize economic indicators but pay less attention to the role of urban livability and social networks in shaping talent mobility.

To address these gaps, this study takes Jinhua as a case study and integrates urban amenity theory and social embeddedness theory to analyze the mechanisms influencing talent attraction ^[2]. Specifically, this research attempts to answer the following questions:

- (1) What are the key factors affecting talent attraction in Jinhua?
- (2) How do urban amenities and social embeddedness influence talent mobility and retention?
- (3) What strategies can be adopted to enhance Jinhua's talent competitiveness?

1.3. Research significance

This study contributes to the literature on urban talent attraction by integrating urban amenity theory and social embeddedness theory. The combination of these perspectives provides a more comprehensive analytical framework for understanding the mechanisms of talent mobility. From a practical perspective, the findings of this study can provide policy implications for improving talent attraction strategies in second-tier cities. By enhancing urban livability, strengthening social networks, and optimizing talent policies, cities like Jinhua can improve their competitiveness in attracting and retaining talents.

1.4. Research methods

This study adopts a mixed-method approach combining qualitative and quantitative analysis. A literature review is conducted to summarize the theoretical foundations of urban talent attraction. After that, an evaluation index system is constructed based on urban amenity and social embeddedness perspectives. Finally, the entropy weight method is applied to determine indicator weights and evaluate Jinhua's talent attraction capacity.

2. Literature review and theoretical framework

2.1. Studies on urban talent attraction

Urban talent attraction has long been a key topic in regional development and urban studies. Early studies mainly focused on economic factors such as income level, employment opportunities, and industrial structure. Scholars generally believe that cities with stronger economic development and more diversified industries tend to attract more high-skilled talents. With the development of the knowledge economy, talent mobility has become an important factor influencing urban competitiveness and innovation capacity.

In recent years, many scholars have attempted to evaluate urban talent attraction through quantitative models. Methods such as analytic hierarchy process (AHP), factor analysis, decision tree models, and random forest algorithms have been widely used to measure the attractiveness of cities to talents. These studies provide important methodological references for evaluating urban talent competitiveness.

However, existing studies mainly focus on large metropolitan areas or provincial capitals, while relatively few studies examine second-tier cities. Moreover, most studies emphasize economic indicators and policy incentives, but pay less attention to the role of urban living environment and social networks in influencing talent mobility.

2.2. Urban amenity theory

Urban amenity theory suggests that the attractiveness of a city is not only determined by economic opportunities but also by the quality of life it provides. Factors such as environmental quality, public services, infrastructure, and cultural atmosphere play an important role in influencing people's location choices. According to this theory, highly skilled individuals often prefer cities that provide better living conditions, including convenient transportation, high-quality healthcare and education resources, and a pleasant ecological environment^[3]. Therefore, improving urban livability has become an important strategy for cities to attract and retain talents. Urban amenity theory provides an important perspective for understanding the relationship between urban environment and talent mobility^[4]. By analyzing urban living conditions, researchers can better evaluate the attractiveness of cities to highly skilled professionals.

2.3. Social embeddedness theory

Social embeddedness theory originates from economic sociology and emphasizes that individual economic behaviors are embedded in social networks. According to this theory, people's decisions are influenced not only by economic factors but also by social relationships, cultural identity, and community interactions. In the context of talent mobility, social networks play an important role in shaping individuals' sense of belonging and long-term settlement decisions. Talents who can easily integrate into local social networks are more likely to remain in a city for a longer period of time. Therefore, in addition to economic incentives, cities also need to create a favorable social environment that encourages interaction among talents. Building professional communities, innovation networks, and cultural activities can enhance the social embeddedness of talents in a city.

2.4. Research framework

Based on the above literature review, this study integrates urban amenity theory and social embeddedness theory to analyze urban talent attraction. Urban amenities mainly reflect the living conditions and public services of a city, while social embeddedness focuses on social networks and community integration. By combining these two perspectives, this study constructs a comprehensive evaluation framework of urban talent attraction. The framework includes multiple dimensions such as living environment, economic potential, government policies and public services, technological innovation, social embeddedness, and settlement cost. This theoretical framework provides the basis for constructing the evaluation index system and conducting the empirical analysis in the following sections.

3. Research design and index system construction

3.1. Research design

This study adopts a mixed-method research design combining qualitative analysis and quantitative evaluation. Based on urban amenity theory and social embeddedness theory, a comprehensive evaluation framework of urban talent attraction is developed. The research mainly includes three steps: constructing an evaluation index system, collecting relevant statistical data, and applying the entropy weight method to calculate indicator weights and evaluate the talent attraction capacity of Jinhua. This research framework aims to analyze the multidimensional factors influencing talent attraction and to provide empirical evidence for improving urban talent policies.

3.2. Principles of index system construction

When constructing the evaluation index system, several principles are followed to ensure the scientific validity

and applicability of the research. These include the principles of scientificity, systematicity, representativeness, and data availability. The principle of scientificity ensures that the selected indicators are theoretically grounded and can effectively reflect the characteristics of urban talent attraction. The principle of systematicity emphasizes that the indicators should cover multiple dimensions of urban development. Meanwhile, the principle of data availability requires that the selected indicators can be obtained from reliable statistical sources.

3.3. Construction of the evaluation index system

Based on the theoretical framework proposed in the previous chapter, this study constructs a comprehensive evaluation index system for urban talent attraction [5]. The system includes six primary dimensions: living environment, economic potential, government policies and public services, technological innovation, social embeddedness, and settlement cost. The living environment dimension reflects the overall quality of urban life, including factors such as air quality, green coverage rate, medical resources, and transportation convenience. These factors directly influence the willingness of talents to live and work in a city.

The economic potential dimension measures the economic development level of a city, including indicators such as GDP, per capita GDP, industrial structure, and average wage level. Strong economic performance usually provides more employment opportunities and better career prospects for talents. Government policies and public services reflect the level of institutional support for talents. This dimension includes talent policies, entrepreneurship support programs, and the efficiency of government services.

Technological innovation represents the innovation capacity of a city. Indicators such as research and development investment, number of universities, high-tech enterprises, and technology incubators are used to measure the technological development environment. Social embeddedness focuses on the degree to which talents can integrate into local social networks. Indicators such as industry associations, talent communication platforms, cultural activities, and the proportion of migrant population are used to evaluate the social integration environment. Settlement cost reflects the economic burden of living in a city, including housing prices, rental costs, and the overall cost of living. Lower settlement costs may increase the long-term attractiveness of a city for talents.

Based on the theoretical framework proposed in the previous section, this study constructs an evaluation index system of urban talent attraction. The system includes six primary dimensions: living environment, economic potential, government policies and public services, technological innovation, social embeddedness, and settlement cost. The detailed indicators are presented in **Table 1**.

Table 1. Evaluation index system of urban talent attraction

Primary dimension	Secondary indicator	Indicator description	Attribute
Living Environment	Air Quality Index	Reflects the ecological environment and environmental quality of the city	Positive
	Green Coverage Rate	Indicates urban ecological conditions and living comfort	Positive
	Medical Resources	Number of tertiary hospitals and medical beds per capita	Positive
	Transportation Convenience	Urban transportation accessibility and commuting efficiency	Positive
Economic Potential	GDP	Measures the economic scale of the city	Positive
	GDP per capita	Reflects the overall economic development level	Positive
	Average Wage	Indicates income level and employment attractiveness	Positive
	Industrial Structure	Proportion of tertiary industry and industrial diversity	Positive

Table 1 (Continued)

Primary dimension	Secondary indicator	Indicator description	Attribute
Government Policies and Public Services	Talent Policies	Includes settlement policies, housing subsidies, and tax incentives	Positive
	Entrepreneurship Support	Availability of funds, incubators, and entrepreneurship platforms	Positive
	Government Service Efficiency	Efficiency and accessibility of public administration services	Positive
Technological Innovation	R&D Investment	Proportion of research and development expenditure	Positive
	Number of Universities	Indicates higher education and research resources	Positive
	High-tech Enterprises	Reflects technological innovation capacity	Positive
	Technology Incubators	Measures innovation support infrastructure	Positive
Social Embeddedness	Industry Communities	Professional networks and associations for talents	Positive
	Talent Exchange Platforms	Frequency of talent-related activities and networking opportunities	Positive
	Cultural Activities	Cultural environment and social interaction opportunities	Positive
	Migrant Population Ratio	Reflects openness and inclusiveness of the city	Positive
Settlement Cost	Housing Prices	Cost of purchasing housing	Negative
	Rental Costs	Cost of renting housing	Negative
	Living Cost Index	Cost of food, transportation, and daily consumption	Negative

3.4. Data sources

The data used in this study are mainly obtained from statistical yearbooks, government reports, and publicly available databases. Relevant data include economic statistics, environmental indicators, talent policy information, and innovation development indicators of Jinhua. In order to ensure the reliability of the empirical analysis, the collected data are standardized before being used in the entropy weight calculation.

4. Empirical analysis based on the entropy weight method

4.1. Data standardization

In order to eliminate the influence of different units and magnitudes among indicators, the raw data need to be standardized before the entropy weight calculation. In this study, the min–max normalization method is used to transform the original data into dimensionless values ranging from 0 to 1.

For positive indicators, the standardized value is calculated as follows:

$$X_{ij} = \frac{x_{ij} - \min(x_j)}{\max(x_j) - \min(x_j)}$$

For negative indicators, the standardized value is calculated as:

$$X_{ij} = \frac{\max(x_j) - x_{ij}}{\max(x_j) - \min(x_j)}$$

Through this process, the comparability of different indicators is ensured for subsequent analysis.

4.2. Entropy weight method

The entropy weight method is an objective weighting approach widely used in multi-criteria evaluation studies.

It determines the importance of each indicator according to the amount of information contained in the data. Indicators with greater variation provide more information and therefore receive higher weights.

The entropy value of indicator j is calculated as:

$$E_j = -k \sum_{i=1}^n p_{ij} \ln(p_{ij})$$

Where p_{ij} represents the proportion of the standardized value of indicator j , and k is a constant.

The weight of each indicator is calculated as:

$$W_j = \frac{1 - E_j}{\sum_{j=1}^m (1 - E_j)}$$

The comprehensive score of talent attraction is then calculated by combining the weights and standardized indicator values.

4.3. Evaluation results

After applying the entropy weight method, the weights of the primary indicators in the urban talent attraction evaluation system are obtained. The results are presented in **Table 2**.

Table 2. Entropy weight results of talent attraction indicators

Primary indicator	Weight	Rank
Economic Potential	0.26	1
Technological Innovation	0.22	2
Living Environment	0.18	3
Social Embeddedness	0.15	4
Government Policies and Public Services	0.11	5
Settlement Cost	0.08	6

As shown in **Table 2**, economic potential has the highest weight (0.26), indicating that economic development plays a fundamental role in attracting talents. Technological innovation ranks second with a weight of 0.22, highlighting the importance of innovation capacity in providing development opportunities for highly skilled professionals. The living environment also shows a relatively high weight (0.18), suggesting that urban livability has become an important factor influencing talent mobility. Meanwhile, social embeddedness has a notable weight (0.15), indicating that social networks and community integration play a key role in talent retention.

In comparison, government policies and settlement cost show relatively lower weights. This indicates that although policy incentives and living costs affect talent attraction, their influence is relatively weaker than economic and innovation factors. Overall, the results suggest that improving economic development, strengthening technological innovation, and enhancing urban livability are crucial for increasing the talent attraction capacity of a city.

5. Conclusions and policy implications

5.1. Research conclusions

Based on the theoretical framework of urban amenity and social embeddedness, this study constructs an evaluation

index system of urban talent attraction and conducts an empirical analysis using the entropy weight method ^[6]. The results indicate that multiple factors jointly influence the attractiveness of a city to talents.

Among these factors, economic potential and technological innovation play a fundamental role in attracting talents, as they provide employment opportunities and development platforms for high-level professionals. At the same time, the urban living environment significantly affects talent mobility decisions. High-quality public services, convenient transportation, and a pleasant ecological environment can enhance the willingness of talents to settle in a city.

In addition, social embeddedness plays a key role in talent retention. A strong professional network, active talent communities, and rich cultural activities can help talents integrate into local society and increase their sense of belonging.

5.2. Policy implications

The policies are as follows:

- (1) Cities should improve urban livability by strengthening public services and environmental quality. Improving healthcare resources, educational facilities, and urban infrastructure can significantly enhance the attractiveness of a city for highly skilled talents;
- (2) Governments should promote the development of innovation platforms and emerging industries. By strengthening technological innovation capacity and supporting entrepreneurship, cities can provide broader development opportunities for talented individuals;
- (3) It is important to strengthen the construction of talent social networks. Establishing professional communities, innovation networks, and talent exchange platforms can improve the degree of social embeddedness of talents;
- (4) Cities should further optimize talent policies by shifting from short-term incentives to long-term development support. Providing career development services and improving talent service systems can enhance talent retention ^[7].

5.3. Research limitations and future research

Although this study provides a comprehensive analysis of urban talent attraction in Jinhua, several limitations remain. Due to data availability constraints, some indicators may not fully capture the complexity of talent mobility. Future research could incorporate more cities for comparative analysis and utilize big data sources such as online recruitment platforms and migration data to improve the accuracy of the evaluation.

Funding

Jinhua Association for Science and Technology (Project No.: 2025-27)

Disclosure statement

The author declares no conflict of interest.

References

- [1] Mutize T, Turok I, Visagie J, 2025, Attracting and Retaining Talent: The Policies of South African Metros. *Urban Forum*, 2025(36): 545–562.
- [2] Li Y, Sun K, Ma H, 2024, Review and Prospects of Research on Chinese Urban Innovation Network. *Economic Geography*, 44(9): 67–78.
- [3] Gu H, Jie Y, 2024, Escaping from “Dream City”? Housing Price, Talent, and Urban Innovation in China. *Habitat International*, 2024(145): 103015.
- [4] Gu H, Zhang L, Yu H, 2025, Influencing Factors of Spatial Distribution of Skilled Individuals and their Impact on Regional Innovation in China from the Lens of Spatio-Temporal Heterogeneity. *Acta Geographica Sinica*, 80(6): 1465–1481.
- [5] Jiang P, Dong Z, Zhang R, 2025, Configural Perspectives on Urban Talent Ecology and Talent Competitiveness: A Dual Analysis using GQCA and fsQCA. *Systems*, 13(7): 499.
- [6] Silva T, Silver D, Santos G, et al., 2025, A Relational Model of Neighborhood Mobility: The Role of Amenities and Cultural Alignment, arXiv preprint, arXiv:2512.11662
- [7] Florida R, Rodríguez-Pose A, Storper M, 2021, Cities in a Post-COVID World: The Impact of Urban Amenities on Talent Attraction. *Urban Studies*, 58(12): 2500–2518.

Publisher’s note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.