

# Influencing Factors of Long-Term Residence Intention of Highly Educated Inter-Provincial and Intra-Provincial Floating Population From the Perspective of Social Integration: Take Guangdong Province for Example

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Floating population plays an important role in the development of cities, regions, and countries. The economic growth path with Guangdong characteristics is inseparable from the support of highly educated groups. Studying the long-term residence intention of the highly educated floating population is helpful for the city to attract and retain talents. From the perspective of social integration, using CMDS 2017 data and taking Guangdong Province for example, this paper studies the influencing factors of long-term residence intention through SPSS logistic regression, taking intra-provincial and inter-provincial floating population with a bachelor's degree or above as sample. The main conclusions are: (1) Marital and childbearing status is the primitive influencing factor of long-term residence intention among intra-provincial and inter-provincial floating population. Samples with high income, under social insurance system, being female and having non-agricultural hukou, are tend to prefer long-term residence. Samples who connect with the locals and participate in social public welfare are more likely to stay. (2) Personal age and city livability have a significant positive impact on the long-term residence intention of the inter-provincial highly educated floating population, but agricultural hukou and self-employed laborer status will weaken the long-term residence intention of this group. (3) Participation in townsmen/alumni association has a positive effect on the long-term residence intention of the intra-provincial highly educated floating population, and connection with outlanders also promotes the long-term residence intention of this group. (4) The long-term residence intention of inter-provincial highly educated floating population is usually based on reality, therefore they pay more attention to the development, changes, and livability of the destination city. However, the long-term residence intention of intra-provincial highly educated floating population is usually based on perception, so they pay more attention to whether they like the city. Compared with intra-provincial flows, inter-provincial flows have higher economic and emotional migration costs, more institutional barriers, and more life adaptation problems. Therefore, the government should introduce targeted measures to promote social integration and improve long-term residence intention.

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#### Introduction

Human capital mainly refers to the knowledge, skills, and labor ability condensed in laborers. Human capital is the determinant of social progress and the main factor of modern economic growth (Schultz, 1990). Since the 18th National Congress of the Communist Party of China, the Chinese Government has vigorously promoted the strategies of "innovation-driven development" and "strengthening the country through human resource development", and made the introduction, cultivation, and appointment of high-end talent an important measure for the great rejuvenation of the Chinese nation (Zhang, 2018). At the local government level, due to competition among cities, population aging, and other issues, many city governments have issued preferential policies to attract and retain talent since 2017 (Luo & Tang, 2020).

Population has always been an important factor in the process of economic and social development in Guangdong Province. The economic development experience with Guangdong characteristics can be summed up as "central policy, Guangdong land, foreign capital, national labor force" mode (Li, 2011). According to the data of the 7th National Census (2020), the permanent resident population of Guangdong Province was 126.01 million in 2020, accounting for 8.93% of the total population of Chinese mainland, exceeding that of Shandong Province and Henan Province. Compared with the size of the 104.32 million residents in the 6th National Census in 2010, the number of residents increased by 21.69 million, with a 10-year increase of 20.79%, which is far greater than the increase of 5.93% nationwide. Among them, the large number of inter-provincial floating population is an important reason for the rapid increase of population size in Guangdong Province. In 2010, the floating population in Guangdong Province and 12.0% of the floating population in the country.

The intention to settle refers to the idea of whether the migrant population is willing to live there for a long time after entering the place for a while. This problem is not only related to a person's own development, but also has an important impact on the process of urbanization in China. Originated from the developed countries in Europe and America, the concept of social integration mainly refers to the adaptation of migrants to their work and life. More studies have shown that the better the degree of social integration, the greater the self-identity of the migrant population, and also more willing to stay and become local residents (Xiao, 2018).

Therefore, from the perspective of social integration, using authoritative survey data and statistical regression model, this paper empirically studies the influence of livelihood capital, social relationship network, social participation, psychological identity, and other factors on the long-term residence intention of highly educated migrant population in Guangdong Province, and explores the similarities and differences between inter-provincial highly educated floating population and intra-provincial highly educated floating population.

# Literature Review and Theoretical Framework

The traditional view on talents migration among regions is the push-pull theory put by scholars such as Lavinstein (Ravenstein, 1884). However, economic motivation cannot fully explain all the phenomena of population movement. With the development of empirical research, more and more scholars choose sociological

perspective as a new entry point. Massey (1988) believes that the migration network is a combination of a series of human relationships, the ties of which can be kinship, friendship, shared community origin, and so on. Once the migration network is formed, information about the destination may be more accurate and comprehensive, and the cost and risk of migration may therefore be reduced (Massey, 1988). Portes and Borocz (1989) believe that every sub-link of the migration process, from mobile decision-making to final urban settlement decision-making, is associated with social networks. Through the tracking research on 51 villages in northeastern Thailand Nang Rong area, Korinek Entwisle, and Jampaklay (2005) found that migration, and are more educated than the sample mean, are still working and living in the city of their destination after six years. They point out that the social ties formed by migrants in the destination cities will promote their long-term residence (Korinek et al., 2005).

About social integration, sociologists from western countries have done a lot of research and formed relevant theories, and domestic scholars (Yang (2009), Zhang & Lei (2008), Huang & Kareda (2010), Zhou (2012), Lu (2014)) have done the summary work. Among them, Huang Kuangshi and Garida (2010) divided the social integration theory into three levels, namely macro (social level), meso (group level), micro (individual and psychological level) (Huang & Gagrida, 2010). Macro-theory mainly includes: social stratification theory, social unity theory, social integration theory, social distance theory, social exclusion theory, social support theory, social capital (social network) theory, social policy and social equity theory. Meso-theory mainly includes: social assimilation theory, cultural pluralism, cultural generation theory, partition fusion theory, fusion heterogeneity theory, and ethnic group stratification theory. Micro-theory mainly includes: identity theory, social integration theory, social acceptance theory, social adaptation theory, and human capital theory.

Although the foreign studies provide a basic cognitive framework and interpretation path for us to understand the social integration of migrant groups, the current study of the long-term residence intention of Chinese floating population from the perspective of social integration is still limited. Shaowei Chen et al. (2016) conducted a study on 1,953 migrants from 12 cities in China through face-to-face interviews. They found that the degree of dependence on host cities (specifically: duration of migration, fluent use of dialect, frequency of contact with local residents, and other connotations) was positively correlated with the willingness to settle down. The results of statistical regression analysis show that although migrants with better human capital (higher education) tend to settle down, social-cultural attachment to a city also plays an important role in residence intention (Chen & Liu, 2016). Based on the data of China Migrants Dynamic Survey 2012 (CMDS 2012) and the relevant statistical yearbook data, Lin Liyue et al. (2016a) analyzed the migration intention, spatial pattern, and influencing factors of the floating population in the cities above the prefecture level in China, and found that the social integration degree of the floating population in the cities would positively promote the residence intention (Lin & Zhu, 2016). However, the study of floating population in our country is relatively late, and topics such as social integration and residence intention are more complicated, also domestic scholars have been learning from the foreign theories and methods for a long time, therefore a mature theory system with Chinese characteristics has yet to be established.

# **Data Source and Variable Selection**

## Survey Data and Study Object

In this paper, the data of China Migrants Dynamic Survey 2017 (CMDS 2017) are used. This nation-wide survey is carried out in provinces, cities, autonomous regions, and municipalities and Xinjiang Production and Construction Corps by stratified, multi-stage, and proportional PPS method. When stratified sampling, provincial capital cities, planned single-listed cities, and individual key cities are the mandatory layers, and other cities are the other layers. When multi-stage sampling, the first stage sampling frame comes from the annual report data of floating population in the previous year, and the second stage sampling frame is compiled according to the latest statistical data of health institution of each province. The samples of CMDS 2017 are: The floating population aged 15 years and above who live in the destination city for at least one month and are not registered in the district (county, city), excluding the instantaneous floating population in train stations or other places during the survey, and students in school.

The study object of this paper is the floating population with high educational background in Guangdong province. The subjects shall meet three conditions at the same time: (1) taking Guangdong Province as destination and living in the inflow place for at least one month; (2) non-local hukou<sup>1</sup>; (3) bachelor degree or above. After screening according to the above conditions, a total of 555 valid samples were obtained, including 334 samples of inter-provincial highly educated floating population and 221 samples of intra-provincial highly educated floating population.

## Variable Setting

This article takes the long-term residence intention of the high education floating population in Guangdong as the dependent variable. This issue is measured by "Do you plan to live here for a long time (more than 5 years)?". The individual who selects "Yes" indicates that he/she wishes to stay for a long time. The code is 1, and the code of options such as "No" and "Unexpected" is 2. Among all the samples, 49.37% of them have long-term residence intention, and the long-term residence intention of the inter-provincial and intra-provincial samples were 45.21% and 55.66% respectively.

In the aspect of social integration, this paper draws on the representative "four-dimension" model (Entzinger & Biezeveld, 2003). The model includes four dimensions of economic integration, social integration, political integration, and cultural integration (Liang & Wang, 2010). It is a deepening of the one-dimensional model (Park, 1950), two-dimensional model (Gordon, 1964), and three-dimensional model (Junger-Tas, 2001) proposed by the predecessors. According to the "four-dimensional" model and the research object of this paper, four kinds of independent variables are constructed to measure the social integration of highly educated floating population: livelihood capital, social relationship network, social participation, and psychological identity, which represent the four integration dimensions of economy, society, politics, and culture.

The independent variables of livelihood capital are divided into four dimensions: hukou, employment status, income, and insurance. In terms of hukou, the agricultural hukou is coded as 1, and the residential hukou, agricultural transfer hukou, non-agricultural transfer hukou, and non-agricultural hukou are classified as non-agricultural hukou, coded as 2. The employment status is divided into four categories: employees with fixed employers, employers, self-employed workers, workers without fixed employers and others. According to the

<sup>&</sup>lt;sup>1</sup> hukou: household registration system in Chinese pinyin.

data released by the Bureau of Statistics of Guangdong Province (2017), the average wage of urban employees in Guangdong Province in 2016 was 60,281 yuan, so code 1 means no less than the average wage of urban employees, and code 2 means less than the average wage of urban employees. In the aspect of insurance, the ones with insurance card is 1, and the ones without insurance card (including heard and unheard of this issue) is 2.

The independent variables of social relationship network can be divided into four dimensions: marriage and family, party-league organization/labor union, townsmen association, and friends. These four dimensions represent four kinds of social relations common in life. According to the theory of "strong relation-weak relation" (Granovetter, 1973), the main social objects of marriage and family and friends belong to "strong relation", and the party-league organization/labor union and townsmen association belong to "weak relation". Marriage and fertility were combined to obtain three categories: married with children, married without children, unmarried or other circumstances (divorce, widowhood, etc.), coded in the order of 1 to 3. "friends" term uses the question: "Who do you spend your spare time with most locally (excluding customers and other relatives)?" classify "fellow townsmen with local hukou" and "other locals" as "locals", code 1; "fellow townsmen without local hukou", "fellow townsmen who have moved to other areas", and "other outsiders" are classified as "outsiders" and coded as 2; Code "no/few friends" as 3. Individual social adaptation is mainly divided into behavioral adaptation and psychological identity.

The independent variables of social participation are divided into four dimensions: democratic management (village/resident autonomy), democratic decision-making (social situation and public opinion reflection), democratic supervision (public opinion supervision), and charity involvement. The corresponding questions in the questionnaire are: "give community/village advice or supervise community/village management", "through various methods to report the situation to the relevant government departments/put forward policy recommendations", "online comment on national affairs and social events, participate in discussions", "actively participate in the donation, blood donation without payment and volunteer activities"; code 1 represents "have such behavior", code 2 "no such behaviour".

The independent variables of psychological identity are divided into four dimensions: city sentiment, city concern, self-identification, and local acceptance perception. The corresponding questions in the questionnaire are: "I like the city/place where I live", "I am concerned about the change of the city/place where I live", "I feel that I am a local person", "I feel that the local person is willing to accept me as one of them". Code 1 represents "Yes" and code 2 represents "No".

Urban amenity refers to the environment, things, facilities, or services that can meet the physical and psychological needs of people and make people feel pleasant and comfortable (Florida, 2012). Urban amenity can be used to predict the future population and economic development of a certain area (Ullman, 1954). Wu, Yu, Wei, and Yang (2019) analyzed the panel data of 334 cities in China for 2010-2016, and found that the higher the accessibility and quality of urban amenity, the stronger the appeal of the city to the floating population. Therefore, gender, age, and amenity of destination city are taken as controlling variables. Take *Annual Report on China's Urban Competitiveness (No. 15)* by Ni (2017) as reference to urban amenity, namely livable competitiveness index.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Value range: 0-1, the larger the value, the more livable the city is; The index system includes: High-quality educational environment, healthy medical environment, safe social environment, green ecological environment, comfortable living environment, convenient infrastructure, active economic environment, etc.

# Table 1

Variable Description

Variable name	Variable definition	Mean	Standard deviation	Mean	Standard deviation
Dependent variable	ent variable (Inter-prov		ovincial)	(Intra-pr	ovincial)
Willingness to stay for a long time (More than five years)	1 = Yes; 2 = Unwilling	1.55	0.50	1.44	0.50
Independent variable					
1. Livelihood capital					
Hukou	1 = Agricultural hukou; 2 = Non-agricultural hukou 1 = Employee with a fixed employer;	1.49	0.50	1.43	0.50
Employment status	2 = Employer; 3 = Self-employed workers; 4 = Workers without fixed employers and others 1 = No less than the average	1.32	0.81	1.43	0.98
Income	wage of urban employees; 2 = Less than the average wage of urban employees	1.5	0.5	1.5	0.5
Insurance	1 = With insurance card; 2 = Without insurance card	1.5	0.5	1	0
2. Social relationship network					
Marital and family	1 = Married with children; 2 = Married without children; 3 = Unmarried or otherwise	1.84	0.92	2.08	0.90
Party and league organizations/labor union	1 = Yes; 2 = No	1.66	0.48	1.59	0.49
Townsmen association	1 = Yes; 2 = No	1.41	0.49	1.45	0.50
Friends	1 = Native; 2 = Outsiders; 3 = No/few friends.	1.90	0.57	1.68	0.67
3. Social participation					
Give community/village advice or supervise community/village management Through various methods to report the	1 = Yes; 2 = No	1.81	0.39	1.88	0.32
situation to the relevant government departments/put forward policy recommendations	1 = Yes; 2 = No	1.89	0.32	1.90	0.31
Online comment on national affairs and social events, participate in discussions	1 = Yes; 2 = No	1.79	0.40	1.85	0.36
Actively participate in the donation, blood donation without payment and volunteer activities	1 = Yes; 2 = No	1.35	0.48	1.37	0.48
4. Psychological identity					
I like the city/place where I live	1 = Yes; 2 = No	1.04	0.19	1.02	0.13
I am concerned about the change of the city/place where I live	1 = Yes; 2 = No	1.03	0.17	1.04	0.20
I feel that I am a local person	1 = Yes; 2 = No	1.41	0.49	1.37	0.48
I feel that the local person is willing to accept me as one of them	1 = Yes; 2 = No	1.05	0.22	1.02	0.15
5. Controlling variables					
Gender	1 = Male; 2 = Female	1.40	0.49	1.49	0.50
Age		26.5	4.5	27	0
Amenity		0.66	0.01	0.66	0.01

# **Analysis Methods and Model Results**

#### **Binary Logistic Regression Model**

Because the dependent variables in this study are dichotomous variables, the binary logistic regression model in SPSS software is used for analysis. Binary logistic regression model is a special form of logarithmic linear model. It uses maximum likelihood estimation to ensure the best fitting of each point. The model assumes that the probability of willing to stay for a long time is P, then the probability of unwilling to stay for a long time is 1-P, then  $\ln[P/(1-P)]$  makes logit change for P, denoted as logit.

$$logit(P) = ln[P/(1-P)] = \alpha + \beta_1 X_1 + \dots + \beta_m X_m$$
(1)

$$Z = \alpha + \beta_1 X_1 + \dots + \beta_m X_m \tag{2}$$

The linear regression equation was established with P as dependent variable:

$$P = \frac{e^2}{1 + e^2} \tag{3}$$

In the model,  $\alpha$  is a constant and  $\beta_m$  is a logistic regression coefficient, that is, it represents the relative contribution rate of each independent variable that affects the long-term residence intention. If the coefficient is positive, then  $e^{\beta m} > 1$ , indicating that the independent variable is positively correlated with the intention to stay; If the coefficient is negative,  $e^{\beta m h}$  is between 0 and 1, indicating a negative correlation between the independent variable and the intention to stay.

#### Analysis of Regression Results

From the overall test, the fitting degree of the model is better, which indicates that the independent variable can explain the dependent variable more fully. Through the study of the model parameters (Table 2), the following characteristics are found in the paper.

#### Livelihood capital.

(1) Commons: Groups with high income and insurance are more likely to stay.

Income level and insurance participation will significantly affect the long-term residence intention of highly educated floating population. The group whose annual income is no less than the average wage of urban employees is more inclined to stay for a long time than the group whose annual income is lower than the average wage of urban employees. The superiority ratio of the inter-provincial model is 1.611 and that of the intra-provincial model is 1.341. Compared with the inter-provincial high education floating population without insurance card, the probability that people with social security card are willing to stay for a long time is about 0.51 times higher; The probability of long-term residence of highly educated floating population within the province with insurance card is about 0.28 times higher than that of those without it.

(2) Differences: Rural hukou, self-employed migrant population with higher education are more likely to leave, but this feature is not significant in the intra-provincial model.

Hukou and employment status had no significant effect on the long-term residence intention of the floating population with high educational background within the province. However, the probability of making a long-term residence decision is low for inter-provincial agricultural hukou holders, about 0.32 times lower than for non-agricultural hukou holders. The inter-provincial highly educated migrant population with self-employed status is more likely to give up long-term residency than those without a fixed employer (or unemployed), with an odds ratio of 0.608.

Table 2

Regression Results o	f Influencing	Factors o	f Long-Term	Residence Intention	
Megression Mesuns 0	1 111/10/00/00/02	ruciors 0	I LONZ-ICIM	Residence mienion	

	Inter-provincial model			Intra-provincial model	
	Dominance ratio	Direction	Dominance ratio	Direction	
1. Livelihood capital					
Hukou ("Non-agricultural hukou" as reference group)					
Agricultural hukou	0.680***	-	1.015	+	
Employment status ("Workers without fixed employers and others	s" as referenc	e group)			
Employees with fixed employers	0.907	-	0.968	-	
Employer	0.835	-	1.256	+	
Self-employed	0.608***	-	0.898	-	
Income ("Less than average wage for urban employment" as refer	ence group)				
Not less than the average wage of urban employees	1.611***	+	1.341***	+	
Insurance ("Without insurance card" as reference group)					
	1.509***	+	1.279***	+	
2. Social relationship network					
Marriage and family ("Unmarried or Other" as reference group)					
	3.544***	+	3.329***	+	
	2.865***	+	2.660***	+	
Party and league organizations/Labor union (do not participate		·	2.000	1	
as reference group)	1.026	+	0.899	-	
	1.111	+	1.149**	+	
Friends ("No/few friends" as reference group)					
	1.609***	+	1.561***	+	
	0.853*	-	1.267**	+	
3. Social participation					
Give community/village advice or supervise community/village					
management ("None" as reference group)	0.991	-	0.990	-	
Through various methods to report the situation to the relevant					
government departments/put forward policy recommendations	1.182	+	0.960	-	
("None" as reference group)					
Online comment on national affairs and social events, participate	0.809**	-	1.001	+	
in discussions ("None" as reference group)					
Actively participate in the donation, blood donation without	1.237***	+	1.229***	+	
payment and volunteer activities ("None" as reference group)					
4. Psychological identity	1 220	I	1 745***		
I like the city/place where I live ("No" as reference group)	1.228	+	1.745***	+	
I am concerned about the change of the city/place where I live ("No" as reference group)	2.359***	+	1.652	+	
	2.375***	+	2.618***	+	
I feel that the local person is willing to accept me as one of them					
("No" as reference group)	1.094	+	1.350	+	
5. Controlling variables					
-	0.642***	-	0.848***	-	
Age	1.021***	+	0.998	-	
	0.682***	+	0.322	+	

Notes. \*, \*\* and \*\*\* represent significance levels of 0.1, 0.05 and 0.01 respectively.

## Social relationship network.

(1) Commons: Marriage and childbearing is the most critical factor that affects the long-term residence intention; There is a significant increase in long-term residence intention for those who make friends with locals.

Whether the inter-provincial or intra-provincial migrant population, those with spouses and children tend to stay for a long time, followed by those with spouses and without children. The long-term residence willingness of married and educated inter-provincial migrants is 3.544 times that of unmarried (or other) groups; In the inter-provincial model, the corresponding value is 3.329 times. Inter-provincial highly educated floating population, who socialize mainly with local people in their spare time, is about 0.61 times more likely to stay long term than those who rarely socialize (or do not); In the intra-provincial model, the corresponding value is 0.56 times.

(2) Differences: Making friends with outsiders will weaken the long-term residence intention of the interprovincial high-education floating population; there is a positive effect on the long-term residence intention of the intra-provincial migrants, but no significant effect on the inter-provincial migrants.

The long-term residence intention of the inter-provincial high-education floating population who mainly communicate with the outsiders in their spare time is weak, but for the intra-provincial high-education floating population, the link is not obvious. Intra-provincial migrants who participate in townsmen association tend to stay longer than those who do not participate in such activities, with a probability of about 0.15 times higher.

## Social participation.

(1) Commons: Charity participation positively affects long-term residence intention; There is no significant correlation between political participation and long-term residence.

On the one hand, highly educated migrants who are enthusiastic about charity are more willing to stay for a long time. On the other hand, the influence of political offline participation (whether or not to participate in grass-roots management, whether or not to participate in democratic supervision) on the long-term residence intention of highly educated floating population is not obvious.

(2) Differences: Online participation in political life will weaken the long-term residence intention of the inter-provincial high education floating population, but has no significant impact on the intra-provincial groups.

The long-term residence probability of inter-provincial highly educated floating population who comment on national affairs and social events online and participate in discussion is about 0.2 times lower than those who do not participate; and whether participating in the online form of political life or not, does not affect the intraprovincial group's long-term-stay intention.

## Psychological identity.

(1) Commons: Self-identification significantly affects long-term residence intention; the perception of local acceptance has no significant effect on the long-term residence intention.

The self-identification of highly educated migrants ("I feel I am a native") is significantly and positively related to the willingness to stay, with an inter- and intra-provincial odds ratio of 2.375 and 2.618 times, respectively. The intention to stay is not influenced by the perception of local acceptance ("I feel local people are willing to accept me as one of them").

(2) Differences: Inter-provincial floating population is greatly influenced by the degree of city concern; Intra-provincial floating population is greatly influenced by the degree of city sentiment. The intensity of long-term residence intention of highly educated inter-provincial migrants who pay attention to their destination ("I pay attention to the change of my current city/place") is about 2.359 times that of those who do not, while city concern has little effect on the long-term residence intention of intra-provincial groups. City sentiment ("I like the city/place where I live now") has a positive impact on the long-term residence intention of the intra-provincial group, and the long-term residence intention of those who like the place where they live is about 0.75 times higher than those who do not; But city sentiment has little effect on the long-term residence intention of the inter-provincial group.

#### Controlling variable.

(1) Commons: Women with higher education are more likely to stay than men.

For inter-provincial groups, women are about 0.36 times more likely than men to stay; For intra-provincial groups, women are about 0.16 times more likely than men to stay.

(2) Differences: Age and city amenity have a significant effect on the long-term residence intention of the inter-provincial migrants, but have no significant effect on intra-provincial migrants.

The long-term residence preference of highly educated inter-provincial migrants increases with age. Specifically, the long-term residence preference increases about 1.021 times for every year of age growth. The more suitable a city is to live, the more active the long-term residence intention of the inter-provincial migrant will be. Specifically, the long-term residence tendency of the inter-provincial migrants increases about 0.682 times for every unit of the amenity improvement. However, there is no correlation between long-term residence intention and age or amenity of the intra-provincial migrants.

# **Conclusions and Discussions**

Based on the data of China Migrants Dynamic Survey 2017 (CMDS 2017), this paper makes a comparative analysis of the long-term residence intention of highly educated floating population in Guangdong Province from the perspective of social integration.

The main conclusions are as follows:

On the one hand, from the general point of view,

1. among the highly educated floating population, the relationship network composed of family, relatives, friends, colleagues, hometown fellows, classmates, and so on can provide social support for them, including not only the material help needed for survival and development in the city, but also the irreplaceable emotion and emotional value. Good social support is conducive to physical and mental health (Cohen & Wills, 1985) so that they are willing to stay.

2. the highly educated floating population who participate in all kinds of social activities, especially charity, has a stronger desire for long-term residence than the non-participants. The process of social participation can cultivate the master mentality of floating population and make it pay attention to the development and change of flowing land and living community. All kinds of social activities have set up a social communication platform for the floating population. Through the communication with the local people and under the action of assimilation phenomenon (Ma, 1997), the life concept, thinking mode, and behavior habit of the floating population will be close to the real local people.

3. the construction of psychological identity has an important positive effect on the long-term residence intention. It is helpful for highly educated floating talents to establish their own group identity, to find their sense

of belonging, and to obtain information, service, material and spiritual help from the group.

4. the higher the income and insurance of the highly educated floating population, the longer the stay, the easier to achieve vertical social mobility, which means, middle class in the city want to stay most. At the same time, with the advancement of social concept and the improvement of female education rate, more and more highly educated women choose to leave their hometown for development.

On the other hand, from the point of view of difference,

1. the long-term residence intention of the inter-provincial migrants is usually based on the reality, so those who want to stay have the following characteristics: They hold non-agricultural hukou and have stable work, they make friends with the local people, concern about the city they live, pay attention to the amenity.

2. However, the long-term residence intention of the intra-provincial migrants is usually based on perception, so those who want to stay often have the following characteristics: They have a wide range of social contacts.

3. The floating distance has an impact on the long-term residence intention, and the core issues concerning residence decision-making are different between the inter-provincial group and the intra-provincial group. Compared with the floating people within the province, the inter-provincial migrants have higher economic costs and emotional costs, more institutional barriers, and life adaptation problems, and more difficulties in social integration because of the geographical distance between their hometown and destination.

In view of the above analysis, the city government should focus on two groups of people: One is the elderly highly educated inter-provincial migrants. After many years of life, they have adapted to the urban environment and they have the material strength to stay, some of them have begun to plan their retirement, so more attention is paid to amenity. The city government should do a good job in the construction of city comfort, create an open and inclusive urban atmosphere, enhance the psychological identity of migrants, and alleviate their homesickness. The other is highly educated migrants who have not yet established a family. The arrangement of families by the migrant population and residence decision are mutually affected (Huang, Liu, Xue, Li, & Shi, 2018), single persons without stable jobs or optimistic income expectations are generally less socially integrated. The city government should help them to consolidate their livelihood capital and expand their relationship network through the preferential policies of talents, so as to help them to develop their careers and form their families in the destination and gradually become a member of the local people.

Due to the limitations of data and methods, there are still some disadvantages in this study. The future research can be deepened from the following two aspects: First, through the qualitative research methods such as interviews to supplement the questionnaire data, to explore the long-term residence intention of the individual differences and individualized reasons; Second, through the panel data regression, to explore the change of long-term residence intention with time going by.

## References

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. Psycological Bulletin, 98(2), 310-357.

Entzinger, H., & Biezeveld, R. L. (2003). *Benchmarking in immigrant integration*. Rotterdam: Erasmus University Express. Florida, R. (2012). *The rise of the creative class: Revisited*. New York: Basic Books.

Goldlust, J., & Richmond, A. H. (1974). A multivariate model of immigrant adaptation. *International Migration Review*, 8(2), 193-225.

Chen, S., & Liu, Z. (2016). What determines the settlement intention of rural migrants in China? Economic incentives versus sociocultural conditions. *Habitat International, 58*, 42-50.

Gordon, M. (1964). Assimilation in American life. New York: Oxford University Press.

Granovetter, M. (1973). The strength of weak ties. American Journal of Sociology, 78, 1360-1380.

- Guangdong Statistical Information Network. (2017-06-13). Interpretation of the average wage data of Guangdong urban employees in 2016 by provincial bureaus. Retrieved from http://stats.gd.gov.cn/gzys/content/post 1411580 .html
- Huang, K. S., & Gagrida. (2010). A summary of social integration theory. Expanding Horizons, 6, 86-88.
- Huang, X., Liu, Y., Xue, D. S., Li, Z. G., & Shi, Z. L. (2018). The effects of social ties on rural-urban migrants' intention to settle in cities in China. *Cities*, 83, 203-212.
- Junger-Tas, J. (2001). Ethnic minorities, social integration and crime. European Journal on Criminal Policy and Research, 9, 5-29.
- Korinek, K., Entwisle, B., & Jampaklay, A. (2005). Through thick and thin: Layers of social ties and urban settlement among Thai migrants. *American Sociological Review*, 70(5), 779-800.
- Li, H. W. (2011). Analysis of the relationship between population and economic and social development—A case study of Guangdong. *Guangdong Economy*, 20(8), 4-8.
- Liang, B., & Wang, H. Y. (2010). A summary of researches on the society and integration of immigrants abroad. *Journal of Gansu Institute of Administration*, 19(2), 18-27.
- Lin, L.-Y., & Zhu, Y. (2016). Spatial variation and its determinants of migrants' Hukou transfer intention of China's prefectureand provincial-level cities: Evidence from the 2012 national migrant population dynamic monitoring survey. Acta Geographica Sinica, 71, 1696-1709.
- Lu, Z. R. (2014). The hierarchy of social fusion theory and the hierarchy of fusion measurement index. *Social Science Front*, 37(11), 189-197.
- Luo, Z., & Tang, Y. D. (2020). The evolution trend and development direction of China's talent policy: Based on citespace knowledge map analysis. *Soft Science*, 3502, 1-12.
- Ma, R. (1997). Theory and method of western ethnic sociology. Tianjin: Tianjin People's Press.
- Massey. (1988). Economic development and international migration in comparative perspective. *Population and Development Review*, 14(3), 383-413.
- National Bureau of Statistics. (2020). The 7th National Census. Retrieved from http://www.stats.gov.cn/ztjc/zdtjgz/zgrkpc/dqcrkpc/index.html.
- Ni, P. F. (2017). Annual report on China's urban competitiveness (No. 15). Beijing: China Social Sciences Press.
- Portes, A., & Borocz, J. (1989). Contemporary immigration: theoretical perspectives on its determinants and modes of incorporation. *The International Migration Review*, 23(3), 606-630.
- Ravenstein, E. G. (1884). The laws of migration. Journal of the Statistical Society of London, 48(2), 289-291.
- Schmitter-Heisler, B. (1992). The future of immigrant incorporation: Which models? Which concepts? International Migration Review, 26(2), 623-645.
- Schultz. (1990). Human capital investment. Beijing: Commercial Press.
- Ullman, E. L. (1954). Amenities as a factor in regional growth. Geographical Review, 44(1), 119-132.
- Wu, J., Yu, Z., Wei, Y. D., & Yang, L. (2019). Changing distribution of migrant population and its influencing factors in urban China: Economic transition, public policy, and amenities. *Habitat International*, 94, 1-14.
- Xiao, Z. H. (2018). Floating population and social intergration: Theory, index and method. Beijing: Social Sciences Academic Press.
- Yang, J. H. (2009). Segregation, selective assimilation and assimilation: A conceptual framework of rural to urban migrants' adaptation at destination. *Population Research*, 33(1), 17-29.
- Zhang, B. (2018). Domestic research on high-end talents: Theoretical perspective and latest progress. *Studies in Science of Science*, 3608, 1414-1420.
- Zhang, W. H., & Lei, K. C. (2008). Analysis on the structure, current situation and influential factors of social integration of urban new immigrants. *Sociological Study*, *5*, 117-141.
- Zhou, H. (2012). Measurement and theoretical perspectives of immigrant assimilation in China. Population Research, 36, 27-37.