

# The influence of medical insurance and social security cards on the floating population's settlement intention

**Yulin Li**

Henan University

**Lingling Huang**

Lida university

**Li Xiang**

Huazhong University of Science and Technology Tongji Medical College

**dongmei dou** (✉ [doudongmei1224@126.com](mailto:doudongmei1224@126.com))

Henan University

---

## Research

**Keywords:** medical insurance, urban employee basic medical insurance, social security cards, floating population, settlement intention

**Posted Date:** August 24th, 2020

**DOI:** <https://doi.org/10.21203/rs.3.rs-60105/v1>

**License:**  This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

---

## Abstract

# Background

There are many studies on the influencing factors of floating population's intention to settle down. Medical insurance and social security cards have an important guarantee for the floating population to live a stable life in the current residence, but there are limited studies focused on the influence of medical insurance and social security cards on their settlement intention. Therefore, the purpose of this paper is to study the influence of medical insurance and social security card on the settlement intention of floating population, so as to create better living and working conditions for floating population and improve their happiness in their current place of residence.

## Methods

Based on the survey data of China's floating population dynamic monitoring in 2017, we explored the influence of medical insurance (urban employee basic medical insurance) and social security cards on the floating population's settlement intention with binary logistic regression and structural equation model. Additionally, this study was also to examine the comprehensive causal relationship, with social integration as the mediator variable.

## Results

The floating population's settlement intention on participating in urban employee basic medical insurance is 23.2 percent higher than those who did not participate. Whether to apply for personal social security cards is related to the settlement intention. The standardized regression coefficients among social insurance and security, social integration, and settlement intention are positive values, and the Z values of the overall effect, indirect effect, and direct effect are all greater than 1.96, and the confidence interval of the indirect effect does not include 0. The article found that this model is a partial intermediary, with an intermediary ratio of 10.66 percent.

## Conclusions

The article highlights the important impact of urban workers' medical insurance and individual social security cards on the floating population. The results of this study may provide some reference for the government to formulate relevant policies.

## Introduction

Under the household registration system of China, the floating population is defined as those whose registered permanent residence is in the original residence, and who live and work in the current residence

with separation from registered permanent residence(1–3). According to < China Statistic Almanac> (2019), the floating population was 244 million in 2017 and 241 million in 2018(4).The "Statistical Bulletin of National Economic and Social Development 2019" released by the National Bureau of Statistics declare that there is 236 million floating population in 2019 (5). According to this situation, the floating population in the future will maintain this considerable volume. (6). Settlement intention is defined as the thoughts of the floating population about future relocation arrangements after they have been in their current residence for some time. Nowadays, there exist differences in social welfare and public service treatment between the floating population and residents. To effectively promote the social integration between them, improve the floating population's settlement intention, further accelerate the urbanization process, promote economic development, it is of certain practical significance to discuss the floating population's settlement intention and its influencing factors.

It has been shown that the individual characteristics of the floating population, the characteristics of the place of origin and current residence all influence the floating population's settlement intention, such as whether to purchase urban housing and housing conditions(7, 8), family migration (9), environment and regional differences(10, 11);, education level, work status, social integration(2),etc. However, little attention has been paid to the impact of the basic medical insurance of urban employees (UEBMI) and social security cards on the floating population's settlement intention. Researchers have demonstrated that participating in UEBMI and applying for social security cards can improve the happiness of the floating population and further enhance their willingness to settle. Therefore, the research idea of this article is to use the survey data of China's floating population dynamic monitoring in 2017 (Volume A), apply binary logistic regression and structural equation model to analyze the influence of UEBMI and social security cards on the floating population's settlement intention. To examine the comprehensive causal relationships, "social integration" is introduced as a mediator variable. Therefore, this paper answers the following research questions:

1. What effect do UEBMI and social security cards have on settlement intention?
2. Will UEBMI and social security cards affect the floating population's settlement intention through social integration?

The remainder of the paper is as follows: The second section reviews the literature on migration theory and the role of UEBMI and social security cards. The third section introduces the data source, assignment, and research methods. The fourth section gives the results of binary logistic regression and structural equation model. The fifth section analyzes the above results. The last section gives conclusions and provides recommendations for the government.

## Literature Review

# Theoretical framework

The most widely used migration theory is the push-pull theory, which originated in the 19th century. E. G. Ravenstein first analyzed population migration and proposed the "seven laws" of population migration.

Later, Rudolph Heberle proposed in the "The causes of rural-urban migration a survey of German theories", push and pressure were the most important factors affecting the flow(12). D.J. Bague first proposed the "push-pull theory" in the study of the reasons for the floating population. He believed that improving living standards were the purpose of the floating population. The factor that flowed out of the place of origin to improve living standards was the thrust, while the factor that flowed into the current residence was the pull (13). Combined with previous researches, the American scholar E.S. Lee proposed a systematic population migration theory in the 1960s—push-pull theory, the factors of floating population migration for the first time were divided into two categories, namely, push and pull, and the push was negative factors and pull was positive factors, both of which jointly affected the migration willingness of migrants (14).

Given the fact that many factors are impacting the floating population's settlement intention, combining the push-pull theory and existing researches, researches classify these factors into four categories: inflow factors, outflow factors, barriers between inflow and outflow areas, and the floating population's self-factors (15).

## **The importance of UEBMI and social security cards**

Medical insurance is a social insurance system that prevents workers from becoming too economically burdened due to illness. UEBMI is a social medical insurance system that guarantees employees' basic medical rights according to law. It enforces through laws and regulations. Implement the basic mode that the society plans as a whole medical treatment fund and individual medical treatment account union. After paying a certain period, you will enjoy medical insurance reimbursement for life. On the one hand, UEBMI is the government's means of realizing income redistribution and promoting social equity. On the other hand, it is also a guarantee of maintaining social stability, alleviating the worries of sick workers, and working with peace of mind.

Social security cards are electronic certificates for workers to work in the field of labor security. There are two types: urban employee social security card and resident social security card. They can verify the identity of the patient when purchasing medicine or medical treatment, store personal account funds, and record the medical consumption of the insured. The setting of UEBMI and social security cards in the current residence plays an important role in the settlement intention of the floating population.

## **Study on the influence of medical insurance on the settlement intention of floating population**

Medical insurance, as a way of obtaining economic compensation in case of illness or accident, profoundly affects the quality of life of the floating population. However, the long-term marginalization of the floating population in their current residence and the difficulty in securing public services and the right to health have led them to be cautious in deciding whether to settle in current residence in the future. Therefore, the research on the influence of medical insurance on the floating population's settlement intention has received increasing attention from the academic community and policymakers in recent

years. The current residence provides medical insurance for the floating population in the new environment will improve the stability of their life and work prominently.

(16, 17). Studies have shown that different regions participate in medical insurance situation is different, and the older, the higher the education level, the higher the income, the children living in the place of arrival, and the poor health status of the floating population has a higher willingness to participate in medical insurance (18). The floating population participating in the new rural cooperative medical insurance need to return to their hometown because they cannot reimburse the medical expenses in the current residence, while the floating population participating in UEBMI can be directly reimbursed by a higher proportion., so they are more willing to settle down in the current residence(19, 20).

## Methods

### Data sources

The data was based on the survey data of China's floating population dynamic monitoring which was collected from the annual large-scale national floating population of 31 provinces(autonomous regions and municipalities) and the Xinjiang Production and Construction Corps by the National Health Commission since 2009,where the floating population is relatively concentrated inflow place(21), After dealing with the missing values of some variables, a total of 154586 subjects were included in this study.

### Variables and measurements

The core independent variables of this article were UEBMI and social security cards, including whether to participate in urban employee basic medical insurance and whether to apply for personal social security cards. The dependent variable was the settlement intention. It was measured by whether you are willing to move your household registration to the current residence. The mediator variable was social integration, expressed as Do you agree that I think the locals are willing to accept me as a member.

The control variables included four categories: (a) demographic characteristics (i.e., age, gender, marital status, the household registration system, and education level), (b) economic characteristics (i.e., average monthly total local expenditure over the past year and whether to sign a labor contract), (c) flowing characteristics (i.e., flowing range and flowing time),(d) health education (i.e., whether to receive health education on occupational disease prevention, whether to receive health education on STD and AIDS prevention, whether to receive health education in the prevention and treatment of chronic diseases.). All of the variables are presented and described in Table 1.

Table 1  
Description of the variables included in the analysis.

Variables		Categories	Frequency	Percentage
Demographic characteristics	Age	18–35 = 0	63,089	40.80
		35–60 = 1	84,032	54.40
		≥ 60 = 2	7,465	4.80
	Gender	Male = 0	79,577	51.50
		Female = 1	75,009	48.50
	Marital status	Unmarried = 0	21,063	13.60
		Married = 1	128,038	82.80
		Divorce and others = 2	5,485	3.50
	The household registration system	Agriculture = 0	119,675	77.40
		Non-agricultural = 1	22,858	14.80
		Other = 2	12,053	7.80
	Education	Elementary school and below = 0	26,358	17.10
		Junior high school = 1	67,181	43.50
		High school, technical secondary school = 2	33,785	21.90
College and above = 3		27,262	17.60	
Economic characteristics	Average monthly total local expenditure (yuan)	< 1000 = 0	10,645	6.90
		1000–3000 = 1	76,673	49.60
		3000–5000 = 2	44,498	28.80
		> 5000 = 3	22,770	14.70
	labor contracts	Sign a contract = 0	89,323	57.80
		No contract signed = 1	65,263	42.20
Flowing characteristics	Flowing range	Interprovincial = 1	74,875	48.40
		Intercity = 2	51,682	33.40

Variables		Categories	Frequency	Percentage
		Cross County = 3	28,029	18.10
	Flowing time(years)	< 8 = 0	81,793	52.90
		8–14 = 1	43,688	28.30
		14–20 = 2	18,356	11.90
		> 20 = 3	10,749	7.00
Health education	Health education in occupational disease prevention	No = 0	103,008	66.60
		Yes = 1	51,578	33.40
	Health education on STD and AIDS prevention	No = 0	93,286	60.30
		Yes = 1	61,300	39.70
Health education on prevention and treatment of chronic diseases	No = 0	96,713	62.60	
	Yes = 1	57,873	37.40	
Insurance and Social security card	Urban employee	No = 0	120,176	77.70
	basic medical insurance	Yes = 1	34,410	22.30
	Apply for a personal social security cards	Did not apply = 0	76,535	49.50
		Apply = 1	78,051	50.50
Do you agree that I think locals are willing to accept me as a member?	Disagree = 0	10,380	6.70	
	Agree = 1	144,206	93.70	
Do you agree with move your household registration to the current residence?	Disagree = 0	92,931	60.10	
	Agree = 1	61,655	39.90	

## Research Methods

Firstly, we analyzed the influence of UEBMI, social security cards, and social integration on settlement intention by controlling the above characteristic variables, with binary logistic regression method. Then considering the results of single-factor analysis and binary logistic regression analysis, the variables with statistical significance were included in the structural equation model.

In this paper, we used the structural equation modeling software Amos 22.0, and the classical bootstrapping method to estimate the direct and indirect effects of core independent variables(22–24). It is effective to solve the measurement errors of variables and examine related risk factors. Meanwhile, it also provided direction for interventions(25, 26) .Compared with the proven model fitting standards(27–29), this model was more suitable for our paper, the results have been presented in Table 2.

Table 2  
Evaluation Index of Model Fit.

Absolute fit index	Fit standard	Fitness index
NC( $\chi^2/df$ )	1 < NC < 3	132.92
<i>P</i>	The smaller the better	0.00
GFI	> 0.9 Good fit	1.00
AGFI	> 0.9 Good fit	0.99
CFI	> 0.9 Good fit	0.99
RMSEA	< 0.05 Good fit	0.03
Note. GFI: goodness-of-fit index. AGFI: adjusted goodness-of-fit index.		
CFI: comparative fitness index. RMSEA: root mean square error of approximation.		

## Results

### Descriptive analysis

According to Table 1, 39.9 percent of the floating population expressed their willingness to move their household registration system into the local area and settle there. This result is similar to previous research (30). Of these respondents, about 77.7 percent do not participate in UEBMI, and 50.5 percent of the floating population has applied for personal social security cards. Besides, the survey found that the floating population had good social integration in the current residence (93.7 percent).

Regarding demographic characteristics, majority of respondents are rural residents, married, young, and middle-aged men (95.2 percent), and nearly 43.5 percent of the respondents stopped at junior high school. Besides, 51.5 percent of the floating population is within the province, and the migration time is less than 8 years. Nearly 58 percent of them have signed labor contracts, and the average monthly expenditure in the past year was 1,000–3,000 yuan. In terms of health education, the floating population received the most health education on STD and AIDS prevention, but the overall acceptance of health education was poor.

### UEBMI, social security cards, social integration, and settlement intention

Taking settlement intention as the dependent variable, we analyzed the influence of UEBMI, social security cards, and social integration on settlement intention by binary logistic regression, controlling the above four types of variables. The results are presented in Table 3.

Table 3  
Logistic analysis of influencing factors of settlement intention.

	B	S.E	Wals	df	Sig.	Exp (B)	EXP(B) 95% C.I.	
							Lower limit	Upper limit
Age	-.016	.018	.776	1	.378	.985	.951	1.019
Gender	.105	.016	43.189	1	.000	1.110	1.076	1.145
Marital status	.088	.019	21.178	1	.000	1.092	1.052	1.134
Education	.250	.010	642.384	1	.000	1.285	1.260	1.310
The household registration system	.249	.013	362.815	1	.000	1.283	1.251	1.316
Average monthly total local expenditure	.174	.010	278.571	1	.000	1.190	1.166	1.215
Labor contracts	-.056	.019	8.408	1	.004	.945	.910	.982
Flowing range	-.304	.011	772.995	1	.000	.738	.723	.754
Flowing time	.167	.010	306.207	1	.000	1.182	1.160	1.204
Urban employee basic medical insurance	.209	.021	97.274	1	.000	1.232	1.182	1.284
Apply for a personal social security cards	.020	.019	1.090	1	.297	1.020	.983	1.059
Health education in occupational disease prevention	-.151	.022	47.978	1	.000	.859	.823	.897
Health education on prevention and treatment of chronic diseases	.121	.023	29.038	1	.000	1.129	1.080	1.180
Health education on STD and AIDS prevention	.016	.023	.530	1	.467	1.017	.973	1.062
Do you agree that I think locals are willing to accept me as a member?	.706	.033	456.131	1	.000	2.026	1.899	2.161
Constant	-1.823	.053	1168.340	1	.000	.162		

As Table 3 shows participating in UEBMI influences the floating population's settlement intention. Specifically, the floating population's settlement intention on participating in UEBMI is 23.2 percent higher than those who did not participate. And during the single factor analysis, it found that whether to apply for personal social security cards is related to the settlement intention. Moreover, when asked do you agree that I think the local is willing to accept me as a member, the proportion of the floating population agreeing to settle down was 2.026 times that of the floating population disagreeing. It is demonstrated that social integration has a positive impact on the settlement intention of the floating population.

## **The mediating effect of social integration**

Mediation analysis is an important tool for statisticians to study causality. The essence is to study whether or to what extent the independent variable acts on the dependent variable by affecting the mediator variable and clarify the direct effect, indirect effect, and total effect (22, 31). Based on the above results, we conclude that UEBMI, social security cards, and social integration have positive impact on settlement intention. To further clarify the causal relationship, we analyzed the intermediary effect by bootstrapping method. And then we incorporated some influencing factors into the structural equation model to form three dimensions: social insurance and security, social integration, and settlement intention. Reliability is 0.600, 0.804, 0.823, and the validity is 0.500, 0.695, 0.719, respectively. The fitness index (GFI/AGFI/CFI) are all greater than 0.9, and the RMSEA is less than 0.05. Even though the reliability and validity of social insurance and security are slightly lower, the overall fit of the model is appropriate, and the values in Table 4 are positive, which indicating that each variable is statistically significant. Therefore, the structural equation model is shown in Fig. 1.

Table 4  
Regression weights.

			Estimate	S.E	C.R.	P	Label
Social integration	<—	Social Security	.115	.004	26.216	***	
Settlement intention	<—	Social Security	.099	.004	25.070	***	
Settlement intention	<—	Social integration	.109	.003	38.361	***	
A3	<—	Settlement intention	1.000				
A4	<—	Settlement intention	1.063	.004	268.101	***	
A5	<—	Settlement intention	1.111	.004	269.905	***	
A2	<—	Social Security	1.000				
A1	<—	Social Security	.642	.019	33.247	***	
Q503A	<—	Social integration	1.000				
Q503C	<—	Social integration	1.387	.006	239.244	***	
Q503D	<—	Social integration	1.181	.005	241.402	***	
<p>Note. A1: UEBMI; A2: Apply for personal medical insurance cards; A3: Health education in occupational disease prevention; A4: Health education on prevention and treatment of chronic diseases; A5: Health education on STD and AIDS prevention; Q503A: Do you agree with the statement I like the city/place where I live now? Q503C: Do you agree with the statement that I would like to be a part of the local people? Q503D: Do you agree with the statement "I think the local people are willing to accept me as a member"?</p>							

According to the model results, the standardized regression coefficients among social insurance and security, social integration, and settlement intention are positive values, and the factor loading coefficient of each observed variable is greater than 0.5. The results of the mediation effect using the bootstrapping method present in Table 5. It is found that the Z values of the overall effect, indirect effect, and direct effect are all greater than 1.96, and the confidence interval of the indirect effect does not include 0, indicating that both direct and indirect effects exist in this model. This model is a partial intermediary, with an intermediary ratio of 10.66 percent.

Table 5  
Direct and indirect effects of social insurance and security cards on settlement intention.

Variables	Estimate	S.E	Z	Bootstrapping			
				Bias-corrected95%CI		Percentile95%CI	
				Lower	Upper	Lower	Upper
Total effect							
Insurance and security-Settlement intention	0.122	0.004	30.500	0.105	0.118	0.105	0.118
Indirect effect							
Insurance and security-Settlement intention	0.013	0.001	13.000	0.011	0.014	0.011	0.014
Direct effect							
Insurance and security-Settlement intention	0.109	0.003	36.333	0.104	0.115	0.104	0.115

## Discussion

### UEBMI, social security cards, social integration, and settlement intention

Previous studies have demonstrated that medical insurance has a significant positive effect on settlement intention(32),and participation in UEBMI has a greater influence on settlement intention than participation in other types of insurance(20). This result could attribute to UEBMI only needs to pay a certain number of years to enjoy medical insurance reimbursement for life. Besides, on the one hand, the employer and the individual jointly pay UEBMI, the employer pays more than an individual, and the reimbursement rate of medical insurance is higher. On the other hand, participating in UEBMI can improve the risk resistance of the floating population in the current residence, reduce the cost of living and reduce the economic burden to a certain extent(33–35) .The balance in the personal account not only for the settlement of outpatient and hospital expenses but also to buy drugs at designated pharmacies. UEBMI is a factor that affects the settlement intention (36), which is consistent with the results of this study.

When it comes to social security cards, although it has an impact on settlement intention in univariate analysis and not in regression analysis, previous studies have shown that social security cards, as the embodiment of social security services, plays an important role in the fairness of the whole society. Social security cards are divided into urban employee social security card and resident social security card. As long as the urban employees participate in the UEBMI, they will get the urban employee social security card. If an accident occurs, the urban employee can use the social security card to reimburse the

hospitalization expenses at a higher rate locally. The resident social security card is to participate in the urban resident basic medical insurance and the new rural cooperative medical scheme. Although there is no balance to consume at the time of medical treatment, it is a certificate of reimbursement when the patient discharge from the hospital. Therefore, the social security card is an important guarantee for the floating population to integrate into their current residence and live a stable life, which finally includes the analysis. This is also consistent with previous research results(37, 38) .

The influence of UEBMI and social security cards on the floating population's settlement intention also reflected in the research on household registration. Although the household registration system has always considered as a hinder to the settlement of migrants in the current residence, recent studies have shown that the household registration system has little or no significant effect on the floating population's settlement intention(8, 36, 39, 40). What affects the floating population's settlement intention is a series of services and rights brought by the household registration system. This is also the reason why the floating population chooses to live in two places. Accordingly, the floating population wants to live in the current place for a long time to settle down, must attend insurance actively, deal with social security cards.

This paper proves that social integration will promote the settlement intention of the floating population. This is because the migrating population who handles their social relations well will promote their career development, improve their quality of life, and ultimately improve their life satisfaction in the current residence. At the same time, the residents are willing to accept the floating population as a member, which reflects the harmonious social relationship between them, which is consistent with the research of Chen, Shaowei, Huang, Xu (41, 42).

## **The mediating effect of social integration**

The above results have demonstrated that UEBMI, social security cards and social integration have a positive impact on the settlement intention of floating population. At the same time, some studies also show that the participation of floating population in medical insurance that reflects social security in their current residence will have a positive impact on social integration, and the better the social integration, the more behaviors of participating in medical insurance. That's because health insurance can increase the security of a population where it lives. Therefore, we analyzed the causal relationship further by structural equation model, with social integration as mediator variable. The structural equation model proves that UEBMI and social security cards have positive influence on social integration and settlement intention, and at the same time, social integration also has a positive effect on settlement intention. This is because participating in UEBMI and getting a personal social security cards can help solve some of the accidents that happen to floating population in their place of residence. Without too much consideration of economic pressure, they can improve the quality of life through hospitalization for injuries and illnesses, and finally improve the utilization level of health services for floating population. It is reasonable to infer that settlement intention will be stronger with the improvement of floating population conditions.

We have explained the issues raised in the introduction: UEBMI, social security cards, and social integration have a positive impact on settlement intention, and will indirectly affect the settlement intention through social integration. Even if this influence is little, it will still be helpful to our policy formulation to further strengthen the floating population's settlement intention in the current residence, advance the urbanization process, and promote economic development. However, this study also has some limitations. The result of this study is the mining of existing data. Due to the limited variables in the original data, the reliability of some indicators and the intermediary ratio is low. If one can add new effective variables in the future, the explanation of the influence of medical insurance and social security cards on settlement intention of the floating population will be more complete.

## Conclusions

The floating population has tremendous implications for urban economic growth, and their settlement intention in the current residence directly affects the development of there. With the development of health services, population aging, chronic diseases, infectious diseases, and public health emergencies increase, the health and quality of life of the floating population pay more and more attention. Therefore, it is necessary to study the influence of UEBMI and personal social security cards on the settlement intention. The results concluded that the floating population participates in UEBMI locally, and applying for a personal social security cards improve settlement intention directly in the future, and it will also have a positive influence through social integration. This indirect influence is little, but it provides us with a valuable solution in promoting the integration of the floating population and residents. In 2014, the Chinese government proposed a "people-oriented urbanization" policy (43), consequently, to attract migrants to settle down, the government should strengthen the management of the social insurance system for the floating population, improve the transfer of the insurance system in different regions, and simplify the procedures for the medical treatment in different places. And the government should increase the possibility of migrants participating in insurance in other places and effectively accelerating the urbanization process.

## Declarations

### Ethics approval and consent to participate

The study protocol was approved by Ethics Committee of Biomedical Research, Henan University. The committee's reference number: HUSOM2020-267.

### Consent for publication

The data used in this article is public.

### Availability of data and materials

The datasets generated and analysed during the current study are available in the Migrant Population Service Center, National Health Commission P.R. China repository, <http://www.chinaldrk.org.cn/wjw/#/data/classify/population/yearList>.

### **Competing interests**

The authors declare that they have no competing interests.

### **Funding**

Not applicable

### **Authors' contributions**

DMD conducted the data analyses. YLL and LLH drafted the manuscript. DMD, LX,YLL and LLH finalized the manuscript with inputs from all authors. All authors contributed to the development of the study framework, interpretation of the results, revisions of successive drafts of the manuscript. All authors read and approved the final manuscript.

### **Acknowledgements**

The author would like to thank all the professors and senior teachers for their help.

## **References**

1. Chen S, Zhao J, Han Z, editors. Study on the Influence of Floating Population on Urban Economic Growth. International Conference on Education & Management; 2018.
2. Cheng Y. The Role of Willingness in Social Integration Process: a Study of Floating Population in Chinese Cities. Social Sciences. 2013.
3. Sheng M, Gu C, Wu W. To move or to stay in a migrant enclave in Beijing: The role of neighborhood social bonds. Journal of Urban Affairs. 2017;41(1):1–16.
4. Statistics NBo. China Statistic Almanac(2019): China Statistics Press. <http://www.stats.gov.cn/tjsj/ndsj/2019/indexch.htm>. Accessed 15 Aug. 2020.
5. Statistics NBo. Statistical Communique of the People's Republic of China on the 2019 National Economic and Social Development: National Bureau of Statistics. [http://www.stats.gov.cn/tjsj/zxfb/202002/t20200228\\_1728913.html](http://www.stats.gov.cn/tjsj/zxfb/202002/t20200228_1728913.html). Accessed 15 Aug. 2020.
6. Mohabir N, Jiang Y, Ma R. Chinese floating migrants: Rural-urban migrant labourers' intentions to stay or return. Habitat International. 2017;60:101–10.
7. Xie S, Chen J. Beyond homeownership: Housing conditions, housing support and rural migrant urban settlement intentions in China. Cities. 2018;78(AUG.):76–86.
8. Yang S, Guo F. Breaking the barriers: How urban housing ownership has changed migrants' settlement intentions in China. Urban Studies. 2018;55(16):3689–707.

9. Fan CC, Li T. Split, Households. Family Migration and Urban Settlement: Findings from China's 2015 National Floating Population Survey. *Social Inclusion*. 2020;8(1).
10. Liu Y, Deng W, Song X. Influence factor analysis of migrants' settlement intention: Considering the characteristic of city. *Appl Geogr*. 2018;96:130–40.
11. Paparusso A, Ambrosetti E. To stay or to return? Return migration intentions of Moroccans in Italy. *International Migration*. 2017.
12. Heberle R. The Causes of Rural-Urban Migration a Survey of German Theories. *Am J Sociol*. 1938;43(6):932–50.
13. Bogue DJ. Internal migration. *The Study of Population*. 1959:486–509.
14. Lee E. A theory of migration. *Demography*. 1966;3(1):47–57.
15. Chen J, Wang W. Economic incentives and settlement intentions of rural migrants: Evidence from China. *Journal of Urban Affairs*. 2018;41(3):372–89.
16. Zheng J, Zhu C. Shanghaishi wailai renkou changqi juzhu yiyuan de shizheng yanjiu[Empirical Study on the long-term residence Intention of migrants in Shanghai]. *Shanghai Economic Research*. 2014;000(7):122–9.
17. Guixin Wang JH. Chengshi nongmingong shehui baozhang yu shiminhua yiyuan[Social Security and citizenization of migrant workers in cities]. *Population Journal*. 2015;37.
18. Su X, Du Y. Liudong renkou yiliao baoxian canyu yiyuan ji yingxiang yinsu fenxi—jiyu zhongguo qige dachengshi diaocha shuju[The Floating Population to Participate and Influence Factors Analysis of Medical Treatment Insurance-Based on survey data from seven major cities in China]. *Northwest population*. 2017;038(2):84–90.
19. Qin X, Zheng Z. Xinnonghe dui nongcun laodongli qianyi de yingxiang:jiyu quanguoxing mianban shuju de fenxi. *Chinese Rural Economy*. 2011;000(10):52–63,76.
20. Zhu M, Shi X. Yiliao baoxian shijiao xia de liurudi nongmingong changqi juzhu yiyuan yanjiu[A Study on the Long-term residence Intention of migrant Workers from the perspective of medical insurance]. *Future and Development*. 2017(2):54–8.
21. Population Dpff. China's floating population dynamic monitoring survey data in 2017 (Volume A): Data platform for floating Population; 2018 [updated 2018].
22. Hayes A. Introduction to mediation, moderation, and conditional process analysis. *J Educ Meas*. 2013;51(3):335–7.
23. Preacher KJ, Kelley K. Effect size measures for mediation models: quantitative strategies for communicating indirect effects. *Psychol Methods*. 2011;16(2):93–115.
24. Mackinnon DP. *Introduction to Statistical Mediation Analysis*: McGraw-Hill; 2008.
25. Hayes AF. Beyond Baron and Kenny: Statistical Mediation Analysis in the New Millennium. *Communication Monographs*. 2009;76(4):408–20.
26. Mackinnon DP. Integrating Mediators and Moderators in Research Design. *Res Soc Work Pract*. 2011;21(6):675–81.

27. Bentler PM. Comparative fit indexes in structural models. *Psychol Bull.* 1990;107(2):238.
28. Korner M, Wirtz MA, Bengel J, Goritz AS. Relationship of organizational culture, teamwork and job satisfaction in interprofessional teams. *BMC Health Serv Res.* 2015;15:243.
29. Tsaprantzi AV, Kostagiolas P, Platis C, Aggelidis VP, Niakas D. The Impact of Information on Doctors' Attitudes Toward Generic Drugs. *Inquiry.* 2016;53.
30. Qiu H, Zhou W. Liudong renkou de luohu yiyuan ji yingxiang yinsu fenxi[Analysis on the willingness of floating population to settle down and its influencing factors]. *Population Journal.* 2019(5).
31. Preacher KJ, Kelley K. Effect size measures for mediation models: quantitative strategies for communicating indirect effects. *Psychol Methods.* 2011;16(2):93–115.
32. Tang SS, Feng JX. Cohort differences in the urban settlement intentions of rural migrants: A case study in Jiangsu Province, China. *Habitat International.* 2015;49:357–65.
33. Shi Z, Shi N. Nongmingong de shehui baozhang yu chengshi rongru fenxi. *Population Development.* 2014;20(2):33–43.
34. Wang S, Xu S. Liuru renkou shehui rongrugan de jiegou yu yingxiang yinsu fenxi—jiyu jilinsheng de diaocha shuju. *Population Journal.* 2013(01):5–14.
35. Wang Z. Nongmingong chengshi shehui rongru de cedu ji yingxiang yinsu —jian yuchengzhen liudong renkou de bijiao. *Research on Labor Economy.* 2015(2):41–61.
36. You Z, Yang H, Fu M. Settlement intention characteristics and determinants in floating populations in Chinese border cities. *Sustainable Cities Society.* 2018;39:476–86.
37. Li H, Xie Y. Liudong renkou shinian yanjiu: redian,qushi,ji qianyan. *Population Society.* 2018;034(4):P.51–63.
38. Yang J, Pan Z. Research on the Structure, Current Situation, and Influence Factors of the Social Inclusion of Migrant Workers: Based on "Three Inclusions" of Migrant Workers Survey in Hunan Province. 2015 IEEE International Conference on Smart City/SocialCom/SustainCom (SmartCity)2015. p. 524-7.
39. Chen C, Fan CC. China's Hukou Puzzle: Why Don't Rural Migrants Want Urban Hukou? *China Review.* 2016;16(3):9–39.
40. Liu T, Chen S, Cao G. Liudong renkoude juliu he luohu yiyuan jiqi yingxiang yinsu. *Chinese Journal of Population Science.* 2019;000(003):80–91.
41. Huang X, Liu Y, Xue D, Li Z, Shi Z. The effects of social ties on rural-urban migrants' intention to settle in cities in China. *Cities.* 2018;83:203–12.
42. Chen S, Liu Z. What determines the settlement intention of rural migrants in China? Economic incentives versus sociocultural conditions. *Habitat International.* 2016;58:42–50.
43. Council TCCatS. National New Urbanization Plan (2014–2020). The CPC Central Committee and the State Council. 2014.

## Figures

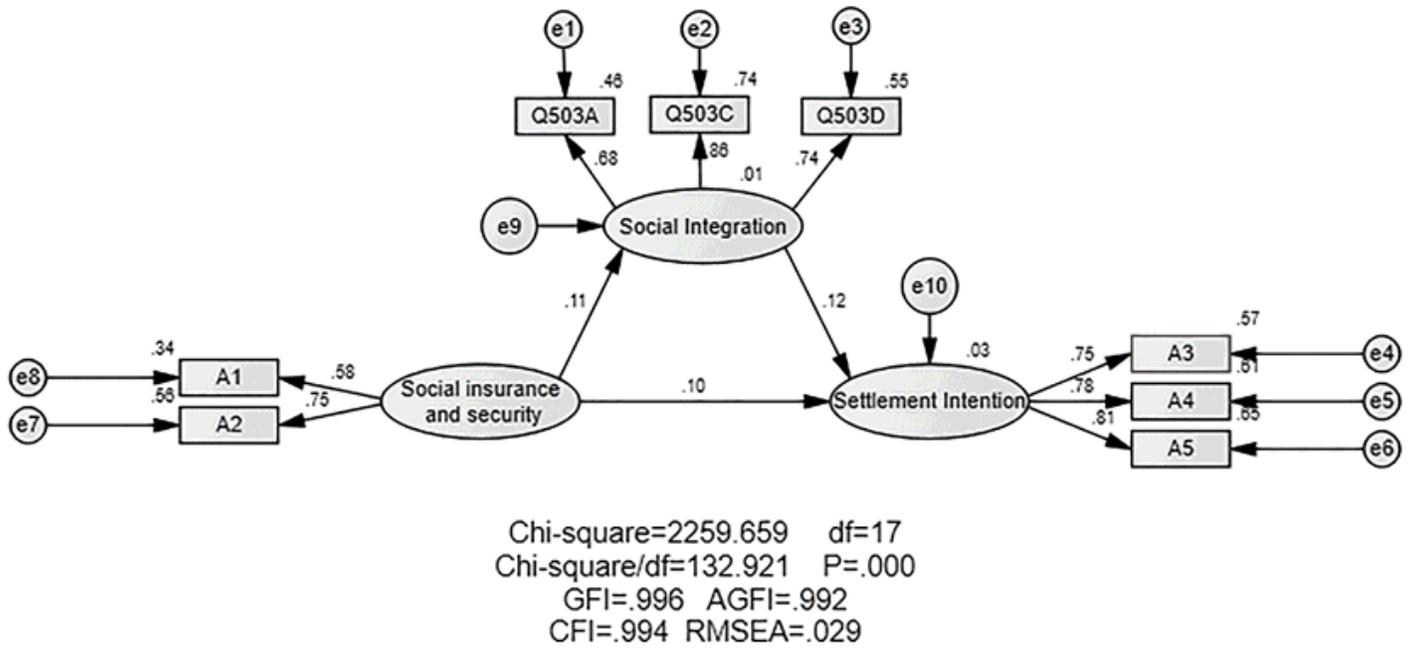


Figure 1

The direct and indirect effects of social insurance and security on settlement intention.