

The Differentiated Impact of Social Capital Types on the Urban Integration of Migrant Workers: An Empirical Analysis based on CGSS Data

Haijing Wu, Yi Xin *

Tianjin University of Traditional Chinese Medicine, Tianjin, 301617, China

* Corresponding author: Yi Xin

Abstract: The urban integration of rural migrant workers constitutes a critical issue in advancing people-centered new-type urbanization. Existing research has predominantly analyzed integration dilemmas from macro-institutional perspectives, paying insufficient attention to the micro-level differential impacts among different types of social capital. The internal heterogeneity of social capital and its mechanisms of influence on different integration dimensions have yet to be fully clarified. From the perspective of social capital heterogeneity, this study utilizes data from the Chinese General Social Survey (CGSS) 2021, screening 1,741 valid rural migrant worker samples, and employs binary Logistic regression models to empirically test the differential impacts of homogeneous and heterogeneous social capital on urban integration. The findings reveal that: heterogeneous social capital exerts a significant positive effect on urban integration—for each level increase in interaction frequency with neighbors, the probability of integration increases by approximately 11.5%; homogeneous social capital does not produce an independent significant effect on urban integration; among control variables, years of education demonstrates a significant positive impact on urban integration. These conclusions reveal that the directional effect of social capital is not vaguely positive or negative, but rather depends on the specific type of social capital—heterogeneous social capital plays a significant positive promoting role, whereas homogeneous social capital produces no significant effect—providing empirical evidence and policy references for promoting the orderly integration of rural migrant workers into cities.

Keywords: Social Capital; Rural Migrant Workers; Urban Integration; Heterogeneous Social Capital; Binary Logistic Regression.

1. Introduction

Urbanization has consistently constituted a pivotal issue in China's modernization process. According to National Bureau of Statistics data, the national permanent resident urbanization rate reached 67.89% by the end of 2025[1]; however, a substantial agricultural transfer population remains stranded in a "semi-citizenization" marginal status [2]. In 2025, the total number of rural migrant workers nationwide reached 301.15 million, including 130.92 million migrant workers in cities [3], widely distributed across manufacturing, construction, wholesale and retail trade, and residential services industries.

While rural migrant workers have propelled urban construction, they themselves have persistently been excluded from mainstream urban society. Liu Chuanjiang and Zhou Ling revealed that rural migrant workers demonstrate pronounced marginalization tendencies across occupational types, residential spaces, and psychological experiences, making it difficult to obtain a sense of belonging and identity confirmation [4]. Considerable numbers of rural migrant workers commute between urban and rural areas—neither able to take root in cities nor willing to return to their hometowns—giving rise to the identity predicament of "dual marginal persons" [5].

Regarding factors influencing rural migrant workers' urban integration, existing research has predominantly discussed social capital as a holistic concept, with insufficient attention to differences among its internal types. Tong Xuemin et al. found that homogeneous social capital represented by fellow-townsmen constitutes an obstacle to integration, whereas

heterogeneous social capital established with urban residents plays a promoting role [6]. This finding reveals that different capital types within the same concept may have diametrically opposite directions of effect, providing an important theoretical entry point for this study.

From the perspective of social capital heterogeneity, this study distinguishes social capital into two dimensions—heterogeneous social capital (interaction with urban local residents) and homogeneous social capital (reliance on fellow-townsmen and kinship networks)—to respectively test their directions and magnitudes of influence on urban integration, addressing the core question of "which type of social capital plays a positive role and which type produces no significant effect." The marginal contributions of this paper are as follows: First, it broadens the research perspective on rural migrant workers' urban integration through the typological differentiation of social capital. Existing achievements have predominantly proceeded from macro-institutional perspectives or holistic social capital concepts, with insufficient attention to the distinction between homogeneous and heterogeneous dimensions within social capital and their differential impacts. By explicitly dividing social capital into two dimensions and incorporating them into an empirical model for comparative analysis, this paper contributes to a more nuanced revelation of the differential mechanisms through which different types of social capital influence urban integration. Second, it responds to the theoretical judgment that "human capital and social capital are the most important endogenous conditions for advancing rural migrant workers' citizenization," and further addresses the more specific question of "which type of social capital

plays what kind of role" by distinguishing social capital types, adding new empirical evidence to research on the endogenous mechanisms of rural migrant workers' urban integration. This provides empirical foundations for formulating differentiated integration policies for rural migrant workers. If the two types of social capital have different directions of effect, policies should differentiate treatment—investing more in areas that promote the accumulation of heterogeneous social capital—while providing references for governments, communities, and enterprises to formulate more targeted integration policies.

2. Literature Review

2.1. Definition of Core Concepts

2.1.1. Migrant Workers

"Rural migrant workers" refers to individuals who have entered cities to engage in non-agricultural industries but whose household registration (*hukou*) identity remains agricultural [7]. This study adopts this definition, defining rural migrant workers as floating populations who have migrated from rural to urban areas for economic activities, hold rural household registration, and engage in non-agricultural work. This group possesses three core characteristics: agricultural household registration, migration from rural to urban areas, and non-agricultural income as the primary source of livelihood. Subsequent sample screening from CGSS data will follow these criteria—simultaneously satisfying both "agricultural household registration" and "engaged in non-agricultural work."

2.1.2. Social Capital

Bourdieu defined social capital as "the aggregate of actual or potential resources linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" [8]; Coleman emphasized the functional dimension, proposing that social capital is aggregated from various elements of social structure, facilitating individual action; Lin Nan defined social capital as "resources embedded in social networks accessed and used by actors in action" [9].

Based on differences in the nature of relational networks, social capital can be divided into two types: homogeneous social capital and heterogeneous social capital. The former is based on blood, geographical, and kinship ties, with network members sharing relatively similar social characteristics—for rural migrant workers, this is primarily manifested as interaction circles centered on fellow-townsmen and relatives. The latter spans different social groups, with differential characteristics among network members—for rural migrant workers, this is primarily manifested as social connections with urban local residents. This typological distinction is of critical significance for understanding the mechanisms of social capital. The discussions of Bourdieu, Coleman, and Lin Nan collectively point to a core proposition: different types of relational networks embed resources of qualitatively different nature. Homogeneous networks, due to members' convergent backgrounds, have highly homogeneous and limited resources; heterogeneous networks, by spanning different group boundaries, enable access to more diverse information and opportunities. This difference implies that the value of social capital does not depend on the quantity of relationships per se, but on what resources actors can derive from them—this constitutes the theoretical basis for this study's distinction between the two types of social capital. From this, the

following inference can be drawn: if rural migrant workers can establish social interactions with urban residents, they are more likely to acquire diversified urban social resources, thereby accelerating the integration process. This inference constitutes the core proposition for subsequent empirical testing in this paper and the direct theoretical source of the research hypotheses.

2.2. Urban Integration

2.2.1. Definition of Urban Integration

Urban integration is a core concept in research on rural migrant workers' citizenization. "Integration" is bidirectional, indicating the mutual penetration and fusion of destination and origin cultures to form a cultural system with some degree of novelty. Conversely, "integration" is unidirectional, referring to the process by which the floating population integrates economically, behaviorally, culturally, and ideologically into the mainstream social system of the destination. Integration is the ultimate goal of contact between different cultures, whereas integration is the first step toward integration. Therefore, Yang Juhua noted that "integration" is more suitable than "integration" for describing the adaptation process and outcomes of rural-to-urban floating populations in cities [10]. Scholarly understandings of urban integration also exhibit two orientations: the processual understanding emphasizes rural migrant workers' gradual adjustment and adaptation in occupation, lifestyle, and values after entering cities, ultimately being accepted by urban society; the outcome-oriented understanding focuses on the gradual narrowing of differences between rural migrant workers and urban residents across economic, social, cultural, and psychological dimensions, ultimately forming a sense of belonging and identity. This study defines urban integration as the dynamic process by which rural migrant workers gradually converge with urban residents in city life and develop a sense of belonging.

2.2.2. Social Integration Theory

International academia has primarily formed two theoretical orientations. Scholars of the "assimilation theory" tend to emphasize immigrants' identification with local mainstream culture, referring to a unidirectional adaptation process. The "pluralism theory" emphasizes the right of different racial or social groups to maintain their differences, advocating that different groups can coexist and integrate while preserving their respective cultural differences, emphasizing bidirectional interaction [11]. These two theories respectively correspond to the directions of effect of different types of social capital: heterogeneous social capital points to the "convergence toward mainstream society" emphasized by the assimilation path, while homogeneous social capital points to the "maintenance of original cultural identity" suggested by pluralism. This correspondence constitutes the theoretical foundation for this paper's analysis of the differential impacts of the two types of capital.

Social integration theory provides a macro-framework for understanding "what to integrate into," but the theory itself does not directly answer "how to measure integration." Building upon this, Yang Juhua further operationalized the social integration of floating populations into four measurable dimensions: economic integration, social adaptation, cultural acquisition, and psychological identification [12]. Among these, psychological identification is widely regarded as the highest level of integration—only when rural migrant

workers develop a subjective sense of belonging to the city can the effectiveness of the first three dimensions be considered truly complete [12] [13].

2.2.3. Measurement Dimensions of Urban Integration

Operationalization approaches for urban integration vary across existing studies. Yang Juhua divided it into four dimensions: economic integration, social adaptation, cultural acquisition, and psychological identification [11]; Kong Xiangli and Zhuoma Cao divided rural migrant workers' social integration into three dimensions—"socioeconomic integration, behavioral integration, and psychological integration"—and found that "possessing high-quality, high-level social capital helps improve rural migrant workers' income and enhance their identity and urban identification"; simultaneously, "behavioral integration has a significant positive effect on socioeconomic integration and psychological integration," with the three dimensions being "interdependent, interactive, and mutually integrated" [14]. Cui Yan (2012) argued that psychological integration represents the sense of belonging and identification with personal social identity, and that truly meaningful social integration must necessarily be built upon a high degree of psychological identification with the destination by the migrant population; psychological integration is the highest level of social integration [13]. Although dimensional division approaches differ, psychological identification is regarded as the core level of integration across studies.

Limited by data availability and research focus, this study emphasizes the psychological identification dimension, using life happiness as its proxy indicator. This operationalization strategy directly corresponds to the dependent variable setting described below, with its rationale explained in the research limitations section.

2.3. The Relationship Between Types of Social Capital and Urban Integration

Existing research has generally focused on the differential impacts of different types of social capital on rural migrant workers' urban integration. Regarding direction of effect, academia has formed relatively consistent judgments: homogeneous social capital hinders integration, while heterogeneous social capital promotes integration. Based on 1,446 survey samples of rural migrant workers in Shanghai, Tong Xuemin et al. found that homogeneous social capital represented by fellow-townsmen interactions hindered urban integration, while heterogeneous social capital established through interactions with urban residents played a promoting role[6], establishing the basic framework of "homogeneous hindrance, heterogeneous promotion." International research similarly supports this judgment; Zhang et al., based on CMDS data, established a comparative model of bonding and bridging social capital, finding that bridging social capital was positively correlated with social integration, while bonding social capital was negatively correlated[15].

Regarding scope of effect, scholars have further revealed differences in how different types of social capital influence different integration dimensions. Kong Xiangli and Zhuoma Cao distinguished integration into socioeconomic, behavioral, and psychological dimensions, finding that rural migrant workers with high-quality social capital had higher income levels and stronger identity identification[14]. Ding Shijun et al., based on 950 survey samples, found that social capital quality produced differential effects on integration levels across different dimensions[16]. Wang Gang et al. noted that

social networks and social trust significantly influenced the integration degree of new-generation rural migrant workers [17].

The aforementioned studies converge on the judgment of "homogeneous hindrance, heterogeneous promotion," laying the foundation for theoretical accumulation in this field. However, a critical issue has yet to be fully examined: most studies operationalize social capital as a holistic concept, or only make binary divisions of network types based on "before/after entering the city," without making explicit distinctions between homogeneous and heterogeneous social capital, nor testing the independent effects of both types within the same model. While such approaches can demonstrate statistical associations between social capital and urban integration, they cannot effectively distinguish which type of capital is playing a role, nor confirm whether the two types of capital indeed have opposite directions of effect. Addressing the above analytical gap, this study explicitly decomposes social capital into homogeneous and heterogeneous dimensions, estimating their independent effects on urban integration within the same regression framework, in order to more accurately reveal the differentiated mechanisms of action of the two types of social capital.

As stated in Section 2.1.2, human capital represented by education level and vocational training has a significant positive impact on rural migrant workers' urban integration; homogeneous social capital represented by fellow-townsmen interactions hinders rural migrant workers' urban integration, while new heterogeneous social capital established through regular interactions with urban residents positively affects rural migrant workers' urban integration[6]. Heterogeneous networks span different social groups, embedding richer and more diverse resources, capable of providing rural migrant workers with multiple supports including information, emotion, and identification. Homogeneous network members share similar backgrounds with highly homogeneous resources, making it difficult to effectively transform into momentum promoting urban integration. Based on the above analysis, this study proposes the following two core hypotheses:

H1: Heterogeneous social capital has a significant positive impact on rural migrant workers' urban integration. Specifically, the more frequently rural migrant workers interact with urban local residents (represented by neighbors), the higher their probability of urban integration.

H2: Homogeneous social capital has no significant positive impact on rural migrant workers' urban integration. Specifically, rural migrant workers' social trust level does not independently promote their urban integration.

3. Research Design

3.1. Data Sources

The data used in this study are drawn from the Chinese General Social Survey (CGSS) 2021[1]. Conducted by the Survey Research Center of China at Renmin University of China, this survey is the first national, continuous large-scale comprehensive social survey project in China. Covering 29 provinces, autonomous regions, and municipalities directly under the central government, it employs multi-stage stratified probability sampling methods, completing 8,148 valid samples in the 2021 survey wave. Questionnaire content covers major modules including demographic characteristics,

social attitudes, social networks, labor markets, and migration, satisfying the variable construction and analysis needs of this study.

3.2. Sample Selection

This study defines rural migrant workers as: labor populations with agricultural household registration currently engaged in non-agricultural work in cities. Based on this definition, samples were screened from CGSS 2021 according to the following criteria:

Screening Criterion 1: Household registration type is agricultural household registration or resident household registration (previously agricultural household registration), corresponding to questionnaire item A18, with values of 1 or 3.

Screening Criterion 2: Currently engaged in non-agricultural work, corresponding to questionnaire item A58, with value of 1 (currently engaged in non-agricultural work).

Through the above operations, 1,741 valid rural migrant worker samples were obtained. Among these, 924 were male (53.1%) and 817 were female (46.9%); age ranged from 18 to 82 years, with a mean age of 42.55 years; mean years of education was 10.55 (standard deviation 3.81); mean personal annual income (logarithm) was 10.66 (standard deviation 0.97).

4. Model Construction and Variable Setting

This study conducts empirical analysis on the impacts of two types of social capital on rural migrant workers' urban integration. Building upon the conceptual definitions, theoretical frameworks, and literature reviews presented above, social capital is operationalized into two core dimensions—heterogeneous social capital and homogeneous social capital—with life happiness (A36) serving as the proxy dependent variable for urban integration, utilizing CGSS 2021 data for empirical estimation.

In terms of analytical methods, this study employs both literature research and quantitative analysis methods. For literature research, relevant domestic and international achievements are systematically reviewed to establish theoretical foundations for variable selection and model specification. For quantitative analysis, based on CGSS cross-sectional data, SPSS software is used to complete data cleaning, variable construction, and descriptive statistics, with binary Logistic regression models employed for estimation.

4.1. Model Construction

Since the dependent variable Y (urban integration) in this study is a binary variable (with values 1 for integrated and 0 for not integrated), binary logistic regression was selected as the primary empirical analysis method. The model specification is as follows:

$$\ln(P/(1-P)) = \beta_0 + \beta_1 \cdot A31a + \beta_2 \cdot A33 + \sum \gamma_i \cdot \text{Control}_i + \varepsilon$$

Here, P denotes the probability of migrant workers integrating into the city; A31a represents heterogeneous social capital (frequency of interactions with neighbors); A33 represents homogeneous social capital $\beta_0\beta_1\beta_2\gamma_i\varepsilon$ (level of social trust); Control refers to various control variables (gender, age, years of education, and logarithmized income); is the constant term;,, are the coefficients to be estimated; is the dependent variable.

Machine error term [6].

The model incorporates all independent variables simultaneously using an input method, without employing stepwise regression. The regression results are interpreted as odds ratios, which represent the multiple change in the probability of migrant workers integrating into urban life for each unit change in the independent variable. Model fit was assessed using the Hosmer-Lemeshow test[6]. It should be noted that, since this study utilizes cross-sectional data from CGSS 2021, it is not possible to track dynamic changes within the same population over time; thus, the regression results reflect a statistical association between social capital and urban integration, rather than a strict causal relationship.

4.2. Variable Settings

4.2.1. Dependent Variable: Urban Integration (Y)

This study measures urban integration using life happiness (A36). Item A36 asks respondents: "Overall, do you think your life is happy?" with options 1 to 5 corresponding to "very unhappy" to "very happy"[1].

Theoretical basis: Urban integration is a multi-dimensional social process; academia typically distinguishes it into levels including economic integration, social adaptation, cultural acquisition, and psychological identification[11]. Among these, psychological identification is widely regarded as the highest level of integration[13], because the effectiveness of the first three dimensions ultimately converges in whether individuals form a subjective sense of belonging to urban life. Existing research also indicates that "social capital has a significant positive impact on rural migrant workers' psychological integration"[18]. Research by Yang Jinhua and Jin Shenghua further demonstrates that "subjective well-being of floating populations can predict their urban identification and social psychological integration, with life satisfaction and positive emotions playing positive predictive roles"[19]. Life happiness is a direct reflection of this psychological belonging state; some studies have also used subjective quality of life perceptions to measure social integration. Limited by data availability and research focus, this study does not intend to cover all dimensions of integration with a single indicator, but rather emphasizes this core dimension of psychological identification, using life happiness as its proxy measurement indicator.

Coding method: Scores of 4 (relatively happy) and 5 (very happy) are coded as 1 (integrated), while scores of 1 to 3 are coded as 0 (not integrated), forming the binary dependent variable y_merge. Among 1,741 rural migrant worker samples, this variable has 1,724 valid responses (validity rate of 99.0%), including 1,033 integrated individuals (59.9%) and 691 non-integrated individuals (40.1%).

4.2.2. Core Independent Variable 1: Heterogeneous Social Capital (X1)

This study measures heterogeneous social capital using frequency of interaction with neighbors (A31a). The stem for A31a is: "How frequently do you socialize and engage in recreational activities with your neighbors (such as visiting each other, watching TV together, dining, playing cards, etc.)?"[1]

Theoretical basis: Zhang Guangli and Chen Shizhong defined social capital as "various social resources embedded in social relationship networks that individuals or organizations can mobilize and utilize to achieve certain goals" [20]. Based on differences in the nature of relational networks, social capital can be further divided into

homogeneous and heterogeneous social capital; the latter refers to resources embedded in relational networks that span different social groups with differential characteristics among network members. In urban communities, neighbors typically include large numbers of urban local residents; rural migrant workers' interactions with neighbors essentially constitute cross-group social interaction, precisely falling within the scope of heterogeneous social capital as described above.

Coding method: Original values range from 1 to 7, representing "almost every day" to "never." Since higher original values represent lower interaction frequency, this study applies reverse coding (1→7, 2→6, 3→5, 4→4, 5→3, 6→2, 7→1), with higher converted values representing higher frequency of interaction with neighbors. This variable has 1,741 valid responses among 1,741 rural migrant worker samples (validity rate of 100.0%), with a mean of 2.70 (between "rarely" and "sometimes" before reverse coding) and standard deviation of 1.03 [1]. In subsequent regression analysis, this variable is incorporated as a continuous variable.

4.2.3. Second Core Independent Variable: Homogeneous Social Capital (X2)

This study measures homogeneous social capital using social trust level (A33). The stem for A33 is: "Overall, do you agree that in this society, the vast majority of people are trustworthy?" Values range from 1 to 5, with 1 representing "strongly disagree" and 5 representing "strongly agree" [1].

Theoretical basis: Homogeneous social capital is built upon blood, kinship, and geographical relationship foundations.

Rural migrant workers' social networks are highly homogeneous, dominated by strong ties, with social interactions decisively influenced by traditional "local networks" tied by blood and geographical relationships. The vast majority of rural migrant workers enter urban employment through introductions by fellow-townsmen or relatives; "social support objects tied by blood and geographical relationships play very important roles in rural migrant workers' social support" [21].

Zhang Guangli and Chen Shizhong noted that social relationship networks are the sum total of various social relationships possessed by individuals or organizations, "including blood relationships, kinship relationships, geographical relationships, occupational relationships, and interest-based relationships"[20]. Social trust reflects individuals' tendencies to rely on social relationship networks; in academic research, rules, social networks, and trust are primary indicators for measuring or assessing social capital. Academia commonly measures social capital from dimensions including social networks and social trust [22]. Homogeneous social capital networks have limited scale and high homogeneity.

Coding method: Original values are incorporated as continuous variable A33 into the regression model. This variable has 1,741 valid responses among 1,741 rural migrant worker samples (validity rate of 100.0%), with 66.6% selecting "relatively agree" or "strongly agree" [1].

4.2.4. Variable Definitions and Measurement

Table 1. Summary Table of Variable Definitions and Measurements

type of variable	Variable Name	Measurement Indicator	Question Item	Value Explanation	type of variable	Variable Name
dependent variable	merging into the urban community (Y)	Life satisfaction	A36	4–5 points = 1 (integrated); 1–3 points = 0 (not integrated)	dependent variable	merging into the urban community (Y)
Core Independent Variable 1	Heterogeneous Social Capital (X1)	Frequency of interactions with neighbors	A31a	After reverse encoding with a scale of 1–7, the values are treated as continuous variables.	Core Independent Variable	Heterogeneous Social Capital (X1)
Second Core Independent Variable	Homogeneous Social Capital (X2)	Level of social trust	A33	1–5 points: Higher values indicate higher trust levels	Core Independent Variable	Homogeneous Social Capital (X2)
controlled variable	sex	—	A2	Male = 1, Female = 0	controlled variable	sex
controlled variable	age	The year 2021 is a year with fewer births.	A3_1	Continuous Variable (Years)	controlled variable	age
controlled variable	Years of Education	Convert to consecutive years	A7a	2000–2019	controlled variable	Years of Education
controlled variable	Personal Annual Income	Take the natural logarithm	A8a		controlled variable	Personal Annual Income

Education conversion standards: No formal education = 0 years, Private school/Literacy class = 3 years, Primary school = 6 years, Junior high school = 9 years, Vocational high school/Regular high school/Technical secondary school/Technical school = 12 years, Junior college = 15 years, Undergraduate = 16 years, Graduate and above = 19 years[1].

Income logarithmic transformation: Due to right-skewed distribution of personal annual income, natural logarithms are

taken before incorporation into regression. Special values such as "refused to answer" and "don't know" in A8a are set as system missing, with logarithms taken for valid values [1].

Regarding local residence duration: This study attempted to incorporate local residence duration (A25) in preliminary analysis, but this variable had only 596 valid samples among rural migrant worker samples, with a missing rate as high as 65.8%. Incorporating this variable into regression would

reduce valid sample size from 1,486 to approximately 500, severely affecting statistical power. Therefore, the main regression model does not incorporate local residence duration [1].

5. Results

5.1. Variable Description and Sample Characteristics

After sample screening of CGSS 2021 data, 1,741 valid rural migrant worker samples were obtained. The sample comprised 53.1% males, with mean age of 42.55 years and mean years of education of 10.55 years.

Regarding the dependent variable, among 1,724 valid

responses, 59.9% of rural migrant workers were in an integrated state, higher than the positive evaluation proportion (approximately 40%) in Tong Xuemin et al.'s (2012) Shanghai data, but with over 40% still having low happiness levels, indicating that integration issues remain prominent [6].

Regarding core independent variables, for heterogeneous social capital (X1), 23.0% of rural migrant workers "never" interacted with neighbors, and only 10.6% interacted "almost every day," with overall social interaction at a medium-low level. For homogeneous social capital (X2), 66.6% of rural migrant workers tended to believe that "the vast majority of people are trustworthy," with overall social trust level relatively high.

The specific distributions of each variable are shown in Table 2.

Table 2. Basic Characteristics of the Migrant Workers Sample

variable	Category/Statistical Measure	numeric value
sex	man (%)	924(53.1%)
	woman (%)	817(46.9%)
Age (years)	Mean $\pm$ Standard Deviation	42.55 $\pm$ 12.46
Years of Education (years)	Mean $\pm$ Standard Deviation	10.55 $\pm$ 3.81
Personal Annual Income (Logarithm)	Mean $\pm$ Standard Deviation	10.66 $\pm$ 0.97
merging into the urban community (Y)	Integrated (%):	1,033(59.9%)
	Not Integrated (%):	691(40.1%)
Heterogeneous Social Capital (X1)	nearly everyday (%)	184(10.6%)
	Once or twice per week (%)	252(14.5%)
	Several times a month (%)	291(16.7%)
	Approximately once a month (%)	129(7.4%)
	Several times a year (%)	249(14.3%)
	Once per year or less (%)	229(13.2%)
Homogeneous Social Capital (X2)	never (%)	401(23.0%)
	Strongly disagree (%):	56(3.2%)
	Disagree to a large extent (%)	266(15.3%)
	Not sure whether to agree or disagree (%):	249(14.3%)
	Agree to a large extent (%):	956(54.9%)
	Very agree (%):	204(11.7%)

5.2. Analysis of Regression Results

The fitting results of the binary logistic regression model are presented in Table 3. The (Hosmer-Lemeshow test yielded a p-value of 0.140 (>0.05), indicating good model fit;

the chi-square test revealed a p-value of 0.025 (<0.05), confirming overall statistical significance of the model. The logistic regression analysis was conducted using 1,486 valid samples.

Table 3. Overall Model Fit Information

Inspection Parameter	Chi-square value	Freedom Degree	conspicuousness
Hosmer-Lemeshow test	12.248	8	0.140
Model Chi-square Test	14.464	6	0.025

Heterogeneous social capital significantly promotes urban integration, with a regression coefficient of 0.109 ($p = 0.040 < 0.05$) and OR value of 1.115, meaning that for each level increase in interaction frequency, integration probability increases by approximately 11.5%. Hypothesis H1 is supported. The more frequently rural migrant workers interact with urban residents, the more likely they are to develop a sense of belonging to the city. This verifies the theoretical expectation that "heterogeneous networks embed richer and more diverse resources," and validates Tong Xuemin et al.'s (2012) conclusion in a national sample[6]. Zhang Liangang et al. also found that new relational networks have a significant positive impact on settlement intention[16]. This finding is entirely consistent with the expectations of social capital

theory—the resource diversity of heterogeneous networks is the fundamental reason for their promotion of integration.

Homogeneous social capital has no significant effect on urban integration ($B = 0.001$, $p = 0.919$). Hypothesis H2 is supported. Lin Nan defined social capital as "resources embedded in social networks accessed and used by actors in action"[9]. The social trust measured in this study represents general trust in "the vast majority of people," rather than trust in specific groups such as fellow-townsmen or relatives; the former is closer to a personality trait than to a mode of social capital mobilization. Hua Shushu and Zeng Xiulan also noted that the "homogeneous social relationship networks" formed by rural migrant workers "huddling together for warmth" constitute structural obstacles to integration [23].

In social integration theory, assimilation theory and pluralism theory respectively correspond to the directions of effect of the two types of social capital: heterogeneous social capital (cross-group interaction with urban residents) points to the assimilation path (convergence toward mainstream society), while homogeneous social capital (reliance on fellow-townsmen and kinship networks) points to the pluralism path (maintenance of original cultural identity). Zhang Guangli and Chen Shizhong defined social capital as "various social resources embedded in social relationship networks that individuals or organizations can mobilize and utilize to achieve certain goals" [24]. The value of social

capital does not lie in the quantity of relationships per se, but in what resources actors can derive from them. Heterogeneous social capital, by spanning group boundaries, embeds diverse resources and has a significant positive effect on integration; homogeneous social capital, due to resource homogeneity, produces no significant effect.

Years of education is significant ($p = 0.038$, $OR = 1.036$)—higher education levels correspond to higher integration probability. Gender ($p = 0.056$) and age ($p = 0.057$) approach significance but do not reach the 0.05 level. Personal annual income is not significant ($p = 0.519$).

Table 4. Results of binary logistic regression on factors influencing urban integration of migrant workers

	B	standard error	Wald	Freedom Degree	conspicuousness	Exp(B)
Heterogeneous social capital (frequency of interactions with neighbors)	0.109	0.053	4.201	1	0.040	1.115
Homogeneous social capital (level of social trust)	0.001	0.008	0.010	1	0.919	1.001
Gender (1 = Male, 2 = Female)	-0.212	0.111	3.651	1	0.056	0.809
Age (years)	0.010	0.005	3.632	1	0.057	1.010
Years of Education (years)	0.035	0.017	4.306	1	0.038	1.036
Personal Annual Income (Logarithm)	0.041	0.063	0.417	1	0.519	1.042
constant	-0.993	0.735	1.825	1	0.177	0.371

6. Conclusion and Recommendations

6.1. Main Conclusion

Based on CGSS 2021 data and employing binary Logistic regression models, this study conducts empirical testing of the impacts of two types of social capital on rural migrant workers' urban integration. The main conclusions are as follows:

First, heterogeneous social capital significantly promotes urban integration. The coefficient for frequency of interaction with neighbors is 0.109 ($p < 0.05$), with $OR = 1.115$, meaning that for each level increase in interaction frequency, integration probability increases by approximately 11.5%. Daily interactions with urban residents enable rural migrant workers to acquire multiple resources including employment information, emotional support, and cultural cognition, gradually shortening the psychological distance from urban society.

Second, homogeneous social capital produces no significant effect. The regression coefficient for social trust level is 0.001 ($p = 0.919$), not reaching significance. There is a conceptual distance between general trust in "the vast majority of people" and behavioral reliance on specific homogeneous groups. Excessive embedding in blood and geographical relationship networks may instead lock rural migrant workers into social circles with limited information and opportunities.

Third, regarding control variables, years of education has a significant positive impact on urban integration ($p = 0.038$, $OR = 1.036$), meaning that for each additional year of education, integration probability increases by approximately 3.6%, consistent with existing research conclusions [12]. The effects of gender ($p = 0.056$) and age ($p = 0.057$) approach significance levels, while personal annual income fails the significance test ($p = 0.519$).

6.2. Policy Recommendations

Based on the above findings, this study proposes the following policy recommendations:

First, use communities as platforms to establish institutionalized platforms for interaction between rural

migrant workers and urban residents. Frequency of interaction with neighbors is a key variable affecting integration; communities should actively create institutional environments and physical spaces for cross-group interaction, such as regularly organizing cultural, sports, and volunteer service activities. Fang Xiangxin noted that integration promotion should use communities as foundations to promote benign interaction between rural migrant workers and urban residents [25]. Additionally, public courses such as dialect training and urban life knowledge lectures can be offered to reduce communication barriers arising from language gaps and cultural differences.

Second, differentiate treatment of different types of social capital, guiding rural migrant workers to transition from homogeneous to heterogeneous networks. Excessive reliance on homogeneous capital such as fellow-townsmen and relatives does not necessarily enhance integration levels; employers can promote exchanges between rural migrant workers and urban employees through team building and skills training; communities can explore institutionalized arrangements such as "new-old resident pairing and assistance." Research by Hua Shushu and Zeng Xiulan indicates that using homogeneous relationships as starting points to build heterogeneous relationships is an effective path [17].

Third, in policy formulation, emphasize "empowerment" support for rural migrant workers. Urban integration depends not only on social capital accumulation but also deeply on institutional environments and policy provisions. Policy orientation should shift from "safety-net protection" to "empowerment for development": on one hand, reducing institutional barriers for rural migrant workers to access education, medical care, and housing public services in destination cities; on the other hand, strengthening vocational skills training and employment information services to provide material foundations for social capital accumulation and transformation. Policy formulation should emphasize systematic thinking, avoiding fragmented single-item policies operating in isolation.

6.3. Research Limitations and Prospects

First, cross-sectional data limits causal inference. CGSS

2021 is a single cross-sectional survey; the statistical associations revealed in this study cannot be equated with causal relationships. Future research can utilize panel data such as CFPS and CLDS, employing fixed-effects models to more precisely identify causal effects.

Second, social capital measurement indicators need refinement. Using "frequency of interaction with neighbors" to measure heterogeneous capital and "social trust level" to measure homogeneous capital still constitutes indirect measurement. CGSS lacks direct inquiries into interaction partners' household registration identity, and homogeneous social capital (A33) lacks parallel alternative items in CGSS, limiting further testing of measurement robustness. Future research can design more refined items to directly measure the proportion of urban residents in social networks, and develop multi-dimensional measurement tools for homogeneous social capital.

Third, measurement dimensions of urban integration need expansion. This study uses life happiness as a proxy variable, emphasizing the psychological identification dimension, and cannot comprehensively cover objective dimensions such as economic integration and behavioral integration. However, as stated above, this focus is intentional—Cui Yan's (2012) finding that psychological integration is the highest level of urban integration [13], and Ning Manxiu et al.'s (2023) indication that "heterogeneous social capital's promoting effect on rural migrant workers' psychological integration is greater than that of unitary social capital," with the differentiated effects of social capital being relatively concentrated in the psychological integration dimension [18], mean that although this study only measures the psychological dimension, the effects revealed are precisely targeted.

Fourth, mediating mechanisms need further revelation. This study does not conduct mediation effect analysis on pathways of influence. Ding Shijun et al. (2020) found that social capital's effects on different integration dimensions vary [16], suggesting possible multiple pathways of influence. Future research can explore the mediating roles of variables such as employment quality and social participation.

In summary, from the perspective of social capital heterogeneity, this study empirically tests the differential impacts of two types of social capital on rural migrant workers' urban integration. It is hoped that subsequent research will continue to advance in data quality, measurement precision, and causal identification, providing more solid academic support for promoting the orderly integration of rural migrant workers into cities.

References

- [1] Survey Research Center of China, Renmin University of China. (2023). Chinese General Social Survey (CGSS) 2021 Data [DB/OL]. Renmin University of China.
- [2] Cao, Y., & Wang, T. (2023). Will rural migrant workers remain in the "semi-citizenization" stage for a long time? Based on the "embedded" survival theory. *Decision and Information*, (10), 31–42.
- [3] National Bureau of Statistics. (2026, April 30). 2025 rural migrant workers monitoring and survey report [EB/OL].
- [4] Liu, C. J., & Zhou, L. (2004). Social capital and urban integration of rural migrant workers. *Population Research*, (5), 12–18.
- [5] Tang, B. (2002). "Dual marginal persons": Formation and social impact of urban rural migrant workers' self-identity. *Journal of South-Central University for Nationalities (Humanities and Social Sciences Edition)*, (S1), 36–38.
- [6] Tong, X. M., Jin, H. T., & Shi, Q. H. (2012). Urban integration of rural migrant workers: An empirical study from human capital and social capital perspectives. *Economic Survey*, (5), 33–37. <https://doi.org/10.15931/j.cnki.1006-1096.2012.05.028>.
- [7] He, H. H., & Pi, X. P. (2005). "Rural migrant workers": A concept no longer suitable—Ethical reflections on "rural migrant workers". *Rural Economy*, (5), 107–109.
- [8] Bu, C. L. (2004). Bourdieu's pioneering research on social capital theory. *Study and Exploration*, (6), 35–38.
- [9] Song, J., & Gu, W. (2011). Social capital theory embedded in social network structure: A review of Lin Nan's social capital theory. *Legal System and Society*, (1), 171–172. <https://doi.org/10.19387/j.cnki.1009-0592.2011.01.106>.
- [10] Yang, J. H. (2009). From segregation, selective integration to integration: Theoretical reflections on social integration of floating populations. *Population Research*, 33(1), 17–29.
- [11] Cai, H., & Cao, Z. G. (2009). Urban identity of rural migrant workers and its influencing factors: Empirical analysis from the Pearl River Delta. *Journal of Sun Yat-sen University (Social Science Edition)*, 49(1), 148–158.
- [12] Yang, J. H. (2015). Research on social integration of China's floating population. *Social Sciences in China*, (2), 61–79, 203–204.
- [13] Cui, Y. (2012). Research on social integration and identity issues of floating populations at the psychological level. *Sociological Studies*, (5), 141–160.
- [14] Kong, X. L., & Cao, Z. M. (2016). Non-institutional approaches to rural migrant workers' urban integration: A qualitative study on the role of social capital. *Journal of Shaanxi Normal University (Philosophy and Social Sciences Edition)*, 45(1), 116–125.
- [15] Zhang, X., Lu, X., Huang, C., Liu, W., & Wang, G. (2024). The impact of social capital on migrants' social integration: Evidence from China. *Sustainability*, 16(13), 5564. <https://doi.org/10.3390/su16135564>.
- [16] Ding, S. J., Liu, G. S., & Chen, L. M. (2020). Impact of heterogeneous social capital on rural migrant workers' urban integration level: Based on survey data of rural migrant workers in Hubei and Guangdong Provinces. *Xinjiang State Farms Economy*, (9), 62–70.
- [17] Wang, G., Liu, B. B., & Lu, Q. (2013). Analysis of factors influencing new generation rural migrant workers' urban integration degree from the perspective of social capital. *Guangdong Agricultural Sciences*, 40(24), 185–189. <https://doi.org/10.16768/j.issn.1004-874x.2013.24.048>.
- [18] Ning, M. X., Liao, Y. J., & Yang, Y. S. (2023). Impact of social capital on rural migrant workers' psychological integration: An empirical analysis based on CMDs data. *Journal of Fujian Agriculture and Forestry University (Philosophy and Social Sciences Edition)*, 26(3), 81–89.
- [19] Yang, J. H., & Jin, S. H. (2017). Relationship among subjective well-being, urban identity and social psychological integration of floating population. *Advances in Psychology*, 7(5), 611–620.
- [20] Zhang, G. L., & Chen, S. Z. (2006). Bottlenecks in the development of social capital theory: Discussion on definition and measurement issues. *Social Science Research*, (2), 102–106.
- [21] Hui, Z. J. (2007). Research on social support networks of rural migrant workers in cities: A case study of Guangzhou [Master's thesis]. Anhui University.

- [22] Pei, Z. J. (2010). Dimensions and measurement of regional social capital: An empirical study based on counties in Zhejiang Province. *Statistics and Decision*, (9), 114–116. <https://doi.org/10.13546/j.cnki.tjyj.2010.09.023>.
- [23] Hua, S. S., & Zeng, X. L. (2023). Boundary dissolution, relationship connection and narrative reconstruction: The practical logic of social work in promoting new generation rural migrant workers' urban integration. *Labor Movement Studies*, (5), 42–52. <https://doi.org/10.19434/j.cnki.ghllyj.2023.05.003>.
- [24] Zhang, G. L., & Chen, S. Z. (2006). Bottlenecks in the development of social capital theory: Discussion on definition and measurement issues. *Social Science Research*, (2), 102–106.
- [25] Fang, X. X. (2019). Evolution trends, prominent characteristics and promotion strategies of rural migrant workers' urban integration. *Seeker*, (4), 147–156. <https://doi.org/10.16059/j.cnki.cn43-1008/c.2019.04.018>.