

Social Trust Between Rural Migrants and Urban Locals in China – Exploring the Effects of Residential Diversity and Neighbourhood Deprivation

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ABSTRACT

The social integration of migrants has become a major challenge for Chinese cities as many rural migrants still face discrimination from urban natives. Research suggests that intergroup social trust can improve cohesion and reduce stigmatisation. However, little is known about the trust level between migrants and locals and its underlying dynamics in urban China. Our study explores the trust between native Shanghai residents and rural migrants and how neighbourhood factors including residential diversity and neighbourhood poverty may play a role. We adopt a multilevel model to analyse the 1,420 questionnaire samples collected in 2013 from local and migrant residents in Shanghai. Our results show that people living in areas with more migrant residents also have higher intergroup social trust, which may indicate that exposure to more out-group neighbours can remove preconceived stigmas and foster tolerance. In contrast, there is less intergroup trust in poor neighbourhoods although migrant residents are exceptions. We speculate that migrants are less affected by local poverty because they are less spatially bound to the locality and are thus less likely to compete with native residents over local resources. Our results differ from findings in multi-ethnic societies where residential diversity causes distrust, but we believe this is a reasonable outcome considering that locals and migrants in urban

China share more in common such as ethnicity, language, and national identity.
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INTRODUCTION

After decades of emphasis on economic growth, China now turns its focus towards another pressing issue of a more social nature. China's economic transition has left millions of migrants in Chinese cities struggling to socially settle into the host society. Especially in major cities with a long history of migration, the social distance between locals and 'outsiders' is still deeply rooted in the mindsets of its residents (Cheng and Selden, 1994; Chen *et al.*, 2011). The consequences are severe including widespread discrimination towards rural migrants (Solinger, 1999; Roberts, 2002; Wang *et al.*, 2015) and difficulties to socially integrate migrants who wish to remain in the host society (Li and Wu, 2013). Furthermore, migrants living in large metropolitan areas suffer from inequalities of work conditions, welfare limitations, and social isolation (Fan, 2002; Wu, 2012; Yue *et al.*, 2013). Consequently, integrating migrants and reducing social tensions stand at the top of the Chinese government's policy agenda (Wang *et al.*, 2008).

According to research, social trust between different social groups enhances the social and

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economic integration of members of minority groups (Putnam, 2001; Putnam, 2007; Letki, 2008; Laurence, 2011). Many contend that intergroup relations between migrants and locals in urban China also lead to greater chances for social integration (Yue *et al.*, 2013), better housing opportunities (Liu *et al.*, 2013), and improved attitudes between migrants and locals (Nielsen *et al.*, 2006; Nielsen and Smyth, 2011). However, there is still little knowledge about the social trust between the migrant and the local population and its underlying dynamics. Especially the role of neighbourhoods is under-researched in urban China although geographers have underlined the importance of the local context in influencing people's social relations (Forrest and Kearns, 2001; Li *et al.*, 2005; Secor and O'Loughlin, 2005; Guest *et al.*, 2008). Studies especially highlight the negative effects of residential diversity and neighbourhood deprivation on the production of intergroup social trust (Stolle *et al.*, 2008; Bécares *et al.*, 2011; Laurence, 2011). This emphasis is also particularly relevant for the context of urban China as the transition to a market economy has resulted in some fundamental changes at the neighbourhood level including residential segregation based on socio-economic status (Li and Wu, 2008) and the concentration of poverty in particular neighbourhoods (Wu *et al.*, 2010).

Existing research suggests that local-migrant social ties are scarce and transient (Liu *et al.*, 2012; Wu, 2012), but it remains difficult to disentangle personal characteristics and neighbourhood factors because existing empirical evidence are limited to migrant enclaves and low-income neighbourhoods. Some results already point towards an existing relationship between contextual factors and local-based social capital such as participation in community activities (Wu, 2012). This gives rise to the question whether residential diversity and neighbourhood deprivation are also associated with the social trust between migrant and locals and have similarly negative outcomes as in some multi-ethnic societies.

Consequently, this paper sets out to examine the dynamics of social trust between local hukou holders and migrant residents and how neighbourhood factors may be related. We will try to answer questions including the following: What is the current level of social trust between migrants and locals? How might neighbourhood factors such as residential diversity and poverty

affect social trust? Our data come from a 1,420 questionnaire sample collected in Shanghai in 2013. A key strength of this paper is that it is based on a survey that interviewed both local and migrant respondents living in a range of neighbourhood types, which allows a better comparison between different social groups. The case of Shanghai serves as an excellent example as migrants live in a very diverse range of neighbourhood types with varying degrees of poverty and migrant concentration. The paper is structured as follows: the second part reviews the underlying dynamics of social trust and sets out the theoretical framework for this study. The third section provides information on the data and research method followed by a presentation of the data results in part 4. Finally, the last part offers some concluding remarks and policy recommendations.

SOCIAL TRUST AND NEIGHBOURHOOD LEVEL DETERMINANTS

Social trust is a recurring key indicator of social capital and is applied by researchers of various fields including political science, geography, and migration studies (Delhey and Newton, 2005; Secor and O'Loughlin, 2005; Putnam, 2007; Stolle *et al.*, 2008). Generalised trust between different social groups is often considered as crucial for the functioning of modern society (Fukuyama, 1995; Putnam 2001) and can be used as a cross-cultural concept that is applicable to various types of societies (Secor and O'Loughlin, 2005: 80). However, social capital is also dependent on the local context, and evidences suggest that neighbourhood characteristics can significantly affect the social capital outcomes of individuals (Forrest and Kearns, 2001; Li *et al.* 2005; Secor and O'Loughlin, 2005). A main reason for the significance of neighbourhoods could be that social changes at this level affect individuals in a more direct and personal way because the residential environment often contribute to a person's social identity and sense of belonging (Kearns and Parkinson, 2001; Li *et al.*, 2005).

The ethnic diversity of the population is an important area characteristic associated with social trust (Putnam, 2007; Guest *et al.*, 2008; Stolle *et al.*, 2008; Bécares *et al.*, 2011). This is because trust is closely related with feelings of common identity and closeness, which in turn is strengthened

through shared characteristics such as one's ethnicity (McPherson *et al.*, 2001; Putnam, 2007). Living in an ethnically diverse neighbourhood can affect intergroup trust although there is no consensus about whether this effect is positive or negative. The overwhelming evidence so far suggests that living in an ethnically diverse neighbourhood leads to social distrust towards the entire ethnic group as articulated by the *conflict theory* (Guest *et al.*, 2008; Stolle *et al.*, 2008). The conflict theory assumes that residents are 'naturally' averted to area heterogeneity as dissimilarity between individuals lead to increased mistrust (Alesina and La Ferrara, 2002). There are many reasons for this outcome, but above all, contention over limited resources is a core cause (Putnam, 2007:143), and especially ethnic minority residents are subjected to distrust (Laurence, 2011). In contrast, the *contact theory* by Allport (1954) in its simplest form asserts that 'pleasant and co-operative contact' with stigmatised social groups can enable better relations with its members and improve overall attitude towards such groups (Hewstone and Brown, 1986). Increased frequencies of intergroup contact reduce the perceived gap between the social identities of different groups (Pettigrew 1998). Empirical evidence at the neighbourhood level in support of this theory is scarce but suggests that higher ethnic diversity is positively related with interethnic contact, because of increased encounter opportunities (Stein *et al.*, 2000).

The effect of residential diversity has also been dismissed by many studies, which assert that low levels of intergroup trust in more diverse neighbourhoods can be explained by area poverty (Li *et al.*, 2005; Letki, 2008). The argument is that socio-economic disadvantage and poverty can lead to heightened levels of mistrust and social isolation amongst residents (Laurence, 2011). Cases from European cities have shown that neighbourhood poverty largely explains the lack of trust between residents as opposed to residential ethnic heterogeneity (Li *et al.*, 2005; Letki, 2008; Laurence, 2011). The explanation is similar to the conflict theory logic and contends that residents in poor areas tend to compete for the neighbourhood's limited resources whereby especially ethnic minority groups are perceived as threats to host society members (Laurence, 2011).

Although there is no consensus on the effects of neighbourhood diversity and deprivation,

one shared commonality of many studies is that the neighbourhood plays a significant role in influencing people's perceptions towards individuals or groups and their level of trustworthiness (Putnam, 2007; Bécares *et al.*, 2011). Some scholars also assert that social interactions at the neighbourhood level help to mediate between the perceived threat of diversity and declining social trust as personal interactions enables stronger tolerance towards ethnic diversity (Stolle *et al.*, 2008; Laurence, 2011).

SOCIAL TRUST AND RESIDENTIAL DIVERSITY IN URBAN CHINA

Compared with multi-ethnic societies, intergroup social trust studies are scarce in China. Existing findings on social ties between locals and migrants imply that such relationships remain truncated and are characterised by discrimination and distrust towards rural migrants (Cheng and Selden, 1994; Chen *et al.*, 2011). Under China's hukou system, rural migrants are categorised as non-local hukou holders, and their access to welfare entitlements in the city is limited. Recent hukou reforms have reduced the inequality between local and non-local hukou holders,¹ but rural migrants in large cities such as Shanghai are still barred from accessing public housing and public school for instance (Chan, 2014; Li, 2015). In addition to the formal limitations, rural hukou holders are often associated with the stigma of crime, low education level, and poverty (Chen *et al.*, 2011). Negative attitudes can be mitigated through friendship ties between migrants and locals (Nielsen *et al.*, 2006; Nielsen and Smyth, 2011), and higher levels of education and longer residency in the city also foster bridging social capital with local hukou holders (Liu *et al.*, 2013; Yue *et al.* 2013).

In addition to individual level determinants, our study hypothesises that neighbourhood level characteristics, including residential diversity and neighbourhood deprivation rate, also affect social trust. Residential diversity in the context of this study is interpreted as the share of migrant residents within a neighbourhood. The underlying logic of ethnic diversity and social trust assumes that living in an environment where residents feel they are outnumbered by neighbours belonging to a different social group (such as ethnic minorities) can affect their level of trust

towards the entire social group (McPherson *et al.*, 2001; Putnam, 2007). This strong differentiation between 'us' versus 'them' also affects migrant-local relationships in urban China (Malloy *et al.*, 2004). Migrants and locals consider each other as out-group members partly because of the sense of native place identity (Tongxiang) and prejudices that further widen the social distance between migrants and locals (for a summary, see Nielsen *et al.*, 2006). Based on this knowledge, our study extends this logic to the residential diversity in Chinese neighbourhoods.

In urban China, surveys reveal that residential segregation and poverty neighbourhoods in its current form are a relatively recent phenomenon and only started to emerge since China's post-reform era (Wu *et al.*, 2010; Li and Wu, 2008; Wu, 2008). According to Li and Wu (2008:417), residential segregation is tenure based in Chinese cities, and segregation between migrants and locals is less extreme than that of ethnic minorities in some Western societies, such as the US for instance. Nevertheless, rural migrants tend to live segregated from local hukou holders and predominantly congregate in the rented sector consisting of low-income neighbourhoods (Wu, 2008) and are less likely owner-occupiers and experience more hardship in purchasing a property (Logan *et al.*, 2009). The residents of ownership-based commodity neighbourhoods are mostly of higher social status and education (Li and Wu, 2008). Consequently, despite the large number of migrants, their presence is not distributed equally in the cities. Because of exclusion from public housing, affordability, and proximity to employment, the majority of migrants congregate in poor areas along with laid-off state workers to make up the two largest groups in deprived neighbourhoods (Wu *et al.*, 2010). The result is an uneven distribution of migrant residential areas: in cities such as Shanghai and Nanjing, many migrants live in poor inner-city neighbourhoods and peri-urban areas (Wu, 2008).

Migrants living in low-income neighbourhoods are more likely to interact with locals, as they understand that contacts with locals can help them to better survive in the city (Wu, 2012). However, social ties with natives remain truncated, as local hukou residents in low-income neighbourhoods are not accustomed to the different lifestyle of migrants (Wu, 2012). Furthermore, studies contend

that social interactions and trust have generally decreased and become more transient because of the urban lifestyle and the decline of the neighbourhood as a space for social interactions (Forrest and Yip, 2007; Zhu *et al.*, 2012). Compared with older neighbourhoods such as work units and courtyard houses, commodity housing neighbourhoods and its predominantly middle-class residents have much fewer neighbourly ties (Forrest and Yip, 2007; Wang *et al.*, 2015).

Although there is evidence supporting the importance of contextual effects, we expect that the influence of residential diversity and area poverty may differ from multi-ethnic societies. Migrants and locals in urban China have far more in common, such as language or national identity, compared with different ethnicities in multi-ethnic societies (Delhey and Newton, 2005). Earlier researches also showed that the mediating effects of intergroup contact are more facilitative in urban China (Nielsen *et al.*, 2006; Nielsen and Smyth, 2011). Therefore, high migrant presence neighbourhoods may have higher intergroup trust because of more frequent interactions between locals and neighbours. Based on this logic, our first hypothesis assumes that the level of migrant concentration is a positive determinant of intergroup social trust. Moreover, rural migrants in urban China do not fit the traditional 'urban poor' definition. Lack of employment is not the cause of their poverty, but instead, institutional limitations of the hukou system have prevented them from escaping poverty (Wu *et al.*, 2010). Migrants change locations depending on their employment and have better spatial mobility compared with indigenous poor who are more bound to the locality (Li and Zhu, 2015). Consequently, migrants may not need to compete with local neighbours for limited resources. Instead, poorer migrants who are aware of their limitations are eager to accumulate informal resources such as social ties with locals in order to make up for their shortcomings (Liu *et al.*, 2012; Wu, 2012). In contrast, indigenous Shanghai residents of poverty neighbourhood may feel more threatened towards their migrant neighbours because of fear that migrants can reduce employment chances (Solinger, 1999; Roberts, 2001). Thus, our second hypothesis assumes that the effect of area poverty is significant but differs between migrant and local hukou holders.

SURVEY AND DATA

This research is based on a survey conducted in Shanghai in August 2013.

Shanghai has a population of 23 million of which almost 40% are migrant residents holding a non-local hukou status (NBS, National Bureau of Statistics, 2010). In terms of Shanghai's spatial characteristics, the city has 208 sub-districts, with population sizes ranging from 6,000 to 30,000 inhabitants and an administrative area covering approximately 1.3 to 15 km² (NBS, National Bureau of Statistics, 2010). A typical sub-district would have 20–30 juweihui, each having a population size between 1,500 and 7,000 residents (ibid). Most financial and commercial activities such as the financial district of Lujiazui or the new Shanghai Free trade zone are located within the inner city. Commercial and business activities are also primarily concentrated in the inner city, whilst residential developments are decreasing and of older age (Wu 2008). In comparison, peripheral and suburban areas have a higher proportion of new residential developments and manufacturing industries and a large share of migrant enclaves in Shanghai (Liao and Wong 2015). There are several reasons why Shanghai is useful for studying intergroup social trust. The city's migrant population is very heterogeneous in terms of socio-economic status and places of origin and also live in neighbourhoods with differing characteristics (Li and Wu, 2008), thus helping the exploration of contextual effects. Furthermore, Shanghai's longstanding issues of discrimination towards non-locals have become representative for many Chinese cities where the sense of superiority over rural residents is deeply embedded in the mindset of many urban citizens (Wang *et al.*, 2015; Cheng and Selden, 1994).

The citywide survey was carried out by a group of professionally trained surveyors and managed by the former survey officer of the Shanghai Statistical Bureau (SSB)'s urban livelihood survey team. The surveyors were also formerly employed by the SSB and are familiar with the neighbourhood assigned to them. We followed the principle of random sampling and adopted a *two-stage sampling strategy* in order to generate a sample that reflects the Shanghai population and the spatial differentiations between neighbourhoods such as neighbourhood

poverty and migrant concentration. The locations of the sampled neighbourhoods are available in Figure 1.

The sampling area was at residential committee (juweihui) level, which is lower than the sub-district level (jiedao) and is naturally defined by building blocks and streets. Forty copies of questionnaires were allocated for each selected neighbourhood, and to ensure the diversity of sampled neighbourhoods, the first stage of the survey included several sampling criteria at the jiedao level. Firstly, the survey considered the location of the neighbourhoods and tried to balance the number of neighbourhoods within the inner ring area, middle ring area, and outer ring area as well as neighbourhood outside of the outer ring area. We also included various criteria including gross domestic product per person, population density, and percentage of native hukou residents at the jiedao level in order to ensure that areas of all characteristics are covered. For the second stage, neighbourhoods were randomly selected at the juweihui level in order to make sure that all types of neighbourhoods have an equal chance of being chosen. Figure 1 shows that the 35 neighbourhoods are distributed fairly evenly across Shanghai and that the distance between them is sufficient to avoid any serious issues of spatial autocorrelation. Households were randomly chosen for interview based on a random starting street number with a fixed interval. Our survey required the head of household to be interviewed, and the survey yielded 1,420 valid samples in total. The success rate for this survey was very high (95%) because members of the residential committee helped introducing the surveyors to selected households.

Amongst the sampled households, 1,046 are local urban hukou residents, 128 local rural hukou, 86 non-local urban hukou, and 158 non-local rural hukou migrants. The reason that the migrant ratio is below the city's average is mainly because many migrant residents were unavailable for interviews because of their irregular work schedule and long working hours. In order to remediate this shortcoming after the initial survey, we have added another 100 migrant samples in order to avoid the possibility of leaving out any particular migrant groups. Although the total number of sampled migrant residents is still below the Shanghai average, we believe that this will not significantly impede on our analysis as

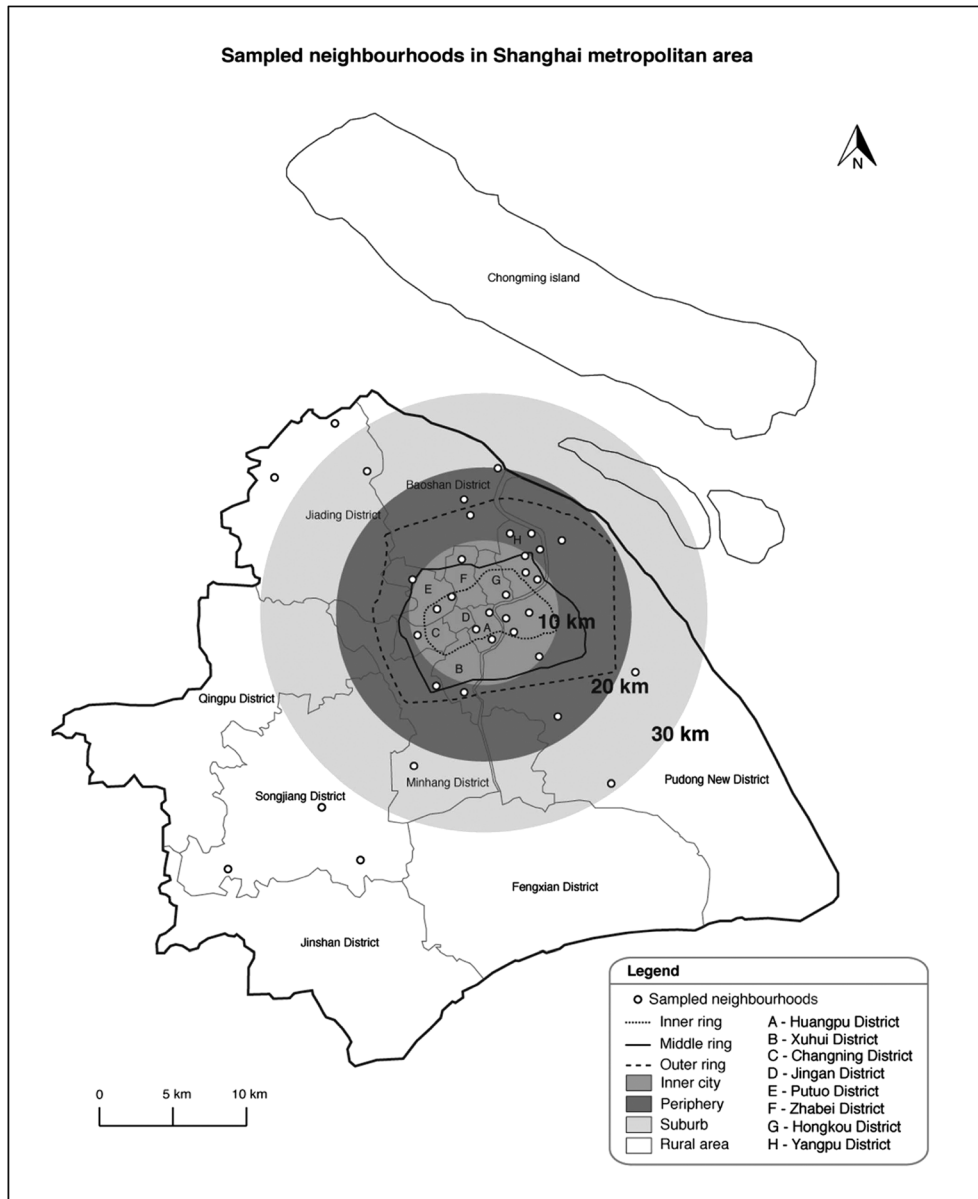


Figure 1. Sampled neighbourhoods in Shanghai.

the comparison between our survey data and official statistics reveals that no particular migrant group is systematically missing and thus is still representative to a large extent (Table 1).

This paper employs a mixed effects linear regression also known as multilevel modelling using the STATA 13 statistical program to test the independent effect of neighbourhood level factors. A multilevel technique is necessary in order to assess the contribution of individual and neighbourhood indicators simultaneously.

The advantage of multilevel modelling over an ordinary least squares (OLS) model is that it controls for dependencies in the sample that were caused by respondents residing in the same locality and allows determining the independent effect of neighbourhood level variables (Gelman and Hill, 2006). Because the hypothesis of our study assumes that there is an independent effect of neighbourhood characteristics, using a multilevel modelling appears to be the most appropriate. This is also in accordance with previous studies

Table 1. Comparison of survey data and official statistics.

	Survey data in 2013 (%)	Shanghai 6th population census in 2010 (%)
Educational attainment of working-age population		
Below elementary	0.64	1.0
Elementary	5.26	9.0
Junior secondary	33.59	40.2
Senior secondary	21.67	21.5
College or above	33.33	28.3
Major occupational sectors		
	Migrant sample only (243)	
Commercial and service industry staff	42.58	31.5
Production and manufacturing	19.52	28.7
Construction	8.10	4.1
Transport and logistics	4.29	5.5

Source: Shanghai 6th National Population Census 2010.

examining the effect of contextual factors (Secor and O'Loughlin, 2005; Bécares *et al.*, 2011; Laurence, 2011).

Dependent Variable: Social Trust

On a scale of 0–5 (where 1 is highly disagree, 5 is highly agree, and 0 means not applicable), we asked migrant respondents how much they agreed with the following statement: 'Most native Shanghainese in Shanghai are trustworthy.' Using the same scale, local hukou respondents had to report their agreement to the following statement: 'Most migrants in Shanghai are trustworthy.' With regard to how out-group is conceptualised, we used the terms local (*bendiren*) for native Shanghai residents and non-local (*waidiren*) for migrants, as it is currently one of the most commonly used definitions of one's own social identity.

Independent Neighbourhood Level Variables

This study uses three contextual variables at the residential neighbourhood level obtained from the respective local residential committees, the *de facto* government institution at the grassroots level. The first variable is the percentage of migrant residents in the neighbourhood to represent migrant density. To measure neighbourhood poverty, we follow the Wu *et al.* (2010) approach and use the number of minimum living standard support (MLSS) recipients within a neighbourhood.

Considering that migrants are not eligible for MLSS, we included the neighbourhood type of urban villages (Chengzhongcun) to reflect the extent of migrant poverty to a certain degree, as articulated by Wu *et al.* (2010:140). Another reason for including housing type of the area is to account for the differing lifestyles of residents living in older areas, such as traditional courtyard housing and newer neighbourhoods, developed under the market economy as proposed by Forrest and Yip (2007).

Individual Level Control Variables

Control variables include tenure, education level, occupation type, and income to represent socio-economic status; age, gender, and number of family members as demographic control variables. We included a question about where the majority of the respondent's friends live in order to take into account the respondents' diversity of social network. The social network of residents in urban China is becoming less bound by the locality, and certain population groups tend to have a less territorially bound social network (Hazelzet and Wissink, 2012; Forrest and Yip, 2007). Through the friendship location variable, we aim to understand which type of social network (i.e. city wide or local based) is more conducive to the out-group social trust of respondents.

Hukou status was included to test whether migrants and locals have different trust levels. There are four categories of hukou status: local non-

agricultural (native urban), local agricultural (native rural), non-local agricultural (rural migrant), and non-local non-agricultural (urban migrant). This research takes into account the heterogeneity of migrants living in large Chinese cities as migrants holding the urban hukou from another city may greatly differ from rural migrants including socio-economic status and access to resources. This interpretation may not fully encapsulate the diversity of the migrant population, and there exist other migrant categorisations [i.e. for skilled migrants, see Liu and Shen (2014), and for young and old-generation migrants, see Liu *et al.* (2012)]. However, given that the focus of this research is to understand the trust between migrant and locals, we chose an interpretation that covers most areas but not to an extensive degree. Finally, we included several interaction terms between hukou status and socio-economic indicators (education, income, and age) of survey respondents as local natives, urban, and rural migrants may have different underlying dynamics for their trust patterns. Area poverty and migrant density were also added as interaction terms as migrants are more likely to live in areas with higher poverty (Li and Wu, 2008) and with higher migrant presence. All independent variables were standardised.

ANALYSIS RESULTS

In-group and Out-group Social Trust in Shanghai

We have included the level of social trust towards in-group members as a benchmark for comparison. With regard to social trust in Shanghai, Figure 2 reveals that the in-group trust of migrants and locals are significantly higher (more than 77% of respondents chose either 4 or 5) than out-group trust between migrants and locals (almost 48% chose either 4 or 5). Although overall there were only few respondents who were distrusting others, compared with in-group trust, a much larger portion of respondents felt that out-group members are neither trustworthy nor untrustworthy. This signals that many determine the trustworthiness of out-group members on a case-by-case basis. It must be noted, however, that both in-group and out-group social trust are considerably high in Shanghai compared with multi-ethnic societies that have significantly more distrustful citizens (Delhey and Newton, 2005).

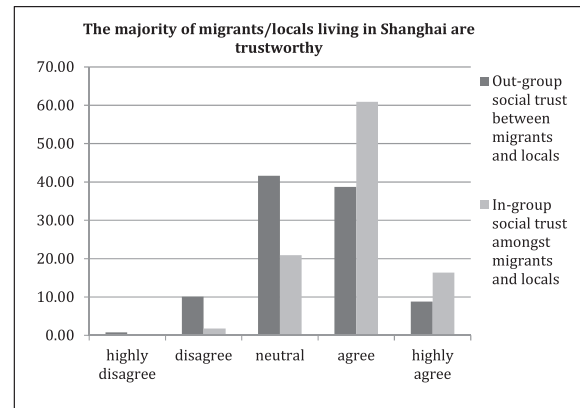


Figure 2. Weighted in-group and out-group social trust in Shanghai.

Comparison of In-group and Out-group Social Trust of Migrants and Locals

The cross-tabulation of in-group and out-group social trust by hukou status can be found in Tables 2 and 3. Table 2 shows that large shares of migrants and locals trust their fellow in-group members, and few distrust other in-group members. Only around 20% of indigenous residents have mixed feelings towards fellow natives. Reasonable shares of urban and rural migrants on the other hand still have mixed to low trust towards fellow migrants.

Regarding out-group social trust, urban and rural Shanghainese are more distrustful towards migrants as less than half of local respondents rated migrants' trustworthiness at four or five points. Comparatively urban and rural migrants are more trusting towards native residents and display remarkable similarities despite the belief that urban migrants are inherently different from

Table 2. Weighted in-group social trust by hukou status (in %).

Hukou status	Most locals (asked to locals)/migrants (asked to migrants) living in Shanghai are trustworthy (1 = highly disagree and 5 = highly agree, in %)				
	1	2	3	4	5
Urban local	0.00	1.62	17.75	64.79	16.88
Rural local	0.00	0.00	23.02	47.50	26.87
Urban migrants	1.36	0.53	37.00	52.96	8.50
Rural migrants	0.00	4.90	32.51	54.67	8.90

Table 3. Weighted out-group social trust by hukou status (in %).

Hukou status	Most locals (asked to migrants)/migrants (asked to locals) living in Shanghai are trustworthy (1 = highly disagree and 5 = highly agree, in %)				
	1	2	3	4	5
Urban local	0.93	12.09	44.16	34.19	8.63
Rural local	0.50	9.10	43.99	43.09	3.32
Urban migrants	0.00	1.76	27.30	57.69	13.26
Rural migrants	0.39	2.13	29.15	56.28	12.06

rural migrants in terms of education and income (Cheng *et al.*, 2014). This suggests that urban and rural migrants share their social identity as non-locals and consider themselves as *different* from local natives. Another reason could be that some of the urban hukou holders may originate from small rural town, which are officially non-agricultural but still very agricultural by nature. Finally, Table 2 shows that the level of in-group trust amongst migrant residents is considerably lower compared with native Shanghai residents. Migrant residents may not consider all non-locals from other regions or cities as fellow in-group members but only those from the same hometown or region. Consequently, it would be useful for future studies to take into account the regional diversity of the migrant population in urban China.

Residential Diversity and Trust

Tables 4 and 5 show that although the overall level of in-group trust and out-group trust differs, their pattern is relatively similar and slightly increases along with the presence of migrants.

Table 4. Weighted in-group social trust by residential diversity (in %).

Percentage of migrant residents	Most locals (asked to locals)/migrants (asked to migrants) living in Shanghai are trustworthy (1 = highly disagree and 5 = highly agree, in %)				
	1	2	3	4	5
0–10	0.00	1.75	12.70	73.27	12.28
10–25	0.00	2.24	24.32	60.84	12.60
25–50	0.20	0.89	22.76	55.52	20.63
50–76	0.00	3.41	18.91	56.82	20.86

Table 5. Weighted out-group social trust by residential diversity (in %).

Percentage of migrant residents	Most locals (asked to migrants)/migrants (asked to locals) living in Shanghai are trustworthy (1 = highly disagree and 5 = highly agree, in %)				
	1	2	3	4	5
0–10	1.18	13.43	36.49	40.69	5.95
10–25	1.00	8.70	47.58	35.33	6.53
25–50	0.44	7.54	40.75	38.95	12.40
50–76	0.48	17.48	32.10	42.81	7.70

In-group social trust remains high across all migrant densities indicating that higher migrant presence does not deter in-group trust. Out-group social trust peaks in neighbourhoods, which have a migrant presence between 25% and 50% and then slightly decreases. Table 5 reveals that areas with more than 50% migrant residents are the most distrustful. This is not very surprising as in practice, any neighbourhood that has a migrant share above 50% are usually urban villages, which because of their high share of poor migrant residents and local rural hukou residents often lack intergroup social trust. Because many newly arrived migrants live in urban villages, they tend to only rely on kin and family ties whilst feeling alienated from the rest of the urban society. Research from other countries also found that migrants living in migrant enclaves heavily depend on their in-group members whilst being isolated from the mainstream society (Kempen and şule Özüekren, 1998). So far, the evidence presented shows a fairly positive relationship between residential diversity and social trust although this needs to be verified by controlling for various individual and neighbourhood level factors.

Determinants of Migrant–Local Social Trust

Before running the mixed effects linear model, we sought to determine whether it is statistically justified to implement a multilevel model and conducted a likelihood ratio (LR) test to compare the estimation between a conventional OLS model and a mixed effect model (Gelman and Hill, 2006). The LR test justifies the usage of a mixed effects model as the neighbourhood variance is significant ($p < 0.001$) and that adding a neighbourhood level variation significantly improves the estimations

compared with the OLS model. The results of the multilevel model can be found in Table 6. The results show that almost 29% of trust between migrants and locals can be explained by the variation between neighbourhoods indicating that neighbourhood factors play a very important role.

The two most significant neighbourhood determinants are *migrant concentration* ($p < 0.001$) and *area poverty* ($p < 0.001$). Firstly, our model reveals that residents living in neighbourhoods with a higher level of migrant residents tend to be more trustful towards out-group members. The interaction term between *hukou status* and *migrant concentration* is insignificant and signals that this pattern applies to residents of all hukou types. It must be noted that the effect of migrant concentration remains highly significant despite controlling for area poverty and neighbourhood type. This suggests that residents feel closer towards their out-group neighbours regardless of the socio-economic status of the individual or the neighbourhood. We speculate that this may be due to the increased chances of contact between local and migrant residents, which fosters understanding and mutual trust. We tried to validate this with a native Shanghai resident who is a member of the local residential committee, how the attitude of herself and other native residents towards migrants have changed in the last decade during which her neighbourhood experienced a rapid increase of migrant residents:

It would be impossible to say that the attitudes [of native Shanghai residents and myself] have not changed [for the better] after so many years. As the head of the residential committee, I have met many migrant residents and some of them displayed great civil courage...the majority of them are very good. There are of course also some who are not so good...but they only form a minority.

With respect to the effect of *area poverty*, people living in poor areas are more distrustful compared with residents in more affluent neighbourhoods. This result conforms to earlier findings (Letki, 2008; Laurence, 2011) and indicates that poverty leads to social isolation. However, the interaction term between *area poverty* and *hukou status* reveals that compared with natives, both migrant groups are more likely to have higher out-group trust if

they reside in poorer areas. This is not very surprising when considering that migrants choose to live in deprived neighbourhood because of the proximity to their jobs (Li and Zhu, 2015). This suggests that migrants would have found employment first before moving to a locality, therefore reducing the need to compete with natives. Our fieldwork further reveals that migrants consciously seek social ties with locals in order to overcome institutional limitations. Our interview with a migrant living in an inner-city low-income neighbourhood confirms this assumption:

Yes, I have many friends who are native Shanghai citizens in the neighbourhood. They have also been very helpful to me, for instance, last week I went to apply for a job and my Shanghai neighbour acted as my guarantor. This helped me save 3000 Yuan which would have been necessary if there was no guarantor.

The variable *neighbourhood type* is also significant whereby compared with urban villages; work unit ($p < 0.05$) and commodity housing ($p < 0.01$) residents are significantly more likely to trust other out-group members. The category of urban villages was included to take into account neighbourhoods with a high share of poor migrant residents. Thus, this result implies that the concentrations of poor local hukou residents or migrant residents have an equally negative effect on social trust. Although higher *migrant concentration* itself is positive, urban villages with an overwhelming share of migrants are an exception. Moreover, the results show that living in a commodity neighbourhood has a positive relationship indicating that higher affluence of an area is positively correlated with social trust. Whilst it is assumed that higher personal income has a positive effect on social trust, our result suggests that being surrounded by similarly affluent residents may have an even greater influence, as homeownership can be another important determinant of one's social identity.

Regarding individual level determinants, respondents whose majority of their friends live in the same neighbourhood have a significantly higher likelihood to trust out-group members. This reinforces our speculation that the neighbourhood plays a mediating role in fostering social trust. Indeed, existing studies also suggest that social

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Table 6. Results of the mixed effect linear regression of the determinants of social trust between migrants and locals (N = 1,406, weighted).

		B	SE
Constant		2.720***	0.268
Neighbourhood level			
Area poverty		-0.403***	0.094
Neighbourhood type	Courtyard housing	0.359	0.190
	Work unit	0.267*	0.111
	Relocation housing	0.1333	0.118
	Commodity housing	0.603**	0.185
	Urban villages (reference)		
Migrant concentration		0.470***	0.101
Individual level			
Most of your friends live in	Same neighbourhood	0.261**	0.097
	Different neighbourhood but same district	0.149	0.104
	Outside of Shanghai	0.138	0.111
	Different district but in Shanghai (reference)		
Age		0.001	0.051
Gender	Female	-0.030	0.057
	Male (reference)		
Occupation level	Manager or highly skilled staff	0.358*	0.174
	Administrative staff	0.322	0.190
	Service industry staff	0.194	0.195
	Production and logistics staff	0.269	0.181
	Retired or unable to work	0.401	0.213
	Other occupation (reference)		
Hukou status	Rural local hukou	0.272	0.315
	Urban migrant hukou	0.309	0.203
	Rural migrant hukou	0.812***	0.192
	Urban local hukou (reference)		
Education level		-0.001	0.025
Income		-0.002	0.041
Tenure	Tenant	-0.039	0.111
	Owner (reference)		
Number of family members		-0.025	0.035
Interaction terms			
Hukou and age	Local rural	-0.318	0.214
	Urban migrant	0.038	0.088
	Rural migrant	0.093	0.144
	Local urban hukou (reference)		
Hukou and income	Local rural	-0.148	0.114
	Urban migrant	-0.023	0.066
	Rural migrant	-0.031	0.057
	Local urban hukou (reference)		
Hukou and education	Local rural	-0.116	0.146
	Urban migrant	0.076	0.047
	Rural migrant	-0.124	0.067
	Local urban hukou (reference)		
Hukou and area poverty	Local rural	0.003	0.051
	Urban migrant	0.338*	0.141
	Rural migrant	0.215**	0.077
	Local urban hukou (reference)		
Hukou and migrant concentration	Local rural	-0.056	0.109
	Urban migrant	-0.038	0.055

Table 6. (Continued)

	B	SE
Rural migrant Local urban hukou (reference)	-0.040	0.076
Within area variance	0.623	0.060
Between area variance	0.250	0.073

* $p < 0.05$;
 ** $p < 0.01$;
 *** $p < 0.001$.

interaction at the neighbourhood level can help reduce social distrust (Stolle *et al.*, 2008; Laurence, 2011). Another significant variable is *hukou status* whereby rural migrants are much more likely to have out-group trust compared with all other groups. This may indicate that rural migrants need social ties to survive in the city, whilst only low-income urban migrants have a similar need. Finally, it is interesting to note that most socio-economic indicators apart from *occupation level* are not significantly correlated with intergroup trust. Previous studies show that more educated and affluent individuals tend to be more trustful because of their better life experience and higher life satisfaction (Letki 2008). The underlying logic is that a higher social standing exposes individuals to a social environment that is more conducive to trust. In other words, individual wealth and good education can be considered proxy indicators of a person's social environment. This may be particularly true in urban China where residential segregation is largely based on one's socio-economic status whereby affluent groups congregate in commodity housing neighbourhoods, whilst low-income groups live in poorer neighbourhoods with a higher share of migrants (Li and Wu, 2008). This may explain why income and education are insignificant because our analysis already accounted for contextual factors such as housing type and area poverty. With regard to the significance of *occupation level*, it may suggest that people further up the career ladder receive better treatment at their workplace and thus are more trusting in general.

CONCLUSION

Millions of migrants struggle to socially integrate into the host society partly because of the poor relationship between migrant and indigenous citizens in urban China. Although there is evidence showing that migrant-local relations help alleviate

these problems (Nielsen *et al.*, 2006; Liu *et al.*, 2013; Yue *et al.*, 2013), little is known about its underlying dynamics in urban China. Using the case of Shanghai, our study is the first to directly address the issue of social trust between migrants and locals and how it is related to neighbourhood factors including residential diversity and neighbourhood poverty. The analysis shows that intergroup social trust is considerably lower than in-group trust but still relatively high compared with ethnically heterogeneous societies (Delhey and Newton, 2005). With regard to the dynamics of intergroup social trust, there are two important findings.

Firstly, compared with most multi-ethnic societies where residential diversity reduces intergroup trust (Putnam, 2007; Bécares *et al.*, 2011), our analysis reveals that residents in neighbourhoods with a higher presence of migrants are more trustful towards out-group members. We speculate that having more migrant neighbours increases the possibility of intergroup neighbourly encounters thus allowing migrants and locals to overcome preconceived stereotypes. Neighbourly relations differ considerably from other forms of interaction between migrants and urban natives, which on many occasions are transient and amount to little personal depth such as short daily encounters during shopping and commuting or even working where employment segmentation (Fan, 2002) may prevent meaningful migrant-local interactions. Such shallow encounters often help little in removing existing stigmas, which are exacerbated through the media or the public's stereotypical assumptions. Many geographers have highlighted the importance of residential neighbourhoods in providing a more psychologically relaxed platform for interaction and recreation (Forrest and Kearns, 2001; Kearns and Parkinson, 2001; Li *et al.*, 2005). Neighbourhoods with higher migrant presence thus offer the chance for residents to interact with out-group members in a more intimate and

consistent manner. At times, simply living in the same environment (and not experiencing anything negative) may be sufficient to remove stigmas and increase their tolerance towards 'others'.

Although the same logic can be applied to multi-ethnic societies, the relationship between diversity and social trust is nonetheless the opposite. This may be because compared to multi-ethnic societies, the absence of any welfare entitlements for rural migrants means that the fundamental relationship between migrant and locals is not based on competition. Secondly, migrants and locals still belong to the same ethnicity with many shared values such as language, nationality, and culture. Consequently, there are fewer barriers to social interaction as compared with interethnic contacts where language and different nationalities could be significant obstacles. The social distance between migrants and locals is considerably closer, which is also why the positive effects of diversity and interaction outweigh the negative externalities of social stigmas. However, it is important to note that the findings of this study only apply to the migrant and native residents in Shanghai, whilst the relationship between Han Chinese and other ethnic minorities in China is exempt and need to be considered as a separate issue.

Our second major finding implies that the positive effect of migrant concentration does not apply to all and fails in poor areas. The results show that the poverty in low-income neighbourhoods and urban villages reduces out-group social trust, whilst affluent areas such as commodity housing neighbourhoods and those with better employment have higher intergroup trust, an outcome that is similar to previous studies (Letki, 2008; Bécares *et al.*, 2011; Laurence, 2011). We suspect that in poor neighbourhoods, native residents feel threatened by the influx of migrants who may compete with them for jobs (Roberts 2001, 2002), whilst residents in urban villages have lower trust because of both poverty and the congregation of newly arrived migrants who only depend on tightly knit hometown ties. However, migrants living in impoverished neighbourhoods are exceptions. There are two potential explanations. Firstly, migrants are fully aware of their limitations and thus strive to overcome such obstacles by accumulating more informal resources such as social

capital with indigenous residents. Consequently, migrants living in poor neighbourhoods who are economically disadvantaged are also more inclined to create ties with locals. Secondly, existing research emphasises on the intergenerational effect of poverty on its residents (van Ham *et al.*, 2014), but we speculate that for migrants who are less bound by the locality and are spatially more mobile than the indigenous poor (Li and Zhu, 2015), the reinforcing effects of neighbourhood deprivation may be less accentuated.

Theoretically, this study's findings indicate that the local context plays a significant role in fostering social trust (Secor and O'Loughlin, 2005; Putnam 2007; Guest *et al.*, 2008; Bécares *et al.*, 2011). Against the prevalent assumption that neighbourhoods have lost their importance in an urbanised world (Forrest and Kearns, 2001), the neighbourhood continues to serve as a vital platform for marginalised groups to establish trust relationships with members of the mainstream society. Social integration therefore has a spatial dimension that matters in terms of both practically enabling intergroup encounters and shaping an individual's attitude towards out-group members. Finally, this study contributes to the longstanding debate surrounding the effect of residential diversity, which has been dominated by the conflict theory discourse, and suggests that the contact hypothesis is also applicable under certain spatial conditions (Allport 1954; Hewstone and Brown 1986). Our findings signal that residential diversity itself is not necessarily detrimental to social trust. Rather, it is the often accompanying effect of intergroup competition caused by a shortage of resources in the locality. In the absence of competition, different social groups are more likely to trust each other through continued intergroup contact.

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ENDNOTES

1. The reform was introduced in 2014 through a government circular (http://www.gov.cn/zhengce/content/2014-07/30/content_8944.htm) and removed hukou registrations in townships and smaller cities and relaxed hukou restrictions in medium-sized cities. However, tight controls are still enforced in cities with more than five million residents such as Shanghai (http://www.chinadaily.com.cn/china/2014-07/30/content_18216278.htm).

REFERENCES

- Alesina A, La Ferrara E. 2002. Who trusts others? *Journal of Public Economics* **85**: 207–234.
- Allport GW. 1954. *The Nature of Prejudice*. Perseus Books: Cambridge, MA, US.
- Bécares L, Stafford M, Laurence J, Nazroo J. 2011. Composition, concentration and deprivation. *Urban Studies* **48**: 2771–2787.
- Chan KW. 2014. China's urbanization 2020: A new blueprint and direction. *Eurasian Geography and Economics* **55**: 1–9.
- Chen X, Stanton B, Kaljee L, Fang X, Xiong Q, Lin D, Zhang L, Li X. 2011. Social stigma, social capital reconstruction, and rural migrants in urban China: A population health perspective. *Human Organization* **70**: 22–32.
- Cheng T, Selden M. 1994. The origins and social consequences of China's hukou system. *The China Quarterly* **139**: 644–668.
- Cheng Z, Nielsen I, Smyth R. 2014. Access to social insurance in urban China: A comparative study of rural–urban and urban–urban migrants in Beijing. *Habitat International* **41**: 243–252.
- Delhey J, Newton K. 2005. Predicting cross-national levels of social trust: Global pattern or Nordic exceptionalism? *European Sociological Review* **21**: 311–327.
- Fan CC. 2002. The elite, the natives, and the outsiders: Migration and labor market segmentation in urban China. *Annals of the Association of American Geographers* **92**: 103–124.
- Forrest R, Kearns A. 2001. Social cohesion, social capital and the neighbourhood. *Urban Studies* **38**: 2125–2143.
- Forrest R, Yip N-M. 2007. Neighbourhood and neighbouring in contemporary Guangzhou. *Journal of Contemporary China* **16**: 47–64.
- Fukuyama F. 1995. *Trust: The Social Virtues and the Creation of Prosperity*. Free Press.
- Gelman A, Hill J. 2006. *Data Analysis Using Regression and Multilevel/Hierarchical Models*. Cambridge University Press.
- Guest AM, Kubrin CE, Cover JK. 2008. Heterogeneity and harmony: Neighbouring relationships among Whites in ethnically diverse neighbourhoods in Seattle. *Urban Studies* **45**: 501–526.
- Hazelzet A, Wissink B. 2012. Neighborhoods, Social Networks, and Trust in Post-Reform China: The Case of Guangzhou. *Urban Geography* **33**: 204–220.
- Hewstone M, Brown R (eds). 1986. *Contact and Conflict in Intergroup Encounters*. Basil Blackwell: Cambridge, MA, US.
- Kearns A, Parkinson M. 2001. The significance of neighbourhood. *Urban Studies* **38**: 2103–2110.
- Kempen R, Şule Özüekren A. 1998. Ethnic segregation in cities: New forms and explanations in a dynamic world. *Urban Studies* **35**: 1631–56.
- Laurence J. 2011. The effect of ethnic diversity and community disadvantage on social cohesion: A multi-level analysis of social capital and interethnic relations in UK communities. *European Sociological Review* **27**: 70–89.
- Letki N. 2008. Does diversity erode social cohesion? Social capital and race in British neighbourhoods. *Political Studies* **56**: 99–126.
- Li B. 2015. China's hukou reform a small step in the right direction. *East Asia Forum 13th January 2015* Available at: <http://www.eastasiaforum.org/2015/01/13/chinas-hukou-reform-a-small-step-in-the-right-direction/> [Accessed 2 October 2015]
- Li Z, Wu F. 2008. Tenure-based residential segregation in post-reform Chinese cities: A case study of Shanghai. *Transactions of the Institute of British Geographers* **33**: 404–419.
- Li Z, Wu F. 2013. Migrant integration in China's urban villages: A case study of Beijing, Shanghai and Guangzhou. In *Rural Migrants in Urban China: Enclaves and Transient Urbanism*, Wu F, Zhang F, Webster C (eds). Routledge: UK; 121–144.
- Li S-M, Zhu Y. 2015. Residential mobility within Guangzhou city, China, 1990–2010: Local residents versus migrants. *Eurasian Geography and Economics* **0**: 1–20.
- Li Y, Pickles A, Savage M. 2005. Social capital and social trust in Britain. *European Sociological Review* **21**: 109–123.
- Liao B, Wong DW. 2015. Changing urban residential patterns of Chinese migrants: Shanghai, 2000–2010. *Urban Geography* **36**: 109–126.
- Liu Y, Shen J. 2014. Jobs or amenities? Location choices of interprovincial skilled migrants in China, 2000–2005. *Population, Space and Place* **20**: 592–605.
- Liu Y, Li Z, Breitung W. 2012. The social networks of new-generation migrants in China's urbanized villages: A case study of Guangzhou. *Habitat International* **36**: 192–200.
- Liu Z, Wang Y, Tao R. 2013. Social capital and migrant housing experiences in urban China: A structural equation modeling analysis. *Housing Studies* **28**: 1155–1174.
- Logan JR, Fang Y, Zhang Z. 2009. Access to housing in urban China. *International Journal of Urban and Regional Research* **33**: 914–935.

- Malloy TE, Albright L, Diaz-Loving R, Dong Q, Lee YT. 2004. Agreement in personality judgments within and between nonoverlapping social groups in collectivist cultures. *Personality and Social Psychology Bulletin* **30**: 106–117.
- McPherson M, Smith-Lovin L, Cook JM. 2001. Birds of a feather: Homophily in social networks. *Annual Review of Sociology* **27**: 415–444.
- NBS (National Bureau of Statistics). 2010. *Sixth National Population Census of the People's Republic of China*. China Statistical Press: Beijing.
- Nielsen I, Smyth R. 2011. The contact hypothesis in urban China: The perspective of minority-status migrant workers. *Journal of Urban Affairs* **33**: 469–481.
- Nielsen I, Nyland C, Smyth R, Zhang M, Zhu CJ. 2006. Effects of intergroup contact on attitudes of Chinese urban residents to migrant workers. *Urban Studies* **43**: 475–490.
- Pettigrew TF. 1998. Intergroup contact theory. *Annual Review of Psychology* **49**: 65–85.
- Putnam RD. 2001. *Bowling Alone: The Collapse and Revival of American Community*. Simon & Schuster.
- Putnam RD. 2007. E Pluribus Unum: Diversity and community in the twenty-first century The 2006 Johan Skytte Prize lecture. *Scandinavian Political Studies* **30**: 137–174.
- Roberts KD. 2001. The determinants of job choice by rural labor migrants in Shanghai. *China Economic Review* **12**: 15–39.
- Roberts KD. 2002. Rural migrants in urban China: Willing workers, invisible residents. *Asia Pacific Business Review* **8**: 141–158.
- Secor AJ, O'Loughlin J. 2005. Social and political trust in Istanbul and Moscow: A comparative analysis of individual and neighbourhood effects. *Transactions of the Institute of British Geographers* **30**: 66–82.
- Solinger DJ. 1999. *Contesting Citizenship in Urban China: Peasant Migrants, the State and the Logic of the Market*. University of California Press: Berkeley, CA.
- Stein RM, Post SS, Rinden AL. 2000. Reconciling context and contact effects on racial attitudes. *Political Research Quarterly* **53**: 285–303.
- Stolle D, Soroka S, Johnston R. 2008. When does diversity erode trust? Neighborhood diversity, interpersonal trust and the mediating effect of social interactions. *Political Studies* **56**: 57–75.
- Van Ham M, Hedman L, Manley D, Coulter R, Östh J. 2014. Intergenerational transmission of neighbourhood poverty: An analysis of neighbourhood histories of individuals. *Transactions of the Institute of British Geographers* **39**: 402–417.
- Wang G, Shen J, Liu J. 2008. Zhongguo chengshi nongming gong shimin hua yanjiu (Researching the 'urbanizing' of migrant workers in urban China). *Population and Development (Renkou Yu Fazhan)* **1**: 71–95. (in Chinese)
- Wang H, Guo F, Cheng Z. 2015. Discrimination in migrant workers' welfare entitlements and benefits in urban labour market: Findings from a four-city study in China. *Population, Space and Place* **21**: 124–139.
- Wang Z, Zhang F, Wu F. 2015. Intergroup neighbouring in urban China: Implications for the social integration of migrants. *Urban Studies*. DOI: 10.1177/0042098014568068.
- Wu W. 2008. Migrant settlement and spatial distribution in metropolitan Shanghai. *The Professional Geographer* **60**: 101–120.
- Wu F. 2012. Neighborhood attachment, social participation, and willingness to stay in China's low-income communities. *Urban Affairs Review* **48**: 547–570.
- Wu F, He S, Webster C. 2010. Path dependency and the neighbourhood effect: Urban poverty in impoverished neighbourhoods in Chinese cities. *Environment and Planning A* **42**: 134–152.
- Yue Z, Li S, Jin X, Feldman MW. 2013. The role of social networks in the integration of Chinese rural-urban migrants: A migrant-resident tie perspective. *Urban Studies* **50**: 1704–1723.
- Zhu Y, Breitung W, Li S. 2012. The changing meaning of neighbourhood attachment in Chinese commodity housing estates: Evidence from Guangzhou. *Urban Studies* **49**: 2439–2457.