Understanding the intergroup relations of migrants in China

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Abstract

The existing integration literature in the Chinese context has mostly focused on migrants' relations with receiving contexts, such as place attachment and settlement intention. Few attempts have been made to investigate migrants' relations with local residents, a better indicator of migrants' integration. Based on the 2014 China Migrants Dynamic Survey, this study scrutinises how environmental factors and individual factors affect migrants' intergroup relations in China. The analysis shows that migrants who live in more migrant-concentrated neighbourhoods and who stay in more developed cities with a higher presence of migrants tend to suffer from worse intergroup relations. This implies that no matter at which level the migrant concentration exists, it can hinder migrants' intergroup relations. Moreover, both higher socioeconomic status and acculturation can significantly improve migrants' intergroup relations, indicating that acculturation also plays an important role in the relatively homogeneous society.

Introduction

The past four decades have witnessed continuous large-scale migration within China

from the countryside to cities and from small towns to metropolises. In 2017, internal migrants made up more than one-sixth of the total population of China. Although these internal migrants, defined by their hukou status, usually share ethnicity and national identity with locals, their experiences in host societies are not much better than those of immigrants in western countries. Due to discrimination related to hukou status, they are usually confined to poor rental housing in urban villages (Huang & Tao, 2015; Tao, Hui, Wong, & Chen, 2015), occupy low-paid jobs shunned by native urbanites (Song, 2016) and have little intimate interaction with local residents (Liu, Wang, & Tao, 2013; Yue, Li, Jin, & Feldman, 2013), leading a parallel life at their destinations (Lin & Gaubatz, 2017). Faced with these social issues, the Chinese government has introduced a series of integration policies, known as 'citizenisation', ranging from granting migrants equal rights to turning them into citizens. The New Urbanisation Plan issued in 2014 further ensured the implementation of these integration policies via a 'people-centred' urbanisation strategy.

Accordingly, there has been a surge of academic interest in the social integration of migrants in China, especially their relationship with the receiving contexts, such as neighbourhood attachment (Wu, Huang, Li, Liu, & Liu, 2019; Wu & Logan, 2016), city attachment (Du, 2017; Lin, Wu, & Li, 2020) and settlement intention (Wang, Ren, & Liu, 2019). However, another aspect of social integration, namely migrants' relationship with local residents, has yet to be systematically investigated. Although intergroup networks prove to be conducive to migrants' integration into the receiving environment (Liu, 2019; Wang, Zhang, & Wu, 2020), such connections with the local

environment may be developed based on tight homogeneous networks within the migrant group, and this may lead to fragmented social order and even intergroup conflicts (Portes & Vickstrom, 2011). Therefore, it is meaningful to understand migrants' relations with local residents in China.

There has been a handful of research related to or directly focusing on the social relations between migrants and locals in the Chinese cities, but the intergroup relations research from the perspective of migrants is still scarce. Several studies have compared migrants' and urban locals' perceptions of or attitudes towards social integration (Liu, Huang, & Zhang, 2018; Liu, Tan, & Chai, 2020). Although these studies may partly reflect urban locals' prejudice towards migrants, their crux is about the general level of integration instead of the specific intergroup relations aspect. A few studies have also dealt with the intergroup neighbourly relations (Wang, Zhang, & Wu, 2016, 2017a, 2020). However, neighbourhood is not the sole social platform (Li & Tong, 2020), and accordingly the relations with outgroup neighbours cannot reveal the overall relations with outgroup members. Besides, some studies have indeed explored the intergroup relations (Du, Song, & Li, 2021; Gu, Nielsen, Shachat, Smyth, & Peng, 2016; Li & Tong, 2020; Nielsen, Nyland, Smyth, Zhang, & Zhu, 2006; Nielsen & Smyth, 2011), but the majority of them have focused on the relationship between two aspects of intergroup relations, namely intergroup contact and intergroup attitudes, instead of the underlying dynamics of intergroup relations. More importantly, these intergroup relations studies have often been conducted from the perspective of local residents. Migrants' relations with local residents are still largely unknown.

Consequently, this study intends to investigate the intergroup relations of migrants and the underlying dynamics in the Chinese context. The 2014 China Migrants Dynamic Survey will be employed to show the patterns of migrants' relations with local residents and demonstrate the possible effects of living environment and individual characteristics. There are two main contributions of this study. First, this study contributes to the intergroup relations literature by analysing the Chinese case. The extant research on intergroup relations often concentrates on the multi-ethnic contexts, where immigrants and natives come from different ethnicities (Boschman, 2012; Fong & Isajiw, 2000; Havekes, Coenders, & Dekker, 2014; Martinovic, Van Tubergen, & Maas, 2015). There remains a paucity of knowledge regarding the intergroup relations between internal migrants and natives in China, a relatively homogeneous society. In China, what distinguishes migrants from natives is not ethnicity but hukou status, known as an institutional outcome. Thus, our analysis of the Chinese case can provide valuable insights to the international debate on intergroup relations. Secondly, this study can help deepen our understanding of migrants' integration in China. Intergroup relations are an indispensable aspect of integration, but there are surprisingly few integration studies in the Chinese context focusing on this aspect. By investigating intergroup relations, this study demonstrates how well migrants socially integrate into host societies and what may hinder migrants' social integration.

This paper will be structured in five sections. The next section will review the intergroup relations literature in both multi-ethnic contexts and the Chinese context. This is followed by an elaboration of the data source and the research method in the

third section and a description of statistical findings in the fourth section. The final

section will summarise the empirical results and make concluding remarks.

Literature review

Interethnic relations and underlying dynamics

In the existing interethnic relations literature, there have been various ways of

measuring or understanding interethnic relations. A host of studies have treated

interethnic relations as contacts with outgroup members, but it is often difficult to make

comparisons between these studies. While some have used the existence of interethnic

contacts (Boschman, 2012; Muttarak, 2014; Petermann, 2014), others have employed

the frequency or dominance of such contacts (Martinovic, 2013; Vervoort & Dagevos,

2011; Vervoort, Flap, & Dagevos, 2011). Moreover, the contacts may range from

general contact (Petermann, 2014) to intimate friendship (Schlueter, 2012), and the

results based on measures of closer contacts tend to reflect gloomier patterns of

interethnic relations (Martinovic, Van Tubergen, & Maas, 2015; Schlueter, 2012).

Another typical way of understanding interethnic relations is based upon individuals'

attitudes towards outgroup members (Havekes, Coenders, & Dekker, 2014; Laurence,

2014; Laurence & Bentley, 2018), which could largely ensure comparability between

research results. Laurence (2014), for instance, captured community interethnic

relations by respondents' perceptions of how local residents from different backgrounds

get on with each other and treat ethnic differences. It is important to note that these two

types of interethnic relations measurements are closely related to each other. Interethnic

contacts are often believed to improve intergroup attitudes (Allport, 1954; Pettigrew, 1998).

With respect to the underlying dynamics, a plethora of literature has explained interethnic relations by residential ethnic composition (Gijsberts & Dagevos, 2007; Vervoort, 2012; Vervoort, Flap, & Dagevos, 2011). For minority group members, living in ethnically concentrated neighbourhoods can affect their cross-group relations in three ways. First, it directly lowers the chance of meeting majority residents (Blau & Schwartz, 1984). Without mixing, social relations can hardly be developed and maintained. Second, the rising size of minority groups may result in hostility from majority group members since their own economic and social privilege is threatened (Blalock, 1967; Oliver & Wong, 2003). This hostility further impedes spatial proximity between residents from translating into meaningful interethnic contacts. Third, the concentration of co-ethnics improves the power of the ethnic community, the third party which demands group solidarity and sanctions individuals' socialisation with outgroup members (Vervoort, Flap, & Dagevos, 2011). In this case, minority group members have few opportunities to cross group boundaries.

On the other hand, the neighbourhood may have lost its importance in shaping residents' social relations due to the development of information and communication technology (Boschman, 2012; Zelinsky & Lee, 1998). Nowadays, it is common that people travel outside their immediate neighbourhoods to work and relax. The social relations developed beyond the neighbourhoods can also be easily maintained through the internet. Thus, the interethnic relations of minority group members may be affected

by the ethnic composition of a larger area or even not be affected by any environmental factors.

The existing empirical studies on interethnic relations have often tested the effects of the ethnic composition at the neighbourhood level. While the majority of these studies have corroborated that minority group members living in neighbourhoods with higher ethnic concentration are more likely to have fewer intergroup contacts and thus hold more negative attitudes towards outgroup members (Martinovic, Van Tubergen, & Maas, 2009; Van der Laan Bouma-Doff, 2007; Vervoort, Flap, & Dagevos, 2011), some others have found no such links (Drever, 2004; Fong & Isajiw, 2000). There are also some studies considering the ethnic composition at different levels at the same time (Boschman, 2012; Eisnecker, 2019; Havekes, Coenders, Dekker, & Van Der Lippe, 2014). Their results usually reveal that the significant contextual effects only exist at a single level. For instance, Boschman (2012) suggested that the ethnic composition of the neighbourhood was irrelevant to minority group residents' interethnic contact but staying in the four largest cities, where the shares of minorities are high, could hinder the contact with Dutch natives. Havekes, Coenders, Dekker and Van Der Lippe (2014) also took into account the percentage of native Dutch in the neighbourhood and that in the municipality. Their research only showed a positive relationship between the share of native Dutch in the neighbourhood and Turkish residents' attitudes towards natives.

In addition to the ethnic composition of the living environment, socioeconomic status is believed to affect minority group members' interethnic relations (Martinovic, Van Tubergen, & Maas, 2009; Muttarak, 2014; Vervoort & Dagevos, 2011).

Considering that native residents tend to have higher socioeconomic status than ethnic minorities, minority group members who are socioeconomically advanced may get more opportunities to contact natives in their daily life, for example, at work or during leisure activities. These advantaged minority group members are also more likely to prefer interethnic relations as a result of their socioeconomic similarity to natives. As McPherson, Smith-Lovin and Cook (2001) claimed, individuals often have a desire to socialise with similar others. Indeed, extensive interethnic relations studies have unravelled that better education, being employed or higher occupational level can lead to social contact with and improved attitudes towards majority group members (Martinovic, Van Tubergen, & Maas, 2009; Muttarak, 2014; Vervoort & Dagevos, 2011).

Similarly, acculturation is thought to boost interethnic relations through providing the opportunities and enhancing the preference to socialise across groups (Martinovic, Van Tubergen, & Maas, 2009, 2015; Muttarak, 2014; Vervoort & Dagevos, 2011). Individuals with similar cultural orientation have higher likelihood of appearing in the same physical space and find it easier to contact each other, so a higher level of acculturation can create more opportunities for minority group members to develop amicable interethnic relations. By mastering local language and learning local culture, minority group members are also more open to the norms of host countries. This further increases their preference for socialisation with majority group members. In the interethnic relations literature, there has been abundant evidence for the favourable effects of the proficiency in the language of host country, the similarity in the ethnic

and religious backgrounds and the experience of being born or growing up in the host country on the interethnic relations of minority group members (Martinovic, Van Tubergen, & Maas, 2009, 2015; Muttarak, 2014; Vervoort & Dagevos, 2011).

Migrants' relations with natives in China

The relationship between migrants and natives is still a new topic in China. Until recently, there have been a small body of related studies, but few have actually focused on migrants' relations with local residents (Gu, Nielsen, Shachat, Smyth, & Peng, 2016; Li & Tong, 2020; Liu, Tan, & Chai, 2020; Wang, Zhang, & Wu, 2017a, 2017b). Several studies have scrutinised the perceptions of or attitudes towards social integration (Liu, Huang, & Zhang, 2018; Liu, Tan, & Chai, 2020). In these studies, both natives and migrants were required to comment on some statements such as whether migrants pose a threat to the city or whether migrants should be equally treated. Although such studies can reflect the exclusion and marginalisation migrants experience in the receiving contexts, their focus is not intergroup relations but overall integration.

Several other studies have investigated the neighbourly relations between migrants and urban locals (Wang, Zhang, & Wu, 2016, 2017a, 2020). However, intergroup neighbourly relations are only a part of the whole picture of intergroup relations. As Logan and Spitze (1994) suggested, neighbouring is an alternative form of socialisation for those who are unable to develop wider social networks. Migrants with amicable relations with their native neighbours do not necessarily get on well with natives in the whole city. Moreover, these studies on the intergroup neighbourly relations have failed to separate migrants from natives when exploring the underlying dynamics. The

existing interethnic relations literature has indicated that the same factor may generate opposite effects on the interethnic relations for minority group members and majority group members (Gijsberts & Dagevos, 2007; Martinovic, 2013). Ethnically concentrated environment, for instance, may constrain minorities' opportunities to mix with outgroup members but provide majority residents with abundant opportunities for interethnic contact (Gijsberts & Dagevos, 2007). Whilst minorities with higher educational attainment have more chances to develop interethnic relations, better-educated majority group members are less likely to meet minorities in their daily life (Martinovic, 2013). Since such opposite effects may also apply to the Chinese case, the intergroup neighbourly relations research based on a sample including both migrants and natives may lead to misleading results.

There are some studies directly focusing on the intergroup relations (Du, Song, & Li, 2021; Gu, Nielsen, Shachat, Smyth, & Peng, 2016; Li & Tong, 2020; Nielsen, Nyland, Smyth, Zhang, & Zhu, 2006; Nielsen & Smyth, 2011). Nevertheless, these studies have often put an emphasis on the relationship between intergroup contact and intergroup attitudes. How intergroup relations are shaped by living environment and individual characteristics has largely been ignored. More importantly, most of these studies have been conducted from the perspective of natives instead of migrants. Intergroup relations require the involvement of both migrants and natives. The research from the perspective of natives can only help us understand one side of the story. There is an urgent need to study the intergroup relations of migrants in China.

Still, all these related studies may provide some clues for understanding migrants'

relations with local residents. Compared with interethnic relations in multi-ethnic societies, migrant–native relations in the Chinese context are not much better. Liu, Huang and Zhang (2018), for example, showed that over half of migrant respondents thought that natives always excluded migrants. Some studies on the intergroup attitudes of local urbanites have also highlighted the ubiquity of the prejudice against migrants (Du, Song, & Li, 2021; Nielsen, Nyland, Smyth, Zhang, & Zhu, 2006). In the Chinese cities, migrants are often viewed as inferior 'others' and associated with many urban problems (Qian & He, 2012; Solinger, 1999).

For the underlying dynamics, the neighbourhood composition is a key factor. Chinese housing policies, which tend to favour local urban hukou holders, have artificially produced hukou-based housing inequalities (Logan, Fang, & Zhang, 2009, 2010), and these inequalities have been further exacerbated by increasing market forces. Compared with locals, migrants are more likely to be confined to disadvantaged informal housing, such as urban villages and dormitories provided by employers (Huang & Tao, 2015; Wu, 2004). This leads to the disproportionate distribution of migrants across neighbourhoods. The extant research on the effects of neighbourhood migrant concentration has produced mixed results (Liu, Huang, & Zhang, 2018; Shen, 2017; Wang, Zhang, & Wu, 2016, 2017a, 2017b). For instance, Shen (2017) found that migrants were less likely to develop cross-group friendships when they lived in suburbs, where there was a higher percentage of migrant residents. Based on a sample including both natives and migrants in Shanghai, Wang, Zhang and Wu (2017a, 2017b) suggested that migrant-concentrated residential environment could not only help develop more

caring and amicable intergroup neighbourly relations but also increase individuals' social trust towards the other group.

The wider living environment, city, may also affect intergroup relations. Using a national household survey, Tse (2016) unravelled the spatial disparities in the level of urban residents' prejudice against migrants. Generally, the average prejudice is highest in the most developed cities, and the less developed areas of China are more friendly to migrants. In China, there are huge economic inequalities between cities, and the advanced economy often goes hand in hand with a large inflow of migrants. For instance, migrants in Shenzhen, one of the most developed cities, even exceeds natives in quantity. The high presence of migrants inevitably elicits threatened feelings from urban locals.

Our knowledge of the relationship between individual characteristics and intergroup relations mainly comes from the studies of Wang, Zhang and Wu (2016, 2017a, 2017b). They found that many significant predictors of general neighbouring, such as education, income and the length of residence, were not significantly associated with intergroup neighbouring activities or affective neighbourly relations between migrants and natives (Wang, Zhang, & Wu, 2016, 2017a). According to them, this may be because that intergroup neighbouring is more of a choice constrained by residential contexts whilst general neighbouring tends to be a necessity for individuals with certain features. Wang, Zhang and Wu's (2017b) another study which is beyond the neighbourhood settings also showed that most socioeconomic attributes had no significant effects on the social trust towards outgroup members. They attributed this

to the fact that they also accounted for the neighbourhood features as where individuals live within the Chinese cities is often closely related to their socioeconomic status. However, it is important to notice that these studies all employed samples including both migrants and natives and failed to separately discuss the underlying dynamics of neighbourly relations or social trust for the two groups (Wang, Zhang, & Wu, 2016, 2017a, 2017b). This may underestimate the role of personal characteristics as a result of the possible opposite effects of some factors on the intergroup relations of migrants and local residents.

Research design

Data source

The data used in this study are from the special sub-survey of the 2014 China Migrants Dynamic Survey (CMDS) called "Social Integration and Psychological Health". This sub-survey was based on a sub-sample of the whole CMDS, including Beijing, Jiaxing, Xiamen, Qingdao, Zhengzhou, Shenzhen, Zhongshan and Chengdu. With different development levels and geographic locations, these eight cities are representative of China. A multistage stratified probability proportionate to size (PPS) method was employed to select 2000 migrant individuals in each city, and this sub-survey yielded 16000 samples in total. At the first two sampling stages, PPS was adopted to choose township or sub-district and neighbourhood or village committee respectively. At the final stage, migrant individuals were randomly sampled. Only those non-local hukou holders who were aged 15 to 59 and had been in destinations for at least one month

were eligible for this sampling.

To test the validity of this sub-survey, a comparison of some attributes of migrants is made between this dataset and the sixth national population census in 2010 (Table 1). Generally, this dataset is similar to the sixth national population census in terms of the gender structure, the percentage of high-level education receivers and the percentage of long-term stayers. The proportion of individuals with a primary school diploma or less, however, is substantially lower in our dataset than in the population census. This may be because that our dataset only investigates migrants at working age while the sixth national population census includes migrants at all ages.

Dependent variable: intergroup relations

Following the existing interethnic relations literature (Havekes, Coenders, & Dekker, 2014; Laurence, 2014; Laurence & Bentley, 2018), this study measures the intergroup relations of migrants in China through their own general evaluation. In the survey, there is a question about how migrants feel about their or their families' relations with natives, which was answered on a 5-point scale: '1. Very amicable; 2. Relatively amicable; 3. Mediocre; 4. Not amicable; 5. Have little interaction'. This study merges the categories of 'not amicable' and 'have little interaction' because of the low representation of the former. This study also inverts the whole scale, getting a new 4-point scale: '1. Not amicable; 2. Mediocre; 3. Relatively amicable; 4. Very amicable'.

Independent variables: environmental factors

For the environmental factors, both neighbourhood composition and city dummies are

included in the empirical analysis. The neighbourhood composition is calculated based on the responses from all the respondents living in the same neighbourhoods. In the survey, individuals were asked a question 'who are your neighbours?' with four choices available: '1. Mostly are migrants; 2. Mostly are natives; 3. There is almost equal number of migrants and natives; 4. Not sure'. About 20 individuals were interviewed in each neighbourhood, and the most frequent answer to this question is used to capture the neighbourhood composition. There may be more than one most frequent answer in some neighbourhoods. To deal with this problem, we provide three solutions, producing a missing value, choosing the lowest value and choosing the highest value. Three neighbourhood composition variables, neighbourhood composition_missing, neighbourhood composition_low and neighbourhood composition_high, are respectively generated based on these three solutions.

Our measure of neighbourhood composition is different from the self-reported measures found in the interethnic relations studies (Kouvo & Lockmer, 2013; Laurence & Bentley, 2018). As Laurence and Bentley (2018) stressed, individuals' perceived ethnic composition of their living environment may be affected by both the actual ethnic composition of the environment and their own attitudes towards outgroup members. The cross-sectional research based on the self-reported neighbourhood composition thus may generate biased results about the effects of neighbourhood composition on the intergroup relations. In contrast, our measure of neighbourhood composition is developed upon the perceptions of the most residents in the neighbourhood. This measure reflects more about the objective environment rather than individuals' own

subjective perceptions, so the endogeneity problem related to self-reported measures can be largely avoided in this study.

City is another environmental factor that may affect migrants' relations with locals. This study includes eight cities, Zhongshan, Jiaxing, Xiamen, Qingdao, Chengdu, Zhengzhou, Beijing and Shenzhen. Among them, Beijing and Shenzhen are first-tier cities with developed economy and a large volume of migrants. Xiamen, Qingdao, Chengdu and Zhengzhou are listed as new first-tier cities. They are less developed than Beijing and Shenzhen. The proportion of migrants in these four cities is also relatively lower. Zhongshan and Jiaxing belong to second-tier cities, which are inferior than new first-tier cities in terms of economic size, population size and administrative rank.

Independent variables: socioeconomic factors

Besides, this study takes into account migrants' socioeconomic characteristics including educational attainment, employment status, income and hukou status. For educational attainment, there are three categories: primary and below, junior secondary, and senior secondary and above. Regarding migrants' employment, this study only considers whether they are employed. Income level is measured by their logged monthly family income. According to the hukou status variable, migrants are categorised into rural hukou holders and urban hukou holders.

Independent variables: acculturation variables

This study also includes a series of variables measuring migrants' acculturation to destinations. According to the ability to understand the dialect of the host city, this study

categorises migrants into three groups, those who cannot understand, those who can partly understand and those who can totally understand. Migrants' cultural proximity to local residents is measured by the extent to which migrants agree with the following eight statements: '(1) It is important for me to conform to the customs in my hometown such as the customs of weddings and funerals; (2) It is important for me to do things according to the habits in my hometown; (3) My child is supposed to learn the dialect of my hometown; (4) It is important to keep the lifestyles of my hometown such as diet habits; (5) I am different from locals in hygiene practices; (6) I am different from locals in dressing; (7) I am different from locals in views on education and elderly support; (8) I am different from locals in thoughts on some social issues'. Migrants' responses to each statement are evaluated by a 5-point scale: '1. Totally agree; 2. Agree; 3. Neutral; 4. Disagree; 5. Totally disagree', and the average score on the eight items is used as the index to represent migrants' cultural proximity. It is commonly accepted that migrants will be more familiar with local culture the longer they have been in their destinations, so this study also includes the length of residence to measure migrants' level of acculturation.

Control variables

Some demographic variables including age, gender and marital status are controlled in the empirical analysis. Marital status is classified into two categories, unmarried and married. The information of all the variables is summarised in Table 2.

Empirical findings

Migrants' intergroup relations in China

The descriptive statistics of migrants' intergroup relations in China are shown in Table 3. According to this table, most migrants consider their or their families' relations with natives as relatively amicable or very amicable, accounting for more than 70 percent of the survey respondents. Still, nearly 25 percent report only mediocre intergroup relations, and over 4 percent admit that they or their families suffer from unamicable relations with local residents. The pattern found here is not as gloomy as other studies related to intergroup relations in China (Du, Song, & Li, 2021; Liu, Huang, & Zhang, 2018; Nielsen, Nyland, Smyth, Zhang, & Zhu, 2006; Wang, Zhang, & Wu, 2017a). This is probably because that the majority of these studies were conducted from the perspective of natives or, at best, based on a mixed sample including both migrants and natives. In most Chinese cities, local residents are still dominant in the population size as well as social and economic privilege, so they have less chance to contact outgroup members and are more likely to view outgroup members as a threat compared with migrants. Another reason can be that this study employs a dataset including various types of cities while most of the other studies were carried out in single cities, especially metropolises like Shanghai (Liu, Huang, & Zhang, 2018; Wang, Zhang, & Wu, 2017a, 2017b) and Guangzhou (Liu, Li, & Breitung, 2012). This sample bias may lead to the underestimation of migrants' intergroup relationship as social conflicts between migrants and natives are often tenser in those metropolises with great migrant influx.

Table 4 summarises the environmental factors, socioeconomic factors and

acculturation factors and their variation across different levels of intergroup relations. For the living environment, most migrants reside in migrant-dominated neighbourhoods (49.80 percent, 49.87 percent or 47.75 percent), and the interviewed migrants are evenly distributed in the eight cities. There are noteworthy distinctions between neighbourhoods and cities in the intergroup relations of migrants. Migrants who live in neighbourhoods with a larger percentage of migrant residents tend to have worse relations with locals. Whilst residents of migrant-dominated neighbourhoods account for over 70 percent of migrants with unamicable intergroup relations, they only make up about 40 percent of migrants with very amicable intergroup relations. The distribution of migrants almost remains the same for the three different neighbourhood composition variables. This means that how to choose the mode of residents' perceptions has little impact on the measurement of neighbourhood composition. For the city difference, migrants in Shenzhen have the least amicable intergroup relations. This further supports the opinion that the intergroup relations studies carried out in single metropolises may depict a more negative picture of intergroup relations. Thus, it is necessary to employ a dataset including various types of cities in the intergroup relations research.

In terms of the socioeconomic characteristics, the educational attainment and the monthly family income of migrants are usually low, but their employment rate is extremely high (91.69 percent). Most migrants are rural hukou holders, occupying 86 percent of the whole migrant group. Migrants who are employed and richer appear to enjoy more amicable relations with native residents. However, the relationship between

intergroup relations and education or hukou status is not clear. Better-educated migrants and urban migrants are more likely to develop both unamicable intergroup relations and very amicable intergroup relations.

As to acculturation characteristics, the majority of migrants (62.13 percent) can totally understand the dialects of host cities while a considerable part cannot or only partly understand local dialects (14.89 percent and 22.98 percent respectively). On average, migrants get a medium-level score of cultural proximity and stay in the current cities for less than 5 years. The comparison between migrants with different levels of intergroup relations reveals their profound differences in acculturation features. Those who are more proficient in local dialects, share more cultural similarities with locals or have a longer duration of stay tend to enjoy more amicable intergroup relations.

Modelling the dynamics of migrants' intergroup relations in China

This section utilises the ordinal logistic model to unravel the underlying dynamics of migrants' intergroup relations. Specifically, we entered the independent variables in a stepwise way, and the regression results are reported in Table 5-7. In each table, the first model only includes neighbourhood composition and control variables while the rest of models further add city dummies, socioeconomic variables and acculturation variables step by step. Three neighbourhood composition variables, neighbourhood composition_missing, neighbourhood composition_low and neighbourhood composition_high are respectively used in Table 5, 6 and 7.

We firstly focus on the regression results based on the neighbourhood composition_missing variable (Table 5). According to model 1, neighbourhood

composition can significantly affect migrants' intergroup relations. Compared with those who live in migrant-dominated neighbourhoods, migrants who are embedded in residential settings with equal numbers of migrants and locals or mostly locals tend to have better relations with locals. This is in accordance with research findings against multi-ethnic contexts (Martinovic, Van Tubergen, & Maas, 2009; Van der Laan Bouma-Doff, 2007; Vervoort, Flap, & Dagevos, 2011). Most literature on interethnic relations has revealed the adverse effects of neighbourhood ethnic concentration on minority group members' relations with natives. For minority group members, an ethnically concentrated residential environment can reduce their opportunities to socialise across groups in both physical and social ways. In this environment, they have little chance to be physically proximate to majority group members. Majority group members may strongly exclude them because of the threatened feelings, and the powerful ethnic community could sanction their connections with majority group members. Our results indicate that this negative role of the concentration of ingroup members at the neighbourhood level is also true in the Chinese context. However, this finding is in stark contrast to Wang, Zhang and Wu's (2017a, 2017b) studies where a high presence of migrants in residential settings was found to be conducive to affective relations with outgroup neighbours and social trust towards the whole outgroup. This may result from the fact that their samples included not only migrants but also local residents. While neighbourhood migrant concentration can hinder migrants from developing intergroup relations, it may boost intergroup relations for local residents due to the abundant opportunities for social mix with migrants. The conclusions derived from a mixed

sample thus can be misleading.

In model 2, the city variable is further included. There are significant differences between cities in the intergroup relations of migrants. Compared with migrants in Zhongshan, those in Shenzhen have 31.5 percent lower odds of achieving more amicable relations with natives. As a result of rapidly growing economy, Shenzhen has become one of the most popular destinations for internal migrants in China. In 2014, migrants took up about 70 percent of the total population in Shenzhen, and this figure is much higher than that of other developed first-tier cities such as Beijing and Shanghai. The high presence of migrants in the city makes it difficult for migrants to form friendly connections with local residents. Still, migrants' relations with local residents in Zhongshan are less amicable than those in other cities except Shenzhen. Zhongshan has a small size of economy and population, but its GDP per capita and percentage of migrants are extremely high due to the proximity to Shenzhen. This disproportionate migrant concentration leads to the poor intergroup relations in this city. Our results of the city differences confirm Boschman's (2012) finding that living in the four largest Dutch cities with high shares of ethnic minorities had detrimental impacts on minority group members' contact with Dutch natives. This is also in line with Tse's (2016) research on the spatial patterns of urban residents' prejudice towards migrants in China. His research suggested that urban residents might have severer intergroup prejudice in provinces or municipalities with a higher level of economic development or in-migration.

Model 3 further includes socioeconomic factors. Most socioeconomic variables

are significant except the employment status. Migrants who achieve higher educational attainment and get higher monthly family income are more likely to get on well with local residents. As local residents tend to be well-educated and well-paid, migrants with these similar features usually have more opportunities to meet and further develop relations with them. These migrants are also inclined to desire intergroup relations since individuals often prefer to interact with similar others (McPherson, Smith-Lovin, & Cook, 2001). In contrast, those who are employed are not significantly different from unemployed ones in terms of intergroup relations. There are two reasons for the insignificant effects of employment status. One is that over 90 percent of migrants find employment in the destinations. The surprisingly high employment rate makes the benefits of being employed less obvious. Another one is that most migrants occupy low-skill and low-paid jobs, where native workers are uncommon (Chen, 2011). Simply getting a job cannot guarantee a larger chance to mix with locals. Moreover, urban migrants are 1.19 times more likely to have better intergroup relations than their rural counterparts. This is probably because that rural origin further exacerbates the discrimination against rural migrants, putting them at a disadvantage in the social field. The positive role of socioeconomic status found here is different from the existing research on neighbouring (Wang, Zhang, & Wu, 2016, 2017a; Wu & Logan, 2016). Wang, Zhang and Wu (2016), for example, unravelled that socioeconomic factors such as education and income could hardly increase individuals' neighbourly activities with outgroup members. Wu and Logan (2016) even found negative associations between socioeconomic positions and the frequency of neighbouring. Neighbourly relations are

only a part of social relations. Despite those socioeconomically disadvantaged individuals are more likely to be confined to their neighbourhoods for social interaction, they often lack the capability to build wider social networks and form amicable relations with outgroup members outside neighbourhoods (Logan & Spitze, 1994). High-level socioeconomic status may not enhance migrants' integration into specific neighbourhoods but profoundly improve their integration into the host cities.

Model 4 includes all the independent variables and highlights the role of acculturation. Compared with migrants who cannot understand the dialects of receiving cities, those who can partly understand and those who can totally understand respectively have 17.8 percent and 85.8 percent higher odds of developing more amicable intergroup relations. Migrants with higher cultural proximity to local residents and longer length of residence in the receiving cities are also more likely to get on well with local residents. These results are in accordance with the positive effects of acculturation found in the interethnic relations literature (Martinovic, Van Tubergen, & Maas, 2015; Muttarak, 2014), suggesting that the importance of acculturation cannot be overlooked even in the relatively homogenous Chinese society. Although most Chinese residents have the same ethnicity, there are cultural differences between people from different regions (Wang & Fan, 2012; Yue, Fong, Li, & Feldman, 2020). As an old saying goes, pronunciation is divergent in places 5 kilometers apart, and customs are divergent in places 50 kilometers apart (shi li bu tong yin, bai li bu tong su). The cultural differences also exist between urban areas and rural areas (Wang & Fan, 2012; Yue, Fong, Li, & Feldman, 2020). In China, urbanites are often characterised by modern

lifestyles and open mind whilst rural residents tend to show the opposite traits. Thus, migrants who are less acculturated into destinations would have difficulty in communicating with and understanding outgroup members. This reduces their opportunities and motivations to build social connections with natives, which further causes their poor intergroup relations.

It is interesting to note that the significance and the sign of the coefficient of Beijing dummy change with the inclusion of other independent variables. When socioeconomic variables and acculturation variables are not included, migrants in Beijing have significantly better intergroup relations than those in Zhongshan. Living in Beijing is no longer associated with better intergroup relations after including socioeconomic variables, and it is even associated with worse intergroup relations after adding acculturation variables. This implies that the better intergroup relations in Beijing actually result from the higher socioeconomic status and deeper acculturation of migrants in Beijing. If these individual characteristics remain constant, both migrants in Beijing and those in Shenzhen have worse relations with local residents than migrants in Zhongshan.

Moreover, we substitute the neighbourhood composition_missing variable with other measures of neighbourhood composition in Table 6 and 7. The results based on the other measures are similar to what we have discussed. Migrants who live in migrant-dominated neighbourhoods and migrant-concentrated cities are found to have less amicable intergroup relations. Those with higher socioeconomic status and deeper acculturation tend to get on well with locals. The largest difference between the results

in Table 6 and 7 and the results in Table 5 is the significance of employment status. Both Table 6 and Table 7 show that being unemployed significantly hampers migrants' intergroup relations. This finding still supports the notion that higher socioeconomic status may help migrants develop more amicable relations with native residents.

Conclusion

Based on the 2014 CMDS survey, this study investigates how environmental characteristics and individual characteristics affect migrants' relations with local residents in China. Our results reveal that migrants who live in neighbourhoods with more co-migrant neighbours tend to have worse intergroup relations, which echoes the debate over the effects of residential ethnic composition on interethnic relations. A substantial body of empirical research has argued that neighbourhood ethnic concentration would limit minority group members' opportunities to interact with mainstream society and thus impose adverse impacts on their intergroup relations (Van der Laan Bouma-Doff, 2007; Vervoort, 2012; Vervoort, Flap, & Dagevos, 2011). Our results corroborate this argument in the Chinese context, highlighting the negative outcomes brought about by neighbourhood migrant concentration. However, our results are in stark contrast to Wang, Zhang and Wu's (2017a, 2017b) studies which found neighbourhood migrant concentration could boost neighbourly relations with outgroup neighbours and improve social trust towards outgroup members. This may be because that their studies employed samples including both migrants and natives. In fact, neighbourhood composition may generate opposite effects for the migrant group and the native group. It may hinder migrants' relations with natives whilst enhance natives'

relations with migrants. There is a need to understand intergroup relations from the perspective of migrants. Moreover, our results are different from the neighbourhood attachment literature in the Chinese context (Li, Zhu, & Li, 2012; Sheng, Gu, & Wu, 2019; Wu & Logan, 2016). According to this strand of literature, some neighbourhood types which usually have a higher percentage of migrants tend to perform better at the social dimension of neighbourhood attachment. This may lie in the fact that both the relations with outgroup members and the relations with ingroup members can contribute to place attachment. Residence in migrant-concentrated neighbourhoods may enhance the solidarity within the migrant group, which in turn improves migrants' neighbourhood attachment, but it can undermine migrants' intergroup relations.

Our analysis also shows that living in developed cities with a high presence of migrants, such as Beijing and Shenzhen, is negatively associated with migrants' relations with locals. The existing interethnic relations studies have rarely investigated the differences between cities, and a few exceptions have produced mixed results (Boschman, 2012; Havekes, Coenders, Dekker, & Van Der Lippe, 2014). The city difference is significant in our case probably because that China, as a rapidly growing country, inevitably faces large economic disparities and uneven migrant distribution across cities. While the number of migrants approaches or even surpasses that of natives in a few metropolises, migrants only account for a small percentage of the total population in most less developed cities.

Moreover, our results indicate that migrants with higher socioeconomic status are more likely to have more amicable intergroup relations. This is different from the

existing neighbouring literature in the Chinese context which has unravelled the limited or even negative impacts of socioeconomic status (Wang, Zhang, & Wu, 2016, 2017a; Wu & Logan, 2016). Our research focus is migrants' relations with the whole native group instead of the native neighbours. Although those who are socioeconomically marginalised may turn to neighbouring as an alternative form of socialisation, they are less able to develop intergroup relations beyond their neighbourhoods (Logan & Spitze, 1994). In this study, what socioeconomic status represents is not the need for self-help but the capability and the preference to socialise across groups.

Finally, we find that migrants who are more acculturated into the host cities generally achieve better relations with local residents, emphasising the important role of acculturation in the Chinese context. The extant interethnic relations literature has shown that acculturation is a crucial predictor of minority group members' interethnic relations (Martinovic, Van Tubergen, & Maas, 2009, 2015; Muttarak, 2014; Vervoort & Dagevos, 2011). Our research extends this strand of literature by showing that acculturation factors can also explain the intergroup relations of migrants in China, where migrants and local residents often belong to the same ethnicity. Although most migrants in China do not need to deal with interethnic cultural differences, they may experience inter-region cultural differences and urban-rural cultural differences (Wang & Fan, 2012; Yue, Fong, Li, & Feldman, 2020). This could become the barriers to their integration. Our finding also calls for more attention to the role of acculturation in the integration research in the Chinese context.

There are two policy implications of our research. At present, migration policies

in China have put an emphasis on the decentralisation of migrants from mega-cities to small and medium-sized cities, but the migrant concentration within the cities has received scant attention. Our research suggests that it is also important to reduce migrant concentration at the neighbourhood level. First, housing diversification should be promoted in the urban renewal process. This can be achieved through setting related rules or providing subsidies for estate developers. Second, migrants' access to housing welfare should be improved, and some mobility programmes can be designed to encourage migrants to move out migrant enclaves. Another policy implication is about improving migrants' acculturation into host cities. The current focus of integration policies should go beyond the socioeconomic aspects such as labour security and public service to the cultural aspect. It is necessary to provide certain resources for migrants to help them culturally adapt to destinations. The resources may include courses, lectures, books and activities related to local dialects, customs and habits.

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Table 1 Comparison of survey data and national population census

	Survey data	National population census
Gender		
Male	54.99	52.49
Female	45.01	47.51
Education		
Primary and below	9.40	18.28
Junior secondary	50.53	40.97
Senior secondary +	40.07	40.74
Length of residence		
Six years and less	77.79	76.18
More than six years	22.21	23.82

Sources: The sixth national population census in 2010

Table 2 Indicators

Dimension	Variables	Descriptions
Dependent variable	Intergroup relations	Not amicable=1, Mediocre=2, Relatively amicable=3, Very amicable=4
Evironmental independent variables	Neighbourhood composition	Mostly are migrants=1, Mostly are natives=2, Equal=3, Not sure=4
	City	Zhongshan=1, Jiaxing=2, Xiamen=3, Qingdao=4, Chengdu=5, Zhengzhou=6, Beijing=7, Shenzhen=8
Socioeconomic independent variables	Education	Primary and below=1, Junior secondary=2, Senior secondary +=3
	Employment status	Employed=1, Unemployed=2
	Monthly family income (logged)	Continuous variable
	Hukou status	Rural hukou=1, Urban hukou=2
Acculturation independent variables	Dialect	Not understand=1, Partly understand=2, Totally understand=3
	Cultural proximity	Continuous variable
	Length of residence	Continuous variable
Control variables	Age	Continuous variable
	Gender	Male=1, Female=2
	Marital status	Unmarried=1, Married=2

Table 3 Migrants' intergroup relations in China

	How do you feel about your or your family's relations with natives?				
	Total	Not amicable	Mediocre	Relatively amicable	Very amicable
Frequency	15996	664	3890	6858	4584
Percentage (%)	100	4.15	24.32	42.87	28.66

Table 4 Descriptive statistics of independent variables (%)

	Total	Not amicable	Mediocre	Relatively amicable	Very amicable
Neighbourhood composition_missing					
Mostly are migrants	49.80	72.20	59.55	48.28	40.25
Mostly are natives	19.95	8.14	14.01	18.70	28.78
Equal	27.64	11.98	23.31	30.70	29.18
Not sure	2.60	7.68	3.13	2.33	1.79
Neighbourhood composition_low					
Mostly are migrants	49.87	72.59	59.51	48.47	40.51
Mostly are natives	20.88	8.13	14.55	19.82	29.69
Equal	26.75	11.75	22.88	29.50	28.10
Not sure	2.49	7.53	3.06	2.22	1.70
Neighbourhood composition_high					
Mostly are migrants	47.75	70.78	58.12	46.00	38.22
Mostly are natives	19.50	8.43	14.09	18.11	27.79
Equal	29.88	13.25	24.50	33.20	31.87
Not sure	2.87	7.53	3.29	2.68	2.12
City					
Zhongshan	12.50	14.46	14.16	13.55	9.23
Jiaxing	12.50	8.89	12.29	15.30	9.01
Xiamen	12.50	9.94	11.75	12.12	14.09
Qingdao	12.50	5.42	7.35	13.08	17.04
Chengdu	12.50	4.37	7.58	12.32	18.11
Zhengzhou	12.50	10.54	13.93	11.49	13.09
Beijing	12.50	10.09	14.78	11.96	11.74
Shenzhen	12.50	36.30	18.15	10.19	7.70
Education					
Primary and below	9.40	6.93	9.90	9.45	9.27
Junior secondary	50.53	47.14	53.91	51.05	47.38
Senior secondary +	40.07	45.93	36.20	39.50	43.35
Employment					
Employed	91.69	87.80	91.47	91.31	93.00
Unemployed	8.31	12.20	8.53	8.69	7.00
Monthly family income* (10000 Yuan)	0.64	0.63	0.59	0.65	0.68
Hukou status					
Rural hukou	86.00	85.09	88.51	86.50	83.25
Urban hukou	14.00	14.91	11.49	13.50	16.75
Dialect					
Not understand	14.89	30.72	19.90	13.78	10.01
Partly understand	22.98	25.45	25.50	25.04	17.41
Totally understand	62.13	43.83	54.60	61.18	72.58

Cultural proximity*	2.97	2.74	2.86	3.01	3.05
Length of residence*	4.25	3.36	3.80	4.27	4.74

Note: * mean value

Table 5 Ordinal logistic regression results of migrants' intergroup relations (based on neighbourhood composition_missing)

	Model 1		Model 2		Model 3		Model 4	
	B	EXP(B)	B	EXP(B)	B	EXP(B)	B	EXP(B)
Age	0.008***	1.008***	0.004**	1.004**	0.007***	1.007***	0.004*	1.004*
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Female (reference = male)	0.053*	1.055*	0.065**	1.067**	0.097***	1.102***	0.098***	1.102***
	(0.030)	(0.032)	(0.030)	(0.032)	(0.031)	(0.034)	(0.031)	(0.034)
Married (reference = unmarried)	0.185***	1.204***	0.286***	1.330***	0.152***	1.164***	0.160***	1.174***
	(0.041)	(0.049)	(0.043)	(0.057)	(0.047)	(0.054)	(0.047)	(0.055)
Neighbourhood composition_missing (reference = mostly are migrants)								
Mostly are natives	0.873***	2.395***	0.498***	1.645***	0.477***	1.611***	0.409***	1.505***
	(0.041)	(0.097)	(0.046)	(0.076)	(0.046)	(0.075)	(0.047)	(0.070)
Equal	0.510***	1.666***	0.339***	1.404***	0.309***	1.362***	0.252***	1.287***
	(0.035)	(0.059)	(0.037)	(0.052)	(0.038)	(0.051)	(0.038)	(0.049)
Not sure	-0.314***	0.730***	-0.538***	0.584***	-0.598***	0.550***	-0.612***	0.542***
	(0.098)	(0.071)	(0.100)	(0.058)	(0.100)	(0.055)	(0.101)	(0.055)
City (reference = Zhongshan)								
Jiaxing			0.187***	1.205***	0.199***	1.221***	0.340***	1.405***
			(0.059)	(0.071)	(0.059)	(0.072)	(0.061)	(0.085)
Xiamen			0.530***	1.700***	0.487***	1.628***	0.509***	1.664***
			(0.061)	(0.103)	(0.061)	(0.099)	(0.062)	(0.103)
Qingdao			0.654***	1.923***	0.662***	1.938***	0.476***	1.610***
			(0.064)	(0.124)	(0.064)	(0.125)	(0.066)	(0.106)
Chengdu			0.864***	2.374***	0.875***	2.399***	0.579***	1.785***
			(0.064)	(0.151)	(0.064)	(0.154)	(0.067)	(0.119)
Zhengzhou			0.367***	1.443***	0.362***	1.436***	0.072	1.075
			(0.064)	(0.092)	(0.064)	(0.092)	(0.067)	(0.072)
Beijing			0.160***	1.173***	0.011	1.011	-0.274***	0.760***
			(0.061)	(0.072)	(0.062)	(0.063)	(0.066)	(0.050)
Shenzhen			-0.379***	0.685***	-0.523***	0.593***	-0.466***	0.628***
			(0.061)	(0.042)	(0.062)	(0.037)	(0.063)	(0.039)
Education (reference = primary and below)								
Junior secondary					0.063	1.065	0.007	1.007
					(0.056)	(0.060)	(0.056)	(0.057)
Senior secondary +					0.288***	1.334***	0.178***	1.195***
					(0.061)	(0.082)	(0.062)	(0.074)
Unemployed (reference = employed)					-0.091	0.913	-0.082	0.921
					(0.056)	(0.051)	(0.056)	(0.052)

Monthly family income (logged)					0.274***	1.316***	0.221***	1.248***
					(0.030)	(0.039)	(0.030)	(0.037)
Urban hukou (reference = rural hukou)					0.174***	1.190***	0.134***	1.144***
					(0.048)	(0.057)	(0.048)	(0.055)
Dialect (reference = not understand)								
Partly understand							0.164***	1.178***
							(0.052)	(0.061)
Totally understand							0.619***	1.858***
							(0.053)	(0.098)
Cultural proximity							0.419***	1.520***
							(0.032)	(0.048)
Length of residence							0.020***	1.021***
							(0.004)	(0.004)
Pseudo R^2	0.018		0.031		0.037		0.049	
Log likelihood	-18074.816		-17834.340		-17731.734		-17518.568	
Sample size (valid cases)	15336		15336		15336		15336	

Note: Standard errors in parentheses; $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$

Table 6 Ordinal logistic regression results of migrants' intergroup relations (based on neighbourhood composition_low)

	Model 5		Model 6		Model 7		Model 8	
	B	EXP(B)	B	EXP(B)	B	EXP(B)	B	EXP(B)
Age	0.008***	1.008***	0.004*	1.004*	0.006***	1.006***	0.003	1.003
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Female (reference = male)	0.043	1.044	0.055*	1.056*	0.087***	1.090***	0.090***	1.095***
	(0.030)	(0.031)	(0.030)	(0.031)	(0.030)	(0.033)	(0.031)	(0.033)
Married (reference = unmarried)	0.198***	1.219***	0.300***	1.350***	0.168***	1.182***	0.177***	1.193***
	(0.040)	(0.049)	(0.042)	(0.056)	(0.046)	(0.054)	(0.046)	(0.055)
Neighbourhood composition_low (reference = mostly are migrants)								
Mostly are natives	0.860***	2.363***	0.486***	1.626***	0.459***	1.583***	0.397***	1.487***
	(0.039)	(0.092)	(0.044)	(0.072)	(0.044)	(0.070)	(0.045)	(0.066)
Equal	0.494***	1.639***	0.319***	1.376***	0.289***	1.335***	0.237***	1.268***
	(0.035)	(0.057)	(0.037)	(0.051)	(0.037)	(0.049)	(0.037)	(0.047)
Not sure	-0.339***	0.712***	-0.564***	0.569***	-0.626***	0.535***	-0.635***	0.530***
	(0.098)	(0.070)	(0.100)	(0.057)	(0.100)	(0.054)	(0.101)	(0.053)
City (reference = Zhongshan)								
Jiaxing			0.149***	1.161***	0.162***	1.176***	0.305***	1.356***
			(0.058)	(0.067)	(0.058)	(0.068)	(0.059)	(0.081)
Xiamen			0.493***	1.637***	0.449***	1.566***	0.477***	1.612***
			(0.059)	(0.097)	(0.059)	(0.093)	(0.060)	(0.097)
Qingdao			0.646***	1.909***	0.662***	1.938***	0.475***	1.608***
			(0.062)	(0.119)	(0.063)	(0.121)	(0.064)	(0.103)
Chengdu			0.850***	2.341***	0.866***	2.377***	0.569***	1.767***
			(0.062)	(0.145)	(0.062)	(0.148)	(0.065)	(0.115)
Zhengzhou			0.360***	1.433***	0.359***	1.431***	0.073	1.075
			(0.062)	(0.089)	(0.062)	(0.089)	(0.065)	(0.070)
Beijing			0.164***	1.178***	0.015	1.015	-0.274***	0.760***
			(0.060)	(0.070)	(0.061)	(0.061)	(0.064)	(0.049)
Shenzhen			-0.413***	0.662***	-0.553***	0.575***	-0.493***	0.611***
			(0.060)	(0.040)	(0.061)	(0.035)	(0.062)	(0.038)
Education (reference = primary and below)								
Junior secondary					0.047	1.048	-0.010	0.990
					(0.055)	(0.058)	(0.055)	(0.055)
Senior secondary +					0.275***	1.317***	0.165***	1.179***
					(0.060)	(0.079)	(0.061)	(0.072)
Unemployed (reference = employed)					-0.100*	0.905*	-0.091*	0.913*
					(0.055)	(0.050)	(0.055)	(0.050)
Monthly family income (logged)					0.274***	1.316***	0.221***	1.247***
					(0.029)	(0.038)	(0.029)	(0.036)

Urban hukou (reference = rural hukou)				0.173***	1.189***	0.135***	1.144***
				(0.047)	(0.055)	(0.047)	(0.053)
Dialect (reference = not understand)							
Partly understand						0.172***	1.187***
						(0.051)	(0.061)
Totally understand						0.629***	1.877***
						(0.052)	(0.097)
Cultural proximity						0.408***	1.504***
						(0.031)	(0.047)
Length of residence						0.022***	1.022***
						(0.004)	(0.004)
Pseudo R^2	0.018		0.031		0.037		0.048
Log likelihood	-18803.259		-18551.741		-18443.820		-18221.824
Sample size (valid cases)	15996		15996		15996		15996

Note: Standard errors in parentheses; $^*p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$

Table 7 Ordinal logistic regression results of migrants' intergroup relations (based on neighbourhood composition_high)

	Model 9		Model 10		Model 11		Model 12	
	B	EXP(B)	B	EXP(B)	B	EXP(B)	B	EXP(B)
Age	0.008***	1.008***	0.004*	1.004*	0.006***	1.006***	0.003	1.003
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Female (reference = male)	0.042	1.043	0.055*	1.057*	0.087***	1.091***	0.091***	1.096***
	(0.030)	(0.031)	(0.030)	(0.031)	(0.030)	(0.033)	(0.031)	(0.033)
Married (reference = unmarried)	0.186***	1.204***	0.291***	1.337***	0.158***	1.171***	0.168***	1.183***
	(0.040)	(0.048)	(0.042)	(0.056)	(0.046)	(0.054)	(0.046)	(0.054)
Neighbourhood composition_high (reference = mostly are migrants)								
Mostly are natives	0.868***	2.382***	0.487***	1.628***	0.466***	1.593***	0.402***	1.495***
	(0.040)	(0.096)	(0.046)	(0.074)	(0.046)	(0.073)	(0.046)	(0.069)
Equal	0.547***	1.728***	0.366***	1.442***	0.333***	1.395***	0.274***	1.315***
	(0.034)	(0.059)	(0.036)	(0.052)	(0.036)	(0.051)	(0.037)	(0.048)
Not sure	-0.144	0.866	-0.392***	0.676***	-0.456***	0.634***	-0.466***	0.628***
	(0.091)	(0.079)	(0.094)	(0.063)	(0.094)	(0.059)	(0.094)	(0.059)
City (reference = Zhongshan)								
Jiaxing			0.155***	1.168***	0.167***	1.182***	0.308***	1.360***
			(0.058)	(0.067)	(0.058)	(0.069)	(0.059)	(0.081)
Xiamen			0.498***	1.646***	0.453***	1.573***	0.481***	1.618***
			(0.059)	(0.097)	(0.059)	(0.093)	(0.060)	(0.098)
Qingdao			0.654***	1.924***	0.667***	1.947***	0.479***	1.615***
			(0.062)	(0.120)	(0.063)	(0.122)	(0.064)	(0.103)
Chengdu			0.861***	2.365***	0.875***	2.398***	0.577***	1.781***
			(0.062)	(0.146)	(0.062)	(0.149)	(0.065)	(0.116)
Zhengzhou			0.370***	1.447***	0.368***	1.445***	0.081	1.085
			(0.062)	(0.090)	(0.062)	(0.090)	(0.065)	(0.071)
Beijing			0.154***	1.166***	0.005	1.005	-0.283***	0.754***
			(0.060)	(0.069)	(0.061)	(0.061)	(0.064)	(0.048)
Shenzhen			-0.398***	0.672***	-0.539***	0.583***	-0.483***	0.617***
			(0.060)	(0.041)	(0.062)	(0.036)	(0.062)	(0.038)
Education (reference = primary and below)								
Junior secondary					0.047	1.048	-0.010	0.990
					(0.055)	(0.058)	(0.055)	(0.055)
Senior secondary +					0.273***	1.314***	0.164***	1.178***
					(0.060)	(0.079)	(0.061)	(0.072)
Unemployed (reference = employed)					-0.102*	0.903*	-0.093*	0.912*
					(0.055)	(0.050)	(0.055)	(0.050)
Monthly family income (logged)					0.274***	1.316***	0.221***	1.247***

	(0.029)	(0.038)	(0.029)	(0.036)
Urban hukou (reference = rural hukou)	0.174***	1.190***	0.136***	1.146***
	(0.047)	(0.055)	(0.047)	(0.054)
Dialect (reference = not understand)				
Partly understand			0.173***	1.189***
			(0.051)	(0.061)
Totally understand			0.629***	1.876***
			(0.052)	(0.097)
Cultural proximity			0.404***	1.498***
			(0.031)	(0.047)
Length of residence			0.022***	1.022***
			(0.004)	(0.004)
Pseudo R^2	0.018	0.031	0.037	0.048
Log likelihood	-18807.223	-18554.417	-18447.024	-18227.105
Sample size (valid cases)	15996	15996	15996	15996

Note: Standard errors in parentheses; $^*p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$