


## Impact of rural-to-urban migration on family and gender values in China

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### ABSTRACT

Drawing on data from the 2006 China General Social Survey, propensity score matching was used to investigate the impact of rural-to-urban migration on family and gender values in China at distinct stages of the migratory process. Little evidence of ideational difference is found between rural natives who intend to migrate to urban areas and those who intend to stay in rural China. However, rural-to-urban migration has significant, diverse and gendered impacts on various domains of family and gender values at distinct migratory stages. The results also cast light on the important roles played by *hukou* status and various forms of socioeconomic and cultural status, such as education and occupation, in mediating the impact of rural-to-urban migration on family and gender values. The ideational impact of migration is shown to be shaped by China's distinctive institutional features.

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## Introduction

In 2012, more than 163.4 million rural Chinese migrated to urban areas of China (China National Bureau of Statistics, 2012). Since the founding of the People's Republic of China (PRC) in 1949, the uneven spread of social policies and political movements has created a socioeconomic gulf between urban and rural China (Chan, 2010; Gu, 2014; Whyte, 2010). Following the near-complete block on the out-migration of rural residents imposed by the Chinese Communist Party (CCP) between 1958 and the early 1980s, the government's relaxation of control over population mobility in the 1980s encouraged a large number of rural residents to seek work and education in urban areas (Liang, 2001). The resulting 'floating' population, i.e. temporary rural migrants residing in urban areas without urban *hukou*, created a key economic connection between rural and urban China (Guo, Chow, & Palinkas, 2011). In 2002, 'permanent' migrants – those born in rural areas who have since gained urban *hukou* – comprised as much as 20% of China's urban population (Gu, 2014).

Previous researchers have focused primarily on the socioeconomic impact of rural-to-urban migration. Although recent research has revealed a gulf in family and gender values between rural and urban China (Hu, 2015; Hu & Scott, 2014), it remains unclear whether and how rural-to-urban migration influences these values. Family values are

important because they guide the organisation of everyday life and its behavioural enactment in Chinese society (Chen & Li, 2014). Because structural shifts provide an insufficient explanation of 'family change across the globe' (Jayakody, Thornton, & Axinn, 2012, p. 2), it is vital to explore the interaction between rural-to-urban migration and family values in China to more accurately predict future changes of the Chinese family.

Following classic assimilationist theories, most researchers investigating the ideational impact of migration have compared migrant and native populations residing in the host society (Gordon, 1964). Only a handful have compared migrants with non-migrants in their places of origin (e.g. Xu & Xie, 2015), and even fewer have addressed the experiences of migrants at different stages of the migratory process. However, it is crucial to compare those who migrate with those who stay to determine whether migration is preceded by or helps to produce ideational difference (Alba & Nee, 1997). Therefore, the first objective of this research is to explore ideational changes at distinct stages of migration (e.g. intended migration, temporary migration and permanent migration), with particular attention to the attitudinal differences between migrants and people who remain in their places of origin.

Meanwhile, theories of 'blocked acculturation' call into question the simplistic linear ideational change predicted by classic assimilation theory, and indicate that ideational change through migration is contingent on migrants' social, cultural, economic and political status (Alba & Nee, 1997). Whereas the phenomenon of blocked acculturation has been ascribed to factors such as human capital, ethnicity and race in Western research, Chinese migrants exhibit almost no variation in ethno-racial status. Instead, rural-to-urban migrants in China are denied full incorporation in areas such as social benefits, access to the urban labour market, medical care and (children's) education. Therefore, it is crucial to disentangle the influences of occupational status and educational status (conferring human capital) and *hukou* status (determining access to social resources and welfare) on ideational change during the migratory process in China. Disentangling these influences is the second objective of the research.

I use propensity score matching (PSM) to analyse data from the 2006 China General Social Survey (CGSS). The results reveal that rural-to-urban migration has diverse and gendered impacts on various domains of family and gender values at distinct stages of the migratory process. *Hukou* status plays an important role in ideational change for women, and the ideational impact of migration is mediated (and thus explained) to varying degrees by educational status and occupational status.

## Background

### *Family and gender values in China: baseline traditions*

Before the founding of the PRC in 1949, traditional family and gender values were informed by two major sets of familial relations (Hu & Scott, 2014): conjugal (between husband and wife) and intergenerational (between parents and children). Patrilineal norms were common to both sets of relations and central to familial obligations, rights and powers (Hu & Scott, 2014).

*Patrilineality.* Patrilineality underpins power relations in Chinese families: older and/or male members are deemed superior to younger and/or female members (Chen & Li,

2014). Traditionally, precedence was given to the eldest male in the family in areas such as authority and inheritance, as a male heir was considered necessary to preserve the family lineage (Baker, 1979). To safeguard the male line of descent, married women were regarded as the property of their husbands' families (Baker, 1979), which were expected to take precedence over their natal families, especially in cases of competing benefits (Croll, 1981).

*Filial piety (xiao and jing).* Filial piety, a corollary of patrilineality, prescribes two specific and complementary sets of relation between parents and children (Bell, 2010). The principle of *xiao* requires (adult) children to care for their aging parents (Chan & Tan, 2004). In the absence of a welfare state, *xiao* was crucial to the functioning of Chinese families: it preserved family lineage, guaranteed childcare and ensured the security of the elderly. The principle of *jing* embodies the non-material aspects of filial piety: respect for and obedience to the elderly. *Jing* obliges children to be grateful to their parents for the 'gift of life' and for bringing them up (Deutsch, 2006), and this gratitude in turn provides the moral imperative to observe *xiao*. It was traditionally considered virtuous for (male) children to honour their parents by making them proud of their achievements (Chan & Tan, 2004; Deutsch, 2006).

*Gender roles.* In the traditional Chinese nuclear family, gender roles were codified by the distinct functions of men and women in the productive, reproductive and domestic spheres (Hu, 2015). In agricultural China, conjugal relations were traditionally arranged with the husband at the centre of the household, undertaking productive activities. The wife was expected to facilitate her husband's productivity by taking charge of domesticity, and to produce heirs to preserve the family's male lineage (Evans & Strauss, 2011).

*Marriage and divorce.* According to the traditional Chinese view of marriage as a lifelong enterprise, divorce dishonours a family (Chen & Li, 2014). With wedlock as the sole legitimate site of reproduction, marriage, childbirth and child-rearing were regarded as important familial obligations. Unsurprisingly, divorce and separation were widely stigmatised for their negative impact on children's development (Croll, 1981).

### ***Ideational inconsistency and the rural-urban gulf in family and gender values***

In traditional China, the various domains of family and gender values belonged to a complementary and consistent value system. However, social, cultural and political changes in China in the last few decades have shaped different domains of family and gender values in distinct ways. China's rapid yet uneven socioeconomic development and the *hukou* policy have polarised the country's rural and urban areas (Whyte, 2010). *Hukou*, the household-registration system, originated in imperial China, and was re-established by the CCP in 1951 (Chan, 2010). Between 1958 and 1978, further regulations were implemented to prohibit individually initiated migration up the urban chain, which almost completely barred the out-migration of rural residents. The symbolic status conferred by urban *hukou* and the difficulties faced by rural Chinese in obtaining urban *hukou* persist to the present day (Knight, Deng, & Li, 2011).

The socialist revolutions led by the CCP forcefully attacked the country's patrilineal traditions. Gender egalitarianism was externally driven by the mobilisation of women into the labour force in the Maoist era, upholding the Maoist ideal that 'women hold up half the sky' (Zuo & Bian, 2001). In addition, processes such as urbanisation, Westernisation,

individualisation, economic reform and the one-child policy variously contributed to the erosion of patrilineality and traditional gender values. Specifically, China's partial urbanisation, Westernisation (e.g. the 'open-door' policy), industrialisation and later de-industrialisation eroded traditional gender and patrilineal values to a greater extent in urban areas than in rural areas (e.g. Evans & Strauss, 2011; Hu, 2015). China's mass de-collectivisation deprived rural families of the inherited assets that were important in maintaining patrilineal authority (Fan, 2003); yet attitudes to patrilineality in post-reform China are more traditional in rural than in urban areas (Hu & Scott, 2014).

Although China's 1950 Marriage Law entitled women to marry and divorce in accordance with 'personal will' (Chen & Li, 2014, p. 66–69), it took a long time for social attitudes towards conjugal relationships to change. Economic prosperity and growing individualism also fostered individual autonomy over decisions related to marriage and divorce (Evans & Strauss, 2011). As China's urban areas are more economically developed than its rural areas, with more widespread individualism (Yan, 2009), urban citizens tend to hold less traditional views of marriage and divorce.

However, filial piety continues to be valorised as a 'Chinese virtue' in the state-guided education system. In the absence of welfare legislation, the responsibility for familial support and care provision rests firmly on the shoulders of individuals (Chen & Li, 2014). Due to the concentration of educational resources in urban China, filial piety is promulgated to a greater degree in urban than in rural schools. In addition, as urbanites enjoy more social security and welfare provision than their rural counterparts, supporting and caring for aged parents are less onerous tasks for young urban adults. The unequal distribution of educational resources and social welfare makes it financially viable and morally plausible for urbanites to uphold filial piety, in contrast to rural residents. Indeed, Hu and Scott (2014) found that urbanites hold more traditional attitudes to filial piety than their rural counterparts.

The interaction between traditional family values and social changes in China has created an ideational inconsistency between value domains. The findings of recent studies have consistently confirmed that traditional values relating to patrilineality, gender roles, marriage and divorce are no longer prevalent in post-reform China, whereas support for filial piety has remained strong over the socialist, reform and post-reform generations (Chen & Li, 2014; Hu & Scott, 2014). It seems likely that the urban and rural endorsement of family values will be more or less traditional depending on the specific ideational domains. Given the ideational inconsistency, it is crucial to investigate the patterns of family and gender values in relation to China's specific social, cultural and political contexts.

### ***Ideational impact of rural-to-urban migration***

An important consequence of China's rural-urban gulf is the widespread perception of urban centres as more socio-culturally and economically developed than rural areas, and thus more desirable destinations for migration. In addition, the CCP's relaxation of the *hukou* policy in the 1980s provided rural residents with new opportunities for urban migration. Previous researchers have emphasised the importance of China's rural-to-urban migration as a socio-economic bridge across the country's rural-urban gulf. However, we know little about the impacts of this migration on family and gender

values in China. As migration may be endogenous to individuals' social values (Jayakody et al., 2012), ideational differences between rural residents who migrate and those who stay may be the cause rather than the result of migration. Therefore, the first task of the research is to determine *whether ideational difference precedes migration and may therefore motivate migration, rather than resulting from the migratory process* [1].

In the West, early attempts to understand the influence of migration on sociocultural values were significantly influenced by the Chicago school of thought. According to cultural-assimilation theory, migrants are both passively exposed to and actively engaged with the process of assimilation as they strive to access resources within their host societies (e.g. Gordon, 1964). In most empirical studies based on the traditional assimilation framework, the native and the 'other' have been dichotomised, and a linear trajectory of ideational change has been proposed; researchers have emphasised the power relations between migrants and their host societies, predicting a 'cultural convergence' between the two groups (Alba & Nee, 1997; Gordon, 1964). However, migrants' sociocultural integration in host societies should not be conflated with the difference between the social values held by migrants and those of their places of origin.

Notably, the assumptions of ethnic and racial difference underlying classic assimilation theories do not readily apply to China, as Chinese migrants exhibit little ethnic or racial variation. In China, rural-to-urban migration may give young adults bargaining power, due both to the possibility of leaving rural areas geographically and their increased potential to support their rural families via remittances (Guo et al., 2011). Nevertheless, the extent to which the bargaining power conferred by rural-to-urban migration actually translates into changes in migrants' values has yet to be determined empirically. Therefore, it is necessary to examine *whether rural Chinese who have migrated to urban areas and rural natives who have never migrated hold different family and gender values* [2].

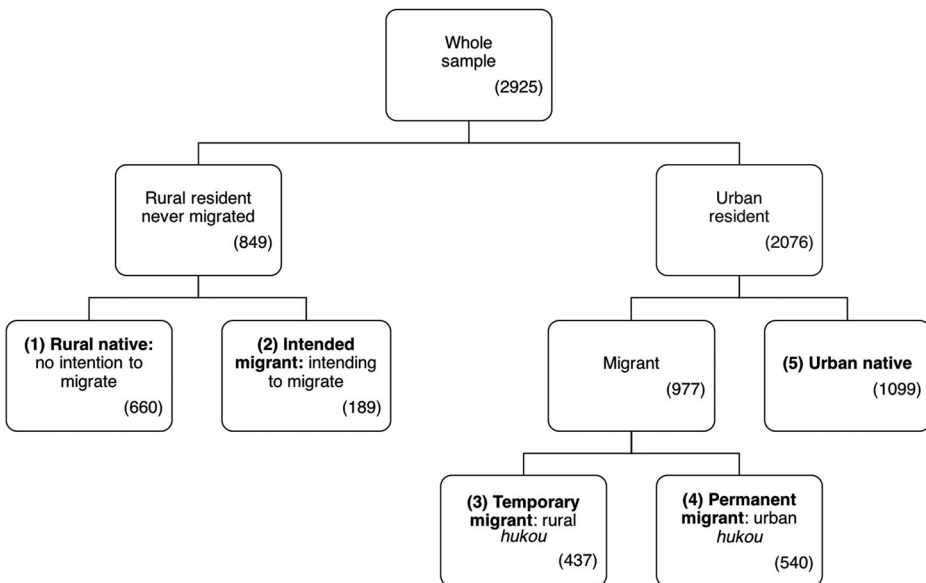
Meanwhile, recent studies of migration, integration and boundary-work have cast light on the processes of blocked acculturation that, according to Alba and Nee (1997), members of disadvantaged social groups proceed more slowly on the path of acculturation in host societies. Although the theory of blocked acculturation was first developed in a Western context, and emphasises factors not readily applicable to China (especially ethnicity and race), it usefully directs attention to the institutional features of the PRC that may powerfully affect sociocultural integration and ideational change among migrants in China.

Most Chinese with urban *hukou* have long benefited from access to pensions and benefits that provide a non-familial basis for the security of the elderly. In sharp contrast, rural-to-urban migrants without urban *hukou* are denied social welfare and medical subsidies, and their children have limited access to education in urban areas (Chan, 2010). Therefore, *hukou* plays an important role in blocking the incorporation of rural migrants into urban China. It also creates a distinction between permanent migrants, who were born in rural areas but have since gained urban *hukou*, and the floating population of temporary migrants. Due to the circular and short-term nature of temporary migration, and the limitations on access to urban institutions and cultural sites, temporary migrants usually enjoy less exposure to urban culture than their permanent counterparts. Therefore, it is important to characterise the role of *hukou* status in affecting the ideational impact of rural-to-urban migration by examining *whether and how family and gender values differ between temporary and permanent migrants* [3].

Rural residents migrate to urban areas primarily for education or work. A favourable educational and occupational status not only confers symbolic power, but increases the likelihood that rural migrants will qualify for urban *hukou*. Education and employment are also powerful forces shaping gender and family values in China (Hu & Scott, 2014). As a result, the sociocultural impact of migration may be contingent on educational and occupational status. Therefore, the fourth task of this research is to determine *the extent to which occupational status and educational status explain ideational differences at distinct stages of temporary and permanent migration* [4].

To address the four objectives above, I first identify five conceptually distinct sub-populations of the sample, as presented in Figure 1. The first group is composed of *rural natives* who have never migrated and have no intention to migrate within the next 3 years. The second group, *intended migrants*, comprises rural natives who have never previously migrated but intend to migrate within 3 years. Rural migrants with rural *hukou* residing in urban areas form the third group, *temporary migrants*. The fourth group, *permanent migrants*, comprises individuals who were born with rural *hukou* but have since migrated to urban areas and gained urban *hukou*. The last group, *urban natives*, is composed of native urban residents. Four sets of inter-group comparisons are devised to explore the ideational impact of rural-to-urban migration at distinct stages of the migratory process.

- (1) First, rural natives and intended migrants are compared to determine whether ideational differences precede migration.
- (2) Second, rural natives and migrants (both temporary and permanent) are compared to examine the impact of rural-to-urban migration.



**Figure 1.** Sub-populations by rural-to-urban migration intention and status.

*Notes:* Categorisation based on location of residence (rural/urban); whether a rural resident who never migrated intends to migrate to urban areas in 3 years; whether an urban resident was born in urban areas; whether an urban resident holds urban *hukou*. Sample size in this research presented in brackets.

- (3) Third, temporary migrants and permanent migrants are compared to determine whether urban-*hukou* status affects ideational change during migration.
- (4) Fourth, following traditional migration studies, I compare the family values held by urban natives with those held by temporary and permanent migrants, respectively.

The impacts of educational and occupational status are examined in each set of comparisons. Given the ideational inconsistency discussed in the preceding section, rural-to-urban migration is not expected to have the same unidirectional influence on every domain of family and gender values. In addition, as male and female migrants occupy different socio-cultural positions within their rural places of origin and urban host societies, the process of internal migration in China is highly gendered (Fan, 2003). Therefore, the impact of rural-to-urban migration is not expected to be the same for men and women.

## Data and method

### Data and sample

In this research, I draw on data from the 2006 China General Social Survey (CGSS). Led by China's Renmin University and the Hong Kong University of Science and Technology, the CGSS is one of China's largest-scale national social surveys. With the inclusion of a Family Module, the 2006 CGSS is the only survey to systematically measure a wide range of family and gender values in China. The 2006 CGSS had a wide coverage, ranging from major cities to remote villages, and from the eastern coast to the western hinterland. The response rate was 51.1%. In the Family Module, multi-stage stratified probability-proportional-to-size sampling was used to survey 3208 individuals from 500 street areas in 125 cities/towns; 1754 were female and 1454 were male, with ages ranging from 18 to 69. One random member from each household was surveyed. The multi-stage process ensured that the sample was representative of population composition at province/municipality level, street/village level and neighbourhood level. Notably, the sampling process was based on location of residence rather than household-registration status, allowing a representative sample of the migrant population to be obtained (see [www.chinagss.org](http://www.chinagss.org) for further details on the CGSS).

To construct the analytical sample, I exclude cases of urban-to-rural migration, due to its rarity in China (Chan, 2010). I then eliminate respondents who had previously migrated to urban areas but have since returned to rural areas, as this group is extremely small, as well as cases with missing values for key variables. The sample used for analysis comprises 2925 individuals, i.e. 91.18% of the original sample.

### Analytic approach and variables

The five sub-populations vary considerably in demographic characteristics. It is essential to measure the impact of migration net of (1) the *confounding* demographic factors that simultaneously influence the process of migration and family and gender values, and (2) the potential *mediating* effects of educational and occupational factors. Therefore, a case-control design is used to compare the sub-populations. I use propensity score matching (PSM) to measure the potential outcomes if untreated respondents were to receive the same treatment (i.e. intending to migrate, migrating, permanently settled in an urban



area) as treated respondents with identical attributes (Guo & Fraser, 2014). Although migration choice may be endogenous to individual and household characteristics, PSM still allows for reliable estimation 'because the odds ratio of the propensity score fit on the choice-based sample is monotonically related to the odds ratio of the true propensity scores' (Heckman & Todd, 2009, p. 230). Compared with regression analysis, matching is particularly advantageous when the predetermined attribute varies significantly between different groups, and when the sample size is relatively small (Guo & Fraser, 2014).

*Outcome measures.* As shown in Table 1, the 2006 CGSS measured family and gender values on 7-point scales. All of the measures are recoded such that 0 represents the most traditional attitude and 6 represents the least traditional attitude towards each family or gender value.

Exploratory factor analysis is used to extract the indexes for Chinese family and gender values. Assessment of the factorability of the 18 items reveals that their correlations are reasonably high. The Kaiser-Meyer-Olkin measure of sampling adequacy is 0.756. Principal-component analysis and Varimax rotation are used to help compute composite scores for the indexes. The Cronbach's-alpha scores show a high consistency within each index. No substantial increase in these scores could be achieved for any of the indexes by eliminating items. Calculated as the arithmetic mean of each set of measures, each index is scaled from 0 to 6, with higher scores indicating less traditional attitudes towards traditional family and gender values.

*Treatment variables.* The treatment variables are coded as dummy variables, distinguishing between control (0) and treatment (1) groups for each set of comparisons, as follows. (1) Rural natives, 0, and intended migrants, 1; (2) rural natives, 0, and migrants, 1; (3) temporary migrants, 0, and permanent migrants, 1; (4) urban natives, 0, and temporary migrants, 1; and (5) urban natives, 0, and permanent migrants, 1.<sup>1</sup>

**Table 1.** List of variables and factor loadings for family and gender values ( $N = 2925$ ).

Measure in CGSS 2006		<i>M</i>	<i>SD</i>	Factor loading	$h^2$
<b>Patrilineality</b> (% var = 7.7, alpha = .60)					
P1	Eldest son should inherit larger share from parents	3.21	1.40	.50	.65
P2	Married women should help spouse's family first	2.70	1.25	.45	.68
P3	One must have a son to keep family lineage	2.70	1.54	.39	.74
<b>Xiao (unmarried)</b> (% var = 19.7, alpha = .95)					
U1	Financial support: unmarried men to parents	2.01	1.30	.90	.14
U2	Financial support: unmarried women to parents	2.06	1.31	.89	.14
<b>Xiao (married)</b> (% var = 33.5, alpha = .92)					
M1	Financial support: married men to parents	1.39	1.00	.77	.34
M2	Financial support: married men to spouse's parents	1.48	1.03	.81	.29
M3	Financial support: married women to parents	1.62	1.05	.87	.20
M4	Financial support: married women to spouse's parents	1.64	1.05	.87	.21
<b>Jing (filial piety)</b> (% var = 20.7, alpha = .79)					
F1	Be grateful to parents for raising me	1.02	.93	.69	.50
F2	No matter what, one should treat parents well	1.18	.94	.69	.51
F3	Support parents to make them live a comfortable life	1.24	.94	.69	.49
F4	Children must do things that honour their parents	1.42	1.01	.60	.60
<b>Gender role</b> (% var = 11.7, alpha = .71)					
G1	Husband job: earn money, wife job: care for family	2.31	1.21	.62	.55
G2	More important for wife to support husband's career than her own	2.48	1.35	.62	.52
<b>Marriage and divorce</b> (% var = 18.3, alpha = .72)					
D1	Divorce after children grown up	2.91	1.34	.39	.83
D2	No matter what, marriage is better than being single	3.05	1.25	.79	.35
D3	No matter what, marriage is better than divorce	3.12	1.27	.80	.35

Notes: All measures range from 0 to 6, where 0 = most traditional, 6 = least traditional. KMO = .756.



*Matching covariates and mediators.* Following previous research on rural-to-urban migration and family and gender values in China (e.g. Chan, 2010; Knight et al., 2011), a wide range of individual, parental and household characteristics are used as covariates in the PSM (presented in Table 2 in the next section). I include age and its squared form. I distinguish between those who have ‘never married’ (0) and those who are or have ever ‘married’ (1). Divorced and widowed respondents are coded into the ‘married’ category, due to the extremely small size of this group (6% of the sample). I include a categorical variable indicating whether the respondents have ‘no’, ‘one’ or ‘more than one’ child. I also include CCP membership as a dummy variable to account for the potential influence of political affiliation on both sociocultural values and access to social-institutional resources during migration.

For the extended family, I distinguish between individuals with ‘neither parent alive’, ‘one parent alive’ and ‘both parents alive’, as the presence of parents may enforce respondents’ sense of filial obligation (Baker, 1979; Bell, 2010). Paternal education is measured using a categorical variable: ‘missing’, ‘no education’, ‘primary education’ and ‘secondary education and above’. As Chinese women in previous generations received far less education than Chinese men, maternal education is divided more crudely into three categories: ‘missing’, ‘no education’ and ‘primary education and above’. As the presence of siblings may affect the respondents’ filial and patrilineal obligations, a distinction is made between respondents with ‘no’, ‘one’ and ‘more than one’ male and female sibling, respectively.

The respondents’ own education is measured in terms of years of schooling, and occupational status is coded using the following categories, based on Erikson-Goldthorpe-Portocarero (EGP) occupation codes: ‘no work’, ‘higher controller’ (EGP I, II & V), ‘routine non-manual’ (EGP IIIa, IIIb, IVa & IVb), ‘manual’ (EGP VI, VIIa) and ‘farm labourer’ (EGP IVc & VIIb). Notably, educational status and occupational status are included only as matching covariates in the first set of comparisons (between rural natives and natives who intend to migrate). As most people migrate for work or educational purposes, and such parallel processes may contaminate the treatment measurement, education and occupation are included as *mediators* rather than matching covariates (*confounders*) in the second, third and fourth sets of comparisons (Guo & Fraser, 2014). Given the variation in family and gender values across China’s east-west geographic span (Hu, 2016; Hu & Scott, 2014), I control for China’s internal regional division using the following crude categories: ‘west’, ‘central’ and ‘east’.

### **Analytic procedures**

As no respondents can be simultaneously treated and untreated in reality, PSM is used in the first, second and third sets of comparisons to estimate the respondents’ counterfactual family and gender values if treated/untreated. To estimate the average treatment effects on the treated (ATT), the assumption of common support must be satisfied; therefore, respondents entering the PSM process are assumed to have the probability of being both treated and untreated (Guo & Fraser, 2014). Let  $Y_i^T$  denote the family-value and gender-value outcomes for a treated respondent, and let  $Y_i^C$  denote the outcomes for the same respondent if untreated. ATT is computed as in Equation (1), where  $D = 1$  if treatment is received. In reality, both  $Y_i^T$  and  $Y_i^C$  are observed for a certain group of respondents in the sample.

$$ATT = E(Y_i^T | D_i = 1) - E(Y_i^C | D_i = 1) \quad (1)$$

I match the treated and untreated groups to ensure that their key covariates are similar and thus comparable. Let the whole set of observable matching variables be  $X$ . If a matched analogue exists in the control group for each treated respondent (i.e.  $X$  applies equally to the treated and untreated groups), the assumption of conditional independence in Equation (2) is met. I estimate the propensity vector ( $p$ ) for the receipt of a given treatment using logistic regression, as in Equation (3). I estimate ATT in Equation (4). In the following equations,  $\Pr(D = 1|X)$  denotes the probability of a respondent's being treated conditional on  $X$ .

$$E(Y_i^C|X, D_i = 1) = E(Y_i^C|X, D_i = 0) = E(Y_i^C|X) \quad (2)$$

$$p(x) = \Pr[D = 1|X = x] \quad (3)$$

$$ATT = E[Y^T|D = 1, \Pr(D = 1|X)] - E[Y^C|D = 0, \Pr(D = 1|X)] \quad (4)$$

As both rural-to-urban migration and family and gender values in China are highly gendered, I use exact matching for gender and PSM for the other variables. Next, I apply an ordinary least squares regression adjustment (RA) to the matched sample by including educational and occupational status (Guo & Fraser, 2014). If migration is a selection process during which people move to urban areas to study or work and thus experience ideational shifts due to changes in educational or occupational status, RA may reduce or eliminate any inter-group differences remaining after PSM. To ensure the robustness of the results, multiple matching methods – local linear regression, nearest-neighbour matching and radius/caliper matching (.05) – are used with replacements and ties. The results of local linear matching are reported, due to the efficiency of this method. The *psmatch2* package in Stata is used to conduct the analysis. As the results of PSM can only be interpreted at the group level (Guo & Fraser, 2014), the results reflect the aggregate impact of rural-to-urban migration rather than individual-level change during the migratory process.

No propensity scores are calculated in the fourth set of comparisons (between urban natives and temporary and permanent migrants, respectively). Instead, following traditional migration studies, mechanical matching with and without educational and occupational status is conducted to compare temporary and permanent migrants, respectively, with urban natives.

## Results

### *Descriptive statistics*

Table 2 presents unmatched descriptive statistics for the sub-populations, disaggregated by gender. The key demographic characteristics vary considerably between the five groups that relate distinctly to the process of rural-to-urban migration. The rural natives who intend to migrate and the temporary migrants are younger than the rural natives, the permanent migrants and the urban natives. This finding is consistent with the observations made in previous research that young people are more likely to intend to migrate (Guo et al., 2011) and that it usually takes considerable time for rural migrants to settle in urban areas (Chan, 2010). Of the rural natives who intend to migrate, females are substantially younger ( $M = 31.55$ ) than males ( $M = 35.76$ ). This could be because married women

**Table 2.** Sample characteristics (unmatched).

	Male							Female						
	All	Rural native	Int. migrant	Temp. migrant	Perm. migrant	Urban native	<i>F/x<sup>2</sup>- difference</i>	All	Rural native	Int. migrant	Temp. migrant	Perm. migrant	Urban native	<i>F/x<sup>2</sup>- difference</i>
Age	43.08	49.31	35.76	35.70	46.25	42.32	<.001	43.02	46.22	31.55	36.56	47.17	43.09	<.001
Age, SD	13.04	11.68	9.61	12.61	13.49	12.15		12.87	10.90	6.96	12.83	12.80	12.72	
Married	.85	.94	.85	.67	.91	.82	.037	.92	.99	.92	.79	.97	.90	.136
Child														
No	.20	.08	.18	.40	.13	.23		.13	.02	.13	.27	.06	.16	
One	.42	.19	.30	.33	.47	.59		.45	.20	.42	.38	.46	.64	
Two and above	.39	.74	.53	.27	.40	.18	<.001	.42	.78	.45	.35	.47	.20	<.001
CCP member	.18	.14	.11	.09	.34	.17	<.001	.08	.03	.04	.09	.08	.12	<.001
Parent(s) alive														
Neither	.31	.49	.19	.19	.42	.24		.34	.46	.15	.22	.46	.28	
One	.25	.28	.25	.23	.20	.26		.23	.25	.20	.15	.18	.27	
Both	.44	.23	.56	.58	.38	.50	<.001	.44	.29	.65	.63	.36	.45	<.001
Paternal education														
Missing	.32	.26	.46	.45	.26	.31		.21	.12	.30	.39	.14	.21	
No	.29	.52	.35	.24	.28	.16		.32	.58	.24	.27	.38	.16	
Primary	.23	.18	.15	.19	.26	.27		.29	.24	.39	.23	.29	.32	
Secondary and above	.16	.04	.04	.12	.20	.26		.18	.07	.07	.10	.19	.30	<.001
Maternal education														
Missing	.35	.25	.41	.50	.28	.37		.23	.13	.31	.40	.16	.24	
No	.39	.66	.42	.30	.41	.25		.46	.73	.44	.37	.54	.30	
Primary and above	.26	.09	.18	.20	.30	.38	<.001	.31	.14	.25	.23	.30	.45	<.001
Brother														
No	.31	.23	.31	.32	.29	.37		.20	.12	.18	.18	.17	.29	
One	.32	.26	.35	.33	.38	.32		.35	.30	.39	.42	.33	.35	

(Continued)

Table 2. Continued.

	Male							Female						
	All	Rural native	Int. migrant	Temp. migrant	Perm. migrant	Urban native	<i>F</i> / $\chi^2$ - <i>difference</i>	All	Rural native	Int. migrant	Temp. migrant	Perm. migrant	Urban native	<i>F</i> / $\chi^2$ - <i>difference</i>
Two and above	.36	.50	.35	.35	.32	.31	<.001	.45	.59	.42	.40	.50	.36	<.001
Sister														
No	.30	.18	.19	.30	.35	.37		.28	.19	.31	.26	.22	.37	
One	.33	.29	.41	.38	.33	.33		.32	.31	.34	.39	.37	.27	
Two and above	.36	.53	.41	.32	.32	.29	<.001	.40	.50	.35	.34	.41	.36	<.001
Region														
West	.23	.24	.31	.22	.25	.19		.21	.24	.20	.21	.24	.18	
Central	.40	.44	.43	.33	.46	.36		.40	.47	.42	.36	.46	.35	
East	.38	.32	.25	.46	.29	.45	<.001	.39	.30	.38	.43	.30	.47	<.001
Schooling years	9.13	6.27	7.69	9.30	10.19	10.56	<.001	7.78	3.75	7.06	8.23	7.75	10.18	<.001
Schooling years, SD	3.76	3.28	2.77	3.66	3.97	3.07		4.45	3.54	3.08	3.99	4.33	3.43	
Occupation														
No work	.25	.10	.08	.20	.44	.32		.45	.17	.20	.45	.63	.56	
Higher controller	.10	.05	.04	.09	.20	.11		.08	.03	.04	.08	.08	.12	
Routine non-manual	.09	.01	.03	.09	.10	.15		.12	.01	.03	.19	.11	.17	
Manual Farm-related	.37	.20	.53	.57	.24	.41		.15	.08	.31	.25	.17	.13	
Farm-related	.18	.64	.32	.05	.03	.01	<.001	.20	.72	.42	.03	.01	.02	<.001
<i>n</i>	1,290	281	118	172	234	485		1,635	379	71	265	306	614	

Notes: CCP = Chinese Communist Party. Column percentages may not sum to 1 due to rounding.

**Table 3.** Descriptive statistics of family and gender values.

	Male											
	All		Rural native		Intended migrant		Temporary migrant		Permanent migrant		Urban native	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Patrilineality	2.80	1.00	2.61	.94	2.72	.94	2.80	.99	2.84	1.01	2.90	1.02
<i>Xiao</i> (unmarried)	2.01	1.26	2.06	1.17	2.02	1.40	1.84	1.08	2.04	1.35	2.01	1.28
<i>Xiao</i> (married)	1.53	.92	1.58	.82	1.34	.85	1.47	.92	1.57	1.00	1.55	.95
<i>Jing</i> (filial piety)	1.23	.75	1.32	.73	1.21	.80	1.27	.76	1.17	.73	1.18	.74
Gender role	2.38	1.09	2.21	1.13	2.20	1.15	2.31	1.06	2.51	1.11	2.48	1.02
Marriage and divorce	3.06	1.01	2.90	.99	2.94	1.04	3.15	.95	3.00	.98	3.19	1.02
<i>n</i>		1290		281		118		172		234		485

	Female											
	All		Rural native		Intended migrant		Temporary migrant		Permanent migrant		Urban native	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Patrilineality	2.93	1.07	2.68	1.01	3.07	1.04	2.80	1.00	2.96	1.03	3.11	1.13
<i>Xiao</i> (unmarried)	2.06	1.28	2.06	1.24	2.05	1.29	2.04	1.38	2.06	1.22	2.08	1.30
<i>Xiao</i> (married)	1.53	.93	1.48	.86	1.42	.85	1.48	.92	1.47	.96	1.64	.96
<i>Jing</i> (filial piety)	1.21	.75	1.21	.69	1.25	.78	1.29	.72	1.27	.82	1.14	.75
Gender role	2.41	1.16	2.16	1.18	2.50	1.23	2.46	1.08	2.36	1.11	2.56	1.18
Marriage and divorce	2.99	1.05	2.77	1.07	3.07	1.09	3.00	1.04	3.00	1.03	3.12	1.04
<i>n</i>		1635		379		71		265		306		614

Notes: All indexes range from 0 to 6, where 0 = most traditional, 6 = least traditional.

are less likely to migrate when tied to familial responsibilities such as childrearing, and women in China generally marry at a younger age than men (Chen & Li, 2014). Temporary migrants have the lowest rates of marriage and parenthood, potentially due to their relatively young age and mobile lifestyle. Compared with rural natives and rural-to-urban migrants, the urban natives are better educated and more likely to take up non-manual rather than manual or farm-related work.

Table 3 presents unmatched descriptive statistics for family and gender values, disaggregated by gender and sub-population. On the one hand, the two dimensions of filial piety – *xiao* and *jing* – are generally consistent across the five groups, irrespective of gender. On the other hand, a clear trend is observed in attitudes to traditional gender roles, patrilineality and marriage and divorce: for men and women alike, values become increasingly liberal from rural natives to natives who intend to migrate, and thence to migrants. Although China's mass de-collectivisation deprived rural families of the property and other inherited assets that are important in maintaining patrilineal authority (Fan, 2003), attitudes toward patrilineality today do not seem to be more liberal in rural than in urban China. Of the five groups, female rural natives who intend to migrate hold the least traditional attitudes to traditional gender roles, patrilineality, marriage and divorce. This should in part be attributed to the narrow age-span of females who intend to migrate, as this group has the lowest mean age (31.55) and the smallest standard deviation (6.96).

### **Propensity estimates for receipt of treatment**

Table 4 presents logistic regression estimates of the propensity scores, which clearly show that China's rural-to-urban migration is a highly selective process.

**Table 4.** Logistic regression estimates of propensity scores.

	Male			Female		
	Intention to migrate $\beta$ (S.E.)	Migrate $\beta$ (S.E.)	Permanent settlement $\beta$ (S.E.)	Intention to migrate $\beta$ (S.E.)	Migrate $\beta$ (S.E.)	Permanent settlement $\beta$ (S.E.)
Age	.197 <sup>†</sup> (.117)	-.110 <sup>†</sup> (.066)	.133 (.083)	.319 (.236)	-.122* (.057)	.167* (.068)
Age <sup>2</sup>	-.004** (.001)	.001 <sup>†</sup> (.001)	-.001 (.001)	-.007* (.003)	.002** (.001)	-.001 (.001)
Married (no)	-1.422 (.948)	-.608 (.567)	.435 (.561)	-.742 (1.216)	-.437 (.718)	.780 (.628)
Child (no)						
One	1.653 <sup>†</sup> (.945)	.748 (.541)	.682 (.524)	.525 (.966)	-.479 (.604)	.060 (.487)
Two and above	1.730 <sup>†</sup> (.962)	-.606 (.546)	-.141 (.590)	.497 (1.013)	-1.880** (.612)	-.593 (.535)
CCP member (no)	-.204 (.474)	.811*** (.243)	1.791*** (.348)	-.344 (.949)	.977 <sup>†</sup> (.403)	.977* (.399)
Parent(s) alive (neither)						
One	-.037 (.444)	-.063 (.265)	-.280 (.391)	-.256 (.516)	-.108 (.213)	.042 (.312)
Both	.403 (.494)	.403 (.313)	.160 (.419)	-.383 (.486)	.187 (.226)	-.236 (.313)
Paternal education (no)						
Missing	-.240 (.498)	-.399 (.388)	.350 (.629)	.554 (.885)	-.026 (.452)	-.501 (.669)
Primary	-1.071* (.500)	.513 <sup>†</sup> (.272)	.238 (.395)	.427 (.463)	.227 (.213)	.335 (.299)
Secondary and above	-1.355 <sup>†</sup> (.795)	1.069* (.431)	.938* (.478)	-.566 (.754)	.602* (.303)	1.069** (.385)
Maternal education (no)						
Missing	-.605 (.477)	.667 <sup>†</sup> (.370)	-.035 (.586)	-.132 (.827)	.875* (.431)	.367 (.629)
Primary and above	1.407* (.559)	1.008** (.326)	.157 (.387)	-.016 (.493)	.705** (.239)	-.056 (.298)
Brother (no)						
One	-.216 (.384)	.312 (.249)	-.134 (.308)	-.012 (.501)	.010 (.251)	-.162 (.301)
Two and above	-.729 <sup>†</sup>	-.151	-.831*	-.338	-.100	-.195

(Continued)

**Table 4.** Continued.

	Male			Female		
	Intention to migrate $\beta$ (S.E.)	Migrate $\beta$ (S.E.)	Permanent settlement $\beta$ (S.E.)	Intention to migrate $\beta$ (S.E.)	Migrate $\beta$ (S.E.)	Permanent settlement $\beta$ (S.E.)
Sister (no)	(.393)	(.240)	(.337)	(.497)	(.240)	(.300)
One	-.152 (.420)	-.329 (.247)	-.278 (.299)	-.224 (.441)	.256 (.216)	-.197 (.264)
Two and above	-1.011* (.412)	-.943*** (.242)	-.304 (.316)	-.435 (.434)	.093 (.207)	-.163 (.269)
Region (West)						
Central	-.372 (.353)	-.043 (.235)	.279 (.314)	-.065 (.464)	-.044 (.191)	.191 (.251)
East	-.519 (.390)	-.015 (.250)	-.204 (.313)	-.198 (.502)	-.033 (.207)	-.181 (.259)
Schooling years	.017 (.056)			.127* (.060)		
Occupation (no)						
Higher controller	-.310 (.845)			-.042 (1.022)		
Routine non-manual	.566 (1.063)			-.534 (1.207)		
Manual	.803 (.542)			1.094* (.557)		
Farm	-.655 (.538)			-.593 (.485)		
Constant	-1.154 (2.233)	3.243* (1.390)	-4.625** (1.729)	-3.678 (3.631)	3.469** (1.212)	-5.110*** (1.431)
McFadden's pseudo- $r^2$	.332	.216	.231	.378	.162	.172
N	399	687	406	450	950	571

Notes: CCP = Chinese Communist Party. Reference category in brackets.

<sup>†</sup> $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .



*Who intends to migrate?* The results show that younger rural natives, both men and women, have greater tendency to migrate to urban areas. Men with better educated mothers are more likely to intend to migrate. Women working in the manual sector are more likely to intend to migrate than unemployed women or women who work in the non-manual sector. The latter finding is consistent with the fact that most rural migrants migrate to urban areas to work in manual factory jobs. The length of schooling is positively associated with rural women's but not rural men's intention to migrate.

*Who is likely to migrate?* The results indicate that younger people are more likely to be rural-to-urban migrants than rural natives. Having more than one child decreases the likelihood of migration for women but not for men, which is consistent with the gendered orientation of childcare responsibilities in China (Evans & Strauss, 2011). Men who are members of the CCP are more likely to migrate than non-CCP members. Respondents with better educated parents are more likely to migrate than those with parents who received little or no education, perhaps because parents with more education are more likely to encourage their children to study or work in urban areas (Liang, 2001). A high level of parental cultural capital may also provide a valuable resource enabling or encouraging children to migrate.

*Which migrants are likely to settle down in urban areas?* Older migrants are more likely to be permanent than temporary migrants, partly due to the considerable time needed for rural migrants to qualify for urban *hukou*. The findings show that men and women with better educated fathers are more likely to be permanent than temporary migrants than those with fathers who received little or no education. CCP membership is significantly associated with an increased probability of permanent settlement in urban areas over temporary migration.

### The impact of rural-to-urban migration

Tables 5 and 6 present treatment effects (ATT) of intended, temporary and permanent migration on family and gender values, disaggregated by gender, before and after the regression adjustment (RA) for education and occupation.

**Table 5.** Summary of average treatment effect on the treated (intended migrant) using propensity score matching, with rural native as the control group.

	Male		Female	
	Unmatched ATT (S.E.)	Matched ATT (S.E.)	Unmatched ATT (S.E.)	Matched ATT (S.E.)
Patrilineality	.112 (.103)	.135 (.124)	.392** (.131)	.005 (.195)
Xiao (unmarried)	.034 (.137)	.198 (.160)	-.015 (.161)	.036 (.201)
Xiao (married)	-.243** (.091)	.081 (.118)	-.057 (.111)	-.312* (.147)
Jing (filial piety)	-.107 (.083)	-.016 (.097)	.048 (.091)	-.029 (.110)
Gender role	.011 (.124)	-.005 (.141)	.340* (.153)	-.065 (.240)
Marriage and divorce	.041 (.110)	-.096 (.129)	.300* (.138)	.155 (.196)
<i>n</i> Treated	118	111	71	69
<i>n</i> Control	281	166	379	108

Notes: Local linear regression matching restricted to region of common support.

\* $p < .05$ , \*\* $p < .01$ .

**Table 6.** Summary of average treatment effect on the treated using propensity score matching and regression adjustment.

	Rural native (control) vs Migrant (temporary and permanent, treated)					
	Male			Female		
	Unmatched ATT (S.E.)	Matched ATT (S.E.)	RA ATT (S.E.)	Unmatched ATT (S.E.)	Matched ATT (S.E.)	RA ATT (S.E.)
Patrilineality	.212** (.076)	.154* (.071)	.066 (.087)	.207** (.067)	.159* (.066)	-.060 (.080)
<i>Xiao</i> (unmarried)	-.098 (.094)	-.101 (.087)	-.027 (.108)	-.018 (.084)	-.200* (.078)	-.486*** (.100)
<i>Xiao</i> (married)	-.056 (.071)	-.141* (.064)	-.132 <sup>†</sup> (.078)	-.001 (.060)	-.182*** (.053)	-.219** (.069)
<i>Jing</i> (filial piety)	-.109 <sup>†</sup> (.057)	-.133* (.052)	.048 (.063)	.072 (.049)	.044 (.045)	.135* (.058)
Gender role	.214* (.086)	.043 (.082)	-.323** (.098)	.248*** (.075)	.139* (.071)	-.316*** (.087)
Marriage and divorce	.169* (.076)	.221** (.075)	.011 (.090)	.230*** (.069)	.144* (.062)	-.107 (.079)
<i>n</i> Treated	406	392	392	571	568	568
<i>n</i> Control	281	132	132	379	206	206

	Temporary migrant (control) vs Permanent migrant (treated)					
	Male			Female		
	Unmatched ATT (S.E.)	Matched ATT (S.E.)	RA ATT (S.E.)	Unmatched ATT (S.E.)	Matched ATT (S.E.)	RA ATT (S.E.)
Patrilineality	.032 (.101)	.177 (.109)	.108 (.118)	.153 <sup>†</sup> (.085)	.383*** (.081)	.330*** (.079)
<i>Xiao</i> (unmarried)	.208 <sup>†</sup> (.125)	.197 (.128)	.218 (.142)	.020 (.109)	-.300** (.109)	-.200 <sup>†</sup> (.110)
<i>Xiao</i> (married)	.097 (.097)	.014 (.095)	.048 (.105)	-.014 (.079)	-.130 <sup>†</sup> (.077)	-.100 (.078)
<i>Jing</i> (filial piety)	-.097 (.074)	-.306*** (.075)	-.255** (.082)	-.022 (.065)	-.012 (.061)	-.005 (.062)
Gender role	.195 <sup>†</sup> (.110)	.222* (.106)	.053 (.116)	-.098 (.092)	.035 (.082)	-.026 (.083)
Marriage and divorce	-.145 (.097)	-.175 <sup>†</sup> (.096)	-.283** (.102)	.002 (.087)	.217* (.085)	.163 <sup>†</sup> (.084)
<i>n</i> Treated	234	198	198	306	300	300
<i>n</i> Control	172	82	82	265	116	116

Notes: Local linear regression matching restricted to region of common support; RA = regression adjustment for education and occupation (full results for regression adjustment available upon request from the author).  
<sup>†</sup>*p* < .10, \**p* < .05, \*\**p* < .01, \*\*\**p* < .001.

*Rural natives vs intended migrants.* After controlling for confounding demographic characteristics during matching, no substantial difference is observed between male rural natives and intended migrants in any of the domains of family and gender values. However, rural native women who intend to migrate are found to hold more traditional attitudes towards *xiao* (married) than those who do not intend to migrate. This may be because women’s intention to migrate entails the assumption that they will support their rural families via remittances.

*Rural natives vs migrants (both temporary and permanent).* The finding that migration has different impacts on different ideational domains is consistent with the ideational inconsistency reported in previous research (Hu, 2016; Hu & Scott, 2014). Compared with rural natives, both male and female migrants hold less traditional attitudes towards patrilineality, marriage and divorce. While male migrants hold more traditional

attitudes to both *xiao* (married) and *jing*, female migrants hold more traditional attitudes to *xiao* (married) but not *jing*. The impact of migration on values pertaining to patrilineality and marriage and divorce is significantly mediated and thus explained by occupational and educational factors. In addition, women’s education and occupation mediate the treatment effect of migration on their gender-role values. This is consistent with the finding of past research that education and occupation have played a significant part in de-traditionalising women’s gender roles (Evans & Strauss, 2011; Hu, 2015).

*Temporary vs permanent migrants.* The results reveal substantial differences in family and gender values between temporary and permanent migrants. Among the men, permanent migrants hold more traditional attitudes to *jing* but less traditional gender values than temporary migrants, net of occupational and educational factors. In terms of

**Table 7.** Summary of average treatment effect on the treated using mechanical matching and regression adjustment.

	Urban native (control) vs Temporary migrant (treated)					
	Male			Female		
	Unmatched ATT (S.E.)	Matched ATT (S.E.)	RA ATT (S.E.)	Unmatched ATT (S.E.)	Matched ATT (S.E.)	RA ATT (S.E.)
Patrilineality	-.097 (.090)	-.044 (.099)	.018 (.102)	-.309*** (.080)	-.426*** (.090)	-.364*** (.093)
<i>Xiao</i> (unmarried)	-.176 (.109)	-.075 (.121)	-.110 (.124)	-.047 (.097)	-.092 (.111)	-.186 (.113)
<i>Xiao</i> (married)	-.083 (.083)	-.017 (.093)	-.041 (.096)	-.157* (.070)	-.137 <sup>†</sup> (.080)	-.159 <sup>†</sup> (.083)
<i>Jing</i> (filial piety)	.084 (.066)	.132 <sup>†</sup> (.073)	.130 <sup>†</sup> (.075)	.150** (.055)	.150* (.063)	.127 <sup>†</sup> (.065)
Gender role	-.173 <sup>†</sup> (.092)	-.077 (.101)	-.040 (.104)	-.098 (.085)	-.183 <sup>†</sup> (.096)	-.115 (.098)
Marriage and divorce	-.041 (.089)	-.017 (.097)	-.035 (.100)	-.118 (.076)	-.216* (.086)	-.193* (.089)
<i>n</i> Treated		172			265	
<i>n</i> Control		485			614	

	Urban native (control) vs Permanent migrant (treated)					
	Male			Female		
	Unmatched ATT (S.E.)	Matched ATT (S.E.)	RA ATT (S.E.)	Unmatched ATT (S.E.)	Matched ATT (S.E.)	RA ATT (S.E.)
Patrilineality	-.066 (.081)	.018 (.085)	.038 (.086)	-.156* (.077)	.000 (.081)	.002 (.082)
<i>Xiao</i> (unmarried)	.031 (.104)	-.003 (.110)	.014 (.111)	-.028 (.089)	-.105 (.097)	-.141 (.097)
<i>Xiao</i> (married)	.014 (.077)	-.017 (.081)	-.003 (.082)	-.171* (.067)	-.238** (.072)	-.227** (.073)
<i>Jing</i> (filial piety)	-.012 (.059)	.022 (.062)	.052 (.063)	.128* (.054)	.136* (.059)	.118* (.059)
Gender role	.022 (.084)	.062 (.088)	.020 (.089)	-.196* (.081)	-.091 (.087)	-.085 (.087)
Marriage and divorce	-.186* (.080)	-.068 (.083)	-.067 (.084)	-.116 (.072)	.015 (.077)	.020 (.078)
<i>n</i> Treated		324			306	
<i>n</i> Control		485			614	

Notes: Mechanical matching applied; sample characteristics in Table 2 matched for all models. RA = regression adjustment for education and occupation (full results for regression adjustment available upon request from the author).

<sup>†</sup>*p* < .10, \**p* < .05, \*\**p* < .01, \*\*\**p* < .001.

gender-role values, the treatment effect of urban settlement on men is substantially reduced by educational and occupational factors. Among the women, permanent migrants hold less traditional attitudes to patrilineality, marriage and divorce, yet more traditional attitudes to *xiao* (unmarried) than temporary migrants. The results show that the influence of urban settlement on women's attitudes to filial piety, marriage and divorce is mediated by educational and occupational factors.

*Urban natives vs migrants (temporary and permanent, respectively).* Table 7 presents the results of mechanical matching, following traditional migration studies, between urban natives (the control group), temporary and permanent migrants, respectively. Among the men, no substantial differences are found between urban natives and temporary or permanent migrants. However, the results show a significant gender difference. Both temporary and permanent female migrants hold more traditional attitudes toward *xiao* (married) yet less traditional attitudes to *jing* than their urban-native counterparts. It is likely that women's rural-to-urban migration entails an obligation to provide financial support for their rural families (*xiao*). At the same time, economic empowerment may have enabled female migrants to de-anchor themselves from the non-financial aspects of filial piety (*jing*). Temporary (but not permanent) migrants hold more traditional attitudes to patrilineality and marriage and divorce than urban natives, and the gap is only slightly reduced by the inclusion of education and occupation.

## Conclusions and discussion

Rural-to-urban migration on a vast scale has created an important socioeconomic connection between China's rural and urban areas (e.g. Chan, 2010; Deng & Gustafsson, 2014; Gu, 2014; Knight et al., 2011). However, little is known about the potential influence of rural-to-urban migration on Chinese family and gender values. In this study, PSM analysis of data from the 2006 CGSS sheds new light on how China's distinctive institutional features configure the ideational impact of the country's rural-to-urban migration.

Most previous researchers, drawing on assimilationist theories, have compared migrants with natives of host societies (Alba & Nee, 1997; Gordon, 1964). However, I would like to underline the need to compare those who migrate with those who stay in rural areas since different factors underlie the selection process at distinct stages of migration. A key contribution of this research lies in its differentiation of migratory stages. Although the association between migration and changing sociocultural values has long been acknowledged, we know little about the processes of ideational change at different migratory stages. Is migration preceded by shifts in sociocultural values? How, if at all, does migration help to produce ideational change? As most rural Chinese migrate to urban areas for education or work, it is crucial to disentangle the influences of occupational and educational factors from geographical migration.

The findings from this research indicate that China's rural-to-urban migration is not preceded by ideational differences. Departing from the assimilation model of a unidirectional ideational change through migration, the results indicate that the impacts of China's rural-to-urban migration on domains of family and gender values are diverse and gendered. On the one hand, values pertaining to gender roles, marriage, divorce and patrilineality are most traditional among rural natives, becoming more liberal among temporary migrants,

permanent migrants and thence urban natives. Whereas ideational change during migration in the West is largely explained by migrants' exposure to host societies (Alba & Nee, 1997), the influence of China's rural-to-urban migration on values pertaining to patrilineality, gender roles, marriage and divorce is substantially mediated by educational and occupational factors. Migration is likely to give rural migrants the bargaining power to break away from traditional values, due to their participation in education and particularly work, which generates remittances for their rural families. Therefore, although China's de-collectivisation may not have directly de-traditionalised family and gender values in rural areas, it is likely to have contributed indirectly to de-traditionalisation by encouraging the migration of rural residents to urban areas and engage in the pursuit of work and/or education (Fan, 2003).

On the other hand, the results reveal the opposite pattern in attitudes to filial piety, which are least traditional among rural natives and become more traditional among temporary migrants, permanent migrants and thence urban natives. In part, this can be ascribed to the concentration of educational resources in urban rather than rural areas, as education has played an important role in 'engineering' filial piety as a 'Chinese virtue' (Chen & Li, 2014). In addition, the non-familial assistance provided for the elderly in urban (but not rural) areas, such as pensions and medical subsidies, may make it less onerous for urbanites to support values pertaining to filial piety. Among the female respondents, migration is associated with an increased support for the material dimension of filial piety, perhaps because female migrants are expected to support their rural families via remittances. However, female migrants' attitudes to the non-material dimension of filial piety do not seem to be bound by their expected financial role. Therefore, rural-to-urban migration not only affects different domains of family values in different ways, but has distinct implications for different facets of a single value.

The results confirm the selective nature of China's rural-to-urban migration. For example, parents' occupation and education are significantly associated with children's migration intention and behaviour. CCP membership, a source of political capital exclusive to China (Gold, Guthrie, & Wank, 2002), is positively associated with rural-to-urban migration and urban settlement. Political capital may facilitate the process of migration and settlement; conversely, migrants may seek a sense of 'belonging' or access to social resources through CCP membership. A gendered pattern is clear that having children negatively predicts female migration. This is consistent with the prevalence in China of 'left-behind' women whose husbands and male siblings have migrated to urban areas to work, while they remained in rural areas as major care providers (Nguyen, Yeoh, & Toyota, 2006).

Although some migrants eventually return to settle in their rural places of origin, a large number move back and forth in a migration cycle. It should be noted that ideational change may arise from interaction between rural natives who have never migrated and returning or even temporary migrants. Unfortunately, due to the lack of a measure taken towards the duration of migration, the outcome of comparison between temporary and permanent migrants in terms of *hukou* is sensitive to random selection in both samples. Similarly, PSM estimates are restricted to the aggregate level. Despite its limitations, however, this research demonstrates the importance of investigating the ideational impact of China's rural-to-urban migration and the selective nature of the migratory process in light of China's particular social, historical and political characteristics. Building on this foundation,

future researchers are encouraged to conduct longitudinal and in-depth qualitative analysis to explore the nuances of ideational change at an individual level.

## Note

1. For the permanent migrants, a strong collinearity is observed between the length of time since obtaining urban *hukou* and age (variance inflation factor > 10). Therefore, the former variable is excluded from the analysis. Multiple collinearity can significantly reduce the efficiency of matching (Pingel & Waernbaum, 2015), and respondents' age should provide a good control for the length of time since obtaining urban *hukou*. I further regress the time spent in possession of urban *hukou* on the permanent migrants' family and gender values, controlling for the demographic characteristics reported in Table 4. The variable is not found to have a significant impact (at 10% level) on any of the family and gender values net of respondents' age.

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