



# Community social capital, migration status, and Chinese rural children's psychosocial development

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#### Abstract

Migration's impact on Chinese rural children's psychosocial development is the subject of growing research attention. While scholars highlight the critical role of social support, they have yet to systematically examine whether and how community social capital, which provides proximal social support for families, affects rural children's psychosocial development as well as whether such associations vary by children's migration status. Using data from the child component of the 2012 Chinese Urbanization and Labor Migration Survey, this article shows that community social capital reduces children's behavioral and emotional problems: however, left-behind children and migrant children gain less from community social capital than children with at-home parents. In addition, left-behind girls fare worse and gain less from community social capital than leftbehind boys. Together, these findings imply that community social capital reinforces the disadvantaged psychosocial development of rural children who experience parental migration and evidence the enduring gender inequality in rural China.

#### **KEYWORDS**

behavioral and emotional problems, community social capital, left-behind children, migrant children, psychosocial development, rural China

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## 1 | INTRODUCTION

In China, the rural-to-urban labor migration has produced diverse living arrangements for rural children. In particular, this migration flow has generated two vulnerable groups: left-behind children remaining in the rural area with at least one parent away working as a migrant, and migrant children living on the edge of cities with rural-to-urban migrant parents (Liang, 2016). The 2010 census estimated that there were 61 million left-behind children and 35.8 million migrant children, accounting for 21.9% and 12.9% of all children, respectively (All-China Women's Federation [ACWF], 2013).

Research has largely shown the negative consequences of labor migration on left-behind children and migrant children's psychosocial development. Compared with rural peers who grow up with two parents, left-behind children show higher levels of depression, anxiety, and loneliness (Cheng & Sun, 2015; Dai & Chu, 2018; Fan et al., 2010; Jia & Tian, 2010; Liu et al., 2009; Murphy et al., 2016; Shi et al., 2016). Migrant children seem to fare better than left-behind children (Ren & Treiman, 2016; Xu et al., 2013), but they still suffer from higher than average levels of anxiety and loneliness (Hu et al., 2009; Lu & Zhou, 2013; Wang et al., 2017) as well as more behavioral and emotional problems (Li et al., 2008). Most often, scholars have attributed the negative consequence of labor migration on rural children to reduced family support (Lu et al., 2016; Su et al., 2013; Xu et al., 2019; Zhao et al., 2017) and called for rural families and schools to take actions (Chen et al., 2013; Dai & Chu, 2018; Hu et al., 2014).

Only recently have studies started to assess whether and how community social capital, which provides the proximal social support for families (Putnam, 2001, 2016; Sampson et al., 1999), affect Chinese rural children's psychosocial development (Huang et al., 2018; Wu & Palinkas, 2012; Wu et al., 2011, 2012; Wu, 2017), yet so far, such work has concentrated on migrant children (e.g., Wu et al., 2011, 2012) and remains negligible for left-behind children (except for Wu et al., 2015). Most research is based on small local studies and provides inconclusive evidence about whether community social capital can protect children with migration status. Whether the benefit of community social capital on children's psychosocial development varies by children's migration status remains unclear.

To fill these gaps, we used a nationally representative sample to systematically examine whether community social capital can reduce Chinese rural children's behavioral and emotional problems. The survey collected the Behavioral Problems Index (BPI) (Peterson & Zill, 1986), which represents a comprehensive and reliable measure of children's behavioral and emotional problems rather than separate scales composed of one or only a few items (Amato & Fowler, 2002). Specifically, we ask three questions: (1) What's the association between community social capital and Chinese rural children's psychosocial development? (2) Does such association differ by rural children's migration experience? And (3) whether these associations (both the main and the moderating relationship) differ by rural children's age and gender?

## 1.1 | Community social capital for children's psychosocial development

It is well established that community social capital matters for child development. Community social capital refers to the connections among neighbors and the various forms of community participation they perform. These community-level connections and participation form one type of social capital for child development, because "social resources inherent in social relationships ... facilitate a social outcome" (Coleman, 1990, p. 302). The large body of literature on neighborhood effect shows that children benefit from a positive community social environment (for reviews, see Sampson et al., 2002; Sharkey & Faber, 2014). In his 2016 book, *Our Kids*, Robert Putnam argued that concentrations of neighborhood poverty are deleterious to child development in the United States not only because of economic resources but also–and more importantly–because poverty manifests a deficit in community trust and vitality. In a study of intergenerational mobility in all zip codes in the United States, Chetty et al. (2014) found that, after controlling for income inequality and residential segregation, community social capital had a correlation of 0.642 to children's chances of upward mobility.

Specifically, community social capital is crucial to children's psychosocial development, as it provides a proximal source of social support for families. Coleman's (1988) concept of "intergenerational closure" regards both

parent-child bonding and parent-parent connections as vital for child development. Parent-parent connections can provide an additional source of information and monitoring for children's problematic behaviors. These parent-parent connections are more effective when embedded within one community, because "a parent who has many friends or acquaintances ... is limited in the benefits ... if those friends do not include the parents or relatives of his or her own children's friends" (Sampson et al., 1999, p .635). Empirical research demonstrates that communities rich in social capital have high mutual trust among neighbors thus benefitting children's mental health (Almedom, 2005; Meltzer et al., 2007; Putnam, 2016; Rankin & Quane, 2002; Stevenson, 1998). Deficits in community social capital, by contrast, have reduced the community capacity to exert informal social control over children and youth's problematic behaviors (Browning et al., 2005; Dorsey & Forehand, 2003; Drukker et al., 2003; Sampson et al., 1999). Sampson et al. (2002) summarized this dynamic succinctly, explaining that "low neighborhood cohesion is linked to greater mental distress ... among adolescents" (p. 459).

The literature on Chinese rural children indicates that community social capital can protect children's psychosocial social development. Left-behind children were psychologically better in communities with higher levels of social capital (Wu et al., 2015). In a series of studies on migrant children in Shanghai, Wu and colleagues (Wu & Palinkas, 2012; Wu et al., 2011, 2012) found that community social capital improved migrant children's self-esteem and life satisfaction as well as reduced their depression symptoms and hostility level. Migrant children living in communities rich in social capital also enjoyed better relations with parents and peers, which in turn benefited their mental health (Wu, 2017).

Because behavioral and emotional problems operate as our measure of psychosocial development, we form the first hypothesis thusly:

H1: Community social capital is associated with children's fewer behavioral and emotional problems.

#### 1.2 | The nexus of family and community

Children with migration experience may have different levels of family support than those with at-home parents, which in turn, may moderate the role of community social capital on psychosocial development. Existing research shows that both left-behind children and migrant children received weaker family support than rural children with at-home parents. Because of physical separation, left-behind children tended to have infrequent communication with—thus were submitted to less monitoring from parents—and were often subject to harsh parenting styles (Lu et al., 2016; Xu et al., 2019). Although migrant children stay with parents, their parents, because of low human capital and institutional barriers, tend to work in jobs that are physically demanding, low-skilled, and dangerous (for a review, see Liang, 2016). Their long working hours (Lu & Wang, 2013) reduced the time available for spending with children. As a result, both left-behind children and migrant children experienced higher levels of loneliness and emotional distress than rural children with at-home parents (Chang et al., 2019; Hu et al., 2009, 2014; Lu et al., 2016; Jia & Tian, 2010; Lu & Zhou, 2013; Wang et al., 2017; Zhao et al., 2017).

How would family support moderate the degree of protection children receive from community social capital? In general, two competing theories—namely, compensation and relative deprivation—differ on to what extent children with different levels of family support are likely to be sensitive to neighborhood social environments.

Theories of compensation propose that community social capital can compensate for family support for child development. Children with strong family support rely less on the community (Rankin & Quane, 2002). However, when family support is weak, children must rely heavily on other adults in the community for resources and social support (Wilson, 1987). That is, community social capital can serve as recompense for family support. Browning et al. (2005), for example, found that community social capital delayed sexual initiation, but only for adolescents with weak family support. As such, children with weaker family support experienced greater exposure to community social capital and were likely to benefit more from it.

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H2a: The association between community social capital and children's behavioral and emotional problems is bigger for Chinese rural children with migration experience than for those with at-home parents.

In contrast, theories of relative deprivation posit that children with weak family support also gain less from community social capital. Community social capital relies on community connections built by parents for informal social support (Coleman, 1988). In other words, the level of parental involvement in the community determines the extent to which children can benefit from community social capital. Furthermore, children are not passive recipients in the community. Children evaluate themselves and are evaluated by adults and peers in the community (Marsh, 1987). Children with weaker family support in communities with rich social capital may suffer from stigmatization or other harmful psychological or emotional stress that attenuates the potential benefits of living in such communities (Cheng & Sun, 2015).

Evidence suggests that rural children with migration experience lower levels of community engagement than those with at-home parents. For left-behind children, parental out-migration eliminates left-behind children's community social connections and reduces their community engagement (Wu et al., 2015). Left-behind children may develop negative self-perception (Cheng & Sun, 2015) that prevents them from connecting and mobilizing community social capital for their own sake. For migrant children, lower community attachment may restrict them to gain from community social capital. Because of migrants' marginalized positions in cities, migrant children live in precarious housing conditions and experience frequent residential moves (Huang et al., 2018). Furthermore, given the overall aloofness in Chinese urban communities, migrant children often encounter ignorance or rejection as tenants, which makes them reluctant to engage in urban communities (Wu & Palinkas, 2012). In this sense, rural children with migration experience are relatively deprived, as lower community attachment due to migration experience reduces their access to and the mobilization of community social capital for psychosocial development.

**H2b:** The association between community social capital and children's behavioral and emotional problems is smaller for Chinese rural children with migration experience than for those with at-home parents.

#### 1.3 | Age and gender difference

Community social capital may also have a heterogeneous impact on psychosocial development, depending on children's age and gender. Age matters because adolescents are more sensitive to community social capital than younger children (Ananat et al., 2011; Ellen & Turner, 1997; Wodtke et al., 2016). Gender matters because girls are more susceptible to community social capital than boys (Clampet-Lundquist et al., 2011; Kling et al., 2007). Yet the prevailing and persistent son preference may put Chinese rural girls in a disadvantaged position relative to Chinese rural boys in terms of benefitting from community social capital (Cherng & Hannum, 2013). Thus, we expect that the benefit of community social capital (H1), as well as the moderating role of family support (H2a and H2b) on community social capital, can be age- and gender-specific.

Children's age may affect the extent to which community social capital protects children's psychosocial development. For children at the primary school age or younger, the family environment is the most influential setting for development (Ellen & Turner, 1997). Evidence from Chinese left-behind children suggests that parental absence is detrimental for children's psychosocial development and cannot be compensated by increased family resources or parental retuning at older ages (Chang et al., 2019; Fan et al., 2010; Liu et al., 2009). Given the critical role of the family at this life stage, community social capital may not yield much protection for children at younger ages than adolescents.

Children's age may also affect how family supports moderates the relationship between community social capital and psychosocial development. Compared to young children, adolescents are more sensitive to peer influence in surrounding environments (Ling, 2017; Zhang et al., 2020) and exert greater agency to engage in communities (Ling, 2015). Thus, if compensation theories are correct (H2a), we expect adolescents with migration experience may benefit more from community social capital than younger children with migration experience.

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If theories of relative deprivation are correct (H2b), adolescents with migration experience may gain less from community social capital than younger children with migration experience.

Girls and boys may differ in the degrees to which community social capital protects their psychosocial development. In the Chinese patrilineal family system, sons have higher value because they continue the family line, stay with their parents, and contribute to ancestral rituals (Greenhalgh, 1988; Hu & Tian, 2018). Compared to rural boys, rural girls tend to receive less family attention and less educational investment (Hannum et al., 2008; Wang et al., 2019). Most importantly, the village social environment shapes and reinforces son preference. For example, the high sex ratio at birth concentrates in villages with strong lineage networks and visible ancestral worship (Murphy et al., 2011). The gender gap in education concentrates in villages with few economic and educational resources (Cherng & Hannum, 2013). Given the prevailing and persistent son preference in a rural area, Chinese rural girls may benefit less than rural boys from community social capital.

Girls and boys may also differ in how family supports moderates the benefit of community social capital, but the direction is more complicated. As son preference is more prevalent in rural villages than urban communities (Goodkind, 2011), the gender difference would be more salient for left-behind children more than migrant children. Thus, if compensation theories are correct (H2a), left-behind girls may gain less from community social capital than left-behind boys. If theories of relative deprivation are correct (H2b), left-behind girls may gain more from community social capital than left-behind boys.

## 2 | DATA AND MEASURES

### 2.1 | Data

Data came from the child component of the 2012 Chinese Urbanization and Labor Migration Survey, collected by Tsinghua University, China, and designed specifically to explore the impact of labor migration on children. It is a nationally representative survey that used a PPS sampling strategy to cover about 500 villages and neighborhoods in 25 provinces of mainland China (excluding Qinaghai, Tibet, and Hainan) (Lu et al., 2019; Yan, 2017). The survey collected children's information from their primary caregiver, which was then used by other scholars to study left-behind children or migrant children (e.g., Ren & Treiman, 2016). The survey initially prepared the questionnaires and instruments in English, then translated into Chinese, and then reverse translated to ensure accuracy.

We imposed two restrictions on the analytical sample. First, we restrict the sample to rural families, that is, children with agriculture *hukou* at the time of survey. Second, we limit the sample to children 6 to 15 years old. The sample size drops from 7546 to 1908. We further drop 293 cases with missing data on dependent variables and key independent variables<sup>1</sup>. The final sample size is 1615.

#### 2.2 | Measures

Our dependent variable is *behavioral and emotional problems*. The survey used Peterson and Zill's (1986) well-established Behavior Problems Index (BPI) to measure the frequency, range, and type of childhood emotional and behavioral, and emotional problems. The survey includes a total of 26 items. (Please see the English and Chinese translations in Appendix A). For each question, response options were 1 = *not true*, 2 = *sometimes true*, and 3 = *often true*. Following

<sup>&</sup>lt;sup>1</sup>The likelihood of missing data is not associated with children's migration status or community quality but is negatively associated with neighbors taking action. With regard to control variables, the missing data are likely to occur in children in disadvantage areas (i.e., poor school facilities, poor villages, and/ or in the middle or west region) and in families with weak support (i.e., low levels of support and/or high levels of punishment). That is, the sample is biased by an underrepresentation of children from disadvantage background.

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Amato and Fowler (2002), items were scored so that high scores indicated negative behavior, and the mean of the items served as the measure of children's behavioral and emotional problems. The alpha score for BPI is 0.91, indicating this measure is considered reliable.

One of the independent variables of focus is *children's migration status*. We distinguish three categories of rural children based on where they live and whom they live with. Children with at-home parents hold rural *hukou* and live with both parents in rural areas; left-behind children hold rural *hukou* and live with at most one parent in rural areas, as one or both parents have left for work; migrant children live with one or both parents in urban areas while holding a rural *hukou*. We do not include urban children with at-home parents in the sample because they have very different life experiences from rural children (Lu et al., 2019).

Another independent variable is *community social capital*, which is measured by two variables<sup>2</sup>: (a) community quality and (b) neighbors take action. Community quality measures the extent to which the community is a good place to raise children. The survey asks the primary caregiver to rate whether their community/village is a good place to raise children. Response options are 1 = relatively bad, 2 = medium, 3 = relatively good, and 4 = very good. We use this scale as a continuous variable in the models.

"Neighbors take action" measures the likelihood of neighbors taking action against deviant behavior in the community, which serves as a proxy for collective efficacy (Sampson et al., 1999). The survey asks the primary caregiver to rate the likelihood that neighbors would intervene in seven scenarios: children getting into trouble, children being rude to adults, children taking things from neighbors' houses (apartments, garages, cars, or yards), someone breaking into your house under the watchful eyes of the people, people fighting in front of your door, children playing with matches, and children scrawling on wall or cars. Response options are 1 = impossible, 2 = unlikely, 3 = likely, and and 4 = very likely. The mean of the items served as the measure of the likelihood of neighbors taking action about deviant behavior in the community. The higher number indicates a higher likelihood of neighbors taking action for the common good of the community, which indicates rich community social capital.

Control variables include child-, family-, school-, and regional-level characteristics. Child-level characteristics include gender, age, and whether the child has siblings. Family-level characteristics include the father's years of schooling<sup>3</sup>, the logarithm of family income per person, and parenting styles. Parenting styles were further classified by the extent of monitoring, support, and punishment. The monitoring measure asks whether the caregiver regulates four types of children's activities: TV watching, video games playing, peers to play with, and time to do homework. Yes to these questions are recoded as 1, responses that are added up as a measure of monitoring. The support measure asks the caregiver how often they participate in activities with, talk to, touch or cuddle, play with, and praise the child. Responses include one or two times a month, once a week, several times a week, and every day. The mean score of these questions is used as a measure of support. The punishment measure is calculated by whether the caregiver has physically punished, grounded, canceled activities, scolded, or hit the child. Yes to these questions is recoded as 1, and responses are added up as a measure of punishment. The alpha score is 0.74 for monitoring, 0.88 for support, and 0.58 for punishment. School quality is measured by the number of school facilities, including playground, library, gymnasium, laboratory, and computer center. Schools that have four or more of these facilities are recorded in the following way: 3 = good; schools having 2 or 3 are recoded as 2 = medium; and schools having 1 or 0 are recoded as 1 = bad. Finally, regional-level characteristics include a binary variable of

 $<sup>^{2}</sup>$ We also tried two other community-level measures: 1) the percentage of families in the community that have members migrate out (1 = *almost all*, 2 = *most*, 3 = *a half*, and 4 = *a few*); (2) number of relatives in the community in which the child currently lives. For the first measure, it is possible that in communities with a lot of labor out migration, left-behind children are not disconnected because such communities may legitimize parental out-migration. For the second measure, Huang et al. (2018) suggest that especially for migrant children, relatives provide additional social support and help children engage in communities. Both coefficients are not statistically significant and do not substantially alter the presented results.

<sup>&</sup>lt;sup>3</sup>We tried caregiver's literacy, which may be associated with left-behind children's behavioral and emotional problems (Lu et al., 2019). It is measured as the number of Chinese words they can recognize from the list: 自己, 世界, 羡慕, 慷慨, 敷衍, 雕琢, 踌躇, 函数, 踟蹰, 迤逦. We also tried fathers' occupation in the city (a categorical variable: self-employed/small business owner, services/skilled worker, and manual worker). Some occupations, such as commercial or service, maybe more attached to urban communities than others thus affect migrant children's behavioral and emotional problems. Both coefficients are not statistically significant and do not change the presented results.

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## 3 | RESULTS

## 3.1 | Descriptive statistics

Table 1 shows the child-, family-, school- and regional-level characteristics of three groups of rural children– namely, left-behind children, migrant children, and children with at-home parents. In the sample, 53.07% of rural children live in families in which both parents are at home; 29.85% live in families in which at least one parent is away from home (left-behind); and 17.09% of children migrate with parents to cities. The percentage of left-behind and migrant children is slightly higher than those reported by ACWF (2013), but close enough to ensure the representativeness of the sample.

All three groups of children are of similar age and gender. The children are, on average, 10 years old, and 55% are male. Left-behind children are slightly younger than the other two groups, but the gender composition of the three groups is roughly similar. This finding suggests that parents' decision to migrate for labor or to take children to migrate does not bear much to a child's age or gender. The only exception is that migrant children tend to be the only child, which may partly be why parents take his/her to live in cities.

With regard to family-level characteristics, migrant children have slightly better family socioeconomic characteristics (in terms of father's year of schooling and family income) than the other two groups. Left-behind children have the lowest level of support and monitoring in parenting style among the three groups. Thus, in terms of familylevel characteristics, migrant children are better off than the other two groups as they have better family socioeconomic resources (Ren & Treiman, 2016). Left-behind children are worse off than the other two groups, as they receive less parental support and monitoring as a result of parental absence (Chen et al., 2013; Lu et al., 2016).

Yet more noticeable differences exist in terms of school quality and geographical regions in which the three groups of children are located. Compared with the other two groups, left-behind children tend to live in western regions and in impoverished countries and to study in poor school facilities. Children with at-home parents, on the other hand, tend to live in the eastern region, which has more job opportunities for parents to remain in villages. These regional differences most likely reflect the fundamental regional income inequality (Xie & Zhou, 2014) shaping child development in China. Migrant children tend to study in schools with better facilities than those children with at-home parents, a reflection of the uneven distribution of educational resources in China.

Finally, the three groups live in neighborhoods with different levels of community social capital. On average, children with at-home parents live in communities that score the highest for raising children, followed by migrant children, and left-behind children, who live in communities with the lowest quality for raising children. A different pattern emerges for scores of neighbors taking action. In this category, migrant children live in communities with the lowest levels of neighbors taking action, a reflection of the sparse and weak connections among urban residents (Fischer, 1982; Zhang, 2009).

#### 3.2 Community social capital and children's behavioral and emotional problems

We first examine if children differ in behavioral and emotional problems due to their migration statuses. Model 1 of Table 2 includes child-level, family-level, school qualities, and regional-level characteristics as control variables. Most control variables are in the expected direction. Younger boys who grow up in the west tend to have greater behavioral and emotional problems, whereas those who study in schools with good facilities tend to have fewer behavioral and emotional problems. Caregivers' punishment is positively associated with children's behavioral and

	Total	Left-behind children	Migrant children	Children with at-home parents
Child's behavioral and emotional problems*	1.32	1.35	1.35	1.30
Child's migration status				
Child with at-home parents	53.07			
Left-behind child	29.85			
Migrant child	17.09			
Community Quality*	2.75	2.62	2.69	2.85
Neighbors take actions*	2.90	2.93	2.69	2.95
Child's age*	10.08	9.73	10.12	10.26
Male	0.55	0.55	0.57	0.55
Sibsize*	0.67	0.76	0.53	0.70
Father's years of education*	8.61	8.30	9.47	8.50
Log family income per person*	8.92	8.81	9.38	8.83
Parenting				
Support*	2.66	2.44	3.05	2.66
Monitor*	1.34	1.14	1.66	1.36
Punishment	0.33	0.37	0.34	0.30
School facilities*				
Poor	36.90	49.17	18.48	35.94
Medium	33.00	31.95	33.70	33.37
Good	30.09	18.88	47.83	30.69
Impoverished county*	0.11	0.17	0.05	0.10
Geographical location*				
East	60.06	42.53	68.12	67.33
Middle	17.96	24.48	12.68	15.99
West	21.98	32.99	19.20	16.69
Observations	1,615	790	448	254

**TABLE 1** Descriptive statistics of rural children with at-home parents, left-behind children, and migrant children

\*p < 0.05 (two-tailed test).

emotional problems. But as other research (e.g., Tian & Ying, 2021) suggests, it may not be the case that punishment leads to more behavioral and emotional problems, but rather punishment is a result of children's problems.

Left-behind children and migrant children have significantly more behavioral and emotional problems than rural children with at-home parents. Specifically, setting all control variables being equal, left-behind children is 0.034 points higher (p < 0.05), and migrant children are 0.048 points higher (p < 0.01) in behavioral and emotional problems than children with at-home parents. The results suggest that migration experiences reduce children's psychosocial development.

	Model 1	Model 2	Model 3	Model 4	Model 5
hild's migration status <sup>a</sup>					
Left-behind child (LBC)	0.034*	0.031*	0.002	-0.116*	-0.148*
	(0.015)	(0.015)	(0.043)	(0.070)	(0.080)
Migrant child (MC)	0.048**	0.038*	-0.140*	0.013	-0.184*
	(0.018)	(0.018)	(0.057)	(0.079)	(0.098)
ommunity social capital					
Community quality		-0.019**	-0.032***	-0.020**	-0.033**
		(0.007)	(0.009)	(0.007)	(0.009)
Neighbors take action		-0.024*	-0.024*	-0.040**	-0.041**
		(0.010)	(0.010)	(0.014)	(0.014)
teractions					
LBC*community quality			0.010		0.009
			(0.015)		(0.015)
MC*community quality			0.065***		0.066**
			(0.020)		(0.020)
LBC*neighbors take action				0.050*	0.052*
				(0.023)	(0.023)
MC*neighbors take action				0.008	0.014
				(0.028)	(0.028)
ontrol variables					
Child's age	-0.005*	-0.005+	-0.005*	-0.004*	-0.005*
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Male	0.045***	0.046***	0.045***	0.046***	0.045**
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
Sibsize	0.011	0.010	0.011	0.010	0.011
	(0.015)	(0.014)	(0.014)	(0.014)	(0.014)
Father's years of schooling	0.001	0.001	0.001	0.001	0.001
	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Log family income per person	-0.000	0.000	0.001	0.001	0.002
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
arenting					
Support	0.004	0.005	0.004	0.006	0.005
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Monitor	-0.002	-0.002	-0.002	-0.002	-0.002
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)

TABLE 2	Results from multivariate lin	near regressions	predicting children's	behavioral and	emotional problems
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#### TABLE 2 (Continued)

TIA	٨N	ΕT	AL

	Model 1	Model 2	Model 3	Model 4	Model 5
Punishment	0.087***	0.084***	0.082***	0.083***	0.080***
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
School facilities <sup>b</sup>					
Medium	0.011	0.012	0.012	0.011	0.011
	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)
Good	-0.039*	-0.040*	-0.039*	-0.042*	-0.040*
	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Impoverished county	0.008	0.004	-0.002	0.003	-0.004
	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)
Geographical location <sup>c</sup>					
Middle	-0.019	-0.020	-0.018	-0.019	-0.017
	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
West	0.040*	0.037*	0.039*	0.039*	0.041*
	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Constant	1.287***	1.397***	1.427***	1.441***	1.476***
	(0.077)	(0.084)	(0.085)	(0.089)	(0.090)
Observations	1615	1615	1615	1615	1615
R-squared	0.093	0.100	0.107	0.103	0.109

Note: Standard errors in parentheses.

Reference groups: <sup>a</sup>child with at-home parents, <sup>b</sup>poor, and <sup>c</sup>east.

\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001,

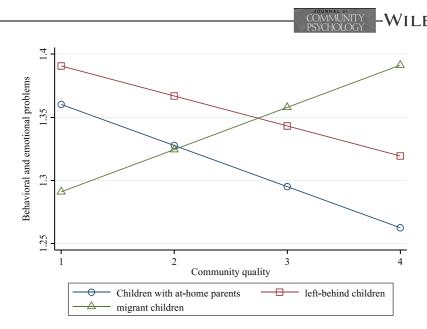
 $^{+}p < 0.1.$ 

Model 2 adds two measures of social capital—namely, community quality for study and the likelihood of neighbors taking action. Both coefficients are negative and significant. Specifically, one degree of increase in community quality reduces children's behavioral and emotional problems by 0.019 (p < 0.05), and one degree of increase in neighbors taking action reduces children's behavioral and emotional problems by 0.024 (p < 0.05). These results are consistent with most of the literature on community social capital (Sampson et al., 2002; Sharkey & Faber, 2014) showing the protective role of community social capital around children's psychosocial development.

## 3.3 | The nexus of family and community

Models 3–5 in Table 2 examine whether the protection of community social capital differs according to children's migration status. Model 3 adds interactions between children's migration status and community quality; Model 4 adds interactions between children's migration status and neighbors taking action; and Model 5 adds both interactions. The coefficients remain fairly stable across three models, so we interpret coefficients from Model 5.

Both interaction terms show a relative deprivation of community social capital for children with migration experience. In Model 5, the coefficient of interaction between community quality and left-behind children is not



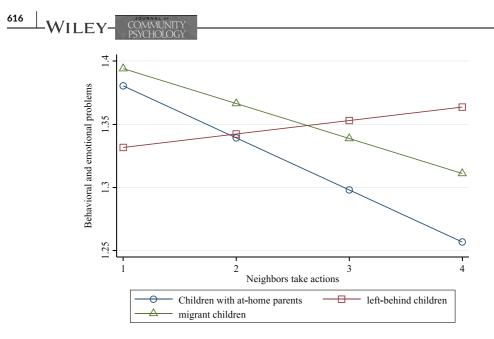
**FIGURE 1** The predicted relationship between behavioral and emotional problems and community quality by migrant status. (Calculated based on Model 5 in Table 2)

statistically significant, but between community quality and migrant children is 0.066 and statistically significant at p < 0.001 level. This suggests that migrant children gain significantly less from community quality than children with at-home parents. Figure 1 plots the predicted level of behavioral and emotional problems by community quality for children with at-home parents, left-behind children, and migrant children, respectively. For both children with at-home parents and left-behind children, living in communities with better qualities reduces their behavioral and emotional problems, but for migrant children, living in better quality communities actually increases their behavioral and emotional problems. In fact, a degree of increase in community quality is associated with a 0.033 point increase in migrant children's behavioral and emotional problems (b = -0.033 + 0.066 = 0.033).

While migrant children gain less from community quality, left-behind children gain less from neighbors take action compared with children with at-home parents. In Model 5, the coefficient for interaction between neighbors take action and migrant children are not statistically significant, but between neighbors take action and left-behind children is 0.052 and statistically significant at p < 0.05 level. This suggests that left-behind children gain significantly less from neighbors taking action than children with at-home parents. Figure 2 plots the predicted level of behavioral and emotional problems by neighbors taking action for three groups of children. Neighbors taking action reduces behavioral and emotional problems for both children with at-home parents and migrant children but does not affect left-behind children's level of behavioral and emotional problems in left-behind emotional problems. One degree of increase in neighbors taking action is not associated with substantial changes in left-behind children's behavioral and emotional problems (-0.041 + 0.052 = 0.011).

The results from Figures 1 and 2 clearly show double jeopardy of children with migration experience, whose relatively weak family support is associated with less protection from community social capital. The mechanisms seem to differ between left-behind children and migrant children. We speculate that migrant children's less gain from overall community quality than the other two groups relates to their low attachment to urban communities (Wu & Palinkas, 2012). We speculate the left-behind children's less gain from neighbors take action relates to their relative marginalized or even stigmatized positions in rural villages as a result of parental out-migration (Wu et al., 2015). It is also possible that rural neighbors would take actions only after children develop behavioral and emotional problems but urban neighbors would not do it at all. We cannot tease out these mechanisms with the existing

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**FIGURE 2** The predicted relationship between behavioral and emotional problems and neighbors take action by migrant status. (Calculated based on Model 5 in Table 2)

data set because it does not contain information on caregivers' or children's community involvement and wait for future research to differentiate these mechanisms.

## 3.4 | Age and gender difference

Table 3 shows results separately by age and gender. The impact of community social capital does not differ much by children's age. Younger children (<12 years old) are more sensitive to parental migration than adolescents (≥12 years old), yet community social capital protects younger children as well as adolescents to a similar degree. Before accounting for community social capital, younger children who are left behind or migrate with parents have higher scores in behavioral and emotional problems than children with at-home parents, but adolescents do not differ by migration status (results available upon request). When accounting for community social capital, younger children's group difference in behavioral and emotional problems largely disappears (except for a marginal significant coefficient for left-behind children). This finding suggests that, for younger children, community social capital can compensate for the negative impacts associated with labor migration.

Interestingly, while community social capital protects both younger children and adolescents, this support comes through different mechanisms. For younger children, living in a good quality community reduces behavioral and emotional problems (b = -0.025, p < 0.01); for adolescents, neighbors taking action reduces their behavioral and emotional problems (b = -0.054, p < 0.01). This data may suggest that community monitoring capacity is crucial for adolescent development (Browning et al., 2005).

But there is noticeable gender difference. First, girls suffer more than boys from parental migration. All else being equal, left-behind girls are 0.062 point (p < 0.01) higher and migrant girls are 0.043 (p < 0.1) point higher than girls living with at-home parents in terms of behavioral and emotional problems. In contrast, boys' level of behavioral and emotional problems does not differ by children's migration status.

Second, boys benefit more from community social capital than girls. For boys, one degree of increase in community quality reduces 0.024 in behavioral and emotional problems, and one degree of increase in the likelihood of neighbors taking action reduces 0.026 in behavioral and emotional problems. However, for girls, neither

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<b>TABLE 3</b> Results from multivariaby gender or age	te linear regressions pre	edicting children's beha	vioral and emotior	nal problems,
	Age		Gender	
	≤12 years old	>12 years old	Girls	Boys
Child's migration status <sup>a</sup>				
Left-behind child (LBC)	0.033+	0.007	0.062**	0.004
	(0.017)	(0.030)	(0.020)	(0.021)
Migrant child (MC)	0.033	0.049	0.043*	0.032
	(0.021)	(0.037)	(0.026)	(0.026)
Community social capital				
Community quality	-0.025**	-0.004	-0.012	-0.024*
	(0.008)	(0.013)	(0.010)	(0.010)
Neighbors take action	-0.014	-0.054**	-0.021	-0.026*
	(0.012)	(0.020)	(0.014)	(0.014)
Control variables				
Child's age	-0.007*	0.005	-0.006+	-0.004
	(0.004)	(0.016)	(0.003)	(0.003)
Male	0.042**	0.058*		
	(0.015)	(0.026)		
Sibsize	0.006	0.023	0.030	-0.003
	(0.017)	(0.031)	(0.021)	(0.020)
Father's years of schooling	0.002	-0.001	-0.001	0.002
	(0.003)	(0.005)	(0.004)	(0.004)
Log family income per person	-0.000	-0.001	0.006	-0.005
	(0.009)	(0.016)	(0.010)	(0.011)
Parenting				
Support	0.013	-0.023	0.009	0.004
	(0.008)	(0.015)	(0.010)	(0.011)
Monitor	0.000	-0.006	0.002	-0.007
	(0.006)	(0.010)	(0.007)	(0.007)
Punishment	0.082***	0.087***	0.077***	0.088***
	(0.010)	(0.025)	(0.014)	(0.013)

0.022

(0.018)

-0.042\*

(0.021)

-0.005

(0.035)

-0.030

(0.037)

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0.013

(0.023)

-0.053\*

0.015

(0.022)

-0.019

(0.025)

#### TABLE 3 (Continued)

	Age		Gender	
	≤12 years old	>12 years old	Girls	Boys
Impoverished county	0.003	0.005	0.038	-0.020
	(0.028)	(0.043)	(0.032)	(0.033)
Geographical location <sup>c</sup>				
Middle	-0.020	-0.012	-0.009	-0.027
	(0.021)	(0.036)	(0.025)	(0.026)
West	0.062**	-0.031	0.036	0.038
	(0.022)	(0.035)	(0.026)	(0.026)
Constant	1.377***	1.408***	1.302***	1.530***
	(0.098)	(0.273)	(0.113)	(0.123)
Observations	1211	404	724	891
R <sup>2</sup>	0.110	0.099	0.095	0.100

Note: Standard errors in parentheses.

Reference groups: <sup>a</sup>child with at-home parents, <sup>b</sup>poor, and <sup>c</sup>east.

<sup>+</sup>p < 0.1.

p < 0.05; p < 0.01; p < 0.01; p < 0.001.

measure of community social capital relates to behavioral and emotional problems. These coefficients are not only statistically insignificant but also substantially smaller than those of boys. Girls' fewer gains from community social capital are consistent with the research that shows rural girls receive much less attention than rural boys due to the enduring son preference (Hannum et al., 2008; Murphy et al., 2011).

Table 4 indicates whether age and gender relate to the relative deprivation of community social capital on children of different migration status. We find no gender or age difference in the coefficients of interaction terms. None of the group comparisons of the interaction terms (i.e., girls vs. boys, younger children vs. adolescents) are statistically significant<sup>4</sup>. These results suggest that the relative deprivation of community social capital on children with parental migration holds for girls and boys as well as for younger children and adolescents.

## 4 | DISCUSSION AND CONCLUSION

Since China's great migration in the 1980s (Liang, 2001), increasing scholarly and public attention has been paid to the psychosocial development of left-behind children and migrant children, the two vulnerable groups under the prosperity of improved life conditions due to internal labor migration. While scholars began to notice that community social capital may protect Chinese rural children with migration experience (e.g., Wu & Palinkas, 2012; Wu et al., 2011, 2012), most research has been based on small local studies, and no systematic analyses have been performed on national representative samples to explicitly examine how community social capital affects the

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<sup>&</sup>lt;sup>4</sup>The comparisons of coefficients of MC\*community quality interactions between boys and girls, as well as between younger children and adolescents, are not statistically significant. (p = 0.496 and p = 0.836, respectively). The comparisons of coefficients of LBC\*neighbor take action between boys and girls, as well as between younger children and adolescents, are not statistically significant (p = 0.602 and p = 0.996, respectively).

interactions between migration experience and community social capital, by gender and age				
	Age			
	≤12 years old	>12 years old	Girls	Boys
Child's migration status <sup>a</sup>				
Left-behind child (LBC)	-0.148	-0.207	-0.068	-0.213+
	(0.092)	(0.165)	(0.114)	(0.113)
Migrant child (MC)	-0.190*	-0.182	-0.142	-0.216
	(0.113)	(0.198)	(0.144)	(0.134)
Community social capital				
Community quality	-0.038***	-0.023	-0.023 <sup>+</sup>	-0.040**
	(0.011)	(0.017)	(0.013)	(0.013)
Neighbors take action	-0.034*	-0.063*	-0.033 <sup>+</sup>	-0.046*
	(0.016)	(0.026)	(0.020)	(0.019)
Interactions				
LBC × community quality	0.010	0.024	0.010	0.013
	(0.017)	(0.032)	(0.022)	(0.021)
MC × community quality	0.062**	0.079*	0.051+	0.079**
	(0.024)	(0.037)	(0.028)	(0.027)
LBC × neighbors take action	0.052+	0.049	0.035	0.061+
	(0.027)	(0.049)	(0.033)	(0.033)
MC × neighbors take action	0.020	-0.000	0.016	0.010
	(0.033)	-0.207	(0.039)	(0.040)
Controls	ADDED	ADDED	ADDED	ADDED
Observations	1211	404	724	891
R <sup>2</sup>	0.118	0.112	0.101	0.112

**TABLE 4** Results from multivariate linear regressions predicting children's behavioral and emotional problems, interactions between migration experience and community social capital, by gender and age

Note: Control variables include child's age, gender, sibsize, father's years of schooling, log family income per person, parenting style (support, monitor, and punishment), school facilities (poor, medium, good), whether an impoverished county and region (east, middle, and west). Standard errors in parentheses.

Reference group: <sup>a</sup>child with at-home parents.

<sup>+</sup>*p* < 0.1. \**p* < 0.05; \*\**p* < 0.01; \*\*\**p* < 0.001.

psychosocial development of left-behind children and migrant children and whether it compensates or reinforces the weak family support associated with migration.

Using data from 2012 Urbanization and Labor Migration Survey, we find that both left-behind children and migrant children are associated with higher levels of behavioral and emotional problems than rural children with athome parents. Community social capital, in general, reduces children's behavioral and emotional problems, but its protection is contingent on children's migration status. Both left-behind children and migration children gain less from community social capital than rural children with at-home parents. The results portray a story of relative deprivation for children with migration experience, whereby community social capital reinforces worse

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psychosocial adjustment by children with weaker family support. We speculate that these two groups of children gain less from community social capital for different reasons. Migrant children might fare worse among rich community social capital because they suffer from stigmatization and marginalization (Wu & Palinkas, 2012). Leftbehind children, on the other hand, do not benefit (but do not suffer) from rich community social capital because they are disconnected (Wu et al., 2015). We cannot examine these mechanisms with the current data and must wait for ethnographic research to unravel the mechanisms. Nevertheless, the results highlight the nexus of family and community in shaping children's psychosocial development.

The gender comparison revealed a previously ignored gender difference in the left-behind children literature. While girls can keep up with education outcomes to a much greater degree than boys when one parent is away for work (Meng & Yamauchi, 2017), these left-behind girls were psychosocially worse off than left-behind boys and benefited less from rich community social capital. This gender-specific pattern speaks to the enduring son pre-ference in rural China, which operates not only within families but also in villages.

We are aware that linear regressions have limitations. One problem, identified by several scholars, is that child psychosocial development may be endogenous in the parents' decision about whether to take the child with them in the migration. Propensity score matching (Xu et al., 2018; Xu & Xie, 2015; Yan, 2017) or instrumental variables (Huang et al., 2018) are two common approaches to account for the selection bias. In our case, we cannot use a propensity score because community characteristics are a set of key variables used in previous studies to account for the selection effect. The instrumental variable approach is also difficult because the commonly used instruments, like whether having other relatives in the village or relatives in destination cities (Huang et al., 2018), highly correlate with children's psychosocial development. We thus do not claim our results are causal but merely interpret them as associations.

But we do believe that the existence of endogeneity does not weaken, but rather reinforces, our results. For example, Wang et al. (2017) speculated that left-behind children are more resilient, independent, and proactive, thus their parents have the confidence to leave them behind. If parents purposefully leave children who have more agency or coping strategies, findings of relative deprivation from both family and community for these agentic children are even more striking.

The analyses have other limitations that wait for future research to address. First, the sample is biased by an underrepresentation of children from a disadvantaged background. The likelihood of missing data is higher for children in poor school facilities, poor or aloof villages, or the middle or the west region (see footnote on p. 10). Given that community social capital tends to be lower in economically disadvantaged places (e.g., Putnam, 2016), we may underestimate the impact of community social capital on rural children's psychosocial development. Second, two community social capital variables are subjective measures rated by caregivers. Parents who bring children to migrate or those who leave children behind may overrate the community quality to justify their decision. This justification bias could be part of the reason why these two groups of children gain less from community social capital. But because the variable of neighbors taking action records behaviors, it could be more objective than the variable of community quality. The similar results from the two variables may suggest that the presented results are not entirely driven by justification bias. Third, ideally, it would be informative to compare children residing in the same village/neighborhood, but for privacy issues the current data do not allow us to identify the location with that level of accuracy. Fourth, the caregiver's rating on the quality of the school facility may not be accurate. Given it is also a subjective measure, the ratings could be influenced by the local socioeconomic development. Fifth, we speculate that left-behind children and migrant children's less gain from community social capital is due to their reduced level of community engagement, but the current data do not have measures for caregivers' or children's community involvement to examine this mechanism in details. Sixth, family support is a multi-dimensional concept that includes not only support from parents or caregivers but also from other family members. We control for the caregiver's parenting styles but it could not suffice to capture the family support. Lastly, city life is quite different from rural villages that affect children's psychosocial development more than the characteristics captured in the presented models. Future research with more objective measures, detailed geographic information, and detailed

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information about community involvement, family support, and city characteristics can advance our knowledge about psychosocial development of three groups of children.

The community social capital theory has long viewed better communities as beneficial for child development, but our results suggest that community engagement is key to rich community social capital working in the expected direction. In our case, for rural children whose parents are absent in rural communities, the association is not significant. For rural families migrating but not integrating into urban communities, the association can even be adverse. The latter finding is also in line with the findings recorded in the "Moving to Opportunity" experiment, which sponsors poor families to live in better communities (Sampson, 2013).

We then propose two policy implications. First, we reiterate the policy urgency proposed by All China Women's Federation (ACWF, 2013) to build community support for rural children but ask for more attention to the delicate interaction between parental absence and community social capital to best help rural children, especially those already vulnerable due to parental migration. Second, simply moving children to cities but not facilitating community integration cannot benefit migrant children. Having policies that allow children to stay are not enough for these children to benefit from urban communities. Without policies or actions to facilitate community engagement, rich community social capital can hardly reduce, but rather reinforce, inequality.

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#### DATA AVAILABILITY STATEMENT

Data available on request due to privacy/ethical restrictions: The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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#### REFERENCES

- All-China Women's Federation (ACWF). (2013). Research report on the stiutation of rural left behind children and rural to urban migrant children [In Chinese]. China Women's Movement, 6, 30–34.
- Almedom, A. M. (2005). Social capital and mental health: An interdisciplinary review of primary evidence. Social Science & Medicine, 61(5), 943–964.
- Amato, P. R., & Fowler, F. (2002). Parenting practices, child adjustment, and family diversity. *Journal of Marriage and Family*, 64, 703–716.
- Ananat, E. O., Gassman-Pines, A., & Gibson-Davis, C. M. (2011). The effects of local employment losses on children's educational achievement. In G. J. Duncan, & R. J. Murnane (Eds.), Whither opportunity?: Rising inequality, schools, and children's life chances (pp. 299–314). Russell Sage Foundation.
- Browning, C. R., Leventhal, T., & Brooks-Gunn, J. (2005). Sexual initiation in early adolescence: The nexus of parental and community control. American Sociological Reivew, 70(5), 758–778.
- Chang, F., Shi, Y., Shen, A., Kohrman, A., Li, K., Wan, Q., & Rozelle, S. (2019). Understanding the situation of China's leftbehind children: A mixed-methods analysis. *The Developing Economies*, *57*(1), 3–35.

- Chen, S., Adams, J., Qu, Z., Wang, X., & Chen, L. (2013). Parental migration and children's academic engagement: The case of China. International Review of Education, 59, 693–722.
- Cheng, J., & Sun, Y.-H. (2015). Depression and anxiety among left-behind children in China: A systematic review. Child: Care, Health and Development, 41(4), 515–523.
- Cherng, H.-Y. S., & Hannum, E. (2013). Community poverty, industrialization, and educational gender gaps in rural China. Social Forces, 92(2), 659–690.
- Chetty, R., Hendren, N., Kline, P., & Saez, E. (2014). Where is the land of opportunity? The geography of intergenerational mobility in the United States. *Journal of Quarterly Economics*, 129(4), 1553–1623.
- Clampet-Lundquist, S., Edin, K., Kling, J. R., & Duncan, G. J. (2011). Moving teenagers out of high-risk neighborhoods: How girls fare better than boys. American Journal of Sociology, 116(4), 1154–1189.
- Coleman, J. (1990). Foundations of social theory. The Belknap Press of Harvard University Press.
- Coleman, J. S. (1988). Social capital in the creation of human capital. American Journal of Sociology, 94(Suppl), S95-S120.
- Dai, Q., & Chu, R.-X. (2018). Anxiety, happiness and self-esteem of western Chinese left-behind children. Child Abuse & Neglect, 86, 403–413.
- Dorsey, S., & Forehand, R. (2003). The relation of social capital to child psychosocial adjustment difficulties: The role of positive parenting and neighborhood dangerousness. *Journal of Psychopatology and Behavioral Assessment*, 25(1), 11–23.
- Drukker, M., Kaplan, C., Feron, F., & Os, J. V. (2003). Children's health-related quality of life, neighbourhood socio-economic deprivation and social capital. A contextual analysis. Social Science & Medicine, 57(5), 825–841.
- Ellen, I. G., & Turner, M. A. (1997). Does neighborhood matter? Assessing recent evidence. *Housing Policy Debate*, 8(4), 833–866.
- Fan, F., Su, L., Gill, M. K., & Birmaher, B. (2010). Emotional and behavioral problems of Chinese left-behind children: A preliminary study. Social Psychiatry and Psychiatric Epidemiology, 45(6), 655–664.
- Fischer, C. S. (1982). To dwell among friends: personal networks in town and city. University of Chicago Press.
- Goodkind, D. (2011). Child underreporting, fertility, and sex ratio imbalance in China. Demography, 48(1), 291-316.
- Greenhalgh, S. (1988). Fertility as mobility: Sinic transitions. Population and Development Review, 14(4), 629–674. http://www.jstor.org/stable/1973627
- Hannum, E., Kong, P. A., & Zhang, Y. (2008). Family sources of educational gender inequality in rural China: A critical assessment. International Journal of Educational Development, 29(5), 474–486.
- Hu, A., & Tian, F. F. (2018). Still under the ancestor's shadow? Ancestor worship and family formation in contemporary China. Demographic research, 38, 1–36.
- Hu, H., Lu, S., & Huang, C.-C. (2014). The psychological and behavioral outcomes of migrant and left-behind children in China. Children and Youth Services Review, 46, 1–10.
- Hu, N., Fang, X., Lin, X., & Liu, Y. (2009). The relationship among fluidity, social anxiety and loneliness in migrant children in Beijing. Chinese Journal of Applied Psychology, 15(166-176).
- Huang, Y., Song, Q., Tao, R., & Liang, Z. (2018). Migration, family arrangement, and children's health in China. Child Development, 89(2), e74-e90.
- Jia, Z., & Tian, W. (2010). Loneliness of left-behind children: A cross-sectional survey in a sample of rural China. Child: Care, Health and Development, 36(6), 812–817.
- Kling, J. R., Liebman, J. B., & Katz, L. F. (2007). Experimental analysis of neighborhood effects. Econometrica, 75(1), 83-119.
- Li, X.-W, Zou, H., Jin, C.-C., & Ke, R. (2008). The relations among problem behaviors, personalities and family functioning of migrant children. Psychological Development and Education, 24(2), 54–49.
- Liang, Z. (2001). The age of migration in China. Population and Development Review, 27(3), 499-524.
- Liang, Z. (2016). China's great migration and the prospects of a more integrated society. Annual Review of Sociology, 42, 451–471.
- Ling, M. (2015). "Bad Students Go to Vocational Schools!": Education, social reproduction and migrant youth in urban China. The China Journal, 73, 108–131.
- Ling, M. (2017). Returning to no home: Educational remigration and displacement in rural China. Anthroppological Quarterly, 90(3), 715–742.
- Liu, Z., Li, X., & Ge, X. (2009). Left too early: The effects of age at separation from parents on Chinese rural children's symptoms of anxiety and depression. American Journal of Public Health, 99(11), 2049–2054.
- Lu, S., Lin, Y.-T., Vikse, J. H., & Huang, C. C. (2016). Well-being of migrant and left-behind children in China: Education, health, parenting, and personal values. *International Journal of Social Welfare*, 25(1), 58–68.
- Lu, Y., & Wang, F. (2013). From general discrimination to segmented inequality: Migration and inequality in urban China. Social Science Research, 42(6), 1443–1456.
- Lu, Y., Yeung, J. W.-J., Liu, J., & Treiman, D. J. (2019). Migration and children's psychosocial development in China: When and why migration matters. Social Science Research, 77, 130–147.

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Lu, Y., & Zhou, H. (2013). Academic achievement and loneliness of migrant children in China: School segregation and segmented assimilation. *Comparative Education Review*, 57(1), 85–115.

Marsh, H. (1987). The big fish little pond effect on academic self-concept. Journal of Educational Psychology, 79, 280-295.

Meltzer, H., Vostanis, P., Goodman, R., & Ford, T. (2007). Children's perceptions of neighbourhood trustworthiness and safety and their mental health. The Journal of Child Psychology and Psychiatry, 48(12), 1208–1213.

Meng, X., & Yamauchi, C. (2017). Children of migrants: The cumulative impact of parental migration on children's education and health outcomes in China. *Demography*, 54, 1677–1714.

- Murphy, R., Tao, R., & Lu, X. (2011). Son preference in rural China: Patrilineal families and socioeconomic change. *Population* and Development Review, 37(4), 665–690.
- Murphy, R., Zhou, M., & Tao, R. (2016). Parents' migration and children's subjective well-being and health: Evidence from rural China. *Population, Space and Place, 22*(8), 766–780.
- Peterson, J. L., & Zill, N. (1986). Marital disruption, parent-child relationships, and behavior problems in children. Journal of Marriage and Family, 48(2), 295–307.

Putnam, R. (2001). Bowling alone: The collapse and revival of American community. Touchstone Books by Simon & Schuster. Putnam, R. (2016). Our kids: The American dream in crisis. Simon & Schuster.

- Rankin, B. H., & Quane, J. M. (2002). Social contexts and urban adolescent outcomes: The interrelated effects of neighborhoods, families, and peers on African-American youth. Social Problems, 49(1), 79–100.
- Ren, Q., & Treiman, D. (2016). The consequences of parental labor migration in China for children's emotional wellbeing. Social Science Research, 58, 46–67.
- Sampson, R. J. (2013). Great American city: Chicago and the enduring neighborhood effect. University of Chicgao Press.
- Sampson, R. J., Morenoff, J. D., & Earls, F. (1999). Beyond social capital: Spatial dynamics of collective efficacy for children. American Sociological Reivew, 64(4), 633–660.
- Sampson, R. J., Morenoff, J. D., & Gannon-Rowley, T. (2002). Assessing "Neighborhood Effects": Social process and new directions in research. Annual Review of Sociology, 28, 443–478.
- Sharkey, P., & Faber, J. W. (2014). Where, when, why and for whom do residential contexts matter? Moving away from the dichotomouss understanding of neighborhood effects. Annual Review of Sociology, 40, 559–579.
- Shi, Y., Bai, Y., Shen, Y., Kenny, K., & Rozelle, S. (2016). Effects of parental migration on mental health of left-behind children: Evidence from northwestern China. China & World Economy, 2016, 105–122.
- Stevenson, H. C. (1998). Raising safe villages: Cultural-ecological factors that influence the emotional adjustment of adolescents. *Journal of Black Psychology*, 24(1), 44–59.
- Su, S., Li, X., Lin, D., Xu, X., & Zhu, M. (2013). Psychological adjustment among left-behind children in rural China: the role of parental migration and parent-child communication. Child: Care, Health and Development, 39(2), 162–170.
- Tian, F. F., & Ying, Y. (2021). The reproduction of working class? Social mobility and the stratification of parenting practice in urban Chinese families. The Journal of Chinese Sociology, 8, 1–16.
- Wang, W., Liu, X., Dong, Y., Bai, Y., Wang, S., & Zhang, L. (2019). Son preference, eldest son preference, and educational attainment: Evidence from Chinese families. *Journal of Family Issues*, 41(6), 636–666.
- Wang, X., Bai, Y., Zhang, L., & Rozelle, S. (2017). Migration, schooling choice, and student outcomes in China. Population and Development Review, 43(4), 625–643.
- Wilson, W. J. (1987). The truly disadvantaged: The inner city, the underclass, and public policy. University Of Chicago Press.
- Wodtke, G. T., Harding, D. J., & Elwert, F. (2016). Neighborhood effect heterogeneity by family income and developmental period. *American Journal of Political Science*, 121(4), 11168–11222.
- Wu, Q. (2017). Effects of social capital in multiple contexts on the psychosocial adjustment of Chinese migrant children. Youth & Society, 49(2), 150–179. https://doi.org/10.1177/0044118X14530133
- Wu, Q., Lu, D., & Kang, M. (2015). Social capital and the mental health of children in rural China with different experiences of parental migration. Social Science & Medicine, 132, 270–277.
- Wu, Q., & Palinkas, L. A. (2012). Social capital and psychosocial adjustment of migrant children in China: The role of children's personal agency. In C. Yi (Ed.), The psychological well-being of east asian youth (pp. 281–309). Springer.
- Wu, Q., Palinkas, L. A., & He, X. (2011). Social capital in promoting the psychosocial adjustment of Chinese migrant children: Interaction across contexts. *Journal of Community Psychology*, 39(4), 421–442.
- Wu, Q., Tsang, B., & Ming, H. (2012). Contributions of family and neighbourhood factors to the mental health of migrant children in China: Implications for policy and services. *International Journal of Adolescence and Youth*, 17(2-3), 113–129.
- Xie, Y., & Zhou, X. (2014). Income inequality in today's China. Proceedings of the National Academy of Sciences of the United States of America, 111(19), 6928–6933.
- Xu, D., Wu, X., Zhang, Z., & Dronkers, J. (2018). Not a zero-sum game: Migration and child well-being in contemporary China. Demographic research, 38, 691–726.

- Xu, H., & Xie, Y. (2015). The causal effects of rural-to-urban migration on children's well-being in China. European Sociological Review, 31(4), 502–519.
- Xu, Y., Xu, D., Simpkins, S., & Warschauer, M. (2019). Does it matter which parent is absent? Labor migration, parenting, and adolescent development in China. Journal of Child an d Family Studies, 28, 1635–1649.
- Yan, B. (2017). Xiangcheng liudong yu ertong renzhi fazhan jiyu 2012nian zhongguo chengzhenhua yu laodongyimin diaochashuju de fenxi. [Effects of rural-to-urban migration to children's cognitive ability development in China: Analysis based on census data of urbanization and migration in 2012]. Shehui, 37(4), 59–89.
- Zhang, L., He, G., Chen, Y., & Shi, A. (2020). Migration status, emotional engagement, and social exclusion in Chinese schools. *Journal of Adolescence*, 80, 192–203.
- Zhang, Y. (2009). Interpersonal trust and social interaction between people of different regions sizes [In Chinese]. Sociological Studies, (4), 112–132.
- Zhao, C., Wang, F., Li, L., Zhou, X., & Hesketh, T. (2017). Long-term impacts of parental migration on Chinese children's psychosocial well-being: mitigating and exacerbating factors. Social Psychiatry and Psychiatric Epidemiology, 52(6), 669–677.

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#### APPENDIX A

#### TABLE A1 Behavior Problems Index (BPI) in 2012 Chinese Urbanization and Labor Migration Survey

Questions	Chinese translation
a. (He/She) has a sudden changes in mood or feeling.	(他/她)情绪善变。
b. (He/She) feels or complains that no one loves him/her.	(他/她)感觉或抱怨没人爱他/她。
c. (He/She) is rather high strung and nervous.	(他/她)容易焦虑及紧张。
d. (He/She) cheats or tell lies.	(他/她)骗人或撒谎。
e. (He/She) is too fearful or anxious.	(他/她)过于恐惧或忧虑。
f. (He/She) argues too much.	(他/她)很喜欢与人争论。
g. (He/She) has difficulty concentrating, cannot pay attention for long.	(他/她)精神不能集中,注意力不能 持久。
h. (He/She) is easily confused, seems to be in a fog.	(他/她)容易感到困惑。
i. (He/She) bullies or is cruel or mean to others.	(他/她)刻薄、欺负别人。
j. (He/She) is disobedient.	(他/她)不听话。
k. (He/She) does not seem to feel sorry after (he/she) misbehaves.	(他/她)似乎不为自己的不当行为感到 内疚。
I. (He/She) has trouble getting along with other children.	(他/她)不懂得如何跟人相处。
m. (He/She) is impulsive, or acts without thinking.	(他/她)性格冲动,做事欠考虑。
n. (He/She) feels worthless or inferior.	(他/她)感到自己没用、自卑。
o. (He/She) is not liked by other children.	同龄的孩子不喜欢(他/她)。

## TABLE A1 (Continued)

Questions	Chinese translation
p. (He/She) has difficulty getting (his/her) mind of certain thoughts.	(他/她)很难摆脱某些念头(有强迫症)。
q. (He/She) is restless or overly active, cannot sit still.	(他/她)过度活跃,动个不停,无法安静 坐着。
r. (He/She) is stubborn, sullen, or irritable.	(他/她)固执。
s. (He/She) has a strong temper and loses easily.	(他/她)脾气很大,容易发火。
t. (He/She) is unhappy, sad or depressed.	(他/她)闷闷不乐。
u. (He/She) is withdrawn, does not get involved with others.	(他/她)孤僻离群,不爱跟别人打交道。
<ul> <li>v. (He/She) breaks things on purpose or deliberately destroys (his/her) own or another's things.</li> </ul>	(他/她)故意破坏自己或别人的东西。
w. (He/She) clings to adults.	(他/她)缠着大人。
x. (He/She) cries too much.	(他/她)经常哭。
y. (He/She) demands a lot of attention.	(他/她)需要别人经常注意自己。
z. (He/She) is too dependent on others.	(他/她)过分依赖别人。

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