

The Pennsylvania State University

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**MIGRATION STATUS AND PARENT-CHILD DISCREPANCIES IN EDUCATIONAL
EXPECTATIONS: DOES SOCIAL CAPITAL MATTER?**

A Thesis in

Sociology and Demography

by

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Abstract

Educational expectations are important predictors of educational attainment for children. However, children's educational expectations are not always aligned with the expectations their parents have for them. Such disagreements may harm children's development. Research on parent-child discrepancies in educational expectations focuses heavily on the consequences of the discrepancies but has tended to less often consider factors that lead to different expectations on the part of parents and children. In the context of China, parents and children may have very different expectations based on their own experiences and origins. This paper takes advantage of a nationally representative and longitudinal survey, the China Educational Panel Study, on both children and parents to investigate how children's migration is associated with parent-child discrepancies in educational expectations. I also link educational expectations and internal migration in a unified framework and study how familial social capital explain such association in China. Results of the multinomial logistic regression models demonstrate that rural origin is negatively associated with shared parent-child expectations, particularly for students in migrant families from rural areas. My analyses also demonstrate that familial social capital, including parent-child interactions, parental investment in school-related activities, parent-teacher interactions, and parent-other interactions, contributes to explaining the relationship between migration status and parent-child discrepancies in educational expectations. Therefore, this study indicates that the urban-rural disparity is not simply a hukou problem but is more embedded in the returns to education. In this case, the elimination of the rural and urban hukou categories is essential but not sufficient to address the huge urban-rural gap. Policymakers may want to promote more on adult education as well as advocate extensive communication between parents, children, and teachers.

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Introduction

Educational expectations and realistic predictions of future academic achievement have long been regarded as influential predictors of educational attainment (Bozick et al. 2010; Glick and White 2004; Jacob and Wilder 2010; Qian and Blair 1999). Students who report high educational expectations are less inclined to drop out of schools and are more likely to earn higher test scores and grades than those exhibiting lower expectations (Driscoll 1999; Kao and Thompson 2003). Parents who have high expectations tend to invest in more monetary and nonmonetary resources in raising their children in order to enhance children's developmental outcomes (Hao and Yeung 2015). It has been well established that the empirical pattern of students' educational achievement is positively influenced by their own educational expectations or others' expectations. However, children's educational expectations and parents' expectations are not always consistent. Children becoming adolescents tend to actively construct views of self and future based on information gained from their parents, teachers, peers, or society, rather than simply accept their parents' expectations for them (Nurmi, 2004). Consequently, parents and adolescents are likely to hold discrepant educational expectations (Wang and Benner 2014).

Despite the plethora of empirical research on parent-child discrepancies in educational expectations, the literature does have important limitations. First, most prior works investigate outcomes resulting from parent-child discrepancies in educational expectations (Beutel and Anderson 2008; Guo et al. 2020; Hao and Bonstead-bruns 1998; Lindberg et al. 2019; De Los Reyes et al. 2010; Wang and Benner 2014; Zhang 2011), but limited numbers of studies focus on the causes for such discrepancies. For example, Hao and Bonstead-bruns (1998) document that parent-child differences in expectations contribute to lower educational achievement among

Mexican immigrant students in the United States. Similarly, Zhang (2011) finds that the mother-child discrepancy in educational expectations is associated with a higher dropout rate in China. De Los Reyes et al. (2010) reveals that higher parent-adolescent discrepancies are generally related to lower achievement motivation and psychological competence such as depression and stress in the U.S. Since almost all related studies consistently record negative outcomes of parent-child discrepancies, it is important to explore the factors that predict such discrepancies.

Second, among limited numbers of studies focus on the causes for parent-child discrepancies, their explanations are far from conclusive. Some scholars interpret the parent-child difference in expectation as a normative developmental process, arguing that such differences are the manifestation of the adolescent desire for autonomy, independence, and identity formation (Grotevant and Cooper 1986). Nevertheless, some researchers suggest that parent-child discrepancies can be considered as the results of family disorganization, maladaptive family interaction patterns, and a lack of cohesion (Minuchin 1985). They contend that parent-child discrepancies reflect the inadequacy of the interactions between them (Hao and Bonstead-bruns 1998; Lindberg et al. 2019). Therefore, it is worth taking a sociological perspective to examine the mechanisms that result in parent-child discrepancies in educational expectations.

Furthermore, the current studies fail to distinguish the nuances within the group of children whose educational expectations match their parents' expectations. Most existing literature measures parent-child discrepancies by dividing their educational expectations into three groups: (1) children's expectation are identical to their parents' educational expectations; (2) children's expectation levels are higher than their parents' expectation; and (3) children's expectations are lower than their parents (Guo et al. 2020; Wang and Benner 2014). However,

this classification is not able to recognize the differences between those who hold a high and aligned parent-child expectation and those who hold a low and matched parent-child expectation level. Given that previous studies have documented numbers of positive outcomes resulting from a high educational expectation (Domina, Conley, and Farkas 2011; Glick and White 2004; Kao and Thompson 2003) or a matching educational expectation between parents and children (Hao and Bonstead-bruns 1998; Zhang 2011), it would be beneficial to distinguish students who hold a low and matched parent-child expectation from those who hold a high and aligned parent-child expectation.

Last, most previous studies have either used cross-sectional data (Hao and Bonstead-bruns 1998) or small datasets (Suárez-Orozco, Rhodes, and Milburn 2009), which restrict research capacities to explore the causes for a negative relationship between migration status and disagreement between parents and children across different family circumstances. This present study takes advantage of a national representative and longitudinal survey—the China Education Panel Study (CEPS). CEPS not only enables me to investigate familial factors that may lead to a parent-child discrepancy of educational expectations, but also allows me to establish a correct temporal order.

Therefore, in this thesis, I study how migration status is associated with parent-child discrepancies in China. I link educational expectations and internal migration in a unified framework, arguing that parent-child discrepancies can be considered as the results of a lack of family interaction (Coleman 1988; Minuchin 1985). Through conducting a series of multinomial logistic regression, I address three research questions: 1) To what degree do parents and children agree or disagree about their educational expectations? 2) What characteristics of a student's family are associated with a larger discrepancy in educational expectations between parents and

their children? 3) To what extent does this association differ for migrant and non-migrant middle-school students in China?

Theoretical Framework

Migration and Educational Expectations in China

China has undergone rapid industrialization and urbanization since the 1990s, inducing unprecedented internal migration, especially rural-to-urban migration (Hu et al. 2018; Li, Wang, and Nie 2017). The number of rural-to-urban migrants increased from 6.57 million in 1982 to 221.43 million in 2010. Not only has this rural-urban migration contributed to the national economy, but it also has changed the demographic composition of China, especially for the rural population, as internal migration has created a large number of migrants and migrant children (Hu et al., 2018; Li et al., 2017). According to the National Bureau of Statistics (NBS 2017), there were 169.34 million migrant workers in 2016 and more than 20 million rural-urban migrant children aged between 6 and 14 living in urban areas (Zhang 2017). In some economically developed regions, migrant students constitute a considerable proportion of the school-aged children in urban schools. For example, 46% of students in Shanghai municipality and 48% of students in Zhejiang province are migrant children (Liu, Holmes, and Albright 2015). However, previous studies have largely focused on such a large-scale internal migration process (Xu and Xie 2015), less is known about the impact of migration on parent-child educational expectations.

It is worth noting that migrant children in China are not homogeneous due to a unique demographic characteristic, the hukou system. Hukou is the Chinese citizens' administrative residential registration, based on individuals' hometown and is independent of where they

actually live. Every individual in China has to register and be assigned a hukou at birth (Quheng and Gustafsson 2014). Hukou is classified into two types: agriculture (rural hukou) and non-agriculture (urban hukou). The hukou system not only registers a person as rural or urban but also has large implications for his or her well-being. It restricts access to social services, education, and welfare to the place of residence in which one is officially registered (Cebolla-Boado and Soysal 2018; Quheng and Gustafsson 2014). The hope for receiving better health and education services has motivated a large number of rural hukou holders to move to urban areas. Hukou can also be classified along with the local–nonlocal division (Wu 1994). This residence division is often used to distinguish whether an individual is a migrant or a local-born. For example, a rural hukou holder who moves to a city is regarded as a migrant whereas an urban hukou holder who moves from one province to another is considered as a migrant.

Previous scholars have documented a negative relationship between children's migration and their educational outcomes. Children who have residential moves are likely to experience academic disadvantages such as having lower test scores, lower educational attainment, and higher risk of school attrition (Astone and McLanahan 1994; Coleman 1988). Children who change schools may miss key educational material, have less information about the school system, are less able to take full advantage of the resources in a particular school than children who have lived in the community for a long time (Astone and McLanahan 1994), thereby lowering their school performance and ambitions. In addition, residential mobility may also undermine the closeness of children's relationships with teachers and their peers (Ream 2005; Ream and Rumberger 2008). Teachers are less likely to invest in a child they do not know very well, and children attending a new school may feel socially isolated or marginalized (McLanahan

and Sandefur 1994). All of these factors suggest that residential mobility may create educational disruption or discouragement for migrant children. Therefore, I expect that

H1: Compared to non-migrant families, migrant families have greater parent-child discrepancies in educational expectations.

Given that hukou is a strong determinant of life course opportunities in China, I divide the migrant children into two basic categories in this study: rural migrants and urban migrants. Specifically, rural migrants refer to the migrants who hold an agricultural hukou and urban migrations refer to those migrants who hold a non-agricultural hukou. The hukou status is particularly consequential for rural-urban migrants whose hukou status cannot be easily converted from a rural to an urban category. The distinction of the migrant group is essential for this study as it captures not only the effects of migration but also the nuances between rural and urban status. Rural migrant families tend to face more institutional barriers due to their rural hukou (Liu, Liu, and Yu 2017). They have to either pay special fees to have their children enrolled in local public schools or send their children to migrant-majority schools where the educational quality was much lower than that of regular schools (Cebolla-Boado & Soysal, 2018). Although some urban public schools are open to rural migrant children, studies reveal that migrant children from rural origins are more likely to be disadvantaged in family socioeconomic status, their parents' educational backgrounds, and academic performances, compared to local children (Liang et al. 2019). These limited resources, as well as geographic mobility, may largely reduce the consistency of educational expectations between parents and children of a rural migrant family. In this case, I expect that

H2: Compared to urban local-born students, rural migrant students tend to have more parent-child discrepancies in educational expectations.

Social Capital as an Explanation

Social capital was first defined by Bourdieu (1986), as “the aggregate of the actual or potential resources which are linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition” (p.248). In a family environment, social capital can be represented by the density of the interaction among parents, children, and schools (Teachman et al. 1996). Such socially structured relations between individuals (e.g., parents, teachers, neighbors, and children) in social groups (e.g., families, schools, and neighborhoods) provides children access to their parents’ human and financial capital which contributes to increasing their skills, achievements, and well-being (Coleman 1988). Social networks or interactions with others, both within or beyond the family, provide much of the social capital which helps shape young people’s desires, tastes, opinions, and plans (Stanton-salazar 2011). Educational expectations, therefore, can be viewed as the product of socialization processes, conditioned by a person’s class background, gender, ethnicity, or other social psychological factors (Behtoui 2017). Nativity differences in social capital can be essential to understanding the subsequent nativity differences in outcomes throughout early adult life (White and Glick 2000). Therefore, my interpretation of social capital in this study emphasizes social relationships through which an individual is able to access various resources (Portes 2000). Adolescents have different kinds of social networks and interact with “significant others” in various contexts such as within-family and between-family environments (Hao and Bonstead-bruns 1998).

Social capital is regarded as an important mechanism through which children’s migration affects their educational outcomes. According to Coleman (1988), in the context of the family, the links between parents and their children constitute intergenerational connectedness or cross-

generational closure, which not only across parent and child friendship networks, but also across schools and other organizations in communities. Geographic and residential mobility can disrupt closure and connectedness at both within and beyond family levels. Coleman (1988) notes that “for families that have moved often, the social relations that constitute social capital are broken at each move” (p113). The negative effects of family migration are significantly more pronounced on children’s educational outcomes in families with uninvolved or unsupportive parents (Hagan, Macmillan, and Wheaton 1996). Hence, I expect that familial social capital is an important mechanism that mediates the relationship between migration and parent-child discrepancies in educational expectations. I focus on two dimensions of social capital in the thesis: intra-familial social capital and extra-familial social capital.

Intra-familial Social Capital

Intra-familial social capital is represented by the amount of positive parent-child interactions (Coleman 1988; Hofferth and Duncan 1998; Teachman et al. 1996). Present in households, intra-familial social capital is developed through the time that parents or other close family members spend teaching, nurturing, monitoring, and caring for their children (Hofferth and Duncan 1998).

Intra-familial social capital contributes to forming both a high and aligned parent-child educational expectation through two dimensions. For one aspect, frequent parent-child communication facilitates the transmission of parents’ expectations and norms to children. Since social capital depends on trustworthiness (Coleman 1988), a high level of trust between parents and children tends to foster a sense of obligation in children to fulfill parents’ expectations

(Pong, Hao, and Gardner 2005). When such a relationship is present, parents' and children's expectations are more likely to agree with each other (Hao and Bonstead-bruns 1998).

Parent-child interactions also reflect on parental involvement in school-related activities, which allow parents to exert positive influences on children's learning behavior. Such parental involvement, as a result, may contribute to increasing both parents' and children's own educational expectations. Researchers have identified several types of parental involvement that facilitate a family to obtain a high educational expectation such as reinforcing school learning at home, encouraging children's ongoing education, serving as role models of achievement, providing economic resources to achieve higher goals, and recognizing and praising behaviors that lead to high achievement (Epstein 1986; Hao and Bonstead-bruns 1998). Thus, parental involvement in schooling strengthens the parent-child bond and contributes to obtaining a high and aligned educational expectation level between the two.

Therefore, I expect that intra-familial social capital will explain the relationship between migration and discrepancies in parent-child expectations. In this study, intra-familial social capital is measured through parent-child interactions and parental involvement in school-related activities such as guiding homework. Accordingly, I hypothesize that

H3a: The more parent-child interactions, the higher probability of a family obtaining a high and aligned parent-child educational expectation.

H3b: The greater parental involvement in school-related activities, the higher probability of a high and aligned parent-child educational expectation, that is a higher probability that parents and children express high educational expectations and a higher probability that their expectations are similar to each other.

Extra-familial Social Capital

Outside the family, social capital can be regarded as the density of social interactions in a community such as among parents in different families and between parents and institutions, especially schools. Coleman (1988) postulates that extra-familial social capital for a child can be facilitated intergenerational closure, a type of social structure within a community that binds children and their parents together in an enclosed network. Such enclosed networks encourage the exchange of information and establish or enforce expectations of behavioral norms.

Extra-familial social capital in this sense could affect educational expectations for a child in two ways. First, closed connections between parents and others in the community, such as teachers or other parents, provide parents emotional and institutional supports and such supports enhance parents' ability to effectively engage in their children's education (Li and Fischer 2017). For instance, parents who are more integrated into parental networks tend to be more knowledgeable about school tracking policies than isolated parents (Useem 1992). Parents of elementary school students who have closer ties with teachers and other parents regularly gain access to and exchange information about the school and their children's schooling (Horvath 2013). Parents who report speaking with more parents at their children's school tend to be more involved at school after controlling for sociodemographic characteristics (Sheldon et al. 2002). As intra-familial social capital suggested, parental involvements foster parents and children to form a high and aligned educational expectation.

Second, the enclosed networks may also discourage children from engaging in behaviors that would threaten the development of subsequent human and financial capital (Teachman et al. 1996). When the parents of a group of students all know each other, they may exchange feedback about their children's behavior outside the home. Children would then be subject to the shared

expectations and norms set by the community (Pong et al. 2005). Parents' communication, participation, and collaboration with the school, thus, constrain children's learning and social behaviors, which also encourage shared educational expectations between parent and the child. When greater interpersonal closure exists among parents and children within a community, children have more aligned behaviors with parental expectations (Coleman 1988).

Taken together, these studies suggest that parental networks act as a communication channel for parents to access valuable information and feedback about school policies and their children's academic performance (Li and Fischer 2017). Such interpersonal ties can both shape and constrain the actions of the children. If parents have such network linkages, they can both more effectively communicate the common goals and values they share with their children and monitor or control their children's behavior (Hofferth and Duncan 1998).

Hence, I also expect that extra-familial social capital may explain relationship between migration and discrepancies in parent-child educational expectations. In this study, extra-familial social capital is measured through parents' social networks such as parent-teacher interactions (e.g., parent-teacher contacts) and parents' relationships with other parents (e.g., parent-parent contacts). Therefore, I also expect:

H4a: The more parent-teacher/other interactions, the higher probability parents and children have a high and aligned parent-child educational expectation.

H4b: The stronger parental network, the higher probability parents and children have high educational expectations and a higher probability that their expectations are aligned with one another.

Methodology

Data and Sample

I use the two latest waves (2013 and 2014) of the China Educational Panel Survey (CEPS). CEPS is a nationally representative and longitudinal survey designed to investigate linkages between individuals' educational outcomes and multiple contexts of families, school processes, communities, and social structure. Starting with the 7th and 9th graders in the 2013-2014 academic year, the data adopted a stratified and multistage sampling design. The survey has a randomly selected school-based sample of approximately 20,000 students of 112 schools in 28 counties in mainland China. The baseline survey was completed in the 2013-2014 academic year, conducted by the National Survey Research Center (NSRC) at the Renmin University of China, and the follow-up surveys are collected annually.

The current study only focuses on grade 7 in order to ensure a low attrition rate and consistent test measurements. The baseline data used in this study consists of 10,750 students in grade 7 and had a response rate of 92.3% in wave 2 ($N=9,920$). Since the outcome of interest is educational expectations, the sample is restricted to students with valid responses related to educational expectations in wave 2 and complete demographic information from wave 1. For example, the sample excludes students who repeated 7th grade in wave 2 or dropped out from the school. This restriction reduces the sample size from 9920 to 9449 because 471 new students transferred to the school during wave 2 and did not participate in wave 1. In addition, since my goal for this study is to examine parent-child discrepancies, the sample is also restricted to children whose parents or stepparents responded to the adult questionnaires in both waves. The sample size then reduces from 9449 to 8506, which is the final sample size of the study.

Given the moderate rate of missingness, I take into account item-level missing values through imputations by chained equation (ICE) (Royston 2004). The percentage of missing values on individual and school-level variables ranged from 0% to 16%. Data were primarily missing due to item nonresponse. I examined patterns of missing data to identify the appropriateness of an imputation model that assumes no selection mechanism (Van Buuren 2012) and used the Stata 16's 'mi impute chained' command to generate imputed datasets and the imputation model included all the variables used in the analyses. Imputed values compared reasonably to observed values, and results using listwise deletion were similar to those I present using multiple imputations, which are presented as supplementary materials in the appendix.

Measures

Parent-child Discrepancy in Educational Expectations— The primary dependent variable is the difference in educational expectations between students and their parents. Data on educational expectations were collected in wave 2 when students were in eighth grade. Students reported their expectations by asking the question: “What is the highest level of education you expect yourself to receive?” Parents’ educational expectation of their children is measured by the question: “What is the highest level of education do you expect this child to receive?” According to the International Standard Classification of Education in its version of 1997 (ISCED-97), the levels of educational expectation are rescaled into five categories—(1) very low expectation (drop out now or graduate from junior high school, (2) low expectation (graduate from senior high school/vocational high school), (3) medium expectation (graduate from junior college), (4) high expectation (get a bachelor’s degree), and (5) very high expectation (get a master’s or Ph.D. degree) (UNESCO Institute for Statistics 2006).

Based on some modifications of previous studies (Guo et al. 2020; Zhang 2011), I originally classified the parent-children discrepancy into six groups: (1) students have low or medium expectations which are still higher than their parents; (2) students have high or very high expectations that are higher than their parents; (3) students have low or medium expectations and their parents agree; (4) students have high or very high expectations and their parents agree; (5) students have low expectations that are lower than their parents; and (6) students have high expectations but parents' expectations are even higher (Figure 1). However, the distribution of the six groups and the Wald test for combination shows that 5 groups may be more appropriate. Specifically, group 1 only contains 1.65% of students which may be too small to analyze. Moreover, the Wald test for combining alternatives examines whether any categories of parent-child discrepancies are indistinguishable from each other. According to the test, all categories except for groups 1 vs. 3 (e.g., $p\text{-value} = 0.373$) are distinguishable from each other and should not be combined ($p\text{-value} < 0.05$). Based on this, I decided to combine groups 1 and 3 so the dependent variable, parent-child educational expectation level, has 5 categories (Figure 2). Grouping education expectations in this way not only allows me to catch the nuance of the parent-child discrepancies in educational expectations but also provides information about the expectation level of these discrepancies.

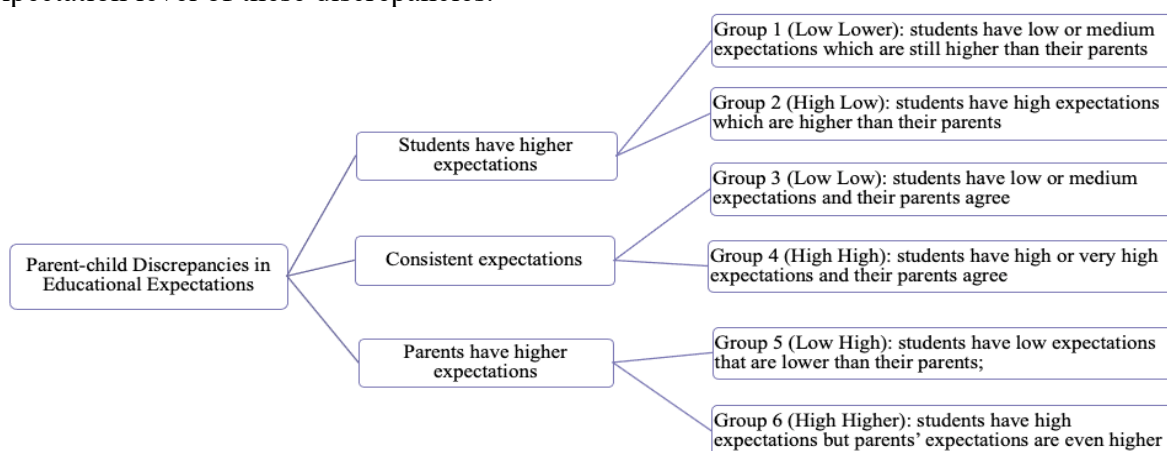


Figure 1: Group Classification of Parent-child Discrepancies (6 groups)

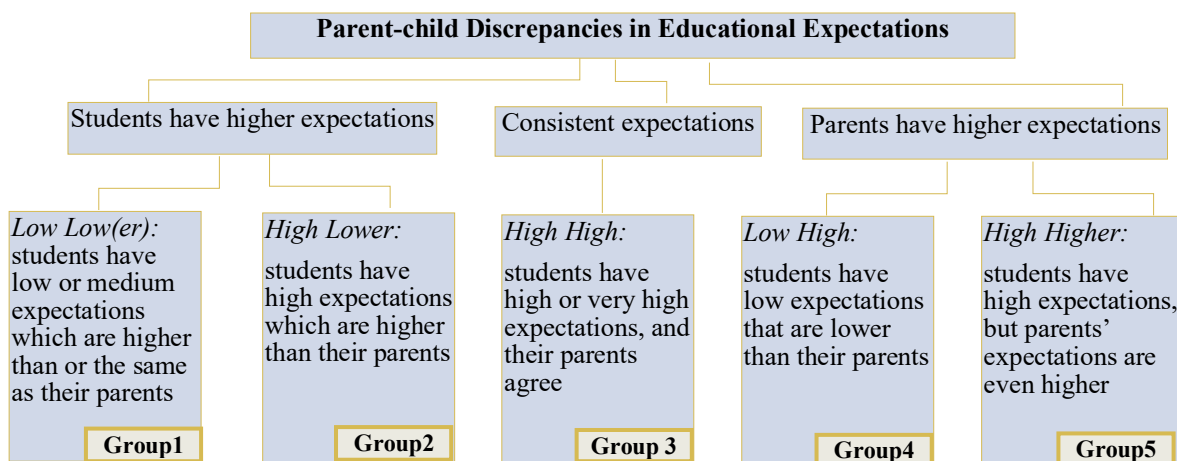


Figure 2: Group Classification of Parent-child Discrepancies (5 groups)

Migration Types— To determine whether a student in the CEPS in the first wave is a migrant, I use the interaction of current hukou type (agriculture or non-agriculture) and migration status (local-born or migration). Both current hukou type and migration status are distinguished by CEPS. Specifically, if a student is a local-born with a non-agriculture hukou, then the individual will be considered as an urban local-born student in this analysis; similarly, if a student is identified as a migrant and he or she holds an agriculture hukou, then the student is regarded as a rural migrant. Based on such measurement, four mutually exclusive groups are generated: urban local-born students (41.35%), urban migrants (7.44%), rural migrants (12.13%), and rural local-born students (39.08%).

Intra-familial Social Capital—is measured by parent-child interactions and parental involvement in education, which are obtained from self-reported questionnaires of both students and parents in wave 1. Some of these measures such as frequency of parent-child communication are commonly used in prior work (Carpenter 2008; Ma and Wu 2020).

Parent-child interactions are captured by the following elements:

- 1) *Parent-child communication*: a variable based on a combination of answers to the question of how children feel about talking to their parents (Never=0, Sometimes=1, Often=2) through principal component analysis: a) things happened at school; b) the relationship between you and your friends; c) the relationship between you and your teachers; d) your feelings; and e) your worries and troubles.
- 2) *Parent-child activities*: similar to parent-child communication, this variable is captured by a combination of answers to the question of how often do children do the following things with their parents (Never=0, Once a year=1, Once every half year=2, Once a month=3, Once a week=4, More than once a week=5) and it is combined through principal component analysis: a) having dinner; b) reading; c) watching TV; d) playing sports; e) visiting museums, zoos, science museums, etc.; and f) going out to watch movies, shows, sports games, etc.;
- 3) *Perceptions of parental support*: is measured by a combination of the question of who will be the first one for children to turn to in the following situations: a) when you want to chat with someone; b) when you are in trouble; c) when you need help. The variable is also captured by principal component analysis and it is coded as binary (Parents=1; Others=0).

Parental involvement in schooling consists of three elements:

- 1) *Homework support*: is captured by the question “how often did your parents do the following to check up on your study last week?” and is coded as a dichotomous variable (No=0, Yes=1);
- 2) *Extracurricular participation*: is measured by asking students “what kind of extra-curricular courses do you take?” and the responses are categorized into two groups—non-school-related courses or not taking any is coded as 0 and schoolwork-related course is coded as 1;

- 3) *Cram school participation*: is also captured as a binary variable based on the question “what do you usually do in winter and summer vacations?” Responses are coded as 1 if the answer is “taking cram school courses (related to schoolwork)”, and 0 for anything else.

Extra-familial Social Capital—is measured by utilization and presence of parental networks, acquired from self-reported parents’ questionnaires in Wave 1. Several of these measures, including parent–teacher conferences and asking parents about how many parents of their children’s friends in their own child’s school they know, have been widely used in prior research to assess parental school involvement (Epstein and Dauber 1991; Hill and Tyson 2009; Sheldon et al. 2002; Sui-Chu and Willms 1996). Utilization of parental network consists of three elements:

- 1) *Parent-teacher interaction* is measured by the question of how many times have this child’s parents contacted the teacher at school this semester and answers have four categories: never (code as 0), once (code as 1), two to four times (code as 2), and five times or more (code as 3).
- 2) *Parent-parent interaction* is a binary variable, based on the question “from whom/which of the following did your family get to know the application and enrollment procedures of this school?” I code 1 for those parents who acquire information from parents of other students and 0 for anything else.
- 3) *Parent-other interaction*: is captured by the question asking parents about what the family did to enroll the child in this school and it is regarded as a dichotomous variable. I code 1 if parents asked their friends for help, and code 0 for anything else.

The presence of parental network is composed of two aspects:

- 1) *Knowing other parents*: is coded as a categorical variable (Don't know=0, Know some=1, Know them all =2), based on a question asking parents “do you know the parents of the friends who often play together with this child?”
- 2) *Knowing neighborhoods*: is measured by a question asking, “which kind of neighborhood are you living with?” and parents are provided with eight options with different occupations. I adjust the variable to be binary so that “0” indicates parents are not clear about their neighbor’s occupation, and “1” refers to any other options that parents marked.

Other covariates—include some basic characteristics of children and their family in wave 1.

The first is age, which is treated as a continuous variable with an average of 12.5 years old.

Second, I control for gender (boys are coded as male=1 and girls refer to male=0). Children in the sample are nearly equally split by sex. Third, family structure is measured by two

dimensions—whether the child is the only child and whether parents are at home. “Only child” is a dichotomous variable with 46.3% of students are the only child of the family. It is coded as 1 if

the child does not have any siblings and 0 if the child has siblings. “Parental presence” is a

categorical variable, with “both parents present” as the reference group (81.9%). Fourth,

household socioeconomic status (SES) is also captured by two aspects—self-perceived family

SES and parental highest education level. Since the data does not contain a direct measure of

family SES, I rely on self-perceived family SES and parents’ education as a proxy of human

capital available in families. “Self-perceived family SES” is a categorical variable (low, middle,

and high), with “low” as the reference group. “Parents’ highest education” is also a categorical

variable and collapsed categories based on the frequency distribution. The categories include

elementary school or below is coded as 0 (7.6%), middle school is coded as 1 (41.4%), high

school or equivalent is coded as 2 (29.9%), junior college is coded as 3 (7.7%), and Bachelors’

degree or above is coded as 4 (13.3%). Last, I also control for children's academic performance in wave 1. As the three major subjects at middle schools in China are Chinese, mathematics, and English, I control for children's standardized test scores of the three main subjects in wave 1. All measures of raw value (without imputation) used in the study are presented above (Table 1).

Table 1: Summary of all variables without imputation

Variable	Observations	Mean	Std. Dev.	Min	Max
Parent-child discrepancy	8,242	2.921	1.122	1	5
Controls:					
Age	8,321	12.53	0.690	11	17
Male	8,365	0.518	0.500	0	1
Only child	8,506	0.463	0.499	0	1
Parental presence	8,506	1.313	0.761	1	4
Self-perceived SES	8,497	1.857	0.489	1	3
Parents' highest education	8,498	1.776	1.131	0	4
Chinese std. test	8,356	70.31	9.686	-2.399	97.60
Math std. test	8,353	70.33	9.786	17.51	145.1
English std. test	8,356	70.38	9.646	14.24	104.1
Migration Status:					
Migration (4groups)	8,506	2.220	1.114	1	4
Migration (dummy)	8,453	0.191	0.393	0	1
Intra-familial social capital:					
Parent-child communication	8,478	0.832	0.640	0	2
Parent-child activities	8,455	2.445	1.165	0	5
Perceptions of parental support	8,455	0.635	0.481	0	1
Homework support	8,416	0.780	0.414	0	1
Extracurricular participation	8,506	0.360	0.480	0	1
Cram school participation	8,506	0.331	0.471	0	1
Extra-familial social capital:					
Parent-teacher interaction	8,419	2.347	1.013	1	4
Parent-parent interaction	8,402	0.293	0.455	0	1
Parent-other interaction	8,387	0.120	0.325	0	1
Knowing other parents	7,242	0.790	0.485	0	2
Knowing neighborhoods	8,338	0.763	0.425	0	1

Analytic Strategy

I employ descriptive statistics and multinomial logistic regression to analyze how migration status is associated with parent-child discrepancies in educational expectations and how familial social capital mediate the association. Specifically, in order to capture the correct temporal order to test my hypotheses, I use data of both students and their parents in wave 1 (as my explanatory variables) to explain the difference of educational expectations in wave 2 (as my outcome variable).

I chose multinomial logistic regression for this study for three reasons. First, the dependent variable of my study, parent-child discrepancies in educational expectations, is a categorical variable with 5 different groups. The method is well suited for describing and testing hypotheses about relationships between a categorical dependent variable and one or more categorical or continuous explanatory variables (Monyai et al. 2016). Second, multinomial logistic regression provides an effective and reliable way to obtain the estimated probability of belonging to a specific population (e.g., adolescents hold high expectation while their parents hold a low one) and the estimate of odds ratio of adolescents' characteristics on their expectation level (Peng and Nichols 2003). Third, multinomial logistic regression is a procedure by which estimates of the net effects of a set of explanatory variables on the dependent variable can be obtained (Morgan and Teachman 1988). In this section, I will describe the general logic behind the multinomial logistic regression which is followed by the specification of a multinomial logistic model for the data used in the study.

The general form of the multinomial logistic regression model involves one categorical dependent variable, Y (P_1 and P_2 are two categories of Y), and one explanatory variable X and it relates the log of odds or logit of Y to X in a linear form:

$$\log \frac{P_1}{P_2} = \beta_0 + \beta_1 X$$

The explanatory variable, X , can be categorical or continuous and parameters β_0 and β_1 are estimated by the maximum likelihood. The value of the coefficient β reveals the direction of the relationship between X and the logit of Y . In this analysis, the dependent variable—the parent-child discrepancy—is a categorical variable with 5 groups and “both students and parents agree on high or very high expectation level” will be taken as the reference category. Thus, multinomial logistic regression examined, for example, the extent to which explanatory variables increases or decreases the probability of being in the “students have low/medium expectation levels which higher than their parents” group compared to being in the “both students and parents agree on high or very high expectation level” group.

Specifically, four models are used to address the main hypotheses in the study:

Model 1a—to investigate how migration status is associated with parent-child discrepancies (hypotheses H1), I to use the following model:

$$\log \frac{P_{tij}}{P_{ti4}} = \beta_0 + \beta_1 M_{(t-1)i} + \beta_2 C_{(t-1)i}$$

Where $\frac{P_{tij}}{P_{ti4}}$ is the relative probability for i^{th} individual to stay in group j rather than the reference group, group 4 in 2014; $M_{(t-1)i}$ is a dichotomous migration status (non-migrants and migrants) in 2013 for i^{th} individual; and $C_{(t-1)i}$ represents a column vector of individual and household characteristics in 2013 as described above. In order to test hypotheses H2, I then replaced the dichotomous migration status with a migration categorical variable with four groups: urban local-born, urban migrants, rural local-born, and rural migrants (*Model 1b*).

Model 2—to investigate the relationship between intra-familial social capital and parent-child discrepancies in educational expectations (hypotheses H3a and H3b), I employ the following model:

$$\log \frac{P_{tij}}{P_{ti4}} = \beta_0 + \beta_1 I_{(t-1)i} + \beta_2 C_{(t-1)i}$$

Where the right-hand side logit is the same as those in the previous model; $I_{(t-1)i}$ is a series variable of intra-familial social capital for i^{th} individual in 2013; and $C_{(t-1)i}$ refers to a column vector of individual and household characteristics in 2013. This model enables me to test whether some parent-child discrepancies are explained by items of intra-familial social capital.

Model 3—Model 3 takes a similar form to Model 2, and the only difference is that intra-familial social capital variables are replaced by the extra-familial social capital variables (hypotheses H4a and H4b):

$$\log \frac{P_{tij}}{P_{ti4}} = \beta_0 + \beta_1 E_{(t-1)i} + \beta_2 C_{(t-1)i}$$

This step allows me to examine how extra-familial social capital explains the association between migration status and parent-child discrepancies.

Model 4— Finally, I put take intra-familial social capital variables back into the model in order to investigate how intra-familial and extra-familial social capital work together to predict the association between migration status and parent-child discrepancies in educational expectations.

The full estimated model examining effect of social capital takes the following form:

$$\log \frac{P_{tij}}{P_{ti4}} = \beta_0 + \beta_1 I_{(t-1)i} + \beta_2 E_{(t-1)i} + \beta_3 M_{(t-1)i} + \beta_4 C_{(t-1)i}$$

Results

Figure 3 demonstrates that there is a significant variation in parents' and students' expectations for future schooling. In general, parents tend to hold higher educational expectation levels than their children. About 20% of students hold a low or very low expectation level while the number is about 12% for parents. In terms of the higher levels, about 65% of students and 72% of parents hold a high or very high expectation level. The descriptive result is aligned with the t-test, a significance test of difference. The t-test shows that on average, parents ($M=6.94$, $SD=1.55$) hold significantly ($p<0.001$) higher expectations than their children ($M=6.91$, $SD=1.71$). This result is consistent with the Chinese context. Parental expectations for children's education are deeply influenced by Confucian philosophy, which emphasizes the importance of education (Guo et al. 2020). A popular Chinese maxim reflects the essence of parental expectations: expecting the child to become a dragon, since the dragon symbolizes supremacy in Chinese culture (Leung and Shek 2011). Families are predisposed to invest heavily in their children's education (Cebolla-Boado and Soysal 2018), which could lead to a very high parents' expectation of education.

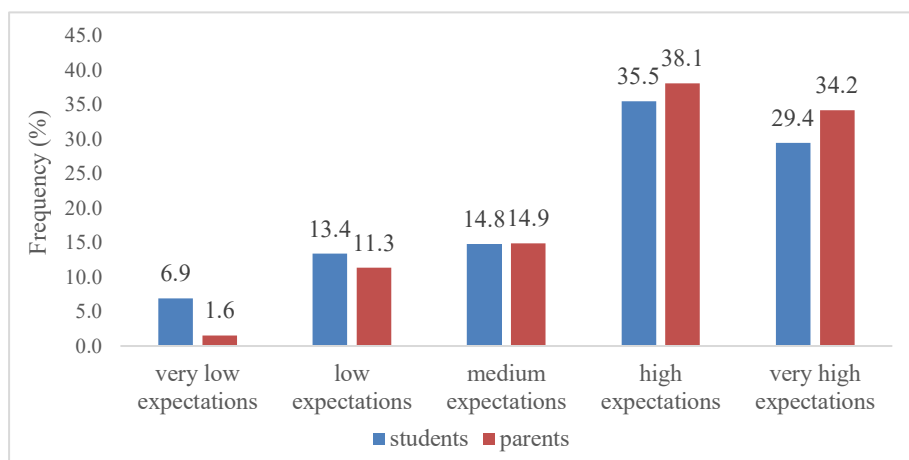


Figure 3: Students and Parents' Educational Expectation Levels (by %)

Figure 4 shows the distribution of parent-child discrepancies in educational expectations by migration status. In general, the patterns for local-born students are similar to migrant students. About 43% of the local-born students and 39% of migrant students hold a high expectation level that is aligned with their parents' expectations (group 3)¹. This result is consistent with the t-test, suggesting that there is no significant difference between migrant students and non-migrant students in parent-child discrepancies. Such a result contradicts my first hypothesis H1 that migration may lead to greater parent-child discrepancies in educational expectations.

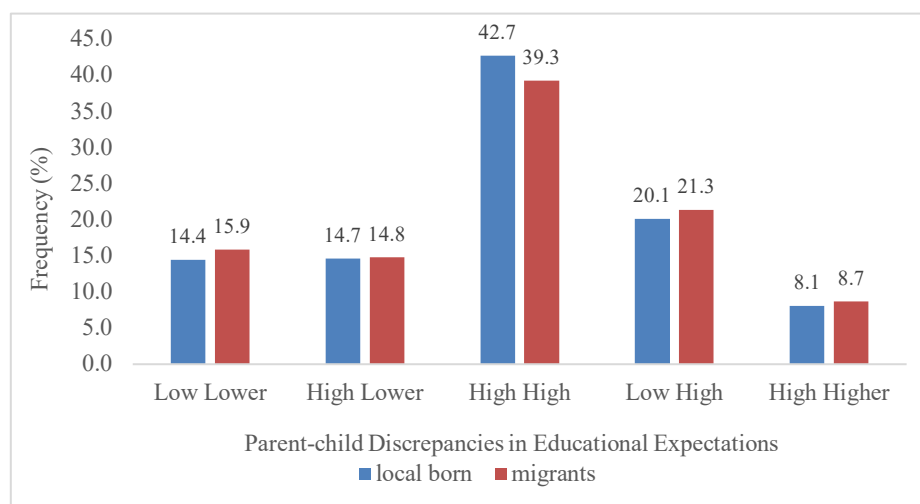


Figure 4: Parent-child Discrepancies by Migration Status (2 categories)

However, when taking a closer examination of migration status and rural-urban hukou division, the pattern has some variations. Figure 5 shows that more urban students, no matter their migration status, hold a high and consistent parent-child educational expectation when compared to their rural peers. Specifically, the fact that fewer rural migrant students are in group 3 reflects that rural migrant students are more likely to have greater parent-child discrepancies.

¹ Please refer to group classification on page 15.

Such a result is aligned with the t-test. For example, when comparing with their urban local-born peers ($M=3.03$, $SD=1.05$), rural migrant students ($M=2.86$, $SD=1.20$) hold significantly ($p<0.001$) greater parent-child discrepancies in expectations. Even when compared with urban migrants ($M=2.98$, $SD=1.08$), rural migrant students ($M=2.86$, $SD=1.20$) on average hold significantly ($p<0.05$) larger parent-child discrepancies in educational expectations. These descriptive results lend empirical support to hypothesis H2, proposing that rural migrant students have greater parent-child discrepancies in educational expectations.

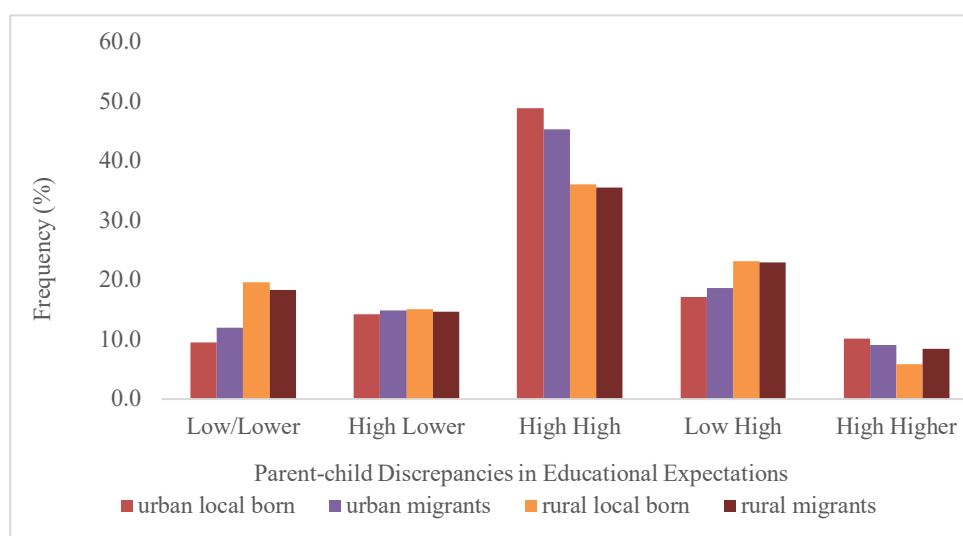


Figure 5: Parent-child Discrepancies by Migration Status (4 categories)

Model 1: Migration Status and Parent-child Discrepancies

Table 2 presents the multinomial logistic regression coefficients from the first model, predicting parent-child discrepancies in educational expectations in wave 2 by different migration statuses. The reference group is group 3, which is the students who have high or very high expectations and parents who have matching expectations². Positive coefficients mean that

² Please also refer to group classification on page 15.

the predictor variable raises the log odds of being in one group rather than the reference group, and negative coefficients lower the log odds of that. In other words, negative coefficients indicate that families are more likely to have a consistent and high expectation. Surprisingly, Model 1a shows that contrary to hypothesis H1, being a migrant student does not have any significant effects on having a high and consistent parent-child expectation when controlling for other covariates. It may be due to the demographic dividend resulting from the implementation of the “one-child” policy. Demographic dividend is produced by demographic transitions where the proportion of children has been declining while the proportion of the working-age population has been rising (Feng and Mason 2007). Such a demographic dividend brings advantages to the young generations in socioeconomic and political aspects. It is possible that the social dividend benefits the entire cohorts rather than some groups such as non-migrant children in China.

Table 2: Multinomial logistic regression migration status model of parent-child discrepancies in educational expectations (Model 1a), CEPS Wave 1 & 2

	Group 1 (Low/Low/er)	Group 2 (High/Lower)	Group 4 (Low/High)	Group 5 (High/Higher)
Students' migration status				
Migrants	0.109	0.016	0.064	0.136
Controls:				
Age	0.261***	0.104*	0.155**	-0.036
Male	0.102	-0.061	0.395***	0.215*
Only Child	-0.456***	-0.158*	-0.338***	-0.095
Self-perceived SES				
Middle	-0.168	-0.051	-0.255**	0.177
Rich	-0.359	-0.435*	-0.467**	0.131
Parental presence (vs. Both at home)				
Only mom is home	0.195	-0.090	0.114	-0.188
Only dad is home	0.415*	0.190	0.148	-0.583
Neither is home	0.212	0.005	-0.004	-0.217
Parents' highest level of education	-0.731***	-0.201***	-0.324***	0.098*
Chinese test	-0.035***	-0.002	-0.029***	0.009
Math test	-0.042***	-0.015**	-0.027***	-0.006
English test	-0.038***	-0.021***	-0.030***	0.003
Observations		8506		

Note: the reference group is group 3, both parents and students hold a high expectation level.

* p<0.05

** p<0.01

*** p<0.001

Given the importance of hukou system in China, I posited hypothesis H2 and replaced the dichotomous migration variable with a categorical migration variable which could capture the interaction between hukou type and migration status (Model 1b). As shown in table 3, the results indicate that being a rural migrant student does have a strong association with having a high and consistent parent-child educational expectation as compared to being an urban local-born student. The positive coefficients of rural migrants reflect that being a rural migrant student increases the log odds by 0.445 of staying in group 1 rather than the reference group, compared to their urban local-born peers. It suggests that rural migrant students are 56.0% ($e^{0.445} - 1 = 0.560$) more likely than urban local-born students to have low and discrepant (or low and consistent) parent-child expectations, controlling for other demographic information. In other words, being a rural migrant student is associated with low expectations and a lower likelihood of both parents and children having high expectations, controlling for other covariates. Such findings lend empirical support to hypothesis H2. Similarly, the coefficient for rural local-born students in group 4 is 0.206, reflecting that rural born students are 22.9% ($e^{0.206} - 1 = 0.229$) more likely than urban local-born students to have inconsistent parent-child expectations (with children hold a low level of expectation while their parents hold a high level of expectation). Such results indicate that hukou type rather than migration status is a more important predictor for parent-child educational expectations. A rural hukou may restrict available resources such as the social welfare of a migrant family and such diminished levels of social capital may be negatively associated with parent-child educational expectations.

Overall, the output of the multinomial logistic regression of Model 1a and 1b suggests that types of migration status are associated with the level of discrepancies, but the association is only statistically significant for students who come from rural areas. Specifically, being a rural

student, no matter they are migrants or local-born lowers the likelihood of having a high and consistent parent-child expectation compared to their urban local-born, holding all other covariates constant. This finding is expected as previous research suggests, children with rural hukou, continue to face significant obstacles in access to educational resources (Liang et al. 2019; Xu and Xie 2015).

Table 3: Multinomial logistic regression migration status model of parent-child discrepancies in educational expectations (Model 1b), CEPS Wave 1 & 2

	Group 1 (Low Low/er)	Group 2 (High Lower)	Group 4 (Low High)	Group 5 (High Higher)
Students' migration status				
Urban migrants	0.171	-0.024	0.006	-0.057
Rural local born	0.350***	0.070	0.206**	-0.134
Rural migrants	0.445***	0.123	0.276*	0.174
Controls:				
Age	0.261***	0.103*	0.154**	-0.038
Male	0.096	-0.064	0.391***	0.214*
Only Child	-0.392***	-0.141	-0.296***	-0.116
Self-perceived SES				
Middle	-0.149	-0.047	-0.241**	0.167
Rich	-0.341	-0.430*	-0.453**	0.129
Parental presence (vs. both at home)				
Only mom is home	0.200	-0.088	0.116	-0.173
Only dad is home	0.417*	0.192	0.151	-0.582
Neither is home	0.214	0.005	-0.007	-0.209
Parents' highest level of education	-0.682***	-0.187***	-0.290***	0.088*
Chinese test	-0.035***	-0.003	-0.029***	0.009
Math test	-0.043***	-0.016**	-0.027***	-0.006
English test	-0.038***	-0.021***	-0.030***	0.003
Observations	8506			

Note: The reference group is group 3, both parents and students hold a high expectation level.

*** $p < .001$

** $p < .01$

* $p < .05$

Model 2: Intra-familial Social Capital and Parent-child Discrepancies

Model 2 adds measures of intra-familial social capital in order to determine if such family-based characteristics can account for differences in the association between migration status and parent-child discrepancies (H3a and H3b). Table 4 presents the results. The decreasing size of coefficients of migration variables (e.g., rural local-born and rural migrants) suggests that

some variations of the association between migration and parent-child discrepancies are explained by the intra-familial social capital. Model 2 also indicates that intra-familial social capital is associated with parent-child discrepancies, when controlling for migration status.

Particularly, the negative and significant coefficients of parent-child communication, parent-child activities, and perceptions of parental support lend support to hypothesis H3a. The more frequent the parent-child communication and parent-child activities, the higher probability of having a high and consistent parent-child expectation. For example, students who sometimes discuss personal life or feelings with their parents are 18.2% ($1 - e^{(-0.201)}=0.182$) less likely to have a disparate parent-child educational expectation (e.g., students hold a lower level while parents hold a high level of expectation), compared to students who never discuss personal life or feelings with their parents. The likelihood is even lower (56.2% or $1 - e^{(-0.826)}=0.562$) for students who often have such discussions with parents. Such a result predicts a similar pattern across groups, except for group 5, in which students hold a high expectation, and their parents have an even higher level of expectation. On the contrary, the more frequent parent-child activities increase the likelihood of students staying in group 5 than the reference group. In addition, perception of parental support also successfully predicts the parent-child discrepancy in educational expectation. Students who will first seek help from them when in trouble are more likely to share a high educational expectation with their parents than those who do not. Therefore, hypothesis H3a is well supported by model 2.

Moreover, parental involvement in school-related activities presents some variations. Homework support, surprisingly, is not associated with parent-child discrepancies; however, participation in school-related extracurricular and cram school well predicts the parent-child expectation levels. Attending school-related extracurricular is 28.6% ($1 - e^{(-0.337)}=0.286$) more

likely to be in the reference group than in group 4; similarly, participating in school-related cram school is 20.6% ($1 - e^{(-0.231)}=0.206$) more likely to be in the reference group than in group 1.

Hence, the mixed results suggest that hypothesis H3b is partially supported by model 2.

Table 4: Multinomial logistic regression of intra-familial social capital models of parent-child discrepancies in educational expectations (Model 2), CEPS Wave 1 & 2

	Model 1b				Model 2			
	Group 1 (Low Low/er)	Group 2 (High Lower)	Group 4 (Low High)	Group 5 (High Higher)	Group 1 (Low Low/er)	Group 2 (High Lower)	Group 4 (Low High)	Group 5 (High Higher)
Students' migration status								
Urban migrants	0.171	-0.024	0.006	-0.057	0.151	-0.029	-0.003	-0.063
Rural local born	0.350***	0.070	0.206**	-0.134	0.297**	0.071	0.181*	-0.140
Rural migrants	0.445***	0.123	0.276*	0.174	0.418***	0.117	0.255*	0.166
Controls								
Age	0.261***	0.103*	0.154**	-0.038	0.224***	0.097	0.113*	-0.039
Male	0.096	-0.064	0.391***	0.214*	0.029	-0.092	0.339***	0.193*
Only Child	-0.392***	-0.141	-0.296***	-0.116	-0.288***	-0.112	-0.188**	-0.094
Self-perceived socioeconomic status								
Middle	-0.149	-0.047	-0.241**	0.167	-0.023	-0.011	-0.115	0.191
Rich	-0.341	-0.430*	-0.453**	0.129	-0.103	-0.377*	-0.245	0.169
Parental presence (vs. both at home)								
Only mother is at home	0.200	-0.088	0.116	-0.173	0.108	-0.114	0.029	-0.184
Only father is at home	0.417*	0.192	0.151	-0.582	0.270	0.129	-0.037	-0.609
Neither is at home	0.214	0.005	-0.007	-0.209	0.085	-0.044	-0.172	-0.169
Parents' highest level of education	-0.682***	-0.187***	-0.290***	0.088*	-0.585***	-0.166***	-0.207***	0.106*
Chinese standardized test	-0.035***	-0.003	-0.029***	0.009	-0.036***	-0.002	-0.029***	0.009
Math standardized test	-0.043***	-0.016**	-0.027***	-0.006	-0.044***	-0.016**	-0.029***	-0.007
English standardized test	-0.038***	-0.021***	-0.030***	0.003	-0.035***	-0.020***	-0.027***	0.003
Intra-familial Social Capital								
Parent-child communication (vs. Never)								
Sometimes					-0.201*	-0.151	-0.367***	0.010
Often					-0.827***	-0.307*	-0.833***	-0.173
Parent-child activity (vs. Never)								
Once a year					0.140	0.115	0.013	0.867*
Twice a year					-0.104	-0.046	-0.138	0.817*
Once a month					-0.304	0.003	-0.500**	0.708
Once a week					-0.505*	-0.091	-0.552**	0.644
More than once a week					-0.173	0.180	-0.311	0.902*
Perceptions of parental support								
Homework support					0.163	0.034	0.062	-0.001
Extracurricular Participation					-0.523***	-0.068	-0.337***	-0.078
Cram school participation					-0.231*	-0.009	-0.068	0.024
Observation	8506							

Note: The reference group is group 3, both parents and students hold a high expectation level.

***p<.001, **p<.01, *p<.05

Taken together, intra-familial social capital contributes to explain some variations of the parent-child discrepancy in educational expectations. Specifically, the empirical results of model

2 support hypothesis H3a, reflecting that more parent-child interaction is associated with a higher likelihood that parents and children have the same and high educational expectations for the child. Hypothesis H3b is partially supported by model 2 as parental support in homework does not predict the parent-child education levels.

Model 3: Extra-familial Social Capital and Parent-child Discrepancies

Model 3 replaces measures of intra-familial social capital with extra-familial social capital (Table 5). Similar to model 2, the coefficients of migration variables also become smaller after adding extra-familial social capital into the model. However, the decreases of coefficients are minimal. In addition, I hypothesized that extra-familial social capital is an important factor predicting how parental expectations differ from students' own expectations (H4a and H4b). Overall, the output of model 3 shows that hypothesis H4a is partially supported and the hypothesis H4b is failed to be supported.

Specifically, for H4a, the parent-teacher contact and parent-other interactions successfully predict the parent-child discrepancies while parent-parent interaction is irrelevant. The negative and significant coefficients for parent-child contact reveal that students with parents who contact the teacher at least once/semester are more likely to be in the reference group, where parents and children have high expectations (but not the highest) and less likely to have lower and discrepant expectations (i.e., groups 1 and 4). A similar pattern can be found in parent-other interaction. Students with parents who interact with others (here, seeking help for school enrollment from friends) are 29.0% ($1 - e^{(-0.343)} = 0.290$) more likely to be in the reference group. Moreover, the results of model 3 contradict H4b, suggesting that knowing other parents fails to predict the parent-child discrepancies and knowing neighborhoods decreases the

likelihood of having a shared and high parent-child expectation. In other words, students with parents who know their neighbors' occupations are 58.9% ($e^{(0.463)} - 1 = 0.589$) more likely to have low and discrepant expectations with their parents and less likely to hold a high and aligned parent-child expectation.

Table 5: Multinomial logistic regression of extra-familial social capital models of parent-child discrepancies in educational expectations, CEPS Wave 1 & 2

	Model 1b				Model 3			
	Group 1 (Low Low/er)	Group 2 (High Lower)	Group 4 (Low High)	Group 5 (High Higher)	Group 1 (Low Low/er)	Group 2 (High Lower)	Group 4 (Low High)	Group 5 (High Higher)
Students' migration status								
Urban migrants	0.171	-0.024	0.006	-0.057	0.224	-0.014	0.020	-0.038
Rural local born	0.350***	0.070	0.206**	-0.134	0.310***	0.056	0.198*	-0.122
Rural migrants	0.445***	0.123	0.276*	0.174	0.455***	0.124	0.267*	0.197
Controls								
Age	0.261***	0.103*	0.154**	-0.038	0.258***	0.102	0.156**	-0.036
Male	0.096	-0.064	0.391***	0.214*	0.136	-0.060	0.433***	0.237**
Only Child	-0.392***	-0.141	-0.296***	-0.116	-0.369***	-0.134	-0.279***	-0.125
Self-perceived socioeconomic status								
Middle	-0.149	-0.047	-0.241**	0.167	-0.102	-0.037	-0.220**	0.167
Rich	-0.341	-0.430*	-0.453**	0.129	-0.273	-0.425*	-0.422**	0.157
Parental presence (vs. both at home)								
Only mother is at home	0.200	-0.088	0.116	-0.173	0.217	-0.082	0.123	-0.173
Only father is at home	0.417*	0.192	0.151	-0.582	0.415*	0.180	0.149	-0.574
Neither is at home	0.214	0.005	-0.007	-0.209	0.246	0.004	0.015	-0.185
Parents' highest level of education								
Chinese standardized test	-0.035***	-0.003	-0.029***	0.009	-0.036***	-0.003	-0.030***	0.008
Math standardized test	-0.043***	-0.016**	-0.027***	-0.006	-0.043***	-0.016**	-0.028***	-0.006
English standardized test	-0.038***	-0.021***	-0.030***	0.003	-0.040***	-0.021***	-0.030***	0.003
Extra-familial Social Capital								
Parent-teacher contact (vs. never)								
Once					-0.313**	-0.057	-0.275**	0.085
Two to four times					-0.389***	-0.093	-0.347***	-0.094
Five times or more					-0.571***	-0.045	-0.520***	-0.220
Parent-parent interaction								
Parent-other interaction					-0.079	-0.076	-0.105	0.028
Knowing other parents (vs. don't know)								
Know some of them					-0.024	0.011	0.029	-0.005
Know all of them					0.051	0.155	0.110	0.139
Knowing neighborhoods					0.463***	0.090	0.111	-0.044
Observation	8506							
* p<0.05	** p<0.01				*** p<0.001			

In summary, the empirical results of model 3 lend partially support hypothesis H4a and rejection to hypothesis H4b, which are consistent with the minimal changes of coefficients for migration status from model 1b to model 3. The results illustrate that some of the measures of

extra-familial social capital contribute to explain the relationship between migration and parent-child discrepancies. In other words, results of model 3 suggest that only parent-teacher contact and parent-other interactions predict why some families hold a high and shared parent-child expectation, by controlling for migration status.

Model 4: Familial Social Capital and Parent-child Discrepancies

After examining the familial social capital separately, I add both intra-familial and extra-familial social capital into the final model (Model 4) to capture the overall effects of social capital on the parent-child discrepancies. Table 6 shows this full model. Overall, the relationship between migration status and parent-child discrepancies in educational expectations are partially explained by familial social capital.

Specifically, I compared the coefficients for the migration variable in models 1b and model 4. As table 6 shows, when adjusting for familial social capital in model 4, the log odds for rural students decrease. This means that the probability of not having a high and aligned parent-child expectation lowers for rural children in model 4 than in model 1b, once familial social capital is controlled. An additional column next to each category with an “†” in model 4 indicates the coefficient has a sizeable change in size from model 1b. The determination of sizeable change across the two models is whether or not the difference is greater than 10%. For example, there is a 27.1% drop in the magnitude of the log odds for rural local-born students of having low and discrepant educational expectations from model 1b to model 4. Specifically, the probability of having low and discrepant expectations (group 1) for rural local-born students was 41.9% ($e^{0.350} - 1 = 0.419$) in model 1b but it decreases to 29.0% ($e^{0.255} - 1 = 0.290$) in model 4. Such a decrease suggests that the likelihood of having low and discrepant expectations for rural

local-born students decreases once controlled for familial social capital. A similar pattern can be observed for urban migrants though the coefficient is not significant. However, unlike rural local-born students, being a rural migrant student is still more likely to hold low and discrepant expectations even controlling for familial social capital. The less significant and smaller coefficients for both rural local-born and rural migrant students suggest that familial social capital accounts for variations of parent-child discrepancy in educational expectations across migrant groups except rural migrants.

Further, Model 4 also indicates that some family or individual characteristics of a student are stronger predictors than others. For example, positive age coefficients indicate that the older the children the more likely to have either low or inconsistent expectation levels with their parents. The result is reasonable since children may become more self-aware as they grow up based on the literature review. Some variables like test scores and parents' highest level of education are positively associated with a high and aligned parent-child expectation level. This may indicate that students with better educational performance and a higher level of parental education tend to hold a high and consistent parent-child expectation.

Table 6: Multinomial logistic regression of familial social capital models of parent-child discrepancies in educational expectations, CEPS Wave 1 & 2

	Model 1b				Model 4			
	Group 1 (Low Low/er)	Group 2 (High Lower)	Group 4 (Low High)	Group 5 (High Higher)	Group 1 (Low Low/er)	Group 2 (High Lower)	Group 4 (Low High)	Group 5 (High Higher)
Students' migration status								
Urban migrants	0.171	-0.024	0.006	-0.057	0.203	-0.019	0.015	-0.044
Rural local born	0.350***	0.070	0.206**	-0.134	0.255** †	0.055	0.165*†	-0.130
Rural migrants	0.445***	0.123	0.276*	0.174	0.435***	0.121	0.253*†	0.192
Controls								
Age	0.261***	0.103*	0.154**	-0.038	0.223***	0.095	0.117*	-0.038
Male	0.096	-0.064	0.391***	0.214*	0.059	-0.093	0.367***	0.212*
Only Child	-0.392***	-0.141	-0.296***	-0.116	-0.273**	-0.107	-0.176*	-0.104
Self-perceived socioeconomic status								
Middle	-0.149	-0.047	-0.241**	0.167	0.012	-0.006	-0.106	0.187
Rich	-0.341	-0.430*	-0.453**	0.129	-0.054	-0.379*	-0.235	0.192
Parental presence (vs. both at home)								
Only mother is at home	0.200	-0.088	0.116	-0.173	0.127	-0.108	0.036	-0.184
Only father is at home	0.417*	0.192	0.151	-0.582	0.274	0.116	-0.034	-0.602
Neither is at home	0.214	0.005	-0.007	-0.209	0.121	-0.043	-0.143	-0.146
Parents' highest level of education								
Chinese standardized test	-0.035***	-0.003	-0.029***	0.009	-0.037***	-0.002	-0.030***	0.008
Math standardized test	-0.043***	-0.016**	-0.027***	-0.006	-0.044***	-0.016**	-0.029***	-0.007
English standardized test	-0.038***	-0.021***	-0.030***	0.003	-0.037***	-0.020***	-0.028***	0.003
Intra-familial Social Capital								
Parent-child communication (vs. Never)								
Sometimes					-0.181*	-0.152	-0.352***	0.021
Often					-0.801***	-0.312**	-0.814***	-0.168
Parent-child activity (vs. Never)								
Once a year					0.120	0.110	0.004	0.839*
Twice a year					-0.120	-0.048	-0.144	0.792*
Once a month					-0.315	-0.001	-0.504**	0.678
Once a week					-0.504*	-0.090	-0.544**	0.621
More than once a week					-0.192	0.174	-0.314	0.880*
Perceptions of parental support								
Homework support					-0.069	-0.179*	-0.203**	-0.181*
Extracurricular Participation					0.171	0.034	0.080	0.011
Cram school participation					-0.493***	-0.064	-0.322***	-0.080
					-0.229*	-0.009	-0.066	0.026
Extra-familial Social Capital								
Parent-teacher contact (vs. never)								
Once					-0.217*	-0.026	-0.164	0.098
Two to four times					-0.284**	-0.057	-0.225**	-0.072
Five times or more					-0.442***	0.003	-0.378**	-0.186
Parent-parent interaction					-0.039	-0.063	-0.062	0.035
Parent-other interaction					-0.174	0.018	0.014	-0.348*
Knowing other parents (vs. don't know)								
Know some of them					0.028	0.038	0.096	0.010
Know all of them					0.189	0.220	0.276	0.193
Knowing neighborhoods					0.444***	0.085	0.109	-0.053

Observation

8506

Note: The reference group is group 3, both parents and students hold a high expectation level.

***p<.001, **p<.01, *p<.05

† indicates coefficients change in sizeable magnitude (>10%) between model 2 and model 5.

Discussion and Conclusions

Using a nationally representative sample from China, I assess the relationship between children's migration status and parent-child discrepancies in educational expectations. I employ longitudinal measures of educational expectation—using explanatory variables of wave 1 to predict the outcome variable of wave 2. Several of my findings are important for furthering the understanding of how migration status is associated with parent-child discrepancies and how familial social capital mediates such association.

First, my analyses reflect that migration status could bring some negative impacts on parent-child expectations once it interacts with hukou types (rural vs. urban). The results of models 1a and 1b demonstrate that migration status by itself does not have a strong association with parent-child discrepancies in educational expectations; however, when interacting with the hukou type, the migration status does play a role. Migrant students with a rural hukou or rural-to-urban migrant students have a lower probability of having a high and consistent parent-child expectation, even compared to their rural local-born peers. These results are aligned with some of the previous studies (Cebolla-Boado and Soysal 2018), suggesting that internal migration in China does not necessarily foster the emergence of immigrant optimism. Although hukou conversion (i.e., convert a rural hukou to an urban hukou) is possible, rural children, especially migrant children, still experience educational difficulties even when controlling for types of schools (Liang et al. 2019; Shen 2017). Such a result possibly reflects that migrant parents and children have constraints and barriers due to a lack of a local urban hukou, resulting in a lack of sufficient resources to achieve the educational goals. Despite the Chinese government's efforts of equal education opportunities, the role of hukou continues to affect the life chances of millions of migrant children in China (Liang et al. 2019).

Second, intra-familial social capital, generated from parent-child interactions and parental investment, is an important factor explaining the association between migration status and parent-child discrepancies. Consistent with the previous studies (Liang et al. 2019; Ma and Wu 2020; Zhang 2017), my study suggests that intra-familial social capital, including parent-child interaction and parental involvement in school-related activities, are significant predictors for the variations of parent-child discrepancy in educational expectations across migration groups. Rural migrant children tend to have parents who may have fewer opportunities of communicating with their children or involving in school-related activities, resulting in larger discrepancies in their educational expectations.

Third, parent-child educational expectation levels are predicted by some measures of the extra-familial social capital of a family, generated from the relationships between the parents and significant others such as teachers. My findings of Model 3 show that both parent-teacher and parent-other interactions are positively associated with having a high and consistent parent-child educational expectation for students. Frequent parent-teacher contact tends to lower the discrepancy levels between parents and children. Similarly, parent-other interactions also positively contribute to obtaining a shared and high parent-child al expectation. Such results are consistent with previous studies (Horvath 2013; Li and Fischer 2017). However, the presence of parental networks such as knowing other parents or neighbors does not significantly change the relationship between migration status and parent-child discrepancies, which counters my hypothesis H4b. Such contradiction may due to different measures of the presence of parental networks in different datasets. The CEPS dataset used in this study has limited measures of parental networks which may not be able to capture the full picture of how the existence of

parental networks relates to parent-child educational expectation. Future studies may employ a different dataset or alter the measures of the presence of parental networks to test this hypothesis.

Last, besides major predictors, control variables like age, gender, household size, parents' education, and student's test scores are strongly linked with parent-child discrepancies in educational expectation. The positive age coefficients in the models illustrate that older children are less likely to hold high expectations in education, consistent with their parents. Families who have girls tend to have consistent and high parent-child educational expectations when compared to boys. Students who are the only child in their family tend to be more likely to be in the reference group. The negative coefficients of parents' highest level of education and children's standardized test scores in Chinese, math, and English in the model indicate that these factors all positively contribute to the likelihood that students hold a high expectation in education, consistent with their parents.

This study is limited in several ways. Most measures of the dependent and independent variables are collected through either self-reports or proxy-reports by parents and are hence subject to reporting errors (Xu and Xie 2015). Besides, although the wave 2 data is the latest released, it was collected in 2014, which may not be able to capture the current trend of internal migration in China. As a hukou reform was passed in 2014 with the purpose of eliminating the differences between rural and urban hukou (replaced by a residential hukou), the association between migration status and parent-child discrepancies may differ once the implementation of the hukou reform is applied across the country. Furthermore, since I intend to use wave 1 data to explain students' educational expectations in wave 2, a two-year time span may not be long enough to capture the change. Given that timing and duration of migration are also important

indicators of students' educational development, future research may explore the changes in educational expectations before and after they experience a change of migration status.

These limitations do not necessarily undermine the strengths of this study. The study infers an association between migration status and parent-child discrepancies in educational expectations. By capturing both expectation levels and parent-child discrepancy, I make fine-grained comparisons across five distinct groups and provide evidence from one of the most important countries of origin of contemporary migration flows (Cebolla-Boado and Soysal 2018). Given that the impact of familial social capital varies across groups, the study provides important insights for both researchers and policymakers.

Although a multinomial logistic regression is suitable for a categorical dependent variable, it is sometimes difficult to draw a decisive conclusion. Future research may employ different statistical models to explore a causal relationship between familial social capital and parent-child discrepancy. Furthermore, after several years of the 2014 hukou reform, I think it is worth exploring the current trend of parent-child discrepancies in educational expectations. I expect that future research can develop a comparison not only between migrants with local born but also with other meaningful groups such as hukou converters. I believe such research is imperative. Moreover, although there is an ongoing hukou reform and rural migrant children are able to attend urban public schools, rural children still face more barriers which may result in larger discrepancies in educational expectations between parents and children than their urban peers.

As this study suggests, some demographic characteristics such as parental education, as well as familial social capital, including parent-child interactions, parental involvement, and parent-teacher interactions, are important contributors to lower the probability of the parent-child

discrepancy. Those factors could lead to emotional deprivation, poor discipline and mental adaptability, and educational difficulties for rural children (Shen 2017), which posit rural children in a disadvantaged group. Therefore, the urban-rural disparity is not simply a hukou problem but is more embedded in the returns to education. In this case, the elimination of the rural and urban hukou category is essential but not sufficient to address the huge urban-rural gap. Policymakers may also want to promote more on adult education as well as advocate the importance of parent-child interaction and parental involvement. Given that the culture of education is intensified across the globe (Baker 2004), educational expectation is still one of the most important topics on which both researchers and policymakers focus.

References

- Astone, Nan Marie and Sara S. McLanahan. 1994. "Family Structure, Residential Mobility, and School Dropout: A Research Note." *Demography* 31(4):575–84.
- Bai, Yu, Linxiu Zhang, Chengfang Liu, Yaojiang Shi, Di Mo, and Scott Rozelle. 2018. "Effect of Parental Migration on the Academic Performance of Left Behind Children in North Western China." *Journal of Development Studies* 54(7):1154–70.
- Baker, David. 2004. *Inequality across Societies : Families, Schools and Persisting Stratification*. Vol. 13.
- Behtoui, Alireza. 2017. "Social Capital and the Educational Expectations of Young People." *European Educational Research Journal* 16(4):487–503.
- Beutel, Ann M. and Kermyt G. Anderson. 2008. "Race and the Educational Expectations of Parents and Children: The Case of South Africa." *Sociological Quarterly* 49(2):335–61.
- Bourdieu, Pierre. 1986. "The Forms of Capital." Pp. 241-258 in *Handbook of Theory and Research for the Sociology of Education*, edited by J. G. Richardson. New York: Greenwood Press.
- Bozick, R., K. Alexander, D. Entwisle, S. Dauber, and K. Kerr. 2010. "Framing the Future: Revisiting the Place of Educational Expectations in Status Attainment." *Social Forces* 88(5):2027–52.
- Carpenter, Dick M. 2008. "Expectations, Aspirations, and Achievement among Latino Students of Immigrant Families." *Marriage and Family Review* 43(1–2):164–85.
- Cebolla-Boado, Héctor and Yasemin Nuhoğlu Soysal. 2018. "Educational Optimism in China: Migrant Selectivity or Migration Experience?" *Journal of Ethnic and Migration Studies* 44(13):2107–26.
- Coleman, James S. 1988. "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 94(1988):S95–120.
- Domina, Thurston, Annemarie Conley, and George Farkas. 2011. "The Link between Educational Expectations and Effort in the College-for-All Era." *American Sociological Association* 84(2):93–112.
- Driscoll, Anne K. 1999. "Risk of High School Dropout Among Immigrant and Native Hispanic Youth1." *The International Migration Review* 33(4):857–75.
- Epstein, Joyce L. 1986. "Toward an Integrated Theory of School and Family Connections." 3–57.
- Epstein, Joyce L. and Susan L. Dauber. 1991. "School Programs and Teacher Practices of Parent Involvement in Inner-City Elementary and Middle Schools." *The Elementary School Journal* 91(3):129–49.
- Feng, Wang and Andrew Mason. 2007. "Demographic Dividend and Prospects for Economic Development in China." Pp. 141–54 in *United nations expert group meeting on social and economic implications of changing population age structures*. New York: United Nations.
- Glick, Jennifer E. and Michael J. White. 2004. "Post-Secondary School Participation of Immigrant and Native Youth: The Role of Familial Resources and Educational Expectations." *Social Science Research* 33(2):272–99.
- Grotevant, Harold D. and Catherine R. Cooper. 1986. "Individuation in Family Relationships: A Perspective on Individual Differences in the Development of Identity and Role-Taking Skill in Adolescence." *Human Development* 29(2):82–100.
- Guo, Xiaolin, Luyang Guo, Surina He, Chunhui Liu, and Liang Luo. 2020. "Mothers' Filial

- Piety and Children's Academic Achievement: The Indirect Effect via Mother-Child Discrepancy in Perceived Parental Expectations." *Educational Psychology* 0(0):1–19.
- Hagan, John, Ross Macmillan, and Blair Wheaton. 1996. "New Kid in Town : Social Capital and the Life Course Effects of Family Migration on Children Author (s): John Hagan , Ross MacMillan and Blair Wheaton Published by : American Sociological Association Stable URL : <https://www.jstor.org/stable/2096354> REF." 61(3):368–85.
- Hao, Lingxin and Melissa Bonstead-bruns. 1998. "Parent-Child Differences in Educational Expectations and the Academic Achievement of Immigrant and Native Students Author (s): Lingxin Hao and Melissa Bonstead-Bruns Source : Sociology of Education , Vol . 71 , No . 3 (Jul . , 1998), Pp . 175-198 Publi." *American Sociological Association* 71(3):175–98.
- Hao, Lingxin and Wei Jun Jean Yeung. 2015. "Parental Spending on School-Age Children: Structural Stratification and Parental Expectation." *Demography* 52(3):835–60.
- Hill, Nancy E. and Diana F. Tyson. 2009. "Parental Involvement in Middle School: A Meta-Analytic Assessment of the Strategies That Promote Achievement." *Developmental Psychology* 45(3):740–63.
- Hofferth, Sandra L. and Greg J. Duncan. 1998. "Parents ' Extrafamilial Resources and Children ' s School Attainment." *American Sociological Association* 71(3):246–68.
- Horvath, Gayle. 2013. "High Performance in Education." *Marine Technology* 50(2):76–78.
- Hu, Hongwei, Jiamin Gao, Haochen Jiang, Haixia Jiang, Shaoyun Guo, Kun Chen, Kaili Jin, and Yingying Qi. 2018. "A Comparative Study of Behavior Problems among Left-behind Children, Migrant Children and Local Children." *International Journal of Environmental Research and Public Health* 15(4).
- Jacob, Brian A; and Tamara Wilder. 2010. *Educational Expectations and Attainment*.
- Kao, Grace and Jennifer S. Thompson. 2003. "Rural and Ethnic Stratification in Educational Achievement and Attainment." *Annu. Rev. Sociol* 29:417–42.
- Leung, Janet T. Y. and Daniel T. L. Shek. 2011. "Expecting My Child to Become 'Dragon' - Development of the Chinese Parental Expectation on Child's Future Scale." *International Journal on Disability and Human Development* 10(3):257–65.
- Li, Angran and Mary J. Fischer. 2017. "Advantaged/Disadvantaged School Neighborhoods, Parental Networks, and Parental Involvement at Elementary School." *Sociology of Education* 90(4):355–77.
- Li, Lili, Lei Wang, and Jingchun Nie. 2017. "Effect of Parental Migration on the Academic Performance of Left-behind Middle School Students in Rural China." *China and World Economy* 25(2):45–59.
- Liang, Zai, Zhongshan Yue, Yuanfei Li, Qiao Li, and Aihua Zhou. 2019. "Choices or Constraints: Education of Migrant Children in Urban China." *Population Research and Policy Review* (0123456789).
- Lindberg, E. Niha., Erdal Yıldırım, Özlem Elvan, Dürdane Öztürk, and Serpil Reçepoğlu. 2019. "Parents' Educational Expectations: Does It Matter for Academic Success?" *SDU International Journal of Educational Studies* 6(2):150–60.
- Liu, Shuiyun, Fuxing Liu, and Yafeng Yu. 2017. "Educational Equality in China : Analysing Educational Policies for Migrant Children in Beijing Educational Equality in China : Analysing Educational Policies." *Educational Studies* 5698:0–21.
- Liu, Ting, Kathryn Holmes, and James Albright. 2015. "Urban Teachers ' Perceptions of Inclusion of Migrant Children in the Chinese Educational Institution : A Comparative Study." 3116.

- De Los Reyes, Andres, Kimberly L. Goodman, Wendy Kliewer, and Kathryn Reid-Quiñones. 2010. "The Longitudinal Consistency of Mother-Child Reporting Discrepancies of Parental Monitoring and Their Ability to Predict Child Delinquent Behaviors Two Years Later." *Journal of Youth and Adolescence* 39(12):1417–30.
- Ma, Gaoming and Qiaobing Wu. 2020. "Cultural Capital in Migration: Academic Achievements of Chinese Migrant Children in Urban Public Schools." *Children and Youth Services Review* 116(18):105196.
- McLanahan, Sara and Gary Sandefur. 1994. *Growing up with a Single Parent: What Hurts, What Helps*. Cambridge, MA: Harvard University Press.
- Minuchin, Patricia. 1985. "Families and Individual Development : Provocations from the Field of Family Therapy Author (s): Patricia Minuchin Published by : Wiley on Behalf of the Society for Research in Child Development Stable URL : [Http://Www.Jstor.Org/Stable/1129720](http://www.jstor.org/stable/1129720) REFERENCES." *Child Development* 56(2):289–302.
- Monyai, Simon, Maseka Lesaoana, Timotheus Darikwa, and Philimon Nyamugure. 2016. "Application of Multinomial Logistic Regression to Educational Factors of the 2009 General Household Survey in South Africa." *Journal of Applied Statistics* 43(1):128–39.
- Morgan, S. Philip and Jay D. Teachman. 1988. "Logistic Regression: Description, Examples, and Comparisons." *Journal of Marriage and the Family* 50(4):929.
- NBS National Bureau of Statistics of China, (2017). Report on the Monitoring of Migrant Workers, April 28 2017, Available at http://www.stats.gov.cn/tjsj/zxfb/index_8.html. (in Chinese)
- Nurmi, J.E. (2004). Socialization and self-development: Channeling, selection, adjustment, and reflection. In R.M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed., pp. 85–124). Hoboken, NJ: John Wiley
- Peng, Chao Ying Joanne and Rebecca Naegle Nichols. 2003. "Using Multinomial Logistic Models to Predict Adolescent Behavioral Risk." *Journal of Modern Applied Statistical Methods* 2(1):177–88.
- Pong, Suet Ling, Lingxin Hao, and Erica Gardner. 2005. "The Roles of Parenting Styles and Social Capital in the School Performance of Immigrant Asian and Hispanic Adolescents." *Social Science Quarterly* 86(4):928–50.
- Qian, Zhenchao; and Sampson Lee Blair. 1999. "Racial/Ethnic Differences in Educational Aspirations of High School Seniors." *Sociological Perspectives* 42(4):605–25.
- Quheng, Deng and Bjorn Gustafsson. 2014. "The Hukou Converters-China's Lesser Known Rural to Urban Migrants." *Journal of Contemporary China* 23(88):657–79.
- Ream, Robert K. 2005. "Toward Understanding How Social Capital Mediates the Impact of Mobility on Mexican American Achievement." *Social Forces* 84(1):201–24.
- Ream, Robert K. and Russell W. Rumberger. 2008. "Student Engagement, Peer Social Capital, and School Dropout among Mexican American and Non-Latino White Students." *Sociology of Education* 81(2):109–39.
- Royston, Patrick. 2004. "Multiple Imputation of Missing Values: Update of Ice." *Stata Journal* 5(4):527–36.
- Sheldon, Steven B., Source The, No Mar, and Steven B. Sheldon. 2002. "Parents' Social Networks and Beliefs as Predictors of Parent Involvement Published by : The University of Chicago Press Stable URL : [Http://Www.Jstor.Org/Stable/1002100](http://www.jstor.org/stable/1002100) REFERENCES Linked References Are Available on JSTOR for This Article : Parents' Soci." *The Elementary*

- School Journal* 102(4):301–16.
- Shen, Youlu. 2017. “‘Migrating’ or Being ‘Left Behind’: The Education Dilemma of Rural Children in Mainland China.” *Chinese Education and Society* 50(3):217–44.
- Stanton-salazar, Ricardo D. 2011. “Framework for the Study of Institutional Agents and Their Role in the Empowerment of Low-Status Students and Youth.”
- Suárez-Orozco, Carola, Jean Rhodes, and Michael Milburn. 2009. “Unraveling the Immigrant Paradox.” *Youth & Society* 41(2):151–85.
- Sui-Chu, Esther Ho and J. D. Willms. 1996. “Effects of Parental Involvement on Eighth-Grade Achievement Author (s): Esther Ho Sui-Chu and J . Douglas Willms Source : Sociology of Education , Vol . 69 , No . 2 (Apr . , 1996), Pp . 126-141 Published by : American Sociological Association Stable UR.” *Sociology of Education* 69(2):126–41.
- Teachman, Jay D., Kathleen Paasch, Karen Carver, J. A. Y. D. Teachman, Kathleen Paasch, and Karen Carver. 1996. “Published by : National Council on Family Relations Social Capital and Dropping Out of School Early.” 58(3):773–83.
- Useem, Elizabeth L. 1992. “Middle Schools and Math Groups : Parents ’ Involvement in Children ’ s Placement.” *Sociology of Education* 65(4):263–79.
- UNESCO. 2006. *ISCED 1997: International Standard Classification of Education*. UNESCO-UIS 2006.
- Van Buuren, Stef. 2012. “Multiple Imputation.” Pp. 25–52 in *Flexible Imputation of Missing Data*. Boca Raton: Chapman and Hall/CRC Press.
- Wang, Yijie and Aprile D. Benner. 2014. “Parent-Child Discrepancies in Educational Expectations: Differential Effects of Actual Versus Perceived Discrepancies.” *Child Development* 85(3):891–900.
- White, Michael J. and Jennifer E. Glick. 2000. “Generation Status, Social Capital, and the Routes out of High School.” *Sociological Forum* 15(4):671–91.
- Wu, Harry Xiaoying. 1994. “Rural to Urban Migration in the People ’ s Republic of China.” *He China Quarterly* 139:669–98.
- Xu, Hongwei and Yu Xie. 2015. “The Causal Effects of Rural-to-Urban Migration on Children’s Well-Being in China.” *European Sociological Review* 31(4):502–19.
- Zhang, Huafeng. 2017. “China Economic Review Opportunity or New Poverty Trap : Rural-Urban Education Disparity and Internal Migration in China.” *China Economic Review* 44:112–24.
- Zhang, Yuping. 2011. “Mothers’ Educational Expectations and Children’s Enrollment: Evidence from Rural China.” *Gansu Survey of Children and Families Papers*.

Appendix

Multinomial logistic regression migration status models with raw data

Table a-1: Multinomial logistic regression migration status model of parent-child discrepancies in educational expectations (Model 1a), CEPS Wave 1 & 2

	Group 1 (LowLow/er)	Group 2 (High Lower)	Group 4 (Low High)	Group 5 (High Higher)
Students' migration status				
Migrants	0.087	0.005	0.055	0.109
Controls:				
Age	0.300***	0.114*	0.176***	-0.041
Male	0.119	-0.061	0.441***	0.229*
Only Child	-0.458***	-0.155*	-0.324***	-0.110
Self-perceived SES	0.000	0.000	0.000	0.000
Middle	-0.200*	-0.047	-0.288***	0.177
Rich	-0.407*	-0.425*	-0.534***	0.079
Parental presence (vs. Both at home)	0.000	0.000	0.000	0.000
Only mom is home	0.169	-0.104	0.084	-0.238
Only dad is home	0.293	0.213	0.047	-0.523
Neither is home	0.216	-0.023	0.008	-0.187
Parents' highest level of education	-0.724***	-0.197***	-0.323***	0.093*
Chinese test	-0.037***	-0.002	-0.026***	0.014
Math test	-0.046***	-0.017***	-0.031***	-0.008
English test	-0.037***	-0.023***	-0.033***	0.002
Observations		7741		
<i>Note: the reference group is group 3</i>				
* p<0.05		** p<0.01		*** p<0.001

Table a-2: Multinomial logistic regression migration status model of parent-child discrepancies in educational expectations (Model 1b), CEPS Wave 1 & 2

	Group 1 (Low Low/er)	Group 2 (High Lower)	Group 4 (Low High)	Group 5 (High Higher)
Students' migration status				
Urban migrants	0.181	-0.058	-0.023	-0.097
Rural local born	0.373***	0.070	0.204*	-0.126
Rural migrants	0.425***	0.127	0.278*	0.172
Controls:				
Age	0.291***	0.108*	0.165***	-0.052
Male	0.104	-0.067	0.435***	0.221*
Only Child	-0.386***	-0.145	-0.281***	-0.125
Self-perceived SES				
Middle	-0.172	-0.038	-0.272**	0.167
Rich	-0.395*	-0.404*	-0.522**	0.120
Parental presence (vs. both at home)				
Only mom is home	0.186	-0.105	0.099	-0.223
Only dad is home	0.301	0.215	0.055	-0.517
Neither is home	0.215	-0.028	0.020	-0.175
Parents' highest level of education	-0.667***	-0.185***	-0.288***	0.082
Chinese test	-0.036***	-0.003	-0.025***	0.014*
Math test	-0.046***	-0.017**	-0.031***	-0.008
English test	-0.038***	-0.024***	-0.033***	0.002
Observations		7786		

Note: the reference group is group 3

* p<0.05

** p<0.01

*** p<0.001

Table a-3: Multinomial logistic regression of intra-familial social capital models of parent-child discrepancies in educational expectations (Model 2), CEPS Wave 1 & 2

	Model 1b				Model 2			
	Group 1 (Low Low/er)	Group 2 (High Lower)	Group 4 (Low High)	Group 5 (High Higher)	Group 1 (Low Low/er)	Group 2 (High Lower)	Group 4 (Low High)	Group 5 (High Higher)
Students' migration status								
Urban migrants	0.181	-0.058	-0.023	-0.097	0.197	-0.028	0.009	-0.107
Rural local born	0.373***	0.070	0.204*	-0.126	0.339***	0.065	0.193*	-0.139
Rural migrants	0.425***	0.127	0.278*	0.172	0.452***	0.126	0.284*	0.177
Controls								
Age	0.291***	0.108*	0.165***	-0.052	0.246***	0.101	0.126*	-0.046
Male	0.104	-0.067	0.435***	0.221*	0.027	-0.093	0.369***	0.193*
Only Child	-0.386***	-0.145	-0.281***	-0.125	-0.274**	-0.125	-0.161*	-0.109
Self-perceived socioeconomic status								
Middle	-0.172	-0.038	-0.272**	0.167	-0.065	-0.035	-0.150	0.184
Rich	-0.395*	-0.404*	-0.522**	0.120	-0.207	-0.382*	-0.313	0.166
Parental presence (vs. both at home)								
Only mother is at home	0.186	-0.105	0.099	-0.223	0.102	-0.123	0.040	-0.217
Only father is at home	0.301	0.215	0.055	-0.517	0.148	0.183	-0.110	-0.638
Neither is at home	0.215	-0.028	0.020	-0.175	0.010	-0.037	-0.139	-0.128
Parents' highest level of education								
Chinese standardized test	-0.667***	-0.185***	-0.288***	0.082	-0.554***	-0.169***	-0.204***	0.101*
Math standardized test	-0.036***	-0.003	-0.025***	0.014*	-0.037***	-0.001	-0.025***	0.015*
English standardized test	-0.046***	-0.017**	-0.031***	-0.008	-0.047***	-0.017***	-0.034***	-0.009
English standardized test	-0.038***	-0.024***	-0.033***	0.002	-0.036***	-0.022***	-0.031***	0.003
Intra-familial Social Capital								
Parent-child communication (vs. Never)								
Sometimes					-0.169	-0.166	-0.354***	0.036
Often					-0.826***	-0.313*	-0.831***	-0.181
Parent-child activity (vs. Never)								
Once a year					0.133	0.153	0.008	0.936*
Twice a year					-0.141	-0.026	-0.171	0.869*
Once a month					-0.313	0.096	-0.508**	0.756
Once a week					-0.533*	0.007	-0.575**	0.734
More than once a week					-0.060	0.285	-0.247	0.907*
Perceptions of parental support								
Homework support					-0.086	-0.181*	-0.248***	-0.225*
Extracurricular Participation					0.134	0.081	0.054	0.009
Cram school participation					-0.536***	-0.094	-0.332***	-0.064
					-0.250*	0.006	-0.083	0.024
Observation	8506				7659			
* p<0.05	** p<0.01				*** p<0.001			

Table a-4: Multinomial logistic regression of extra-familial social capital models of parent-child discrepancies in educational expectations, CEPS Wave 1 & 2

	Model 1b				Model 3			
	Group 1 (Low Low/er)	Group 2 (High Lower)	Group 4 (Low High)	Group 5 (High Higher)	Group 1 (Low Low/er)	Group 2 (High Lower)	Group 4 (Low High)	Group 5 (High Higher)
Students' migration status								
Urban migrants	0.181	-0.058	-0.023	-0.097	0.176	-0.042	0.103	0.006
Rural local born	0.373***	0.070	0.204*	-0.126	0.337**	0.007	0.249**	-0.096
Rural migrants	0.425***	0.127	0.278*	0.172	0.383**	0.103	0.243	0.172
Controls								
Age	0.291***	0.108*	0.165***	-0.052	0.284***	0.123*	0.130*	-0.036
Male	0.104	-0.067	0.435***	0.221*	0.070	-0.094	0.493***	0.264**
Only Child	-0.386***	-0.145	-0.281***	-0.125	-0.420***	-0.177*	-0.273***	-0.172
Self-perceived socioeconomic status								
Middle	-0.172	-0.038	-0.272**	0.167	-0.152	0.018	-0.261**	0.162
Rich	-0.395*	-0.404*	-0.522**	0.120	-0.344	-0.345	-0.592**	0.048
Parental presence (vs. both at home)								
Only mother is at home	0.186	-0.105	0.099	-0.223	0.288*	-0.202	0.104	-0.199
Only father is at home	0.301	0.215	0.055	-0.517	0.229	0.173	0.122	-0.673
Neither is at home	0.215	-0.028	0.020	-0.175	0.195	-0.144	-0.066	-0.375
Parents' highest level of education								
Chinese standardized test	-0.667***	-0.185***	-0.288***	0.082	-0.636***	-0.188***	-0.269***	0.096*
Math standardized test	-0.036***	-0.003	-0.025***	0.014*	-0.046***	-0.006	-0.029***	0.006
English standardized test	-0.046***	-0.017**	-0.031***	-0.008	-0.044***	-0.018**	-0.031***	-0.003
English standardized test	-0.038***	-0.024***	-0.033***	0.002	-0.039***	-0.019**	-0.030***	0.001
Extra-familial Social Capital								
Parent-teacher contact (vs. never)								
Once					-0.274*	-0.099	-0.294**	0.083
Two to four times					-0.413***	-0.073	-0.370***	-0.085
Five times or more					-0.509***	-0.075	-0.556***	-0.403*
Parent-parent interaction								
Parent-other interaction					-0.032	-0.112	-0.145	-0.050
Knowing other parents (vs. don't know)								
Know some of them					-0.053	-0.029	-0.013	-0.011
Know all of them					0.076	0.111	-0.070	0.175
Knowing neighborhoods					0.472***	0.097	0.159	-0.108
Observation		8506				6394		
			** p<0.01				*** p<0.001	

* p<0.05

** p<0.01

*** p<0.001

Table a-5: Multinomial logistic regression of familial social capital models of parent-child discrepancies in educational expectations, CEPS Wave 1 & 2

	Group 1 (Low Low/er)	Group 2 (High Lower)	Group 4 (Low High)	Group 5 (High Higher)
Students' migration status				
Urban migrants	0.159	-0.017	0.135	-0.000
Rural local born	0.296**	-0.009	0.222*	-0.113
Rural migrants	0.417**	0.105	0.259	0.183
Intra-familial Social Capital				
Parent-child communication (vs. Never)				
Sometimes	-0.120	-0.140	-0.274**	0.057
Often	-0.769***	-0.314*	-0.738***	-0.181
Parent-child activity (vs. Never)				
Once a year	0.170	0.250	0.050	0.741
Twice a year	-0.193	0.052	-0.146	0.662
Once a month	-0.295	0.189	-0.536*	0.473
Once a week	-0.508	0.088	-0.533*	0.451
More than once a week	-0.109	0.346	-0.255	0.744
Perceptions of parental support	-0.139	-0.216**	-0.282***	-0.274**
Homework support	0.118	0.118	0.114	0.007
Extracurricular Participation	-0.551***	-0.112	-0.377***	-0.094
Cram school participation	-0.274*	0.022	-0.056	0.064
Extra-familial Social Capital				
Parent-teacher contact (vs. never)				
Once	-0.184	-0.114	-0.200	0.102
Two to four times	-0.315**	-0.065	-0.263**	-0.048
Five times or more	-0.375*	-0.031	-0.435**	-0.331
Parent-parent interaction	-0.010	-0.102	-0.139	-0.056
Parent-other interaction	-0.160	0.033	0.052	-0.361*
Knowing other parents (vs. no)				
Yes, know some of them	-0.019	-0.004	0.052	-0.009
Yes, know all of them	0.173	0.155	0.060	0.200
	0.422***	0.084	0.132	-0.100
Controls				
Age	0.256***	0.126*	0.106	-0.032
Male (vs. Female)	-0.032	-0.136	0.411***	0.220*
Only Child (vs. Not an only child)	-0.309**	-0.160	-0.161	-0.154
Self-perceived socioeconomic status				
Middle	-0.049	0.010	-0.148	0.185
Rich	-0.146	-0.314	-0.407*	0.105
Parental presence (vs. both at home)				
Only mother is at home	0.222	-0.217	0.065	-0.198
Only father is at home	0.047	0.131	-0.048	-0.888*
Neither is at home	0.006	-0.147	-0.193	-0.387
Parents' highest level of education	-0.522***	-0.175***	-0.186***	0.120*
Chinese standardized test	-0.046***	-0.005	-0.028***	0.007
Math standardized test	-0.044***	-0.018**	-0.033***	-0.004
English standardized test	-0.038***	-0.017**	-0.028***	0.002
Observation	6290			

* p<0.05

** p<0.01

*** p<0.001