

Effects of Economic Capital, Cultural Capital and Social Capital on the Educational Expectation of Chinese Migrant Children

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Abstract

The barrier for Chinese migrant children to receive compulsory education in megacities has been gradually solved in recent years. The demand for senior high school education is now the bottom line for most of migrant children. Unlike compulsory education, high school education in China is a prerequisite for students to enter university and can profoundly affect their future decisions. This study aims to identify how various dimensions of economic, cultural and social capital embedded in the family, school and peer contexts influence the educational expectation of Chinese migrant children. The study results showed that all dimensions of capital significantly influenced the educational expectation of migrant children except family social capital. The effect of objectified cultural capital appeared to be the most predominant factor. Surprisingly, against the original hypothesis, economic capital and embodied cultural capital negatively influenced educational expectations.

Keywords Migrant children \cdot Senior high school \cdot Economic capital \cdot Cultural capital \cdot Social capital

Introduction

As China's urbanization progresses, the number of rural residents migrating to cities for work and living has been increasing. This large-scale domestic migration has been lasting 40 years in China. Migrant workers refer to migrants living in their destination cities for at least six months without a local household registration in the early 21st century. Once they settle in the city, they will bring their spouses and children to the city as well, while

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some even choose to have their children born in destination cities. In particular, young migrant workers are more willing to settle down in cities. Although the strict control over migration was relaxed to a certain extent after the market reform, the hukou system is still affecting permanent residents' employment opportunities and social welfare (Ma et al., 2018; Wu & Zhang, 2015). According to the latest China's seventh national census, the floating population in 2020 increased by 69.73%, exceeding 375 million (National Bureau of Statistics, 2021). In China, the floating population aged from 0 to 17 and having their residence locations different from their hukou addresses for over half a year is classified as migrant children, from which those with residence locations separated from their hukou addresses in the municipal area are excluded (UNICEF, National Bureau of Statistics of China, and UNFPA, 2017). Approximately 14.26 million migrant children were within the legal age scope for compulsory education in 2020 (Ministry of Education of China, 2020). However, the rural hukou of migrant children cannot ensure their equal access to education, medical care and other social services in urban cities.

Education is seen as a high-return investment in China. Parents believe that qualifications can help children get better job opportunities (Giddens et al., 1991). More importantly, education can provide a social ladder for individuals to achieve a higher social status (Sheng, 2017). Nine-year compulsory education which includes primary school and junior high school education is a fundamental legal right of Chinese citizens (National People's Congress Standing Committee, 1986), while postcompulsory education includes senior high school education, vocational education and higher education. With an increase in skill requirements in the current labor market, compulsory education can no longer meet individuals' needs for education (Yang, 2017). High school education is different from compulsory education because it requires a convergence process and will affect students' future decisions. Students who enroll in senior high schools have a larger chance of accessing university education, which ensures upward mobility in their lives (Yang, 2006). However, it has been found that that when migrant children finish their studies and enter the labor market, they mainly engage in jobs that lack social protection and security (Goodburn, 2019). It is contrary to the parents' expectations that their children can achieve upward mobility and change their fortunes through education.

As an internalized social structure that shapes one's worldview and guides one's life trajectory, the educational expectation significantly affects an individual's future education, occupation and social status ((Dumais, 2006; Ray, 2006; Reynolds & Johnson 2011). Educational expectation of students refers to level of education they intend to receive based on their rational and subjective evaluation of their ability and resources (Andres et al., 2007; Huang & Gong, 2021; Sewell et al., 1969, 1970) proposed the Wisconsin model that illustrates factors affecting young people's educational attainments, occupational status and earnings. In this model, educational expectation can be used as a mediating variable that affects educational achievements (Jacob and Wilder, 2010). In this study, the educational expectation is related to the education career after migrant children finish compulsory education in urban cities. Presumably migrant children's loss of access to high school education before the age of 16, direct access to low-quality vocational education or even direct entry into the labor market may undermine their future development in various fields and cause social problems, the costs of which may have to be borne by society.



Although there has been considerable research conducted in recent years on the education of migrant children in China, there are some limitations in existing research. Firstly, most research concentrates on compulsory education for migrant children and less attention has been paid to the post-compulsory education (Goodburn, 2009; Wang & Holland 2011; Donzuso, 2015). In terms of raThe educational and early occupationalising Chinese policy-makers' awareness and promoting education equality in China, the investigation into the educational expectation of migrant children after compulsory education is of great significance. Secondly, a growing body of published work has also provided evidence of the impact of parental educational expectation on children's academic achievements (Eccles et al., 1998; Englund et al., 2004; Fan & Chen, 2001; Glick & White, 2004; Gong et al., 2015; Leung & Shek, 2019; Sandefur et al., 2006; Sewell & Shah, 1968a; Sewell & Shah, 1968b; Sewell et al., 1969). Previous studies tend to focus on parents' educational expectations rather than paying attention to children's inner thoughts. Thirdly, Huang and Gong (2021) summarized the formation of educational expectations can be classified into two streams. The first one related to family background and resources. The second one related to interpersonal influence such as peer, parents and teachers. Therefore, this article intends to adopt a new perspective by combining these influential factors into a theoretical framework and discussing the influences of educational expectations more comprehensively by implementing the capital concepts proposed by Bourdieu (1986) and Coleman (1990). Understanding these capitals allows policy makers understand the needs for education of migrant children in cities and adjust education policies appropriately, and also enables parents to make the best use of the resources at their disposal to help migrant children access educational opportunities after compulsory education. Fourthly, most of the previous studies have considered Bourdieu's theory in the context of European culture and society. Nevertheless, it is also necessary to explore the applicability of Bourdieu's conceptual toolkit in the context of Chinese culture and society. In addition, although Applied Research in Quality of Life has issued a special issue about quality of life among children and adolescents in Chinese societies, this issue mainly concentrate on children in Hong Kong or on the mainland, and there is currently no research focusing on the postcompulsory education of migrant children (Leung & Fung, 2021). While Huang and Gong (2021) paid attention to the educational expectations of left-behind children in China, research on the educational expectations of migrant children in China remains a gap. Additionally, most studies focus on analyzing the case of one or two schools in metropolises, but the results from a smaller sample size cannot be generalized to the Chinese context. Therefore, this study explored how different forms of capital affect children's educational expectations by employed to the nationwide data from China Education Panel Survey 2013–2014 (CEPS), thereby providing a panorama of migrant children's educational expectations.

The main purpose of this study aims to fill part of the gap by analyzing data from mainland China to explore the educational expectation of migrant children and the influence of economic, cultural and social capital on Chinese migrant children's educational expectations based on the theoretical framework proposed by Bourdieu (1997) and Coleman (1988). The conceptual framework of this research is illustrated in Fig. 1. To be more specific, two research questions were addressed: (1) what is



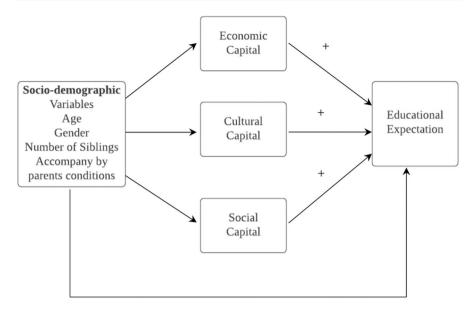


Fig. 1 Conceptual framework

the educational expectation of migrant children in the Chinese context? (2) How does economic, cultural capital and social capital influence Chinese migrant children's educational expectations? These findings have implications for understanding the post-compulsory education needs for migrant children, senior high school education opportunities in urban areas, and future education policies to promote educational equity for migrant children.

Theoretical Framework and Hypotheses

When exploring migrant children's educational issues, cultural capital and social capital have become increasingly popular concepts. According to Bourdieu (1984), capital is a set of resources and power used in practice. Capital can be accumulated and practiced as resources to pursue profits and be reproduced identically or expansively. Therefore, capital is significant in one's life because those who possess capital have more opportunities to obtain a large number of other resources within a short period and thus improve their social status (Bourdieu, 1986; Coleman, 1990).

Economic capital is an essential concept in Bourdieu's theory of practice (1986). It refers to an individual's wealth, physical resources and production instruments and can be undoubtedly transformed into money or institutionalized as property rights, as well as other capital forms (Bourdieu, 1996). According to Bourdieu (1986), economic capital can be transformed into other forms of capital under specific circumstances. It was believed that family economic condition is the most crucial factor affecting parents' expectations for their children (Feng et al., 2017). Parents' expectations of their children's education can be affected by family incomes



and economic conditions (Entwisle et al., 2018; Feng et al., 2017; Liu et al., 2014). The higher income the parents have, the higher expectation they will have for their children and the more they will invest in their children's education. Similar findings have been discovered by Entwisle et al. (2018), Liu et al. (2014), Davis-Kean (2005), Wang and Shi (2014) and Wu and Huang (2017). They have found that limited financial resources can lower the expectation of children's educational attainments. Thus, children from high socioeconomic backgrounds (SES) have higher educational expectations than those from low SES backgrounds. Thus, the hypothesis is proposed:

Hypothesis 1: Economic capital has a significant positive impact on educational expectation for migrant children.

Cultural capital is a symbolic resource that can be transmitted among generations or gained from families and education in the form of educational qualifications. Bourdieu (1986) categorized cultural capital into three kinds, namely objectified, embodied and institutionalized cultural capital. The embodied one is the disposition of one's mind and body and thus has a direct connection with one's body. This kind of cultural capital can be expressed by family education and school education in the form of actions, behaviors and operational skills. As for the objectified cultural capital, it is also transmissible and related to material objects, such as books, monuments, paintings and machines (Bourdieu, 1997). Lastly, institutionalized cultural capital includes nationally recognized diplomas or education qualifications (Bourdieu, 1986). It is an acknowledgement of academic competence and thus commonly valued in the labor market, demonstrating that actor has an academic title and academic qualifications. Lareau and Weininger (2003) believed that cultural capital is an important factor leading to educational inequality. This concept explains why a child born in a family with a higher social class has a cultural advantage. According to the social reproduction theory, children born in the high social class are more likely to achieve educational success, prosperous careers and high salaries than their peers born in the working class because they have more cultural capital. A number of studies discovered that parents' educational levels and extracurricular reading will affect the students and parents' educational expectations (Davis-kean, 2005; Gillies, 2005; Lareau, 2003; Liu et al., 2014; Wu & Huang, 2017). One piece of interesting finding in the study by Feng et al. (2017) was that mothers who received senior high school education will spend significantly more time on their children's homework supervision and more money on extracurricular books. Fathers' high educational levels will also considerably increase their expectations of children's education. Gillies (2005) and Lareau (2003) have reported the possible influence of family cultural capital on children's educational expectations, which gives rise to education success. These studies hint that Children's educational expectations are likely to be influenced by parental education and objects provided by families. Combined with Bourdieu's conceot of cultural capital, second hypothesis in this study is:

Hypothesis 2: Cultural capital (Objectified, embodied, and institutional) has a significant positive impact on educational expectation for migrant children.



Social capital was defined by Bourdieu (1986) as the combination of social relationships and resources. It is also an aggregation of actual or potential resources, the volume of which is determined by the agent's network. According to Coleman (1990), social capital refers to the inherent resources in social relationships that can facilitate a certain outcome. Coleman (1990) defines family social capital as the bond between parents and children and the reflection of time and attention between parents and children, the supervision of their activities and the facilitator of their happiness. Studies based on the concept of social capital have assessed social capital at the family level and demonstrated its positive effects on children's happiness, psychosocial adjustment and academic performance (Blake, 1985; Coleman, 1988; Downey, 1995; Wu et al., 2010), but there is relatively little research on the impact of social capital at the school level and peer level on educational expectation (Sewell et al., 1970; Duncan & Featherman, 1972; Davies & Kandel, 1981). In this study, Coleman's and Bourdieu's concepts of social capital were integrated because they involve complementary definitions of social capital (Rogošić & Baranović, 2016). Bourdieu pays close attention to social capital outside the family such as relationships or networks involving friends, acquaintances and schools, whereas Coleman emphasizes the quality of the relationship within a family and beyond the family. The former primarily stems form children's interactions with their parents and other family members. It consists of two components, namely the structure (parent-child communication) and the process (parental supervision). On the other hand, the school is the dominant institution in which people spend most of their childhood and adolescence (Schneider & Coleman, 1993), providing an interactive place for young people to acquire social capital. Thus, school social capital is another important factor affecting the development of children who are constantly under the influence of their peers (Coleman, 1961; Jørgensen, 2017; Salikytluk, 2016; Sewell et al., 1969). Peer social capital concentrates on their networks, such as peer friendship and peer influence. It has also been found that students' academic performance and subsequent educational aspirations can be affected by homework supervision from parents, the influence of peers and their relationships with teachers (Salikuluk, 2016; Jin et al., 2017; Wu & Huang, 2017). Apparently, most studies merely focus on Bourdieu or Coleman's one or two concepts of capital. Economic, cultural and social concepts are seldom considered concurrently in studies of educational inequality based on Bourdieu's framework. Papapolydorou (2016) argued that such a method ignores some critical information about the overall issue, making it impossible to comprehensively investigate similar problems. Thus, the hypothesis is proposed:

Hypothesis 3: Social capital (Family, peer and school) has a significant positive impact on educational expectation for migrant children.

To sum up, it is essential to understand migrant children's educational expectations from the perspectives of three forms of capital, which, thus can be seen as a proxy to forecast migrant children's performance and achievements in the future.



Method

Sampling

This study referred to the data from the China Education Panel Survey 2013–2014 (CEPS), which is a longitudinal survey conducted by the Renmin University of China. This survey adopted multistage sampling, covering 19,487 students from 438 classes of 112 schools in 28 Chinese counties, districts and cities. The CEPS data is representative as it is a large-scale national survey of junior high school students in the 7th Grade and 9th Grade, as well as their families, schools, teachers and school principals. The reason for referring to CEPS data is that the educational expectation is a psychological state, and students in junior high schools have stable educational expectational expectations. Therefore, the researcher can get an accurate and comprehensive analysis of different forms of capital that affects their educational expectations on a national scale.

According to our hypotheses, this study first merged information about students and their parents and created a new dataset. Then migrant children and their parents were chosen as the research sample. In this study, migrant children were those of school age with rural household registration but migrating with their parents to urban areas where they were receiving compulsory education. Based on the answers to the questions of their locations of hukou and current locations of residence, migrant students whose locations of Hukou is not in the local county/district but live in the local county/district at present were selected, and finally, a total of 2813 pairs of migrant children and parents were included in this study.

Measurement of Key Variables

The dependent variable was the highest level of education that migrant children expect to receive. After reassigning values to this variable according to educational years in different stages, a continuous variable ranging from 7 to 22 was obtained (7 or 8 years=drop out now; 9 years=Graduate from junior high school; 11 years=Go to technical secondary school/technical school, vocational high school; 12 years=Go to senior high school; 15 years=Graduate from Junior College;16 years=Get a bachelor's degree; 19 years=Get a master's degree; 22 years=Get a doctor's degree) (Wu & Huang, 2017).

The independent variables included economic, cultural and social capital. Economic capital was assessed from three dimensions, which include present family financial conditions (view of parents), family income levels in the community (view of parents) and family financial conditions at present (view of migrant children). A 5-point scale was adopted to represent answers ranging from 1 (very poor) to 5 (very rich). Objectified cultural capital objectified cultural capital can be measured by writing desks, books in the family and the possession of computers and the internet (Yang et al., 2016), three questions were used to investigate objectified cultural capital in this study: (1) Do you students have a writing desk at home (No desk = 0); (2) How many books do your family have (1 = very few, 2 = not many, 3 = some,



4=quite a few, 5=many); (3) Do you have a computer and access to the internet at home (0=no, 1=have a computer but no internet, 2=yes). embodied cultural capital was assessed by asking the frequency of parents' participation in their children's cultural activities. For example, how often do your family visit museums and zoos? How often do your family go out to watch films, shows and sports games? The answers ranged from 1 to 6, which represent 'never', 'once a year', 'half a year', 'once a month', 'once a week' and 'more than once a week', respectively. Besides, institutionalized cultural capital was measured by the education level of parents. The answer ranged from 1 to 9, which represent 'none', 'Finished elementary school', 'junior high school degree', 'technical secondary school or technical school degree', 'vocational high school degree', 'senior high school degree', 'junior college degree', 'bachelor's degree' and 'master's degree or higher, respectively.

Social capital is classified into three types, including family social capital, school social capital and peer social capital. Family social capital can be measured by parental supervision of homework, examination and family relationships (Coleman, 1988). In this study, family social capital (parental supervision) was measured by the extent of parents' strictness on homework/examination, children's behaviors at school, their attendances at school, their time to go home and their friends. The answers ranged from 1 (they don't care) to 3 (they are very strict about it). Another kind of family social capital (family relationship) was assessed by the five indicators: the frequency of discussions about what happened at school with parents, the frequency of discussions with parents about their relationships with friends, the frequency of discussions about their relationships with teachers, the frequency of discussions about their own feelings and the frequency of discussions about their worries and troubles. The answers ranged from 1 (never) to 3 (often).

School social capital can be assessed by the teacher-student relationship, which was further measured by 4 aspects in this study, namely praises from mathematics, Chinese, English and homeroom teachers. A 4-point scale was provided for the participants to rate from 1 (strongly disagree) to 4 (strongly agree). Peer social capital can be assessed by the peer effect because Coleman (1961) and Ream (2005) have found that children can be greatly influenced by their peers. Hence, in this study, peer social capital was assessed in 3 items, namely friends doing well in academic performance, studying hard and expecting to go to college, with a 3-point Likert scale to rate from 1 (None of them) to 3 (Most of them).In addition, sociodemographic variables in this study were based on the test of hypothesized models, including gender (male-1, female-0), age, number of siblings (1–8) and whether living with parents (none of them-1, only mother-2, only father-3, both parents-4).

Data Analysis

The research data were entered into SPSS 26.0, and Mplus 8.3 was used to verify the hypothesized models through structural equation modelling (SEM). To prepare for the data analysis, the screening of data, the reversal of items, the aggregation of scales and the categorization of continuous variables were conducted in the process of data transformation. SEM allows both unobserved (i.e. latent) and diverse



observed variables, as well as the estimation of the relationship between latent constructs. In order to make the results more accurate, the explicit estimation of wrong variance parameters can be realized through SEM (Byrne, 2016). This study followed Kline's (2005) two-step approach to SEM. Firstly, the measurement model was validated through confirmatory factor analysis (CFA) to confirm whether the desired constructs or factors were accurately reflected by the measured variables. As Thompson (2004) indicated: 'It makes little sense to relate constructs within an SEM model if the factors specified as part of the model are not worthy of further attention' (p.110). Then the relationship between the latent constructs of economic, cultural and social capital and the educational expectation was examined through SEM.

Jackson et al. (2009) summarized some indices frequently used in previous studies to assess the goodness of fit. Accordingly, this study followed these indices including chi-square (χ^2), the ratio of chi-square to the degree of freedom (χ^2 /df ratio), the comparative fit index (CFI), the Tucker-Lewis Fit Index (TLI) and the root-mean-square error of approximation (RMSEA). Chi-square (χ^2) is the likelihood ratio test statistic and will not be significant if p > 0.05. However, the test is sensitive to large sample size and thus is commonly significant (Byrne, 2016). χ^2 /df scores could range from 1 to 5 (Byrne, 2016; Iacobucci, 2010). A value above 0.90 is acceptable for both CFI and TLI, and the value above 0.95 is an excellent modelling fit for both indices (Hu & Bentler, 1999). The RMSEA below 0.05 means a close fit, and a value from 0.05 to 0.08 is considered reasonable fit (Kline, 2015).

Results

The sample size was 2813 with 1426 males (50.7%) and 1387 females (49.3%). The average age of migrant children was 13.86 (SD=1.2). Migrant children would like to receive an average of 16.31 years of education, which means a bachelor's degree. Besides, most of migrant children live with their parents. Table 1 summarizes the descriptive statistics of the main variables.

Test of Measurement Model

Before the hypotheses were tested, the confirmatory factor analysis was conducted to evaluate the measurement model of construct variables including economic capital, cultural capital (i.e. embodied cultural capital, objectified cultural capital and institutionalized cultural capital) and social capital (i.e. family social capital, school social capital and peer social capital). The factor loading value ± 0.3 was used as the minimal significant reference for factor analysis, and the value ± 0.5 was used as the practically significant reference (Hair et al., 1998). Therefore, the modelling modification indicators with a factor loading value below 0.3 were excluded for a better modelling fit of the latent construct. All standardized factor loading of each indicator in the latent construct. All of them were significantly loaded on the latent construct, with factor loading values above 0.3, suggesting that all the latent variables



 Table 1
 Description statistics of sample characteristics

		•	
Educational expectation (years)		16.318	3.433
Economic capital			
Family condition (parents' view)		2.882	0.532
Income level in community		2.753	0.656
Family condition (children's view)		3.053	0.471
Objectified cultural capital			
Writing desk	Yes	2293	81.5
	No	520	18.5
Books	Very few	259	9.2
	Not many	352	12.5
	Some	1024	36.4
	Quite a few	738	26.2
	A great number	440	15.6
Computer and Internet	No, we don't	620	22
	We have a computer but no access to the Internet	264	9.4
	Yes, we have both	1929	9.89
Embodied cultural capital			
Frequency of visiting museums, zoos, science museum (with parents)		2.417	1.436
Going out to watch movies, shows, sports games, etc. (with parents)		2.401	1.514
Institutionalised cultural capital			
Highest education level (mother)		3.498	1.784
Highest education level (father)		3.982	1.864
Family social capital (Parental supervision)			
Your homework and examination		2.462	0.548
Your behaviour at school		2.298	0.599



Table 1 (continued)

	Mean/Frequency	SD/Percent
Attendances at school everyday	2.401	0.657
Time when you get home everyday	2.388	0.606
Whom you make friends with	2.160	0.693
Family Social capital (Family relationship)		
Things happened at school (parents)	2.300	0.615
The relationship between you and your friends (parents)	2.185	0.657
The relationship between you and your teachers (parents)	2.184	0.675
Your feelings-mother (parents)	2.091	0.726
Your worries and troubles (parents)	2.016	0.739
School Social capital (Teacher-student relationship)		
My mathematics teacher always praises me	2.418	0.915
My Chinese teacher always praises me	2.514	0.897
My English teacher always praises me	2.459	0.927
My homeroom teacher always praises me	2.348	0.854
Peer Social capital (Peer influence)		
Doing well in academic performance	2.327	0.608
Studying hard	2.342	0.640
Expecting to go to college	2.591	0.605
Age	13.861	1.189
Number of Siblings	1.172	0.520



SD/Percent 49.3 83.5 8.9 6.4 3.2 Mean/Frequency 1426 1387 91 2350 191 181 Both mother and father None of them Only mother Only father Female Living with parents Table 1 (continued) Gender



are reliable. The correlations between the theoretical constructs were also found to be significant in the measurement model. In a word, the standardized measurement model achieved a good modelling fit ($\chi^2=1535.484$, df=430, χ^2 /df=3.571, p<0.000, CFI=0.963, TLI=0.956, RMSEA=0.030).

Test of Structural Model

Based on the measurement model, the structural model was constructed. Moreover, socio-demographic variables not only have direct impacts on educational expectations but also can affect educational expectations through mediating indicators of economic, cultural and cultural capital. Finally, the model archived a good model fit (χ^2 =1698.936, df=437, χ^2 /df=3.888, CFI=0.954, TLI=0.942, RMSEA=0.032). Figure 2 shows the standardized structural path of the relationship between different forms of capital and educational expectations.

Surprisingly, the path coefficient significance results showed that the relation between economic capital and the educational expectation of migrant children was significant but negative (β =-0.064, p<0.05). That is to say, the lower economic capital migrant children possessed, the higher their educational expectations would be. The results also suggested that the impact of objectified cultural capital on the educational expectation of migrant children was positively significant (β =0.303, p<0.001). Moreover, objectified cultural capital played the most significant role among different forms of capital in affecting the educational expectation of migrant children. Then the path coefficient significance results demonstrated the significant

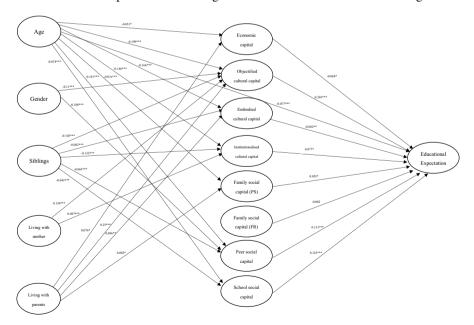


Fig. 2 SEM with Standardised Coefficients on the Relationship Between Economic, Cultural, Social capital and Educational Expectation (*p<0.05, **p<0.01, ***p<0.001). Note: only significant paths are showed in the figure



but negative impact of embodied cultural capital on the educational expectation of migrant children (β =-0.082, p<0.01). Meanwhile, the path coefficient significance results showed a significantly positive correlation between institutionalized cultural capital and the educational expectation of migrant children (β =0.077, p<0.05). Furthermore, according to the path coefficient significance results, family social capital (parental supervision) was positive correlated with the educational expectation of migrant children (β =0.055, p<0.05). However, the impact of family social capital (family relationship) on the educational expectation of migrant children was found to be insignificant (β =-0.002, p>0.05). At the same time, the path coefficient significance results suggested a significantly positive correlation between peer social capital and the educational expectation of migrant children (β =0.151, p<0.001). Finally, the impact of school social capital on the educational expectation of migrant children was found to be significant and positive (β =0.123, p<0.001) (Table 2).

Nowadays, bootstrapping has already been conducted in some SEM software (i.e. AMOS, EQS, MPlus, R) to bootstrap the indirect effect (MacKinnon, 2008). This method produces an empirical representation of the indirect effect's sampling distribution by regarding the sample size as a small-scale representative population. It is a process of repeatedly resampling during analysis, so as to imitate the original sampling process. Hayes (2009) recommended, this process should repeat at least 5000 times. The estimation to produce a CI% (confidence interval) for five thousand times can infer the size of the indirect effect. If 0 is not between the range from the lower bound to the upper bound of the 95% bootstrap confidence interval, the indirect effect will be significant at the 0.05 level. Mackinnon et al. (2004) have recommended that bias-corrected bootstrap should be an approach to inferring the mediation analysis. In addition, the effectiveness of bootstrapping is more significant than that of the Sobel test and causal steps to test the mediating effect. As a result, this study adopted the Bootstrap Confidence Interval to test the indirect effect of different forms of capital.

Table 2 Test of the significance of path coefficient and standardised path coefficient

DV	IV	Estimate	S.E.	Est./S.E.	p	Standardised
Edu exp	EC	-0.480	0.207	-2.315	0.021	-0.064
Edu exp	OCC	5.688	1.089	5.221	0.000	0.303
Edu exp	EMCC	-0.207	0.073	-2.822	0.005	-0.082
Edu exp	INCC	0.181	0.076	2.374	0.018	0.077
Edu exp	PS	0.578	0.267	2.166	0.030	0.055
Edu exp	FR	-0.019	0.231	-0.084	0.933	-0.002
Edu exp	PR	1.076	0.187	5.766	0.000	0.151
Edu exp	TSR	0.571	0.110	5.180	0.000	0.123
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Edu exp-Educational expectation, EC-Economic Capital, OCC-Objectified cultural capital, EMCC-embodied cultural capital, INCC-Institutionalised cultural capital, PS-Family Social Capital (Parental supervision), FR-Family Social capital (family relationship), PR-Peer social capital, TSR-School social capital; (2) *p < 0.05, **p < 0.01, ***p < 0.001



Among the socio-demographic variables, the direct effect of age on the educational expectation of Chinese migrant children was significant but negative (β =-0.077, P<0.001). Age was negatively associated with family social capital (parental supervision) (β =-0.076, p<0.001), and family social capital (parental supervision) positively correlated with educational expectation (β =0.055, p<0.05), suggesting that younger children formed high educational expectations because of high family social capital (parental supervision). Age was negatively associated with school social capital (β =-0.074, p<0.001), school social capital positively influence educational expectation (β =0.123, p<0.001), indicating that the younger the children the higher educational expectations because of higher levels of school social capital.

Compared with girls, boys were statistically significant and negatively associated with peer social capital (β =-0.188, p<0.001), and peer social capital positively influence educational expectation. Compared with girls, boys have lower educational expectations because of low levels of peer social capital. The effect of the number of siblings on the educational expectation of Chinese migrant children was also mediated by objectified cultural capital (estimate=-0.204, 95% CI=[-0.369, -0.084], institutionalized cultural capital (estimate=-0.068, 95% CI=[-0.137, -0.013], peer social capital (estimate=-0.064, 95% CI=[-0.117, -0.024]) and school social capital (estimate=-0.036, 95% CI= [-0.081, -0.006]). The number of siblings negatively associated with objectified cultural capital (β =-0.103, p<0.001), and the objectified cultural capital positively associated with educational expectation (β =0.303, p<0.001). The lower the number of siblings, resulting in higher educational expectations because of higher objectified cultural capital.

Taking migrant children without parents living with them as a reference group, the effect of children living with mother on their educational expectations was mediated by objectified cultural capital (estimate = 0.646, 95\% CI=[0.307, 1.079]) and institutionalized cultural capital (estimate = 0.103, 95% CI=[0.021, 0.253]). Living with mother positively related with objectified cultural capital $(\beta = 0.154, p < 0.001)$ and institutionalized cultural capital $(\beta = 0.097, p < 0.01)$. The objectified cultural capital and institutionalized cultural capital positively associated with educational expectation. Migrant children living with parents led to high educational expectation because of high levels of objectified and institutionalized cultural capital. Taking migrant children without parents living with them as a reference group, the effect of children living with parents on their educational expectations was mediated by objectified cultural capital (estimate = 0.695, 95% CI=[0.399, 1.072]) and family social capital parental supervision estimate = 0.042, 95% CI=[0.004, 0.120]). Compared with living without parents, migrant children living with parents have high educational expectation because of high level of objectified cultural capital and family social capital (parental supervision). Table 3 shows a detailed specific indirect effect, direct effect, total indirect effect and total effect presented in.



Table 3 Specific indirect, direct effect, total indirect effect, total effect of Age, Gender, Number of Siblings, living with mother, living with father and living with parents on Educational Expectation of Migrant children

	Path			Estimate	BC Bootstrapped 95% Confidence Intervals	
					Lower	Upper
Specific Indirect Effect	AGE	EC	EDU EXP	0.009	0.001	0.025
	AGE	OBCC	EDU EXP	-0.173	-0.256	-0.105
	AGE	EMCC	EDU EXP	0.039	0.012	0.068
	AGE	INCC	EDU EXP	-0.032	-0.064	-0.007
	AGE	PS	EDU EXP	-0.012	-0.031	-0.002
	AGE	FR	EDU EXP	0.001	-0.020	0.022
	AGE	PR	EDU EXP	-0.061	-0.091	-0.037
	AGE	TSR	EDU EXP	-0.026	-0.046	-0.012
Direct Effect				-0.219	-0.325	-0.115
Total indirect Effect				-0.255	-0.323	-0.194
Total Effect				-0.474	-0.574	-0.371
Specific Indirect Effect	GENDER	EC	EDU EXP	0.015	-0.002	0.047
	GENDER	OBCC	EDU EXP	-0.228	-0.380	-0.117
	GENDER	EMCC	EDU EXP	0.014	-0.006	0.046
	GENDER	INCC	EDU EXP	-0.010	-0.045	0.007
	GENDER	PS	EDU EXP	-0.008	-0.039	0.007
	GENDER	FR	EDU EXP	0.002	-0.050	0.052
	GENDER	PR	EDU EXP	-0.193	-0.282	-0.124
	GENDER	TSR	EDU EXP	-0.021	-0.061	0.012
Direct Effect				-0.115	-0.367	0.130
Total indirect Effect				-0.429	-0.582	-0.284
Total Effect				-0.543	-0.793	-0.295
Specific Indirect Effect	SIBLINGS	EC	EDU EXP	0.009	-0.005	0.037
	SIBLINGS	OBCC	EDU EXP	-0.204	-0.369	-0.084
	SIBLINGS	EMCC	EDU EXP	-0.068	0.013	-0.013
	SIBLINGS	INCC	EDU EXP	-0.068	-0.137	-0.013
	SIBLINGS	PS	EDU EXP	-0.015	-0.050	0.000
	SIBLINGS	FR	EDU EXP	0.002	-0.049	0.052
	SIBLINGS	PR	EDU EXP	-0.064	-0.117	-0.024
	SIBLINGS	TSR	EDU EXP	-0.036	-0.081	-0.006
Direct Effect				0.056	-0.183	0.301
Total indirect Effect				-0.332	-0.493	-0.175
Total Effect				-0.276	-0.508	-0.044
Specific Indirect Effect	MOTHER	EC	EDU EXP	-0.014	-0.096	0.040
	MOTHER	OBCC	EDU EXP	0.646	0.307	1.079
	MOTHER	EMCC	EDU EXP	-0.031	-0.113	0.026
	MOTHER	INCC	EDU EXP	0.103	0.021	0.253
	MOTHER	PS	EDU EXP	0.009	-0.036	0.078
	MOTHER	FR	EDU EXP	0.000	-0.021	0.030
	MOTHER	PR	EDU EXP	0.074	-0.039	0.211
	MOTHER	TSR	EDU EXP	-0.023	-0.118	0.073



Table 3 (continued)

	Path			Estimate	BC Bootstrapped 95% Confidence Intervals	
					Lower	Upper
Direct Effect				-0.218	-0.933	0.517
Total indirect effect				0.765	0.359	1.196
Total Effect				0.546	-0.161	1.245
Specific Indirect Effect	FATHER	EC	EDU EXP	-0.106	-0.114	0.045
	FATHER	OBCC	EDU EXP	0.113	-0.249	0.493
	FATHER	EMCC	EDU EXP	-0.030	-0.135	0.041
	FATHER	INCC	EDU EXP	0.018	-0.047	0.121
	FATHER	PS	EDU EXP	0.015	-0.037	0.105
	FATHER	FR	EDU EXP	0.000	-0.029	0.038
	FATHER	PR	EDU EXP	-0.040	-0.209	0.117
	FATHER	TSR	EDU EXP	-0.087	-0.218	0.031
Direct Effect				-0.371	-1.197	0.479
Total indirect effect				0.765	0.359	1.128
Total effect				0.546	-0.161	1.136
Specific Indirect Effect	PARENTS	EC	EDU EXP	-0.044	-0.138	-0.003
	PARENTS	OBCC	EDU EXP	0.695	0.399	1.072
	PARENTS	EMCC	EDU EXP	-0.072	-0.011	-0.018
	PARENTS	INCC	EDU EXP	0.024	-0.047	0.094
	PARENTS	PS	EDU EXP	0.042	0.004	0.120
	PARENTS	FR	EDU EXP	-0.002	-0.055	0.045
	PARENTS	PR	EDU EXP	0.080	-0.004	0.191
	PARENTS	TSR	EDU EXP	0.014	-0.054	0.092
Direct Effect				-0.397	-0.995	0.164
Total indirect effect				0.738	0.404	1.100
Total effect				0.341	-0.188	0.853

Confidence intervals that do not contain zero are statistically significant (Bold). Estimates are unstandardized

EDU EXP=Educational Expectation; EC=Economic capital; OBCC=Objectified cultural Capital; EMCC=Embodied cultural capital; INCC=Institutionalized cultural capital; PS: Family social capital (parental supervision); FR=Family social capital (family relationship); PR=Peer social capital; TSR=school social capital

Discussion

This study showed that more than half of migrant children (64%) expected to receive higher education, especially junior college education, 33.4% of them expected to receive further education after compulsory education, and only a few of them (2.7%) expected to stop receiving education after compulsory education, which echoes the findings of previous studies, suggesting that most migrant children hope to receive education after compulsory education (Feng et al., 2017; Koo, 2012; Xiang, 2014; Yang et al., 2016). Thus, this study supported the argument that education is



important for children in China and education provides a social ladder for them to gain good employment opportunities and achieve a higher social status.

Firstly, this study provided meaningful evidence for the significant influence of economic capital on the educational expectation of migrant children, showing that economic capital was negatively correlated with the educational expectation of migrant children. In other words, the lower economic capital they owned, the higher educational expectation they would have, which is in line with the results from Yang et al. (2016) but contradict the findings from previous studies (Davis-Kean, 2005; Entwisle et al., 1997; Feng et al., 2017; Liu et al., 2014; Wang & Shi, 2014; Wu & Huang, 2017). Previous research has found that in Western societies, children from low socioeconomic status families are typically less ambitious than children from more affluent families (Bozick et al., 2010; Li & Xie, 2020. However, our study found that Chinese children, especially those from families with low economic status, pay more attention to education. This is also indicative of the high value placed on education in China. This social difference between China and the Western society is probably due to China's Confucian cultural traditions, where the Chinese value educational effort and achievement, even when families are in a poor financial situation. Families of migrant children tend to settle down on the edge of cities, and their parents usually engage in low-skilled work, which results in a low income of the family. For this reason, the pursuit of higher education could fulfil migrant children's demands for their futures. Those from low-income families may expect to change their fortunes through higher education.

Secondly, this study identified the significance of objectified cultural capital, supporting the argument that people need economic capital to gain objectified cultural capital (Bourdieu, 1997). These two kinds of capital cannot be separated from each other. However, it was found in this study that the effects of objectified cultural capital and institutionalised cultural capital and the effect of embodied cultural capital were contradictory. The results showed that the higher objected and institutionalised cultural capital migrant children's families owned own, the higher educational expectations they would have. These results are in line with previous studies (Davis-kean, 2005; Feng et al., 2017; Gillies, 2005; Lareau, 2003; Liu et al., 2014; Wu & Huang, 2017) For instance, Feng et al. (2017) argue that children may have a higher educational expectation if their parents have higher education qualifications. To be more specific, mothers receiving senior higher education can afford more extracurricular books for their children. Parents with high education qualifications are willing to invest to their children's education. They generally transfer their own experiences to the invest on children's education. Those with low education qualifications can hardly recognized the benefits of education and they may invest less effort on children's education.

However, embodied cultural capital has a significantly negative effect on the educational expectation of migrant children, which is different from the findings of previous studies. Studies in Japan and Western countries have found that students with high family economic and social status tend to be more exposed to and involved in literary, artistic and musical activities at home than students with lower socioeconomic status, as these activities can contribute to students' academic performance (Omae, 2002; Tan, 2017; Yamamoto & Brinton, 2010). This



was positively associated with their educational aspirations and these activities made them even more motivated to learn. Additionally, Ma and Wu (2020) have found that academic achievements are not significantly affected by embodied cultural capital. They argue that Bourdieu's concepts focus more on the upper-middle class in foreign countries. However, the social context in foreign countries is different from that in China where students are admitted to senior high schools and universities according to their scores of the entrance examination. As a result, students who want to enrol in an ideal university need to spend more time studying before tertiary education. Hence, they rarely have the opportunity and energy to participate in some elegant cultural activities during this period. In this study, migrant children with lower embodied cultural capital had higher educational expectations as they had few chances to go outside to visit museums, zoos, concerts or shows. It was the lack of opportunities to participate in these activities that motivated them to form higher educational expectations and participate in these activities in the future.

This study found that the impacts of school social capital and peer social capital on the educational expectation of migrant children were greater than that of family social capital. In previous studies, it has been found that peer social capital and school social capital are related to academic achievements (Astone et al., 1999; Blake, 1985; Downey, 1995; Jin et al., 2017; Ma & Wu, 2020; Salikuluk, 2016; Wu & Huang 2017), while this study focused on the educational expectation of migrant children in the Chinese context. Furthermore, previous studies have shown that families play a more significant role than peers in shaping children's future aspirations (Davies & Kandel, 1981; Duncan et al., 1972; Sewell et al., 1970), while this study found peer that social capital had a much more important impact on the educational expectation of migrant children. Since children spend most of their childhood and adolescence at school, peers' performance and attitudes towards education will influence migrant children's own educational expectations (Schneider & Coleman, 1993). They have homogeneous social networks and stay together for a long time to study and play. Thus, if their peers have a strong interest in learning, they will also be motivated to study. When migrant children encounter problems and troubles, they are inclined to talk to their peers rather than their parents and change their educational expectations and learning styles based on their peers' suggestions. In addition, the teacher's praise can affect their educational expectations. Therefore, it is not difficult to find that internal resources at school and peers can more significantly affect the educational expectation of migrant children than family social capital.

Furthermore, family social capital (parental supervision) was found to have a relatively weak influence on the educational expectation of children in this study. Specifically, the educational expectation of migrant children was significantly associated with positive parental supervision including parents' care and strictness on their children's homework and examinations, behaviors at school, attendances at school, time to go home and friendships. Previous studies have focused on family social capital and academic achievements (Feng et al., 2017; Gillies, 2005; Li & Zheng, 2017), while this study paid attention to the educational expectation of migrant children. The less significant impact of family social capital (parental supervision) could result from the fact that migrant children's



parents are busy with their work and hardly devote their efforts to the supervision of their children's daily lives and studies. Besides, the education level of parents plays a crucial role in parental supervision in previous study (Li & Zheng, 2017). But parents of migrant children are usually not highly educated, so they are not able to provide assistance in their children's homework. However, previous studies have found that middle-class or highly educated parents spend more time assisting in their children's studies (Feng et al., 2017; Salikutluk, 2016). The two groups hold completely opposite attitudes towards parental supervision, let alone the fact that parents of migrant children generally have a low level of education. Although parental supervision plays a significant role in shaping educational expectation, its role is much weaker in that of migrant children.

However, it is worth noting that the educational expectation of migrant children was negatively affected by family social capital (family relationship) in this study. The lower the family social capital (family relationships), the higher the educational expectations, no statistical significance was found. Previous studies have shown that a good relationship within the family is favorable for students' academic performance and parents can greatly influence their children's future aspirations (Coleman, 1988; Davies & Kandel, 1981). In terms of the educational expectation, one reason mentioned before is that migrant children could be unwilling to discuss what happened at school, their relationships with friends and teachers, their feelings and their worries with their parents. Migrant parents are also busy with their work and could lack sufficient time and energy to discuss these issues with their children. As a result, migrant children are unwilling to take the initiative to communicate and share their views with their parents in their daily lives, but they still have a plan for their futures.

The impact of age on the educational expectation of migrant children is worth attention as well. With an increase in their ages, migrant children's educational expectations are lowered due to lower economic and embodied cultural capital, as well as high levels of social capital and partial cultural capital. That is to say, migrant children have become increasingly realistic with the growth of age and the kinds of capital they own. This conclusion was supported by the results of the studies that children will evaluate the possibility of achieving what they want. Then they adjust their previous educational expectations based on the reality and their educational stages (Andres et al., 2007; Jacob & Wilder, 2010; Koo, 2012).

Limitations and Implications

This study has several limitations due to the data restrictions. First of all, the measurement of economic capital might not be accurate because it was based on the subjective answers of parents and students. The measurement of cultural capital, social capital and educational expectation might cause biases because it was restricted by the limited information in the CEPS dataset. Besides, community social capital is also an important domain from social capital (Coleman, 1988; Wu & Ou, 2021). However, the CEPS dataset did not have corresponding questions related to



community social capital. Therefore, a more comprehensive national data collection is needed for future studies.

Although this study has some limitations, this study also has several implications for the development of the related theories and social service programmes, as well as the design of the related social and educational policies. In terms of theoretical implications, firstly, the research advances Bourdieu's concepts of capitals by incorporating Coleman's social capital into a conceptual framework. It promotes the implication of Bourdieu and Coleman's conceptual toolkit by taking into account the impact of economic, cultural and social capital on educational expectations simultaneously, filling in the knowledge gaps on all dimensions of capital. Additionally, this study extends the understanding of how the various dimensions of capital operate in the Chinese context, which enhances the cross-cultural applicability of practical on Theory of practice. Specifically, in terms of economic capital, Chinese parents want their children to attend senior high school and gain access to university education and then have a decent job. The families with poor economic conditions have higher expectations of their children, and their children also want to be able to climb the social ladder through education (Huang, 2013). This extends the understanding of the operation of economic capital in the context of Chinese migrant families. Compared with children in Western countries, Chinese Children need to be aware of the sacrifices that their parents make to sustain their education (Carrasquillo & London, 2013; Zhang & Carrasquillo, 1995). With high expectations from parents and schools, Chinese migrant student should work hard.

In terms of practical implication, firstly, economic, cultural and social capital can be utilized to design a new asset building approach to the provision of alternatives or the complementation of capital assets to improve migrant children's educational demands. It is one potential policy tool to provide social welfare for disadvantaged children and promote educational development (Fang et al., 2020). Children have specific forms of capital in their development, and the more capital they have, the less likely they will get into trouble. The asset building includes tangible and intangible resources. The former one refers to economic or material resources that can improve educational or economic conditions for vulnerable groups, and the latter one mainly refers to social capital. Consequently, in the light of the significant effects of social capital (family, school social and peer social capital) on the educational expectations of migrant children found from this study, social service professionals could devote their efforts to the development of these types of social capital. In terms of family social capital, parents of migrant children from low-income families in China do not have extra time and energy to supervise their children's studies and lives because they are busy with work or have multiple jobs (Chen & Feng, 2019). Hence, social service professionals can design family services training programmes to encourage parents to spend more quality time with their children. In terms of peer social capital, despite the rare interference from communities, it is their own choice for migrant children to make friends. Nevertheless, since most of the friends of migrant children in cities are also migrant children, social service agencies can try to hold some activities to build a platform for local and migrant students to communicate with each other and enhance their sense of identity and belonging to the city. In terms of school social capital, given its strong effect on



educational expectations, the teacher should pay more attention to both the study and daily performance of migrant children at school. In terms of embodied cultural capital, since migrant children may have few chances to participate in elegant cultural activities and thus develop low educational expectations, social service agencies can organize visits to museums, shows and zoos to widen their horizons and enrich their experiences.

Secondly, policymakers should design public policies to empower migrant families to promote their capital accumulation. Hence, capital building is significant for policy-making that promotes children's educational development. For instance, Child Development Accounts (CDAs) are saving accounts opened as early as possible and aim to promote savings and capital building for lifelong development (Beverly et al., 2013), having been proposed and implemented in developed countries, such as Singapore, Canada, the UK and the US. For example, Singapore has four programmes for children from the baby stage to the post-secondary education stage. This programme has not been officially established and implemented in China. The CDA programme has positive financial and non-financial benefits for children and families. As a result, this programme in China should be designed and implemented to promote the accumulation of more financial and non-financial resources by children and their parents for their future development.

Declarations

Conflict of Interest We have no known conflict of interest to disclose.

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