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Which Family Capitals Aid Rural and Urban First-generation College Students in China to Realise Intergenerational Mobility in Higher Education?



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Abstract

With the growth of the gross enrolment rate in higher education in China, the number of college students whose parents have no higher education experience is also increasing. This group of students is known as the first generation of college students. This phenomenon challenges cultural reproduction theories' view that it is difficult for children from disadvantaged family who lack the cultural capital to realise an intergenerational breakthrough in higher education. Many studies found that family capitals are the core factors to aid first-generation college students to realise such an intergenerational breakthrough. However, to date, numerous studies considered Chinese first-generation college students as rural students and ignored their first-generation urban counterparts. Furthermore, it is essential to establish the role of family capitals based on Chinese students' experience. Therefore, this research aims to establish the family capitals aiding rural and urban first-generation college students to realise intergenerational breakthrough in higher education, and the differences as well as similarities in rural and urban family capitals.

Using grounded theory, seven family capitals were identified by coding the content of 30 interviews across three groups: rural students, urban students, and rural students whose parents worked in the urban areas. Family capitals consist of normative capital, family guiding force capital, family collaborative capital, emotional capital, Guanxi capital, economic capital, and information capital. In terms of the similarities between the groups, in all three cases these five capitals are present: normative capital, family guiding force capital, emotional capital, Guanxi capital, and economic capital. A difference is that family collaborative capital only exists in the urban group. There is information capital in two groups but not in the case of rural students. There are also differences in the categories and subcategories within the five capitals shared by the three groups. The study finds that the degree of parental involvement in children's learning increased with the average number of years of parental education. This research also provides four recommendations for cultivating

first-generation college students: parents should steer children to study in elementary school and trust them adequately in high school; parents should provide role models; school should focus on rural students' mental health; the establishment of an official, unified college selection information platform would assist students significantly.

Acknowledgements

I would like to say thanks to volunteers attending in this research. Without you, I could not have done this complicated dissertation. Your enthusiasm and expectation motivated me to complete this research. I also want to thank very friends who helped me recruit the volunteers. Your support not only reduced my pressure but also expanded my social circle.

I am also very grateful to my supervisor, Professor Simon Marginson, for his academic and spiritual support to me. My supervisor gave me detailed guidance and suggestions to each step of the research. As a second language student, I always lacked the confidence when I attended to the group discussion and gave presentation. Prof Marginson always told me to believe in myself and gave me examples that I have made great progress. These inspiring experiences promoted me to face the challenges and finish my dissertation. Thanks very much, Simon!!!

In addition, I also want to express my gratitude to my family. My mother taught me persistence and seriousness and father taught me to look at life positively. Your support and encouragement are the most valuable asset in my life. I also want to thank my fiancée Yiming Sun. You made me stronger and let me find and believe the beauty of life.

List of Abbreviations

FGCS	First-generation college students
CGCS	Continuing-generation college students
Gaokao	Nationwide Unified Examination for Admissions to General Universities and Colleges (高考)
SPRAWUA	Students with Parents from Rural Areas Working in the Urban Area

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Chapter 1 Introduction

Since the 1999, universities of China have rapidly expanded their enrolment. The gross enrolment ratio soared from 7.59 per cent in 2000 to 53.77 per cent in 2019 (World Bank, 2020). Students from rural areas whose parents have relatively low levels of education are starting to enter higher education institutions, and their numbers are increasing (Ding & Liang, 2010). These children can be described as first-generation college students (FGCS) that refers to college students whose parents or guardians have no experience in higher education. Zhang, Zhao and Guo (2016) found that 69.74per cent of first-generation college students come from rural areas. Due to the large proportion of rural students, FGCSs and rural students are almost synonymous in the Chinese research context. Few studies have focused on the intra-group differences specific to FGCS in China.

The meaning of FGCS in different countries varies due to the social context. The British FGCS are equated with those from lower social class (Hunt et al., 2018). Indian FGCS are related to the inequality of the caste system (Wadhwa, 2018). American FGCS are related to the ethnic minority group (Rodriguez, Garbee & Martínez-Podolsky, 2021). Nevertheless, studies about the FGCS revolve around “challenges” and “inequality” (O’Shea, 2016; Tian & Yu, 2021). The mainstream of research about FGCS embodies a disadvantaged perspective. For example, comparisons of FGCS and continuing-generation college students (CGCS) identify disadvantages of FGCS in relation to financial support, family cultural capital, and social networks (Horn & Nunez, 2000; Wang, 2019; Pascarella et al. 2004).

Yet in contrast, scholars also reveal the advantage of FGCS to explain how that they enter and graduate from university. Familial support, individual excellent characters, positive mindset, and social assistance are discussed as the essential advantaged factors (Wright, Jenkins-Guarnieri & Murdock, 2013; Mochetti & Hudley, 2015). Capital theory also provide a perspective to explain the success of FGCS in entering university. The capital perspective develops from Bourdieu’s three capitals: economic capital,

social capital, and cultural capital. In educational research, some scholars integrate these three capitals into familial background and used “family capitals” to illustrate why FGCS can realise intergenerational breakthrough in higher education. The notion of family capitals has entered numerous theorisations. Yosso (2005) mentions “Community Cultural Wealth” to demonstrate the factors aiding FGCS. Cheng (2018) argues that “Cultural Capital of Underclass” helps FGCS overcome the challenges in study. Gofen (2009) also establishes “family capitals” to explain why Israeli FGCS can enter university. However, Yosso and Gofen’s theories are based on North American or Israeli social experiences. Cheng’s theory is built on rural children’s experiences. These findings may not explain the urban FGCS experience.

Given that few studies have explored the favourable family capitals of Chinese FGCS in rural areas and urban areas, and the large number of first-generation college students in China, it is essential to find family capitals to explain Chinese rural and urban FGCS’s success in entering universities. Therefore, the overarching question of this research is:

Which family capitals aid rural and urban first-generation college students in China to realise intergenerational mobility in higher education?

This research also aims to answer two sub-questions:

- 1) *What the family capitals facilitate rural and urban FGCSs’ enrolment in top universities in China?*
- 2) *Are there any differences or similarities in rural-urban family capitals?*

To answer the question, this research used mixed research methods. Since some participants have an agriculturally registered permanent residence (i.e. rural hukou), but their parents are working in urban areas, participants were divided into three groups: rural students, urban students, and students with parents from the rural areas who were working in urban areas (SPRAWUA). Firstly, an online questionnaire collected the details of student and parental educational background, as well as

familial socioeconomic background. Participants who wanted to attend the interview left their personal contact information in the questionnaire. Secondly, based on the results of questionnaires, 30 interviewees were found. After the online semi-structured interviews were completed, the transcripts were coded by grounded theory to identify the family capitals, and analyse the similarities and differences between the interviewee's statements and their parental educational backgrounds.

This thesis is divided into six chapters. The introduction provides the research background and aim of the thesis. The second chapter reviews the literature about family capitals and FGCS. The third chapter provides the methodology including sampling, data collection and analysis. The findings are set down in the fourth chapter. The fifth chapter discusses the findings (family capitals, similarities, and differences among three groups) and contributions of this research in the light of previous studies. The final chapter summarises the findings and notes the limitation of this research. and provides recommendations based on findings.

Chapter 2 Literature Review

2.1 Family capital in Education

The traditional concept of capital relates to labour and transformation of labour. Marx (1979) thinks capital is the sum of labour and dominates production. Bourdieu (1986) also sees capital as accumulated labour that can be reified by agency or agencies via allocation. Apart from economic capital, capital also has two categories. One is social capital, the other is cultural capital. These two categories can transform into economic capital. In detail, Bourdieu divides cultural capital into three categories: embodied state (controlled by the body or mind, such as thinking or gesture), objectified state (the objective carrier of culture, i.e., books etc.), and institutionalized state (such as academic qualifications). Bourdieu expands cultural capital to a new concept - habitus. He argues that

Habitus is both the generative principle of objectively classifiable judgements and the systems of classification of these practices . . . The habitus is necessity internalized and converted into a disposition that generates meaningful practices and meaning-giving perceptions' (Bourdieu, 2010, p.166).

For instance, if the Mona Lisa can be considered as a kind of cultural capital, the capacity to identify and appreciate it is the habitus. Based on the habitus, people generate, perceive and appreciate works and generate the unique and hierarchical lifestyle of the elite. Thereby, capital inequality can generate education inequality.

In terms of social capital, Bourdieu (1986) thinks that it includes potential and obvious social networks or institutionalized relationships, and it cannot independently exist. Although social capital establishes the connection between numerous non-material resources or capacity and social reproduction or mobility, Portes (1998) argues that social capital such as bonding social capital, which causes isolation and burdens, is a negative factor to family development (Holzmann & Jorgensen, 1999). The customary use of family capital is related to social capital. Family capital is always considered as a sub-section of social capital (Coleman, 1990; Crosnoe, 2004; Parcel &

Dufur, 2001). Research about family-social capital takes two directions: “what capitals are there within the family?” and “What are the capitals that the family owns?” (Gofen, 2009).

In China, the concept of the social capital is similar to the term Guanxi (关系). Ke (2018) thinks it has three dimensions: 1) normative relationship, including Lunli (Confucian ethics, 伦理) and Yi (obligations, 义), which refers to traditional norms and values and control people's relational behaviours; 2) sentimental relationship, which contains Qing (feelings, 情) and Xin (trust, 信), indicates the feelings, attachment for other people and feelings of trust; 3) instructive relationship, involving Jiao (exchange, 交), represents the material or nonmaterial exchanges, such as ideas or gifts (p.62-65). Family Guanxi can be divided into two aspects, internal Guanxi and external Guanxi. Internal Guanxi means the familial internal network and relationship, while the external is the relationship with people in society.

Coleman (1990) merged social capital into the family. He argues that “social capital is the set of resources that inhere in family relations and in community social organizations and that are useful for the cognitive or social development of a child or a young person” (p.300). He also defined the social capital of the family as “The relations between children and parents (and, when families include other members, relationships with them as well)” (Coleman, 1988, p.110).

However, in education research, family capital has a larger scope rather than just being social capital. It can be considered as the products of the continuous integration of three types of capital - cultural, economic and social - in the family context. Based on Bourdieu's and Coleman's theory, Chinese scholars divide family capital into four dimensions: family political capital, family economic capital, family social capital, and family cultural capital (Wang, 2019; Zhang and Zhao, 2012; Liu and Gao, 2015; Ye, 2012). In China, Liu and Gao (2015) also argue that in these four-dimensions family capital impacts the quantity and quality of higher education gained by students. The family boundary in this research includes both the nuclear family and the extended family, all family members that can impact the students' enrolment in the university.

Wang (2019) points out Chinese scholars tend to take parent's annual income as the main index for classifying family economic capital and take parent's education background as the main index of family culture capital. In terms of family social capital, Zhang and Zhao (2012) divide it into two categories: family external social capital and family internal social capital. Family external social capital consists of interpersonal relations in the community, the relationship with the child's teachers, the relationship with the child's friends and his parents. Additionally, parents' membership of the Communist Party of China is also an important family political capital in relation to higher education opportunity (Ye, 2012; Marginson, 2018).

When scholars research how family capital affects education, Bourdieu's theory of reproduction and the concept of capitals is a widely used theoretical framework. Bourdieu (1986) argues that education system reproduces inequality via the promotion of cultural practices related to the ruling class and utilizing "symbolic violence" to pressure underprivileged children to embrace cultural practice with which they are unfamiliar (Tramonte and Willms, 2009; O'Shea, 2016). The habitus of underprivileged students may not help them to gain advantage in education in the same way that the habitus of privileged students helps them. The reproduction of cultural capital is concealed in daily educational activities and knowledge forms. Since job and income are related to the quality of diplomas, social and economic capital is also reproduced through the allocation of cultural capital (i.e. diplomas). Bourdieu's theory of capital reveals the institutional and structural inequalities behind educational inequality. The idea of family capital, based on Bourdieu's theory, shows that an advantage in family capital can be transmitted into an advantage in educational resources and opportunity (Liu and Gao, 2015). The lack of family capital is often considered as one of reasons why disadvantaged children cannot enter university or drop out. Nevertheless, the notion of family capital based on Bourdieu's theory may not be able to explain the phenomenon that disadvantage children enrol in the university. Bourdieu's theory has been criticized for overemphasizing the constraints of external structural forces and ignoring the scope for human initiative (Collins and

Stevens, 2019; Pitman, 2013; O’Shea, 2016; Cheng and Kang, 2016).

Table 1. Some Concepts of Capitals and Family Capitals in Relation to Education

Concepts	Mentioned by	Context
Capital	Bourdieu (1986)	Economic Capital
		Social Capital
		Cultural Capital
Social Capital of the Family	Coleman (1988)	“The relations between children and parents (and, when families include other members, relationships with them as well)” (p.110)
Family Capital	Liu and Gao (2015); Zhang and Zhao (2012); Ye (2012)	Family Political Capital
		Family Economic Capital
		Family Social Capital
		Family Cultural capital
Community Cultural Wealth	Yosso (2005)	Aspirational Capital
		Familial Capital
		Resistant Capital
		Linguistic Capital
		Navigational Capital
Family Capital	Gofen (2009)	Attitude toward Education
		Interpersonal Relationships
		Family Values
Cultural Capital of Underclass	Cheng and Kang (2016)	Inherent impetus
		Moralized Thinking
		A Nature of Mind That Is Corresponding to Schooling

Hence new concept of capitals that help to explain how disadvantaged children can realise the intergenerational breakthrough in education can fill a gap in the literature. Yosso (2005) mentions the Community Cultural Wealth framework, consisting of six different capitals, challenging Bourdieu’s neglect of the interaction between students and institutional capitals. Cheng and Kang (2016) establish the concept of “Cultural Capital of the Underclass” to explain how poor children realise educational intergenerational breakthrough in China. In terms of family capital, based on the grounded theory, Gofen (2009, p115) argue that “family capital emphasises the contextual setting of the family in which aspects of social capital, human capital, and

cultural capital intersect . . . family capital is implicitly and explicitly reflected through behaviour, emotional processes, and core values.” She believes that unique family capital is the vital factor to facilitating first-generation students' access to and success in higher education.

In addition, scholars also study how family influences children' education through family cultivation and communication. Family cultivation varies within the social hierarchy. Lareau (2009) concludes that the American middle and upper class tend to educate their children with “concerted cultivation”, while the working class prefers to utilise the “accomplishment of natural growth”. “Concerted Cultivation” is the method used by middle and upper-class parents to develop their children's skills and talents, and take the initiative to assess their children's abilities. They usually communicate with their children by means of negotiation, discussion, reasoning, bargaining. “Accomplishment of natural growth” is the method whereby parents control their children's actions but provide much more free time to them. Compared with children from working class families, those from the middle-class tend to develop analytical and communication capacities that give them advantage in adapting to school culture and labour market. Bernstein (1962) also notices the difference of daily language code between the middle class and the working class. He concludes that the working class uses a restricted code (contextually constrained language, low generality, less logic and short sentences) while the middle class use an elaborated code (language with universality and logic express accurately). This difference also leads to discrepancy in students' academic achievement. This research expands the content of family capital. Family internal influence on the children's education, such as methods of family communication and cultivation, is seen as a kind of family capital. Similarly, parent participation also can be considered as a category of family capital (Wang, 2019).

In conclusion, based on the afore-mentioned research, the definition of family capital used in the present research can be any investment a family makes to support first-generation college students who enrol in universities, including material and non-material capital, behavioural and emotional capital, and internal and external capital.

In addition, this review of the literature suggests two research gaps. Firstly, most of research about family capital in education are established by theories developed for a Western social and cultural context. It is debatable whether these theories of family capital can explain the correlation between of family and education in China. Secondly, although Chinese scholars mentioned the “Cultural Capital of Underclass”, this theory focuses on the student’s individual spirit and characters. The role of family is ignored. Therefore, it is essential to find a theory to explain which Chinese family capitals aid students to realise the intergenerational breakthrough in education.

2.2 Studies about First-Generation College Students

2.2.1 Overall research trend

In the 1990s in the United States, studying first-generation college students (FGCSs) became more important when the proportion of FGCSs increased from 43 per cent between 1989 and 1990 to 47 per cent between 1993 and 1996 in the U.S. (Nunez & Cuccaro-Alamin, 1998). From 1999 to 2013, the number of studies related to the FGCS increased over six-fold (Wildhagen, 2015). Based on the education experience of FGCS and the different kinds of inequality that FGCS have to face, studies of FGCS can be divided into three categories: before entering university, during university and after graduation (Gofen, 2009). In terms of the groups studied, Chinese academics focus on FGCSs from rural areas, while Western scholars focus on FGCSs from non-English families and low-income families.

2.2.2 Before entering university

FGCSs appear to be disadvantaged in their opportunities to enter to higher education, specifically to enter different types of universities, in relation to choice of majors, and in adaptations to university life.

In terms of university entrance opportunity, FGCSs tend to attend high schools with a low college-going ratio, compared with the continuing-generation college students

(CGCSs) (Warburton et al, 2001; Meng, Chu and Li, 2017). In relation to type of university, both Chinese FGCSs and the American counterpart experience similar patterns. FGCS are more likely to enter a vocational college or 2-year college rather than 4-year academic universities (Bao, 2013; Warburton et al, 2001). In relation to the choice of majors, because of parents' lack of experience and their socio-economic status, FGCS choose their majors more based on their individual cognition and have low motivation to enter postgraduate education (Bao, 2013). Furthermore, Zhang, Guo and Shi (2016) find that most FGCS choose the professional and more technical majors.

The larger challenge to FGCSs is in financial support. FGCSs from the working-class receive less financial support than CGCSs from the middle and upper class (Horn & Nunez, 2000; Hossler, Schmit, & Vesper, 1999). Therefore, they need to do part-time jobs to earn tuition fees, which potentially reduces the time they can spend on academic courses and important internships that might help them excel in the labour market (Delaney, 2010). In China, due to the low affordability of education, compared with other groups of the same age, the first-generation rural college students are more likely to give up on college admission (Bao, 2013). Although student loans in part help finance FGCSs' university studies, they create the pressure of having to repay debts and stimulate the need for students/graduates to enter labour market earlier. Student loans tend to increase the number of hours FGCSs work after school, but not the amount of time spend in studying (Huang, Yao & Li, 2016)

2.2.2.1 Factors that influence FGCSs' access to universities

Apart from the challenge that FGCS face before entering university, scholars have also studied the factors that possibly facilitate FGCSs' access to colleges and universities. Carter (2006) argues that some FGCSs from Black and Latino familial backgrounds can adopt different cultural capitals to realise their goals. Yosso (2005) classifies six essential cultural capitals: aspiration capital, linguistic capital, familial capital, social capital, navigational capital and resistant capital. These capitals can help FGCSs to excel academically (Beattie, 2018). Though FGCSs' families are disadvantaged in socio-

economic background, families can still play critical roles in FGCSs' college success. For instance, parental aspiration is found to be the basis of children's aspiration for post-secondary education (McCarron & Inkelas, 2006). Gofen (2009) emphasises that family solidarity, respect and ambition underpin FGCSs' success. In African American and Hispanic families, family capital relates to intergenerational breakthroughs.

In China, the role of family also captures much scholarly interest. Through interviewing 12 female FGCSs, Zhang (2020) finds that these students' motivation for study stems from their parents' aspirations. Zeng (2019) also finds that family mobility expectation, faith in knowledge, methods of family nurturing, and family harmony are the vital factors for FGCS. In challenging Bourdieu's capital theory, some Chinese scholars mention that FGCS have their own "culture capital of underclass" which contains an inherent impetus (the intrinsic motivation to escape harsh living conditions), moralised thinking (moral debt from the sacrifices their families make for their education) and a nature of mind that corresponds to schooling (respect for teachers and knowledge), all of which can support their success in higher education (Cheng & Kang, 2016; Cheng, Lv & Yang, 2018). Nonetheless, there is still a gap between urban FGCS and rural FGCS in terms of the available support from families. For example, urban FGCS have the opportunity of partaking in extracurricular cram schools, often not available to their rural counterparts (Bao, 2013).

2.2.3 During university

Existing research focuses on FGCSs' participation in tutorial and extracurricular activities during university. Studies reveal that students who frequently partake in extracurricular activities and interact with peers and tutors are more successful in persisting with university life. FGCSs, however, are less likely to join these social activities (Pascarella et al. 2004; Terenzini et al. 1996; Kuh et al. 1991 and Tinto 1987). In China, Zhang, Guo and Shi (2017) find that FGCS attend less often in extended learning practices and research-related practices. The low engagement in both academic and social activities in part demotivate and isolate FGCS from the rural areas

(Guo, 2020) and results in a low sense of belonging to the universities (Bell & Santamaría, 2018). However, Williams and Ferrari (2015) find that the students who are both FGCSs and first-generation citizens have a greater sense of school community.

In terms of academic performance, Arum and Roksa (2011) believe that FGCSs with less-educated parents have a lower capability in critical thinking, analytic reasoning, and problem-solving compared with peers from highly-educated families, in the sophomore year. Stephens et al. (2012) reveal that the lack of middle-class cultural norms results in the academic under-performance of working-class FGCSs in American universities. In addition, Zhang, Guo and Shi (2016) reveal a significant gap between FGCS and CGCS in collaborative learning, online learning, resource-driven high-impact educational activities, post-graduation study or going abroad. Again, FGCS are seen to be at a disadvantage.

2.2.4 After graduation

There is difference between FGCSs and CGCSs in the intention to pursue higher education. FGCSs tend to consider higher education as preparation for job but CGCSs tend to see it as a means and process of self-cultivation (Mullen, 2010; Bao, 2013). Hence, after graduating from 4-year universities, FGCSs choose to seek employment, while CGCSs will often pursue advanced studies (Guo, 2019). However, less FGCSs can utilise their social circles to find satisfying employment and connect their current job and future job (Parks-Yancy, 2012). Similarly, Zhang (2019) also finds that most Chinese FGCSs lack clear career goal and seldom blueprint their future life.

2.3 Differences between Rural and Urban Conditions of Life and Entry to Higher Education in China.

Zhang, Zhao and Guo (2016) find rural students accounted for 69.74 per cent of Chinese FGCS. Since students from rural backgrounds make up a relatively high percentage of FGCS, problems about the FGCS-CGCS educational gap are often classified as rural-urban educational inequality. Thus, it is essential to review urban-

rural educational differences in China.

Many scholars have noticed the educational inequalities between urban areas and rural areas and conducted longitudinal research about this form of educational inequality (Li, 2014; Liu 2005; Li, 2006). They point out that educational inequality has been enhanced since the Reform and Opening-up that began at the end of the 1970s. Wu (2013) finds that between 1979 and 2008, urban and rural education inequality expanded, in relation to high school and university progression. Yang (2006) points out that students from rural areas have to gain higher scores in National College Entrance Examination (Gaokao) than do students from urban area when entering the same universities. Focusing on the internal stratum of urban and rural areas, there is significant distinction in gaining higher education, and this stratum effect is more significant in rural areas than in urban areas (Liu and Guo, 2020).

The differences between rural and urban conditions in enrolling in higher education arise in two aspects. One is family background which mainly includes father's education level, father's occupation and family educational investment (Li, 2014; Shi, Zhang and Liu, 2018; Liu and Guo, 2020). The other is social education resources. In terms of family background, Shi, Zhang and Liu (2018) elaborate on the relation between father's education, father's occupation, and rural and urban background, as well as category of universities. They find that in urban areas, father's education level positively influences the level of university that students enter but the counterpart in rural areas is the father's occupation. Nevertheless, for groups with the same educational level, the urban-rural inequality of opportunities to enter university has gradually expanded. The degree of inequality increases with the upgrading of university level. This inequality is more serious in groups with low education levels. From the perspective of parents' profession, the degree of inequality in access to university in cities has declined, while the degree of inequality in rural areas has increased. For the same professional class, the degree of inequality in urban and rural opportunities between the white-collar and blue-collar classes has not changed, while the rural-urban inequality of opportunities for the peasant class to go to university has

expanded, and it has increased with the improvement of the quality of schools.

However, in terms of social educational resources, the urban-rural difference exists in relation to pre-higher education resources. Yang and Jiang (2011) find that the urban-rural education inequality is embodied in differences in the quality of teachers, education budget and media equipment. Li (2014) argues that inequality in enrolling in higher education between rural and urban areas is not in itself significant because the inequality really relates to enrolling in the elementary school, middle school, and high school. Hannum et al (2008) reveal that urban-rural inequality in the elementary school to middle school transition rose after 2000. In terms of enrolling in top middle schools, the proportion of students from rich families is 32.6 per cent. However, the proportions of students from middle class families and disadvantage families are 24.4 per cent and 13.3 per cent respectively (Xue, 2017). In addition, Peng (2014) finds that in middle school the rate of academic excellence of county students is two to three times higher than that of rural students. In relation to enrolling in top universities, admission to a selective high school is the key. Students from national or provincial selective high school are 10.1 times more likely to enter top universities (211 project universities) than are students from general high schools (Wu, 2016).

Compared with the provision in urban areas, the number of elementary school and middle schools in rural areas decreased because of the “School Abolishing and Merging Policy”. The lack of elementary and middle schools leads to a decrease in the quality of rural education available (Cai and Kong, 2014). Additionally, rural students have to face higher education costs, compared to those experienced by urban students. In a rural county of Henan province, the direct family education investment of non-resident students, resident students, and parent-accompanied students in every term are respectively 161 yuan, 1860 yuan, and 2308 yuan (Zhang, 2020). Furthermore, teacher quality is also unequal. Li (2013) finds that the proportion of teachers in rural primary and middle schools with higher education qualifications is much lower than that is the case with their urban counterparts.

2.4 Conclusion

The literature discussed above indicates that scholars have studied FGCS as a disadvantaged group to reveal the inequalities that they face. Unequal family capital helps to explain the educational inequality. However, the average share of first-generation college students in OECD countries is 53 per cent (Spiegler and Bednarek, 2013), while the percent of FGCS is nearly 70 per cent in Chinese university (Zhang, Zhao and Guo, 2016). This shows that many FGCS are realising intergenerational educational breakthroughs, and suggests that family capital can be a positive factor. The way it aids the success the success of FGCS should be investigated. Yet in China, the “disadvantage perspective” still dominates the research about FGCS. How FGCS gain this achievement and how family influences first-generation students' access universities in China remains under-discussed.

Discovering the success stories of FGCS can and should be a new research trend (Tian & Yu, 2021). How does family capital underpin FGCS in enrolling in selective universities in China? Although some Chinese scholars have tried to develop a theory to explain the success of FGCS, they have focused on students' individual character and spirit and mostly ignored the role of family. There is a research gap about which family capitals aid FGCS to enter the elite universities. In addition, most studies simply equate China's first-generation college students with rural students. Urban FGCSs tend to be ignored. Thus, another research gap is that in relation to the question of whether urban FGCSs' story is the same as that of the rural FGCS counterpart.

Chapter 3 Methodology

3.1 Research questions

Based on the literature review and research gaps, the following research question drives this study:

Which family capitals aid rural and urban first-generation college students in China to realise intergenerational mobility in higher education?

Two sub-questions are also pursued:

2) *What the family capitals facilitate rural and urban FGCSs' enrolment in top universities in China?*

2) *Are there any differences or similarities in rural-urban family capitals?*

The researcher gathered data from people who attended, or completed their undergraduate degree at “Double-First Class” universities. “Double-First Class” university is the abbreviation of the university selected in the “First-class Universities and Disciplines of the World” list issued by Chinese government in 2017. “Double-First Class” universities represent the highest level of Chinese universities. There are 137 “Double-First Class” institutions in China. Universities in the “985 program” and “211 program” have been included into the “Double- First Class program”.

The qualitative data collected during the research (the transcript of respondents) was collected through semi-structured interviews and the data were analysed based on grounded theory and Nvivo software.

This chapter begins by introducing the research method. In the next section, data collection and analysis are explained. Finally, limitations and ethical problems are discussed.

3.2 Mixed Research Methods

Mixed methods refer to combinations of quantitative and qualitative methods

(Creswell and Clark, 2017). Qualitative research helps researchers to solve culture-specific problems with enough contextual data and quantitative research to establish the linkages (Creswell and Clark, 2017; Eckert, 2013) In the present study, mixed methods were utilised to find the answers to the above questions concerning first-generation college students. Here, the qualitative method was selected to explore which family capitals play important roles in aiding first-generation students to enrol in universities. The quantitative data was used to find the linkage between differences in family capitals and parental background.

Semi-structured interviews and questionnaires were used to collect data, as is now explained.

3.3 Data Collection

The questionnaire aims to collect information on the family backgrounds and educational backgrounds of interviewees and their parents and ensure that interviewees met the selection criteria. The semi-structured interviews were designed to gain more information about interviewees' educational and life experience and to explore issues of family capital in depth. Specifically, the semi-structured interviews were used to find which family capitals had aided first-generation students to realise educational intergenerational breakthroughs. Purposive sampling method was utilised to find interviewees, not only because this method saves time but also because it can establish "information rich cases" (Patton, 2015: 53). Since "Double-First Class" universities are supported by the Chinese government, they represent high-quality universities in China. Sampling students from "Double-First class" universities, where the first-generation student has climbed high, highlights the role of family capitals.

3.3.1 Sampling

The samples of students were drawn from 12 different "Double First-Class" universities. In terms of distinguishing FGCS from the rural and urban area, for students from rural families to be regarded as fully rural they had to meet all three of the following

standards: (1) having an agricultural registered permanent residence; (2) having finished their elementary school in the country; (3) both parents work in the country.

If they only meet the first standard, their family was classified into “parents from the rural area working in the urban area.” This became a distinct group within the total sample, for analysis purposes. Therefore, there were three distinct groups of students studied: a) students who were fully urban, b) students who were fully rural, c) students with parents from the rural areas who were working in urban areas (SPRAWUA).

The sampling process involved two steps. Firstly, 219 questionnaires were distributed to students through their class tutors, in 12 universities. The number of valid questionnaires was 182. Through the questionnaires, as noted, the students’ backgrounds were obtained to classify the first-generation students. Secondly, according to the outcome of the questionnaires, 109 respondents were willing to participate in an interview. Given that the interviewees need to be divided into three groups (rural, urban, and SPRAWUA), it was decided to interview 30 students, 10 in each group, to ensure the same number in each group and reliable conclusions: 10 students from the rural areas, 10 students from urban areas, and 10 SPRAWUAs. To ensure a balance of academic backgrounds, the number of students taking the Science Gaokao and the Arts Gaokao were the same in each group. To ensure balances both in academic background and gender, it was necessary to move beyond the original 109 respondents and recruit 7 students using snowball sampling (i.e. one interviewee introduce another interviewee). This sampling method is a means of concentrating research focus on the desired characteristics rather than obtaining a spread of characteristics (Patton, 1990).

In each group of 10, there were 5 females and 5 males. Among these 30 students, two students were from Gaokao reform polit provinces. That is, although their provinces do not have a college entrance exam division into Science and Art, their own choice of exam subjects is the same as the Science Gaokao. Thus, in the present study they were categorised as “Science Students”. In addition, one student entered college through the Independent Admissions Test of University rather than the Gaokao. Given

that her major subject is German language literature, she was also classified as an “Arts Student”. The details about interviewees’ and their parental educational background are provided in Tables 2-6:

Table 2 Sample Gender Distribution

	Urban	Rural	SPRAWUA
female	5	5	5
Male	5	5	5
Total	10	10	10

Table 3 Distribution of sample in Gaokao Categories

	Urban	Rural	SPRAWUA
Arts	5	5	5
Sciences.	5	5	5
Total	10	10	10

Table 4 The Distribution of samples in University

University	Number
Beijing Normal U	9
Zhejiang U	6
Northeast Agricultural U	4
Peking U	3
Beijing Institute of Technology	1
Jilin U	1
Lanzhou U	1
Nanjing U	1
Nankai U	1
Tianjin U	1
Tsinghua U	1
U of International Business and Economics	1
Total	30

Table 5 Interviewees' Parental Educational Background

	Elementary School	Middle School	High School	Total
Father	4	13	13	30

Mother	7	15	8	30
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Table 6 Interviewees' Educational Background

	Undergraduate	Postgraduate	PhD and above	Total
Number	24	5	1	30

3.3.2 Questionnaire

As noted, the questionnaires aim to collect information about family background and establish the interviewees for the next phase of the research. The content of the questionnaire consists of two sections. One was about the students' basic information, including gender, students' category of household registration, location of students' elementary schools, major, and their universities. The other was about their family background, including parents' occupations and parent's educational background, and annual household income.

The last question in the questionnaire was to ask students whether they could participate in the interviews, and if so, what was their contact information.

To save statistical time and to make sure that respondents could answer the questions accurately, most questions were designed as closed questions. For some open questions, such as age, family annual income, and major, the form of answers was determined by the respondents.

3.3.3 Semi-structured Interviews

Given the situation in relation to Covid-19, semi-structured online interviews were used, via Tencent meeting. To respect the potential need of interviewees, the online interview also could transfer into telephone interview mode.

The interview consisted of 10 questions concerning how family background and parents impacted the educational experiences of interviewees. All interviewees were asked these questions but the order of the questions was adjusted based on the

interviewees' answers. Some more detailed questions were also asked, to further explore the interviewees' experiences.

The semi-structured interview format helps researchers to understand the world as it is experienced by others, and through their memories. It can broaden the horizons of interviewees, helping them to think beyond themselves (May, 2011). Open-ended questions in semi-structured interview play a crucial role in collecting the participants' emotions, perspectives, and experiences (Cohen, Manion, and Morrison, 2011).

To protect the safety of participants and interviewer, the interviews were limited to online video calls in the Tencent meeting room, with WeChat video or voice calls used as a backup if technical difficulties arose. Video interviews could be changed to telephone interviews if necessary to respect the interviewees. The interviews ranged from 20 minutes to one hour in length.

3.4 Data Analysis

In the analysis process, grounded theory was used, to inductively determine the family capitals that have affected interviewees' educational experiences. In addition, given that Bourdieu's capital framework is mature, some categories of family capitals, such as economic capital and social capital, were deducted based on Bourdieu's framework. Through "constant comparison", the core content and different categories of family capital can be explicated (LaRossa, 2005). In this research, the coding process consisted of two steps of grounded theory: opening coding and axis coding. The opening coding step aimed to name interview transcripts and compares them. Open coding mainly consists of two steps: firstly, researchers abstract "putatively dissimilar but still allied concepts" from interview transcripts (LaRossa, 2005, p.7). For instance, "parents accompany the children to study" can be coded as "parental accompany". This process is also named "dimensionalisation". It can be used to select two or three categories under a higher-level category. For example, "parental accompany" and "trusting children" can be categorized in "emotional capital".

The axis coding step is a process of classifying and analysing the outcomes of open

coding. It is the process of constructing the inner relationship among these codes. Strauss and Corbin (1998) describe axial coding as “A process of relating categories to their subcategories”. Dimensionalisation is the similarity between axis coding and open coding. Hence, the outcome of open coding is abstracted further. However, axis coding also focuses on the correlation among different categories, including causal relationships, and temporal relations.

Coding is stopped when a concept is saturated, which means all codes from transcripts can be categorized by the concept concerned. Each concept (i.e. in the present study, the component of family capital) has numerous categories and each category includes many subcategories. The subcategory consists of the indicators (i.e. the portion of the interview transcripts that was encoded). Although some categories may not have subcategories, numerous indicators still exist in them. The number of indicators contained in each category is at least greater than or equal to 2 (≥ 2) otherwise the category is deleted. The coding structure is shown as figure 1.

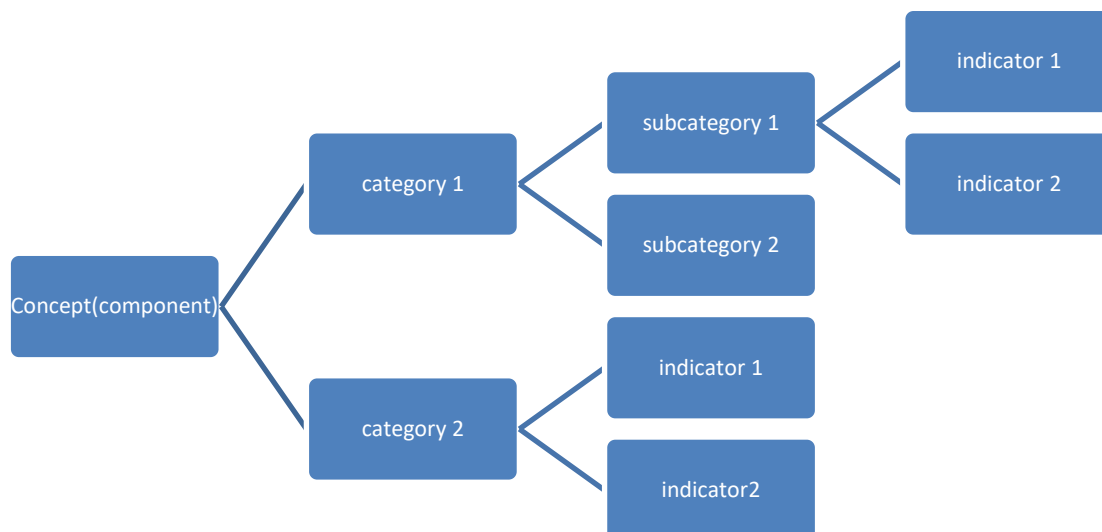


Figure 1. Coding Structure

3.5 Positionality

This research works with the interpretivism perspective. Interpretivism emphasises that evidence and phenomena stem from society, and people can construct them. The

interpretive method is a process of deconstructing phenomena from society and from people's thinking (Elliot et al., 2016). Interpretive researchers believe that people have the capacities to create and develop the world individually (Neuman & Biga, 2006). Interpretivism is consistent with this research because this research aims to find which family capitals have aided first-generation college students, from students' experiences via interviews.

The mixed research method makes researchers focus on reflexivity both on the individual level and the social level (Beck, 1994; Giddens and Sutton, 2017). There are interactions between researchers and subjects. This research aims to find useful family capitals which can aid FGCS to enrol in top universities, based on analysing interview transcripts. These family capitals may be copied by other families and aid these families to cultivate their first-generation students. The researchers' own knowledge, life experience, and familiarity with first-generation students may impact the interpreting and classifying of family capitals. To mitigate the individual bias, the qualitative analysis software NVivo was used in coding and analysing transcripts. The supervisor also played an important role in reducing individual bias in the research.

3.6 Limitations

One limitation is that the result of the research may lack universality because this research focuses on Chinese students and families. Willis (2017) argues that the specific traditions and continuity that have been passed down through society are vital and they organise cultural symbolic material while providing their specific symbolic meaning. Therefore, different societies cultivate different cultural symbols. As forms of cultural expression, family culture and family capitals also stem from specific societies. In this research, family capitals can explain Chinese students' success but cannot necessarily explain the successes or experience of other countries' students.

The instability of the interviewee's language causes another limitation of this research. Robson and McCartan (2016) argue that the results of interviews can only be understood as a product of the events of the interview situation and not as an

unmediated expression of the interviewee's true views. The interviewees' answers can be influenced by the interview situation. For example, the researcher possibly leads interviewees to express their experiences, rather than being a neutral listener.

A third limitation is that online interviews may not have the same effect as the face-to-face interview. In the 30 interviews, although the researcher used his camera, 12 interviewees choose to close their camera. The researcher could not select suitable questions or change questions. Thus, one example of failure came from a female interviewee. She asked: "why do your questions always focus on my family?" with a slightly questioning and unhappy tone. This factor may also have a negative influence on the collect transcript.

Finally, there is tension between Chinese and English when translating the code and transcript. The whole coding process were based on the Chinese transcript and the results of coding were translated into English. However, some Chinese concepts cannot be suitably translated. For instance, Guanxi (关系) can be translated as "relationship" in English but in this research it represents the sum of social relations within and outside the family. It is hard to find a suitable English word to translate it. Thus, the researcher used the Chinese spelling to represent it. To make sense of each concept, description and examples are provided.

3.7 Ethic Issues

This study gained the approval from University of Oxford's Central Research Ethics Committee. To protect privacy, the names and their universities of all the interviewees in this study were pseudonymised with number. A private mobile hard disk and cloud disk were used to store confidential information and they were kept in encrypted documents. As noted, the interviews were conducted via Tencent Meeting or WeChat.

Before conducting the research, participants received the participant information sheet, written consent form, and concert form through Wechat or email. The documents were re-emphasised before the participant answered the questionnaires and attended the interview to ensure that the prospective interviewee understood the

aim and process of this research.

Since this research aimed to find out about family capitals from interviews, some unmentionable and unhappy experiences could arise. If they dislike being participants or feel uncomfortable mentally or physically during the research, participants could withdraw from the study at any time. Originally there were 33 participants, but 3 people chose to give up, so that 30 people completed the interviews.

Chapter 4 Findings

Through opening coding and axis coding, seven components of family capitals were identified. Firstly, seven components are discussed briefly. Secondly, the family capitals existing in the three groups: rural students (A1-A10), urban students (B1-B10), and rural students whose parents working in the urban areas (SPRAWUA) (C1-C10) are presented. Thirdly, similarities and differences of family capitals among three group are provided. Each example is followed by a respondent code.

4.1 What Do Family Capitals Consist of?

Family capitals include: normative capital, family guiding force capital, family collaborative capital, emotional capital, economic capital, Guanxi capital, and information capital. Factors supporting students to enter university and studying were all coded as these family capitals.

4.1.1 Normative Capital

This capital refers to the familial notions and ideas that shapes students' perceptions and behaviours aiding to enter universities. This component consists of three categories: Believing in Education, Valuing Education, Valuing Individual Excellent Characters (see Table 7).

Table 7 Normative Capital

Categories	Subcategories
Believe in Education (n*=8)	
Valuing Education	Valuing the College Degree (n=8)
	Pursuing High-quality Education Resource (n=25)
	Study Hard for the Sake of

	Learning (n=20)
Valuing Individual Excellent Characters (n=3)	

*is the number that this code appears in 30 transcripts.

“Believing in education” not only represents parents’ belief that education is the ladder to achieving intergenerational class upward mobility based on the fairness of the Gaokao, but also their respect for education itself: *“My father gave me a very urgent desire for knowledge, or rather a sense of reverence from my heart”* (A3). In terms of emphasis on education, “believing in education” is stronger than “valuing education”

“Valuing education” indicates familial notions and ideas that value education itself and specific aspects of education, including a college degree, and various education resources. Among them, “Pursuing High-quality Education Resource” is the most iterative theme, mentioned 25 times in the 30 interview transcripts. “High-quality” means that school has good teaching quality and complete teaching facilities. High-quality educational resources include from key elementary school to elite universities, as well as students and teachers. “Pursuing High-quality Education Resource” cuts across the entire educational process of children.

“Valuing individual excellent characters” means the notion about developing good characters (e.g. politeness, kindness and self-discipline) that are beyond the realm of education. For instance, *“My parents didn't want me to make the same mistakes a second time”* (C2).

Normative capital emphasises the family's perceptions and views on education and generally on children’s development. In addition, it is also the source of “Family Guiding Force Capital” and “Family Collaborative Capital” correlating with the family’s behaviours of encouraging students to persist and excel in learning.

4.1.2 Family Guiding Force Capital

Family Guiding Force is the force of parents or elders guiding or steering children to study. This concept has five categories: Creating Learning Motivation, Develop Learning Qualities, Developing Learning Habits, Developing Interest in Learning, and Tutoring Homework (see Table 8).

Table 8 Family Guiding Force Capital

Categories	Subcategories
Creating Learning Motivation	Expressing Regrets (n=12)
	Family Encouragement (n=9)
	Improving Life (n=18)
	Parental Enterprise (n=7)
	Providing Successful Cases (n=10)
	Providing Unsuccessful Cases (n=8)
	Showing Hardship in Life (n=15)
	Sibling Influence (n=10)
Developing Interest in Learning (n=12)	
Developing Learning Habits	Completing Assignments on Time (n=9)
	Strict Management (n=2)
	Grandmother's Supervision (n=3)
	Developing Study Plans (n=2)

Develop Learning Qualities (n=15)	
Tutoring Homework (n=8)	

Among the five categories, “Creating Learning Motivation” with the largest number of subcategories play the most critical role. This category represents the behaviours or words family members used to encourage and help FGCS study well. In the “Creating Learning Motivation” category, “Improving Life” and “Showing Hardship in Life” are the two most reiterated subcategories. The actions and expressions about family members expecting their children to “find a good job” (A4) or “improve the quality of life” (C4) through higher education can be classified as “Improving Life”. Dream life means a comfortable living environment and a stable income. Thus, “living the dream life” become one of motivations to study hard.

“Showing Hardship in Life” represents the way in which parents encourage students to persist in learning through sharing stories of hardship or engaging them with different types of working experiences. For parents, farms and factory workshops are the “classrooms” in which children experience the sense of tiredness and hard work, which has encouraged some people to persist in studying.

Furthermore, parents also play the critical roles in developing children’s learning habits, interests, individual qualities, and tutoring children’s homework. The parental role model is always the most important. In terms of books, one interviewee mentioned that her father *“would like to read historical books and watch history documentary in the leisure time”* (A7). This is the reason why she has liked to read since she was a child. Although parents may not necessarily impart knowledge, children can learn excellent qualities from their parents: *“I was more influenced by my mother... she would consciously calculate what work to do every day, and then finished it. I learned self-discipline from her”* (C10). Although parents have no way to teach their children what to learn, they can teach them how to learn.

4.1.3 Family Collaborative Capital

Like Family Guiding Force Capital, Family Collaborative Capital emphasises parental influences on children via behaviours and communicating. However, family collaborative capital focuses more on how parents are equally engaging in children's learning life, rather than ordering children to act upon their expectations. Family collaborative capital consists of "facilitator role" and "consultant role".

▪ **Table 9 Family Collaborative Capital**

Categories	Subcategories
Facilitator Role	As a Student (n=2)
	Collecting Mistakes in Exam and Homework (n=3)
	Using Teaching Aids to teach Children (n=2)
Consultant Role (n=3)	

"Facilitator Role" refers to the methods parents support learning through direct involvement such as role playing "As a student", "Collecting Mistakes in Exams and Homework", and "Using Teaching Aids to teach Children".

When role playing "as a student", parents allow their children to "teach them". This situation appeared more common in tutoring elementary English, Chinese and mathematic problems. In addition, some parents utilised teaching aids that come from daily life, such as cups and carrot, to promote students' understanding of the knowledge. This behaviour also happened when children were in elementary schools, the knowledge of which was not very difficult for parents. Finally, some parents also helped children collect and take notes of the mistakes in test papers and homework, which tends to be more common among families with middle school and high school students. These parental behaviours had helped improve children's academic performance and their self-confidence in learning. *"As my parents participated in my*

study, I gradually realised that school knowledge was not as difficult as I thought it would be.” (B10).

Compared to being “facilitator Role”, “Consultant Role” means less direct involvement where parents only made suggestions for matters such as university or major selection. Children have the right to decide if they want to accept their parents' opinions.

4.1.4 Emotional Capital

Emotional capital means the emotional interaction in family, including familial emotional support for children, such as trust and respect, and the children's desire to meet parents' expectations. Emotional capital has two main positive effects on students: increasing motivation and reducing learning stress. It consists of 6 categories: “Accompany from Parents”, “Comforting Children”, “Amiable Family Atmosphere”, “Increasing Parental Self-confidence”, “Respect for Children”, and “Trusting Children”.

Table 10 Emotional Capital

Categories	Subcategories
Accompany from Parents	Cooking for Children (n=6)
	Accompanying Learning (n=9)
Comforting Children (n=16)	
Amiable Family Atmosphere (n=13)	
Increasing Parental Self-confidence (n=3)	
Respecting for Children	Refused to Corporal Punishment (n=3)

	Equal Communication (n=16)
Trusting Children	Loose Environment (n=29)
	Providing Children with Freedom of Selection (n=34*)

*Some interviewees mentioned twice. The number thus is over 30.

Trusting Children is the most pivotal element in emotional capital, which is epitomised by “Loose Environment” and “Providing Children with Freedom of Selection”, at least one of which was mentioned by all interviewees. Loose environment means that parents do not interfere with or exert pressure on their children's academic life and arrangements, so that "loose parenting" and “stress free” are the main characteristics of this subcategory. For instance, *“I think one of the most important reasons I enter college was ‘free-range education’ from my parents. I could decide everything, I think it's still relatively free.” (A2)*

“Providing Children with Freedom of Selection” highlights children’s agency in deciding on a variety of learning activities such as the extra-curriculum courses and the college entrance exams to take. However, what is worth noting is that “Trusting Children” and “Developing Learning Habits” seem to be paradox family guiding forces because there are strict management and grandmother’s supervision (see Table 8). However, “Developing Learning Habit” mostly happened in the kindergarten and elementary school, while “Trusting Children” occurred when children were in middle school and high school. “Developing Learning Habit” helps FGCS cultivate good habits in learning, and “Trusting Children” lets FGCS to make the best choices for themselves.

Besides giving trust, respecting children, comforting children and creating a favourable family atmosphere also helps reduce children's academic stress in different ways. “Respecting for Children” represents that parents communicated with children equally to learn about children’s state of mind: *“my parents called me once a week to*

learn about school life and ask whether I felt unhappy recently” (B1). No violent corporal punishment is involved. “Comforting Children” symbolises that parents’ relief of their children's anxiety caused by studying and exams. “Favourable Family Atmosphere” implies the stability of family relationship (i.e. relationships between parents, children and siblings, and parents and children) to give children stable mental support. As an interviewee said: “because my family is harmonious, I don't have to be distracted by family conflicts or various troubles outside of my studies” (A6).

For increasing motivation in learning, “Increasing Parental Self-confidence” should be noticed. FGCSs sometimes endeavour to study to enhance parent's self-confidence (C10). Additionally, “Accompanying Children” is the intersection of the “increasing motivation in learning” and “reducing stress in learning”. Parental accompanying lets children know they are not alone in their leaning journey. Meanwhile, children will have a sense of responsibility: they will not give up their studies, for the sake of the family.

4.1.5 Economic Capital

Unlike the aforementioned capitals that emphasise family perspectives on education, Economic Capital indicates direct family investment in the education, including investments in Shadow Education, Life Foundation, Learning Environment, Learning Materials, and Family Tour.

Table 11 Economic Capital

Categories	Subcategories
Family Tour (n=4)	
Investment for Life Foundation (n=30)	
Investment for Learning Environment	Changing Elementary School and Middle School (n=10)

	Renting House (n=3)
	Purchasing Computers (n=2)
	Tuition (n=31)
Investment for Learning Materials	Purchasing Books (n=21)
	Purchasing Extra-curricular Exercise set (n=3)
	Offline Programs (n=29)
	Online Programs (n=2)

"Investment for Shallow Education" is the most influential category. Twenty-four interviewees mentioned a total of 31 experiences about extra-curriculum courses. Most of the extracurricular tutoring occurred in middle school and high school. This additional tutoring was reported to have positive impacts on grades. Additionally, "Investment of Life Foundation" refers to living costs. All the respondents mentioned that parents gave them economic support in their educational life and that this support would continue until before graduation. Such support brings a sense of security, even when there was only a small amount of money: "I didn't spend much money, but if I wanted to buy something, they would meet my need. This gave me a sense of security" (C5). As the said "trusting children", children have some sort of freedom to ask and decide how to spend living costs.

FGCS's parents also value the investment for learning environment, including covering the expenses of changing schools and tuition fees, renting houses and purchasing computers. All the interviewees reported that tuition from elementary school to college was covered by their families.

Books have been an important investment as learning materials. All interviewees reported the visiting bookstores with parents as a common memory. 21 out of 30 them mentioned that their parents had bought extra-curricular books and textbooks for them. Moreover, parents also bought or supported children to buy the extra-curricular exercise sets.

Some interviewees also argued that family tour had a positive effect on aiding them to enter university. Given that this category only exists in urban students' group, the details about the family tour will be discussed in the second section of findings.

4.1.6 Guanxi Capital

Similar to economic capital, the purpose of Guanxi capital is to create educational conditions conducive to student learning. Guanxi (关系) means relationship in English. It can be considered as the expansion of social capital, the sum of actual or potential resources associated with the possession of the institutionalised and mutually recognised social network (Bourdieu, 1986). Guanxi capital contains the home-school relationship, kindred relationship, and family social relationship.

Table 12 Guanxi Capital

Categories	Subcategories
Home-school Relationship (n=4)	
Family Social Relationship	Changing Class (n=4)
	Changing School (n=7)
	Gathering Study Materials (n=2)
	Making Suggestions for Selecting School (n=5)
	Shadow Education (n=4)
Relative Relationship	Changing School (n=4)
	Make Suggestions for Selecting School (n=6)
	Shadow Education (n=2)

“Home-School Relationship” refers to parent-teacher relationship. Parents built friendship with teachers by giving them gifts or taking them to dinner to so that they could know how their children’s performance at school. In addition, this relationship also helped parents gain more information about selecting school and educating children. Hence, home-school relationship contributes to the information capital.

“Relative Relationship” influences education in multiple ways (table 12). Relative relationship can play essential roles in “Changing School”, “Make Suggestions for Selecting School (from elementary school to university)”, and “Shadow Education” (relative tutor FGCSs or help them find tutors).

Family social relationship represents parental or relative social networks that support FGCS’s education. The functions of family social relationship largely overlap with relative relationship, with only one exception, “Changing Class” - namely the ability to help children switch to another better class after the entry of school. In sum, Guanxi Capital aims to gain educational information and create favourable educational conditions for children.

4.1.7 Information Capital

▪ **Table 13 Information Capital**

Categories
Admission Policy (n=2)
Children’s Performance in School (n=7)
Educational Experience (n=2)
Educational Quality of Schools (n=13)

Information capital indicates information that benefits the children’s education in multiple ways. It can be information about educational experiences, the quality of schools (from elementary school to university), university admission policy, and

children's performance in school. Information capital is the expansion of Guanxi capital, sourcing from teachers, relatives, friends of parents, students themselves and parents' own knowledge repertoire (see table 13).

4.2 What family capitals does each group have?

This section discusses the family capitals of three groups: rural student, urban student, rural students whose parents working in the urban area (SPRUWUA). Categories or subcategories appearing once in each group are not discussed.

4.2.1 Rural students

There are five categories in family capitals: normative capital, family guiding force capital, emotional capital, economic capital and Guanxi capital.

Table 14 Family Capitals of Rural Students

Components	Categories	Subcategories
Normative Capital	Believing in Education (n=4)	
	Valuing Education	Pursuing High-quality Educational Resource (n=9)
		Study Hard for the Sake of Learning (n=7)
		Valuing the College Degree (n=4)
Family Guiding Force Capital	Creating Learning Motivation	Expressing Regret (n=6)
		Family Encouragement (n=5)
		Improving Life (n=8)
		Parental Expectations (n=4)
		Providing Successful Cases (n=1)
		Providing Unsuccessful Cases (n=3)
		Sibling Influence (n=3)

		Showing Hardship in Life (n=8)
	Developing Interest in Learning (n=6)	
	Developing Learning Habits	Completing Assignments on Time (n=5)
	Developing Learning Qualities (n=4)	
	Tutoring Homework (n=1)	
Emotional Capital	Comforting Children (n=4)	
	Amiable Family Atmosphere (n=5)	
	Respecting for Children	Equal Communication (n=6)
	Trusting Children	Loose Environment (n=7)
		Providing Children with Freedom in Selecting (n=14)
Economic Capital	Investment for Life Foundation (n=10)	
	Investment for Learning Environment	Purchasing Computers (n=2)
		Tuition (n=10)
	Investment for Learning Materials	Purchasing Books (n=7)
Investment for Shadow Education.	Offline Programs (n=6)	
Guanxi Capital	Family Social Relationship	Changing School (n=2)
		Making Suggestions for Selecting School (n=1)
	Relative Relationship	Changing School (n=2)

4.2.1.1 Normative Capital

1) Believing in Education

In relation to normative capital, the rural family holds two types of notion about education. One is the belief that education can change destinies by facilitating individual development. This can become the source of internal motivation of studying among rural students, coming along with a sense of a hard life and respect for knowledge. As an interviewee mentioned:

“I knew that my family was poor, and I had a deep desire and awareness that I wanted to go through the path of studying. And I strongly believed that this path can change my destiny” (A6).

For some others, education is a sacred faith shared by students and their families. For instance, one noted that:

“I felt that my father had a very urgent desire for knowledge since I was a child. This gave me a sense of reverence from my heart for the knowledge because he always bought books to me” (A3).

2) Valuing education

Normative capital also epitomises in another faith that values education emphasises in a secular sense, which contains three subcategories: Valuing the College Degree, Pursuing High-quality Education Resource, and Study Hard for the Sake of Learning.

In FGCS’s parents’ eyes, “the College Degree” is important symbolic success for the family regardless of the pragmatic value in labour market. It became the source of familial motivation to provide “unconditional support” to FGCS’s further learning.

“They just let me study as long as I want, even to PhD, just very supportive of my study” (A3).

“Pursuing High-quality Education Resource” was coded 9 times in the rural group, 4 of which emphasised the role of mothers, 3 of which referred to joint parental influence, and one of which was about the influence of the father. Findings suggested that rural family focused on selecting the high-quality schools from secondary to post-secondary levels since the elementary school options are limited due to the “School Abolishing and Merging Policy”. The quality of university is oftentimes measured by

institutional reputation, i.e. whether it is a university they have heard of. Despite father has impacts on the children's education (Zhang and Liu, 2018), mothers tend to play a more leading role in FGCs' education, whose sensitivity to a certain extent determines children's opportunities and access to higher education. Some participants recalled that notwithstanding father disagreement, mothers insisted in choosing arguably the best schools in their communities or cities:

"I went to one of the best middle schools in Chongqing. That school also called my father but he didn't care, but my mother felt that this opportunity must be seized." (A2)

At times, mothers can be resourceful even when there was insufficient information to make decisions. For instance, one participant mentioned that when he was uncertain about which 211 university to choose, his mother advised him to apply to Zhejiang University since *"she knew that Zhejiang University is definitely better than the one I [participant A6] chose"*.

"Study Hard for the Sake of Learning" reflects a rural parental thinking that learning is important for its own sake, not always coming with a fixed purpose. In rural society, studying hard is not always bound with the ends of entering university or getting well-paid jobs. Though believing that education is life-changing, rural parents did not place any pressures on these ends, but rather made education a spontaneous, natural growth process of the natural instincts of human beings as the growth of plants (Dewey, 2004).

"They [parents] focussed on it [education]. They emphasised going to school. You must persist in learning" (A7)

"They always said, no matter what level you learn, but you must learn seriously at least" (A10)

4.2.1.2 Family Guiding Force Capital

The rural family has four types of family guiding force capitals: creating learning motivation, develop interest in learning, developing learning quality, and developing

learning habits.

1) Creating Learning Motivation

Showing hardship in life, improving life, and expressing regret are three main ways to create learning motivation. Parents would demonstrate the hardship in their lives and work to help children understand the importance of studying and entering university. Besides being role models, parents also involved their children directly in work or allow their children to observe them at work. As many participants elucidated, this both taught them the pains and gains of labour work, and was one of the factors that drove them to study harder to pursue lives better than what they had seen.

“During the vacation, I would help my parents do the housework. But I couldn’t stand those things because my mom worked in a fireworks factory of the village...My mother wanted me to go to the fireworks factory for a day or two. After I did, I felt I could not stand this life, I didn’t want to work so hard, so I preferred to study” (A5)

Compared to demonstrating the toil in labour, stressing that entering college will improve lives in daily conversation is a more explicit guiding force among rural parents. For instance, one participant mentioned that “under the influence of traditional thinking”, her mother always said that she studied well, she would “definitely have a good life in the future” (A8). For some other parents, “a good life” was substantiated with careers and life environment. One participant recalled that her parents expected her to become a teacher “because most parents want their children to have a stable job, and then think that this is better” (A9). Another participant expressed that parents hope him study well to “live and work in a place without ‘centipedes’” (A3).

Parents also expressed their regrets to their children for not attending college. These parental experiences also became some interviewees’ motivation to enter universities.

“My grandfather did not pay attention to education. He didn't let my mom go to college because no one else was working at home..... So, my mom never went to college. This is also her wish, so she just put her hope of going to college on me” (A1)

“My grandmother said my mother is a relatively intelligent student, but her family

conditions at that time was not allowed to go to school, so my mother hope that I study well. This is to make up for her own regret back then” (A4)

In creating learning motivation, there are also many subcategories, including family encouragement, parental expectation, providing unsuccessful cases, and sibling influence. Children's experiences of being encouraged or praised by their parents or relatives are coded as family encouragement. Family encouragement aided children to gain the confidence to enter university and to endeavour to study.

“One of my relatives is a teacher. She...told me that after I grew up, I couldn't stay in this countryside forever. Depending on your family conditions, I could only change my living environment by myself.” (A5)

“I will be praised by my parents if I do well in school” (A4)

Compared with other subcategories in the creating learning motivation, parental expectations do not embody in specific behaviours and words. It is a mental perception and additional product of afore-mentioned subcategories. Parents would not express their expectation directly to their children, to reduce the children's stress but children know the parental expectation. Parental expectation underlies children's expectation for higher education (McCarron & Inkelas, 2006; Zhang, 2020). Thus, some children internalised meeting their parents' expectations as their motivation to study.

“My family's expectations for me are probably higher. This may have some impact on me. I feel that I can't let them down at all” (A4)

“Since I am the best academic performer in our family, so that they still expect a lot from me” (A8)

Rural parents also tend to describe some unsuccessful examples, to make children understand the consequences of not getting into college. These experiences were coded as “Providing Unsuccessful Cases”. However, parents often portrayed themselves as failure cases to motivate their children to study hard to get out of their current life situation. “Don't be as tired as we are” (A3) and “don't do farm work like us” (A7) are the examples often given by parents.

In rural family, siblings also play positive roles in promoting FGCSs to study. In addition to parents and relatives, they also help FGCSs understand the importance of

studying. One interviewee recalled that her older sister found her colleagues to “persuade him to study hard” together (A6).

2) Develop Interest in Learning

Rural families also develop the children’s interest in learning. Children’s interest in learning comes from parental guidance intentionally or unintentionally. Rural students’ interest in learning stemmed from the interest in reading. They like to read books because their parents like it and their parent develop children’s interest in reading intentionally. For instance, A1 mentioned:

“My mother likes literature. When I was young, she taught me some simple poems.”

Also, some interviewees were influenced by their parent unintentionally:

“My dad likes to read more than my mom, and he often has a lot of books at his bedside. For example, he likes to watch Chinese medicine and health programs, and takes notes. Every day he is watching these in front of the TV” (A7).

The common point of above two examples is that their parents love to read book or study firstly, and then had influences on their children. FGCSs’ parents tend to insists on informal lifelong learning, which creates a role model for children (Gofen, 2009). Parents' role models are the most important to cultivate their children's interest in learning and to developing their qualities about learning.

3) Developing Learning Qualities

Developing learning qualities means that parents allow their children to build good qualities that help them learn. These qualities stem from the parents’ behaviours in their daily lives. Graveness, perseverance, high efficiency, honesty, and self-reliance are the qualities that interviewees learn from their parents. Although children learn these qualities from their parents in their daily lives, these qualities have profound impacts on children’s learning. The following case show how parents impacted on the children to develop these qualities:

“For example, if he repairs something, he must fix it. If the light is broken, he does

not ask others to fix it. Therefore, this [perseverance] aspect also affected me” (A9)

4) Developing Learning Habits

In terms of developing learning habits, rural parents urged their children to complete homework on time. Parents utilised this method when children were in elementary school. This made children to consider finishing homework as the top priority, though parents could not provide detailed suggestions for children’s study. “Finish my homework at home firstly” became the common memory (A2, A6)

4.2.1.3 Emotional Capital

In rural family’ emotional capital, there are four categories: Trusting Children, Comforting Children, Amiable Family Atmosphere, and Respect for Children. Among them Trusting Children play the most important role based on the interviews.

“Trusting children” not only reduces the psychological burden of studying but also gives the freedom to children for their learning. This category consists of “Loose environment” and “Providing Children with Freedom in Selecting”. “Trusting children” occurred when children studied in high school. Since parents understood the academic pressure their children face at high school, they did not add their children’s pressure at home. Thus, parents tended to provide the loose environment for children and trust their children to plan their leisure time. This is also related to the “Study Hard for the Sake of Learning” mentioned before. Parents agree that learning should not be a task that relies on supervision for quick success, and know that overly strict management will backfire on children.

“I am more relaxed at home, because my parents they don’t give pressure, and also because I have given myself a lot of pressure” (A9)

“When I was in high school, I basically studied by myself, didn’t let them manage” (A10)

Since rural FGCSs’ parents do not have enough experience in studying and university life, parents give their children freedom of choice when they faced with

learning-related matters. Parents believe that their children can make more suitable decisions for study than they do. This allows rural students to make the right choices at critical times, such as when choosing the type of Gaokao or whether to take remedial courses.

“They often said that ‘ we are uneducated, so, we respect all your choices’” (A3)

“They respect all of my choices. I consider my parents as friends to go, just free” (A8)

In addition to the Trusting Children, Respect for Children, Amiable Family Atmosphere and Comforting Children also creates strong moral supports for rural students. Parents showed respect for their children mainly through equal communication. Parents could learn about the children’s demand via conversation to reduce conflicts: *“I think I have a pretty good relationship with my parents, we talk with each other like friends. I often talk to them about my school life” (A2).*

“Amiable Family Atmosphere” also provide emotional support to rural students. As the interviewee A8 mentioned:

“I think the heart is warm and I am happy. I'm happy because I grew up in a happy environment. My family really cares about me. I don't feel bad about my life, even before exams.”

“Comforting children” aims to relieve the stress caused by the study. The rural family did not deliberately emphasise with children the need to get into college: *“They told me that it is just a goal, if we can achieve, [it is] the best; [if] can't reach, as long as try[ing] your best is enough” (A9).* This kind of comfort to the child was also a kind of tolerance, which could make the child not panic when facing the test. Therefore, these children could achieve good results in Gaokao.

4.2.1.4 Economic Capital and Guanxi Capital

Different from normative capital, family guiding force capital, and emotional capital, which affect the students themselves, economic capital and Guanxi capital mainly influence the external conditions and resources of students' learning to help them enter university. Thus, economic capital and Guanxi capital will be discussed together

in this section.

In terms of economic capital, living cost (Investment for Life Foundation), tuitions, book and offline cram school (offline program of shadow education) are main directions of education investment of rural family. Only 2 interviewees mentioned that their parents purchase the computers to help them study. All the interviewees mentioned that their family afforded the living costs and tuitions from elementary school to university. This allowed students to concentrate on their studies without worrying about their livelihood.

Parents supported children to buy any books if they like or need them. Bookstores could become the important cultural sources for rural children.

“Every time I went to the county with my mom, she would take me to the bookstore, she also gave me a reading card, very cheap, about a few dozen yuan. So, every time I went there with them I could go to the bookstore to read. I read all books in that bookstore.” (A1)

Offline cram school also facilitated children to meet the gap between them and other students especially when they were in middle school and high school. Parents found cram schools based on their children's demand, and children could decide whether to go or not rather than the parent forcing.

“I want to find those teachers, I said that those teachers are better, and then my parents went to communicate them” (A9)

For rural student, Guanxi capital help them enter better middle schools. Four respondents answered that relative relationship and family social relationship aid them to change middle schools. These phenomena are the embodiment of “Pursuing High-quality Education Resource”. Changing school help them gain advantage in entering better high school and indirectly helped them enrol in the college.

“That's what happened in my middle school. Because my junior high school teacher is my father's senior, and then he and my uncle-in-law are classmates, my class teacher is known to be particularly strict but he helped me a lot in mathematics.” (A8).

4.2.2 Urban Students

Urban students exhibit all seven categories of family capital: normative capital, family guiding force capital, family collaborative capital, emotional capital, economic capital, Guanxi capital, and information capital. To elaborate family capitals of urban students, detailed cases with interviewees' number (B1-B10) will also be presented in the paragraphs. The detailed content of urban students' family capital is given in Table 15

Table 15 Family Capitals of Urban Students

Components	Categories	Subcategories
Normative Capital	Believing in Education (n=1)	
	Valuing Education	Valuing the College Degree (n=3)
		Study Hard for the Sake of Learning (n=5)
		Pursuing High-quality Educational Resource (n=6)
Family Guiding Force Capital	Creating Learning Motivation	Expressing Regret (n=2)
		Family Encouragement (n=2)
		Improving Life (n=5)
		Providing Successful Cases (n=6)
		Providing Unsuccessful Cases (n=7)
		Sibling Influence (n=2)
		Showing Hardship in Life (n=2)
	Developing Interest in Learning	

	(n=6)	
	Developing Learning Habits	Completing Assignments on Time (n=4)
		Developing Study Plans (n=2)
		Grandmother's Supervision (n=3)
		Strict Management (n=2)
	Develop Learning Qualities (n=2)	
	Tutoring Homework (n=4)	
Family Collaborative Capital	Facilitator Role	As a Student (n=2)
		Collecting Mistakes in Exam and Homework (n=3)
		Using Teaching Aids to teach Children (n=2)
	Consultant Role (n=3)	
Emotional Capital	Accompanying Children	Cooking for Children (n=3)
		Accompanying Learning (n=4)
	Comforting Children (n=8)	
	Amiable Family Atmosphere (n=2)	
	Increasing Parental Self-confidence (n=1)	
	Respecting for Children	Refused to Corporal Punishment (n=1)
		Equal Communication (n=6)
Trusting Children	Loose Environment (n=14*)	

		Providing Children with Freedom in Selecting (n=8)
Economic Capital	Family Tour (n=4)	
	Investment for Life Foundation (n=10)	
	Investment for Learning Environment	Changing Elementary School and Middle School (n=7)
		Selecting High-quality High School (n=1)
		Renting House (n=1)
		Tuition (n=10)
	Investment for Learning Materials	Purchasing Books (n=10)
		Purchasing Extra-curricular Exercise set (n=1)
		Purchasing English Cassettes (n=1)
	Investment for Shadow Education.	Offline Programs (n=15)
Online Programs (n=2)		
Guanxi Capital	Home-school Relationship (n=3)	
	Family Social Relationship	Changing Class (n=4)
		Changing School (n=2)
		Gathering Study Materials (n=2)
		Shadow Education (n=2)
Relative Relationship	Shadow Education (n=2)	
		Making Suggestions for Selecting School (n=2)

Information Capital	Admission Policy (n=2)	
	Children's Performance in School (n=3)	
	Educational Experience (n=1)	
	Educational Quality of Schools (n=3)	

4.2.2.1 Normative Capital

The urban family values the education embodied by three subcategories: study hard without utilitarianism, pursuing high-quality education resource, valuing the college degree. Among them, valuing study and pursuing high-quality education were mentioned the most.

Urban family focus on the importance of education because of their own experience and educational background. Education is only related to personal development but not to utilitarian goals. This notion or idea also comes from other relatives besides the parents. For instance:

"My aunt was the teacher of the remedial classes. she went to high school, but she didn't go to college, she was probably already the most educated in our family, my aunt might be the first one to realise the importance of studying" (B2)

Parents will also convey this idea through actions and words:

"My mother is a really good person, that is, she is not a good wife, but she must be a good mother. Well, I don't know why she put all her energy on me, it's not exaggerating. She put all her energy on me" (B3)

"They were always euphemistically conveying a message to me that studying is very important" (B6).

For the urban family, "pursuing high-quality educational resource" concentrates on the elementary schools and middle schools. Their parents believe that taking advantages of good educational resources from a young age is important for children's future development. Under the influence of this idea, parents also chose to move from the small cities to big cities with abundant educational resources. Therefore, changing

school during studying in the elementary school and middle schools are common phenomena.

“I have changed my school. I read in an elementary school in our county from first to third grade and then. Then until the third grade I had been always at the top of my class, because my parents probably wanted me to receive a better education. So, I went to a school in the city when I was in the fourth grade.” (B1)

Urban family also value the college degree. However, they value the college degree because they compromised with the prevailing social thinking rather than their own thinking. Some urban FGCSs' family do not understand the meaning of entering universities clearly. As the interviewees mentioned:

“This wasn't exist because this thing (emphasis on college degrees), is the mainstream social thinking. Entering in high school is to study well, to get into a good university. If you are in a better school, their mainstream thinking would be like this, parents are naturally also influenced” (B5)

“There is no reason for me to go to college, I was just entangled in this tendency. Parents only knew that a college degree is important, but we are entangled in it.” (B9)

4.2.2.2 Family Guiding Force Capital

There are five categories in family guiding force capitals for urban FGCS: creating learning motivation, developing interest in learning, developing learn habits, developing learning qualities, and tutoring homework. Family guidance fills many aspects of a student's study life.

1) Creating Learning Motivation

The urban family endeavours to create learning motivation of children. Among 7 subcategories of creating learning motivation, providing successful and unsuccessful cases, as well as “improving life”, are the three main methods for urban parents, based on the number of mentions. In terms of providing unsuccessful cases, this subcategory appeared 7 times out of 10 interviewees. Parents often use their own experience (n=4) and their relatives' children who do not learn well (n=3) as counter-examples.

Examples from people surrounding them can give children a clear understanding of the consequences of not studying well.

“My father's relatives gave me an example. My aunt's child was good at school, but after graduating from high school, [he] did not go to university, and then went abroad to earn money. But recently, the economic situation abroad hasn't been very good, he came back, and then my father has been telling me to study hard not to be like that child” (B4)

Since they live in the urban areas, urban parents have larger social circles that can provide cases of successful students who study well or enter selective universities. The urban parents tend to utilise the successful cases to motivate their children. In their parents' words, entering university is equal to success.

“I remember when I was in high school, he would often mention, consciously or unconsciously, that his colleague, how great his son was etc. I thought it's true, it gave me some pressure.” (B7)

Half of the urban respondents stated that parents used “improving life” as a cause to persuading them to study. In contrast with the rural families that tend to hope their children would escape from current living environment, urban parents consider entering university as an access to pursuing a better life. For urban students, “better work” (B8) and “better life” (B9) become the definitive results of entering university.

The rest of the subcategories, including expressing regret, family encouragement, sibling influence, and showing hardship in life, all appeared twice in the interview. They also provided learning motivation for children, but in the urban group, were not as significant as other three subcategories.

2) Developing Interest in Learning and Developing Learning qualities

Urban families also steer children to develop interest in learning. Parental role model has a positive impact on the children. Six interviewees mentioned that parents' love of literary magazines and history books also makes children interested in learning:

“My father he is indeed a very bookish person, books I have read basically from my father, for example, like the Reader, like the General History of China.....these history books. My mother likes to read French literature, although I think her understanding of books was very shallow, I think they choose to read books in their

free time rather than to brush the phone, which really helped me quite a lot!" (B4)

Parental role models also developed children's learning qualities. Interviewees agreed that they learnt enterprise from their parents: *"I feel that my mother is always learning and progressing" (B2).*

3) Developing Learning Habits

Urban families prefer the development of learning habits over the development of study qualities, which can have a direct positive impact on students' academic achievement. Four subcategories were found in this category. Urban family has developed learning habits since children entered kindergartens. Four respondents stated that their parent asked them to complete homework on time. Two respondents mentioned that their parents managed them strictly and design the plan for them. Additionally, developing study habits is a family affair. Grandmother also have a positive influence on children's study. For instance, interviewee B1 recalled his grandmother let him *"do elementary school arithmetic problems"* when he was in kindergarten since she used to be a teacher. This experience developed him a habit of *"learning the curriculum in advance"*.

4) Tutoring Homework

Parental direct influence can also be embodied by tutoring homework. This happened when children studied in the elementary school and parents could tutor children's mathematics and Chinese. Parental tutoring solved children's problem and reinforced the child's confidence in learning:

"I couldn't distinguish the pronunciation of the letters L, M and N. So, my mother begun to teach me...and ask me to review them again. It was a little stressful, but I think it was very important because...my mom gave me that training, so, I didn't feel like I was falling behind." (B10)

4.2.2.3 Family Collaborative Capital

This capital indicates that some parents equally participate in children's learning and interact with children to aid their study. This capital is unique to the urban family. Parents play the "facilitator roles" and "consultant roles" to help students' study.

The facilitator role focuses on how parents serve their children's study life. Parents can play the children's students to aid them understand knowledge:

"My mom would like to play the role in English dialogue, and she would read it after me, although her pronunciation was not accurate and I taught her many times, she would still read it. This made me enjoyable and fulfilling in learning" (B3)

Parents also collected children mistakes in homework and exams to help children review: *"my parents would sometimes help me copy my mistakes into my notebook when I was busy"* (B5). Additionally, parents also could use the simple teaching aid to help student understand abstract knowledge:

"I am very impressed is in elementary school when doing math problems, because my spatial imagination was not very good, and then she just would use carrots, or white carrots, I forget, no matter, she cut out that shape, and then let me look at it, is to take me along to explore." (B10)

"Consultant role" means that parent provide suggestions to children during selecting universities but not compulsory order:

"They respect my ideas. But she only raised objections, the final decision was still up to me. If she finds something need to be opposed, she will say tell me why she objected, but in the end, it was up to myself" (B1)

4.2.2.4 Emotional Capital

Six categories of emotional capital support children to study and enter university. "Loose environment" and "provide children with freedom in selecting" in trusting children were mentioned the most. Parent gave their children adequate freedom in matters related to learning. Urban parents also respected for children via equally communication (n=6) to solve the problems. Two interviewees thought that their family atmosphere in this respect aided them to concentrated on study.

Additionally, accompanying children with two subcategories - accompanying learning and cooking for children - also play the critical role for children. When children studied, parents would accompany them as well, which motivates students to concentrate on studying better:

“When I study, she will also learn something, or some materials, if my mother play the mobile phone, I can’t study definitely!” (B8).

Cooking is also a kind of companionship for children. Meals symbolised the warm of family so that children did not feel alone when faced with challenges such as learning:

“In high school, they lived in my dorm together, and they wanted to be able to cook me a meal and give a good living environment, and I felt warm.” (B5)

Urban families also emphasised the children’s mental health. Eight interviewees stated that their parent would not blame them if they failed in the exam. Urban FGCSs could obtain tolerance and understanding from parents to face the challenges of learning:

“They will pay attention to my mental health if they felt that my mood was not good today, they might ask me in a roundabout way, try to intervene or give me psychological care (B6).

4.2.2.5 Economic Capital

Urban families also utilised economic capital to provide and construct educational conditions. The economic capital of urban family could involve five categories. The first is family tour. Parents make children learn about the universities directly via visiting universities. By traveling to college, parents plant a seed that “I can enter universities” in children's minds. For instance:

“My family would travel every summer, no matter the distance. One year we went to Peking University and Tsinghua, and then I felt that college was wonderful, and it just seemed like my life wasn't my living environment. I wouldn't just be in current city. It just made me feel that going to college would be a wonderful thing” (B3).

Also, for students undergoing the liberal Arts Gaokao, traveling to natural and human landscapes also helps them understand knowledge about geography and

history.

“ I've travelled a lot of place. So, I feel as if I just have a more direct and clear understanding of the topic every time I answered the geography questions.” (B1)

The second category of economic capital is living costs. It is classified in the investment for life foundation. All the interviewees' living costs was given by their family. Children could spend money freely and did not have to work during school year.

The third category is investment in the learning environment involving changing school and tuitions. Similar to living costs, all the interviewees mentioned that all tuition fees are paid by the family. Additionally, because of the influence from “Pursuing High-quality Educational Resource”, parents were willing to send children to high-quality schools albeit they had to afford additional fees and tuitions. 7 out of 10 people had experiences of changing school during elementary school or middle school. The experience of attending high-quality schools expanded student's opportunities of entering college. However, this also proves the inequality between key schools and common schools causes the inequality of higher education enrolment (Dai, 2018).

Fourthly, urban family also invest in learning materials, especially books. Although urban FGCS' parents have limited influence on their children's education, by buying books, parents make up for the gap between FGCSs and CGCSs caused by their own educational background. All the interviewees agreed that parental support for buying books was significant.

The fifth category of economic capital is investment for shadow education. This investment closes the gap between their children and the other top students. Similar to rural parents, urban parents also decide whether to participate in cram school based on their children's needs.

“If I thought my score was low in a certain subject, or I think I needed to improve my score in a certain subject, I would tell my mother, and then she would just take the money and let me attend to various tutorials.” (B7)

4.2.2.6 Guanxi Capital

Guanxi capital is used to create a better education environment, collect learning materials, and gather educational information. Urban families exhibit 3 categories of Guanxi capital. Home-school relationship indicates relationship between parents and teachers. Parents established friendship with teachers by giving gifts and entertaining them. Then, parents could ask teachers to focus on children. “Changing seats” was the most common request made by parents to find a good desk mate for their children:

“I found out that all my desks mates were boys, and later I learned that because my mother spoke to my teacher. She said that she didn't think I was very good in science and asked my teacher if he could find me a boy who was better in science, so that I could communicate with him, which I think is very important because indeed my desk mate really taught me a lot in math, physics, chemistry, they were really good!” (B10).

Guanxi capital also involves family social capital. Urban families can change children’s school or class via family social capital. For example,

“It would be through my aunt, my aunt...she had some Guanxi, to help me change another middle school.” (B2)

Urban families also utilised this capital to “gather study materials” or find cram schools (shadow education):

“Some of colleagues' children had some books or some materials after the Gaokao, and they (parents) will bring them back to help me review” (B5)

Apart from said relationships, urban families also used “relative relationship” to “make suggestions for selecting school” and find cram schools. The cases below is to explain how relative relationship made suggestions for selecting school.

“Then my uncle asked me what you want to do in the future. I said I want to be a teacher in the future. My uncle is more knowledgeable, but also the best in our family, his experience is also useful to gather the information, he said to me if you want to be a teacher, you can apply the Beijing Normal University.” (B9)

4.2.2.7 Information Capital

Information capital is the expansion of Guanxi capital. Urban families can collect

information aiding children study and to enter university based on their relationships. The information contains admission policy, children’s performance in school, and educational quality of schools. Based on children’s performance in school, parents can adapt education strategy and learn about children’s mental situation. The basis for parental choice of schools is educational quality. Among them, admission policy is the most important because parents could plan children’s entrance pathway of higher education based on education policies. For instance,

“My mom heard from her friend that if you study at a foreign language high school and get good grades, you might enter college without examination, and her friend's child made it. So, when I prepared to enter middle school my mom insisted that I go to the middle school attached to that high school. I was lucky enough to get a college admission.” (B7)

4.2.3 Students with Parents from Rural Areas Working in the Urban Area (SPRAWUA)

SPRAWUA is the intersection group of rural students and urban students. They have the same rural household registration as rural students, but also live with their parents in the city. Via the interviews, six components of family capital were found. They are normative capital, family guiding force capital, emotional capital, economic capital, Guanxi capital and information capital. To explain how family capitals aid them enter university, interviewees’ (C1-C10) transcript will be selected.

Table 16 Family Capitals of Rural Students whose Parents Working in the Urban Area.

Components	Categories	Subcategories
Normative Capital	Believing in Education (n=3)	
	Valuing Education	Pursuing High-quality Education Resource (n=10)
		Study Hard for the Sake of Learning (n=8)

		Valuing the College Degree (n=1)
	Valuing Individual Excellent Characters (n=2)	
Family Guiding Force Capital	Creating Learning Motivation	Expressing Regret (n=4)
		Family Encouragement (n=2)
		Improving Life (n=5)
		Parental Expectation (n=3)
		Providing Successful Cases (n=2)
		Providing Unsuccessful Cases (n=5)
		Sibling Influence (n=5)
		Showing Hardship in Life (n=5)
	Developing Learning Qualities (n=8)	
	Tutoring Homework (n=3)	
Emotional Capital	Accompanying Children	Cooking for Children (n=3)
		Accompanying Learning (n=5)
	Comforting Children (n=4)	
	Amiable Family Atmosphere (n=3)	
	Increasing Parental Self-confidence (n=2)	
	Respecting for Children	Refused to Corporal Punishment (n=1)
		Equal Communication (n=4)
	Trusting Children	Loose Environment (n=8)
		Providing Children with

		Freedom in Selecting (n=12*)
Economic Capital	Investment for Life Foundation (n=10)	
	Investment for Learning Environment	Changing Elementary School and Middle School (n=3)
		Renting House (n=2)
		Tuition (n=10)
	Investment for Learning Materials	Purchasing Books (n=4)
		Purchasing Extra-curricular Exercise set (n=1)
		Purchasing Electronic Dictionary (n=1)
	Investment for Shadow Education.	Offline Programs (n=8)
Guanxi Capital	Home-school Relationship (n=2)	
	Family Social Relationship	Changing School (n=2)
		Making Suggestions for Selecting School (n=4)
		Shadow Education (n=2)
	Relative Relationship	Changing School (n=2)
		Making Suggestions for Selecting School (n=4)
Information Capital	Children's Performance in School (n=4)	
	Educational Experience (n=1)	
	Educational Quality of Schools (n=10)	

4.2.3.1 Normative capital

1) Believing in Education

The normative capital of SPRAWUA consists of believing in education, valuing education, and valuing individual excellent characters. The SPRAWUA family also has the same belief that education can change the faith as rural family. This belief also comes from the fairness of Gaokao: *“For children from humble family like us, the Gaokao is one of the easiest shortcuts to take. This is also the fairest way to realise intergenerational breakthrough in China so far”* (C6). This belief supports SPRAWUA to endeavour to study.

2) Valuing Education

Valuing education also exists in the SPRAWUA family. Like the rural family, “pursuing high-quality education resource” and “study hard for the sake of learning” are the subcategories mentioned most. They argue that education serves for children’s individual development instead of other goals:

“They worked in the city, and when I was young, I studied in the countryside. My mother brought me to the city because she missed me more, and she also felt that the city had more educational resources and would be better for my future development.” (C1)

3) Valuing Individual Excellent Characters

SPRAWUA’s parents do not have a university degree, but they still managed to settle in the city. They tend to attribute their success to good character. Therefore, they value education but do not focus on the college degree. As C2 said, the parents hope that *“we can survive in society”*. SPRAWUA parents prefer to concentrate on whether children have the good characters, such as “politeness” and “self-discipline” (C2) or “kindness” (C10). Good character aids children to get along better with their classmates and teachers, enabling them to get help with studies at school. Although

only two respondents mentioned this category, there were 8 respondents stating that their parents develop their learning qualities. This will be discussed in family guiding force capital.

4.2.3.2 Family Guiding Force Capital

There are three categories of family guiding force capital: creating learning motivation, developing learning qualities, and tutoring homework.

1) Creating Learning Motivation

Among 8 subcategories of creating learning motivation, improving life, providing unsuccessful cases, sibling influence, and showing hardship in life were mentioned most with 5 times. Firstly, parents hope children to improve life via higher education because they believed that higher education means better life albeit better life is ambiguous:

“Both my parents came from the countryside. They are not highly educated. They graduated from elementary school, or even hadn’t graduated from elementary school before they went out to work, which is the common situation of that previous generation. They think that educated people will have a better life, so they let me study hard!” (C7)

Like the rural family, most of the SPRAWUA’s parents also prefer to consider themselves as unsuccessful cases, to remind children to study hard rather than provide success cases (n=2) and encourage them (n=2). Thus, providing unsuccessful cases, expressing regret (n=4) and parental expectation (n=3) can appear together. As C5 said:

“My mother always told us that you must study hard. Don’t become me, [since] I could only find an uneducated person to marry, and then served him every day.....She also loves to read books. She always told us that if she had graduated from university, she would have been a TV host now.....She wanted us to realise her dream.”

Apart from parental influence, siblings also had positive impacts on studies. The excellent temperament of older siblings entering the university becomes their first

impression of the university:

“There are a lot of older siblings in the relatives who went to college. When I got in touch with them...I could clearly feel that these brothers and sisters have a different temperament from their parents' generation, which may be a change brought by knowledge. Anyway, it is an obvious change, including quality and manners. College students are different from our parents' generation. So this made me curious about college back then, and I was wondering how I could become a college student too.” (C10).

These successful cases from elder sibling also enlightened SPRAWUA that entering university is not out of reach:

“Because of the experience of my two older sisters as a reference, so my college entrance exams were relatively smooth, without too many obstacles. I achieved my goals step by step” (C5).

In addition to other people's influence, the difficulties of life also became their motivation to study. As with rural students, an intuitive sense of hard work allows them to persevere in study, which were coded as “showing hardship in life”. For instance:

“When I was a child in elementary and middle school, the family situation was not good. My parents worked very hard at that time, I could feel it, sometimes I couldn't see them at home when I was on vacation.” (C9)

2) Developing Learning Qualities

The SPRAWUA parents tended to cultivate their children's learning qualities under the influence of “Valuing Individual Excellent Characters”. 8 respondents answered concerning six qualities related to study: honesty, persistence, diligence, staidness, self-reflection, and self-discipline. Some of qualities were trained by parents directly:

“They would take the initiative to ask us to do these things [review knowledge] and asked us to discipline ourselves, although I didn't know why they asked us to do, I did, and later when I got into college I realised that their request was right.” (C5)

Some qualities were learnt from parents' behaviours:

“My parents would lead by example. They handled things more seriously in life. For example, when doing housework, my mom would sweep the floor very clean..... I will also be influenced by them, so I also have this quality.” (C2)

“My father was never late to send me to school, he always waited for me to leave, I never waited for him. He is a very punctual person. So, I also have a strong sense of time and self-discipline” (C8).

3) Tutoring Homework

SPRAWUA’s parents also tutored children’s homework when they were in the elementary school and kindergarten. Like urban family, parental tutoring made up the gap between children and classmates and gave the confidence to children:

“When I was in elementary school, I was very slow in learning Chinese characters and pinyin. To solve the problem, my mother copied all the characters and questions in my Chinese book and took me to memorise them, and tested me every morning. After about a semester, my grades came up, I then realised that Chinese is so easy!” (C4).

4.2.3.3 Emotional Capital

The Emotional Capital of SPRAWUA’s family consists of six categories. As with the previous two groups of students, the rural and urban cases, “trusting children” had the greatest impacts on the children. Children had free space in scheduling their study and selecting cram school, major and university:

“My parents always said to me that they can't help me in these matters [about education]. So, you have to make your own decisions. But no matter what decision you make, we will support you!” (C3)

“Accompanying children” provides spiritual support to SPRAWUA. Parents chose to accompany children when they were in high school because children face the greatest academic pressure from Gaokao:

“My mom has accompanied me for a while during my senior year in high school...because I felt angry and upset when living in the dormitory. I asked my mom whether she could come back and take care of me for six months, she agreed. And then she rented a house next to the school, and I felt quite comfortable for those six months.” (C7)

Additionally, for students living in the school, the meal cooked by parents also become a mental power for children during high school:

“Before the Gaokao, she would send me food every day because our school required students to live in school and she couldn’t come to accompany me. When I felt stressful, meals from mom supported me.” (C8).

Parents' love for their children can be transformed into children’s strength to overcome stress, while children's love for their parents will also become motivation to study. Two interviewees said that they hope increase self-confidence via entering university:

“I clearly felt that there was a difference between the village kids and the city kids. I don't want to be in such a situation in the future, so I also have more desire to study. I had a desire to study to make my mother look good and give her honour” (C10)

Apart from these categories, “Comforting Children” (n=4) reduces children’s stress, two interviewees agreed that “Favourable Family Atmosphere” help them focus on the study. In terms of “Respect for Children”, six respondents mentioned that their parent often communicate with the equally.

4.2.3.4 Economic Capital

All the SPRAWUA’s parents afforded children’s living costs and tuitions. This helped SPRAWUA concentrate on studying without spending time in finding part-time jobs. Like the urban parents, SPRAWUA’s parents valued “investing in learning environment”. Changing schools (n=3) and renting house (n=2) are two main ways. Most of changing schools occurred when children were at elementary school and this experience could become the turning point of children. As C1 mentioned, *“If I did not transfer to the city to go to elementary school in the third grade, I may not get into college.”* “Purchasing high-quality educational resources” is the parental impetus of changing school. Some parents also rented houses to take care of children. This also laid the foundation for accompanying children. This is also like urban families.

The number of parents purchasing books was less than in the cases of the rural and urban groups, with only 4. SPRAWUA’s parents are more interested in directly helping their children improve grades than encouraging reading. Thus, they paid more attention to shadow education. In relation to shadow education, 8 respondents

answered that their parents support them to attend offline cram school. These investments provide advantaged educational conditions for SPRAWUA. Parents thought that “it is worth to spend money for improving children’s grades” (C5). Investment in shadow education is the common point for all three groups.

4.2.3.5 Guanxi Capital

There were three categories in Guanxi capital. Firstly, SPRAWUA’s parents and urban parents are similar in using home-school relationship (n=2). SPRAWUA’s parents also communicate with teachers actively via “giving gifts” (C8) and “inviting teachers to dinner” (C4). This relationship aids SPRAWUA’s parents to learn about children’s performance in the class and makes the teacher pay more attention to the children.

Secondly, family social relationship helps SPRAWUA to change school (n=2), make suggestions to select schools (n=4), and find cram schools (n=2). Relative relationship plays the similar role in changing school (n=2) and providing suggestions to select schools (n=4). Although the functions and categories of Guanxi capital of SPRAWUA’s families are not as rich as those of urban families, SPRAWUA’s families have the advantage compare with rural families in collecting information about school from elementary school to university.

4.2.3.6 Information Capital

Information capital is also the transformation of Guanxi capital. Based on home-school relationship, parents can know the information about children’s performance (n=4) from teachers.

Parents also can gain the information about educational quality from elementary schools to university (n=10). Nine out of ten are college-related. Different from that rural parents let children select university by themselves, SPRAWUA’s parents tend to gather information about university and disciplines from their social and relative relationships as references when children selected university. Sometimes the final

choice was a compromise between parents and children albeit most parents respected children's choices. For example,

"They [parents] listened to some advice from people around them. I wanted to study philosophy before, but because some their friends knew weren't very optimistic about the philosophy [in finding jobs]. So, they disagreed with me. Finally, I didn't study philosophy because of our conflict was more serious" (C8).

Chapter 5 Discussion

This section provides discussion based on the above findings. It is guided by the two sub-questions. Family capitals in FGCSs' family, similarities and differences among three groups in family capitals, and contributions of this research are presented respectively.

5.1 Family Capitals aiding FGCS in China

This research has identified seven components of family capitals aiding rural and urban FGCSs to enter university, via data in interview and analysis of the transcripts. This section aims to respond to the first sub-question:

What the family capitals facilitate rural and urban FGCSs' enrolment in top universities in China?

Bourdieu's capital theory (1986) suggests that children cannot realise an intergenerational breakthrough without enough cultural capital. FGCS have accumulated cultural capital to enter university (Collier and Morgan, 2008). The findings of this research echo Zhu's (2018) views that FGCS's family will pool their family's internal and external resources to bridge the capital gap between their children and CGCS. The family capitals in this research include normative capital, family guiding force capital, family collaborative capital, emotional capital, Guanxi capital,

economic capital, and information capital. Different from “Cultural Capital of Underclass” mentioned by Cheng and Kang (2016), parents are at the centre in the family capital of this research, instead of students. Within the family, parents conveyed their views, behaviours, qualities and emotions favourable to education to children. Through interacting with children, these experiences formed various capitals to aid children to study well and enter university. Parents also used social networks and economic resources to create educational condition outside the family. Family capitals are the implicit and explicit intersection between social capital, human capital, and cultural capital in family background. They exist in behaviours, emotional exchange and notions (Gofen, 2009).

The seven components of family capitals discussed here accord with or expand the previous research.

Normative capital emphasises the influence of parental notions and value. Gofen (2009) argues that core values of family are a kind of family capital. Sometimes, this capital is the underlying motivation for FGCS to enter university. Parental participation steers children to study (Wang, 2019).

Family guiding force capital and family collaborative capital focus on the positive impact that parental involvement has on FGCS. Family guiding force capital enables research to identify the influence of parental expectations on promoting children to enrol in university. This resonates with Zhang’s (2020) as well as McCarron and Inkelas’ (2006) studies. Yosso (2005) referred to this as “Aspiration Capital”.

Family collaborative capital focus on parental equal engagement in children’s learning life. In terms of cooperating with children in education, this capital is similar to the “Concerted Cultivation” existing in middle-class family mentioned by Lareau (2009). This research found this collaborative education also exist in FGCSs’ family, that is so often seen as a disadvantaged family. Family collaborative capital also challenge the view that FGCSs’ parents provide less academic support to children than CGCSs’ family (Pascarella et.al.,2004).

Emotional support from family also has positive impacts on students (Holland, 2010).

Lu, Li and Chen (2019) also found that parental emotional engagement benefits children's cognitive capacity. This research was also classified emotional capital as a component of family capital. It can reduce the children's academic pressure and increase their learning motivation to help student succeed in entering university.

Guanxi capital here is the sum of family social relationship and relative relationship. It is the combination of Bourdieu's social capital and Ke's (2018) Guanxi. Economic capital represents familial educational investment.

Additionally, information capital is the product of Guanxi capital, which indicates the information FGCS gained to help student study including admission policy, educational quality of school etc. Thayer (2000) believes that FGCS cannot understand the rules of higher education and make the best choice in selecting schools with the limited cultural capital. However, information capital may challenge this view. Information capital can make family capital free from the limitation of social capital.

Normative capital, family guiding force capital, family collaborative capital, and emotional capital help FGCS parents to steer children to study through the effects of ideas, behaviours and words and various interactions. Guanxi capital, economic capital and information capital create good learning conditions that help to close the capital gap between FGCS and other students.

5.2 Similarities and Differences in Rural-Urban Family Capitals

This section aims to respond the second sub-question:

Are there any differences or similarities in rural-urban family capitals?

Therefore, this section is divided into two parts. Similarities are provided firstly. Differences among three groups in family capitals are the next part.

5.2.1 Similarities

Table 17 The Same Family Capitals in Three Groups

Component	Category	Subcategory
Normative Capital	Valuing education	Pursuing High-quality Education Resource
		Study Hard for the Sake of Learning
Family Guiding Force Capital	Creating Learning Motivation	Expressing Regret
		Family Encouragement
		Improving Life
		Providing Unsuccessful Cases
		Sibling Influence
	Showing Hardship in Life	
	Developing Learning Qualities	
Emotional Capital	Comforting Children	
	Amiable Family Atmosphere	
	Respecting for Children	Equal Communication
	Trusting Children	Loose Environment
Providing Children with Freedom in Selecting		
Guanxi Capital	Family Social Relationship	Changing School
		Making Suggestions for Selecting School
	Relative Relationship	Changing School
		Making Suggestions for Selecting School
Economic Capital	Investment for Life Foundation	Living costs
	Investment for Learning Environment	Tuition
	Investment for Learning Materials	Purchasing Books
	Investment for Shadow Education.	Offline Programs

In terms of similarity (see Table 17), all three groups (rural, urban and SPRAWUA) exhibited normative capital, family guiding force capital, emotional capital, Guanxi capital, and economic capital.

Firstly, normative capital represents family’s core notions and ideas about education. FGCS’s families share the “valuing education”. FGCSs’ parent concentrate on high-quality educational resources. Pursuing high-quality educational resource promote

children's ambition to enter university. Furthermore, FGCSs' parents focus on pursuing high-quality education perhaps because this can increase the possibility of entering university for children. Based on Wu's (2016) finding, students from selective high school are 10.1 times more likely to attend top universities than students from general high school in China. Similarly, selective middle school students are more likely to enter selective high schools. Entering university is the result of accumulation of pre-university education results.

Compared with entering university, FGCSs' parents focus more on wanting their children to study well. FGCSs' families argue that study is not for the sake of getting into college, but mainly for the sake of studying as a virtue. FGCSs' parents concentrate on the value of education for their children's individual development, including spiritual and academic development, rather than finding a good job. Thus, in parents' minds, education is not driven by utilitarianism. Normative capital steers parents to support children's education at all costs and steer children to know education is important. An (2021) also believed that in rural society, there exists a pure spirit of study, and what supports rural children in achieving social mobility and cultural transcendence is not a utilitarian and urgent attitude to change their fate, but a moral belief in the concepts of "study". Via interviews, this thesis found urban and SPRAWUA's families also has this pure sprit.

This pure sprit about studying may derive from Confucian culture. Confucian culture emphasises that learning is the life's purpose (Li, 2012). Education is served for person-making and self-perfection in Confucianism (Zhao & Deng, 2016). FGCSs' families focus on the intrinsic value of education in aiding children's self-perfection both in the knowledge and the ethic. FGCSs' parents think that higher education is also a process of self-perfection for children. Thus, they hope children enter universities. This echoes Marginson's (2018; 2021) argument that higher education contributes to students' self-formation.

Secondly, in terms of family guiding force, creating learning motivation and develop learning qualities appeared in three groups. Among 6 subcategories of creating

learning motivations, only “improving life” appeared 5 time at least in each group. “Improving life” become the common reason when FGCSs’ parent steer children to study. Escaping from current environment become one of learning motivations, although children did not clearly know what the better life meant. This does not conflict with normative capital because “improving life”, for parents, is one of the results of studying well, not the goal of study. Additionally, this research also found that parents developed children learning qualities (e.g. persistence, self-discipline, and conscientiousness) via direct training, or the influence of role models to help children resist temptation outside of study and avoid the experience of failure in examinations. These qualities have far-reaching impacts on student’s learning habits or even life habits. Cheng and Kang (2016) consider these qualities as the “nature of mind that is corresponding to schooling”. Zhang and Zhu (2018) also argued that diligence and self-discipline help underprivileged students to face challenges in study.

Thirdly, emotional capital provides spiritual support for FGCS when they face challenges and make decisions during study. This helps children to study well. Parents reduce children’s academic pressure though comforting and communicating with children equally (respecting for children) and provide a loose environment and freedom in trusting children. The trust from parents aids FGCS to make the most suitable plan and decisions for study. High school is the cut-off point of parenting style for FGCSs’ families. Prior to high school, parents used family guiding force. After high school, trusting and respecting children are more important. This echoes Zhang and Zhu’s (2018) finding that strict parenting in the early and democratic parenting in the late aid FGCS to study. “Amiable family atmosphere” enables children and parents to understand and tolerate each other which also provide motivation to students’ study and give children a haven when facing academic pressure. The solid love and warmth between parents and children become an important spiritual motivation for children (Gofen, 2009; Zeng, 2019) .

Fourthly, in Guanxi capital, FGCSs’ parents utilise the family social relationships and relationships with relatives to identify cram schools and collect suggestions about

school selection. This proves that FGCSs’ parents have the capacity to create advantaged capitals (e.g. home-school relationship) depending on their own social capital, which raises doubts about Bourdieu’s capital theory and reproduction theory that underprivileged children hardly realise intergenerational breakthrough in education due to the lack of cultural capital. When faced with challenges in study, FGCSs’ families will take full initiative to overcome rather than succumb.

Fifthly, FGCS also have economic capital. They can use educational investment to aid children to study, even though this creates financial burdens. Wu (2020) believed that Chinese family income has no significant influence on the probability of family educational investment. Education expenditure is the top priority for the FGCS family. As Gofen (2009)’s finding, books and tuitions are never lacking even if finance is difficult. This also embodied the “valuing education” in normative capital.

5.2.2 Differences

Table 18 Components of Family Capitals in Three Groups

Rural Group	SPRAWUA Group	Urban Group
Normative Capital	Normative Capital	Normative Capital
Family Guiding Force Capital	Family Guiding Force Capital	Family Collaborative Capital
Emotional Capital	Emotional Capital	Family Guiding Force Capital
Guanxi Capital	Guanxi Capital	Emotional Capital
Economic Capital	Economic Capital	Guanxi Capital
	Information Capital	Economic Capital
		Information Capital

In each component of family capitals, there are differences in the three groups. This section will discuss differences in normative capital, family guiding force capital, family collaborative capital, emotional capital, Guanxi capital, economic capital, and information capital respectively. These capitals are arranged in order of importance. The first four emphasise the influence from family and the remaining three focus on the capitals that family can use to create advantage educational conditions.

Firstly, in relation to normative capital, groups with rural background (rural students

and SPRAWUA) place more value on the belief that education can change destiny, than do urban group. Although the three groups all argue that education is not utilitarianism, perhaps the family with rural background has a deeper commitment to the value of education. Some interviewees consider this faith as an “awakening to the meaning of study” because they needed to fight for their destiny (A3, C5) Zeng (2019) also note that rural family takes "education changes fate" as a belief and this belief becomes a strong power to promote students to study hard. Cheng and Kang (2016) also note that rural students tend to consider study as a moral commitment. The urban FGCS families also value education but sometimes this notion stems from a herd mentality (i.e. entering university is a pervasive social trend) As interviewee B4 said, “I was just entangled in this tendency”.

Secondly, in relation to family guiding force capital, families with rural backgrounds prefer to “show hardship in life” and to create learning motivations (rural=8; SPRAWUA=5), while urban family tend to provide successful cases (n=6) to encourage children. This finding confirms family resilience theory emphasising that successful poor families resist and rebound from adversity with confidence (Simon, Murphy, & Smith, 2005; Gofen, 2009). Additionally, there is a new finding in the present study, that both rural and urban family like to develop children’s interest in learning but SPRAWUA’s family prefer to develop children’s learning qualities (n=8). This is partly because that SPRAWUA’s parents attribute their success of settlement in the city to their good qualities. Apart from that, urban and SPRAWUA’s parents have experience in tutoring children homework, while rural parents rarely have such an experience. This difference is related to the parental educational background. The difference in family collaborative capital among three groups is also correlated to parental education. These two differences can be explained together.

Table 19 Parental Educational Background of Each Group

Groups	Parents	Elementary school (6 years)	Middle school (3 years)	High school (3 years)	Average years of parental
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					education
Urban	Father	0	4	6	10.65
	Mother	0	5	5	
SPRAWUA	Father	1	6	3	9.3
	Mother	3	4	3	
Rural	Father	3	3	4	8.55
	Mother	4	6	0	

Table 20 Family Capitals about Parental Direct Involvement in Children’s Study

Groups	Family Collaborative Capital	Tutoring Homework (Family Guiding Force Capital)
Urban	√	√
SPRAWUA		√
Rural		

Table 21 The Median Annual Household Income by Group

Interviewee’s Number	Median
Urban	125,000 ¥
SPRAWUA	45,000 ¥
Rural	55,000 ¥

Thirdly, family collaborative capital only appears in urban family in this research. Both “tutoring homework” and family collaborative capital entail direct parental involvement in children’s study. They are related to the parents’ educational background.

Based on Table 19 and Table 20, moving from rural family to urban family, the average years of parental education increase gradually from 8.55 to 10.65. Meanwhile, the categories of family capitals about parent involving in children's study also increase. Thus, [1] in FGCSs' families, the degree of parental involvement in children's education is positively correlated with the level of parental education. Furthermore, since there are extreme values in all three groups of annual income data (e.g.in SPRAWUA, the minimum is 25,000, but the maximum is 900,000), the average is not a valid indication of the income level of each group. Thus, the median is used to indicate the annual household income of each group (see Table 21). The median of urban family is 125,000, while the rural and SPRAWUA's median is 55,000 and 45,000. Hence, [2] The difference in the degree of direct parental involvement between urban and rural areas is also consistent with the difference in annual household income. These two findings ([1] & [2]) confirm that there is significant difference in parental involvement in children 's study between low-SES and middle SES groups in China (Poon, 2020). However, in FGCSs' group, further research is needed to determine which plays the dominant role in impacting on parental involvement: parental educational background or family income.

Fourthly, in emotional capital, parents accompanying children talks place in the urban and SPRAWUA's group, but rural students seldom mentioned parental company. As noted, this is perhaps because of the impact of "School Abolishing and Merging Policy". Most middle and high schools are in the city or county. Rural students had to live at school because the school was far from home and thus had less opportunity for family company. Therefore, rural students think that family atmosphere is more important (rural=5, urban=2, SPRAWUA=3). Furthermore, "increasing parental self-confidence" mainly appears in SPRAWUA's group (n=2).

Fifthly, in relation to Guanxi capital, besides family social relationship and relative relationships, urban and SPRAWUA family also focus on the home-school relationship but the rural family hardly do. Aside from parent-teacher meetings, rural parents seldom communicate with teacher about their children's school performance actively.

One reason is that rural FGCS were always “the top students in the class” (A1). The other is that parents know that they cannot provide valuable academic assistance. Therefore, they “refused to communicate with the teacher” (A10) because of lacking confidence.

Sixthly, in economic capitals, urban family has more choices in shadow education than rural and SPRAWUA’s family. This also confirms Bao’s (2013) argument that urban students have the advantage in shadow education. Urban family and SPRAWUA’s family also can rent house near the school but rural family rarely did. This is also the result of “School Abolishing and Merging Policy”. Furthermore, since urban group has advantage in annual family income, family tour also become unique capital of urban group. Students could get a direct impression of the university and understand historical and geographical knowledge through the tour.

Seventhly, information capital only exists in urban and SPRAWUA’s family. SPRAWUA’s family mainly collected information about the education quality of university and occupational outlook of disciplines for selecting university. However, urban family sometimes can design children educational pathway underlain by admission policy of middle school and university in advance. The FGCS whose parents are civil servants and teachers are likely to do. This echoes previous research that parental politic capital can aid children to choose school (Ye, 2012; Marginson, 2018).

5.3 Contributions of This Research

Based on Chinese FGCSs’ background, this research contributes a new access to explain that Chinese FGCSs enter universities successfully. Since most of previous studies about Chinese FGCSs have consider FGCSs in terms of rural college students, urban FGCSs received scant attention. Therefore, a comparison of urban and rural FGCSs may contribute new perspectives in this area. In addition, the discussion about normative capital can provide new explanations for relation between higher education. and self-formation.

The thesis now moves to the final summary, statement of limitations, and ideas for further research.

Chapter 6 Conclusion and Recommendations

This chapter are divided into three sections. Firstly, summary of the whole research is presented. The following section is about the limitations of this and the implication for further research. Finally, recommendations based on the findings and discussion are provided.

6.1 Summary

This research aims to identify the family capitals aiding rural and urban first-generation college students to realise intergenerational breakthrough in higher education in China. Finding similarities and difference between rural and urban family capitals was another goal of the research. Students with agricultural household status who live in the city are classified as students with parents from the rural areas who were working in urban areas (SPRAWUA). Through employing semi-structured interviews and grounded theory to code, this research has the following findings.

Family capitals in this research mean any investment and factors family held to support children to enter universities, including material and non-material, behavioural, and emotional elements, and core ideas. Seven components of family capitals were found by coding 30 transcripts with grounded theory method. Each component contains different categories and subcategories. The seven components are normative capital, family guiding force capital, family collaborative capital, emotional capital, economic capital, Guanxi capital, and information capital. The first four capitals represent parental notions, behaviours, and emotions contributing to children's study. The remaining three represent the relationships and information held by parents to create educational conditions for their children.

In terms of similarities, the rural, urban and SPRAWUA's group share normative capital, family guiding force capital, emotional capital, Guanxi capital, and economic capital. In relation to differences, family collaborative capital only exists in urban group.

Urban and SPRAWUA's share information capital but rural group does not have this.

There are also many differences in the balances between categories and subcategories, in the five common components among three groups. For example, in relation to normative capital, the rural and SPRAWUA families have a "belief in education" which is a self-formed motivation, while urban family seldom has this to the same extent. The SPRAWUA family more greatly "value individual excellent characters" than the other two groups do.

In relation to family guiding force capital, rural and urban families like to "develop interest in learning" but SPRAWUA's families value "developing learning qualities". The three groups utilise different ways to "create learning motivation". Rural and SPRAWUA's families tend to use negative examples but urban families like to use positive examples.

In terms of emotional capital, "accompanying children" exists in urban and SPRAWUA families. The students from rural families seldom mentioned this. Compared with other two group, SPRAWUA students saw studying as a way of increasing parental self-confidence.

In relation to Guanxi capital, SPRAWUA and urban families both focused on establishing the "home-school relationship". However, rural students seldom mentioned it. Urban families are more able to use Guanxi capital to create more favourable conditions than are the other two kinds of family.

In relation to economic capital, urban families have huge advantages in relation to the family tours and online cram schools. Urban and SPRAWUA families also rented house to accompany children but rural family rarely did.

Additionally, the three groups' differences in tutoring homework of family guiding force capital and family collaborative capital were related to the parental educational background. These two capitals represent the degrees of parental involvement in children's learning. In the FGCSs' families, the degrees of parental involvement in children's learning increases with an increase of years of parental education and annual household income.

In conclusion, family capitals are core factors aiding FGCSs' family to realise intergenerational breakthrough in higher education. Family capitals in FGCS families from different areas have the similarities and differences. However, "family capitals" is just one aspect that explains why family can cultivate first college students. It is not the only way to explain these students' success. The school and social environment also impact on their success. Students are nurtured by both families and schools. Family capital is forward-looking. Willis (2017) noted that "cultural location" is a suitable model to explain social mobility. Family capitals help FGCS's family to improve their cultural location and transcend their own class culture. Thus, they realise intergenerational leap in education. Each FGCS student makes a great achievement. The fundamental goal of this research has been to help more Chinese families to cultivate their first college student.

6.2 Limitations and Implications of Further Research

This research has aimed to identify which family capitals aid rural and urban FGCS to enter university. However, this does not mean that family capitals are the only crucial factor for FGCS. The role of teachers and schools also cannot be ignored. Some interviewees mentioned help from teachers and classmates in relation to psychological counselling, establishing self-confidence, choosing school, and developing learning habits. As C1 said, *"one girl classmate told me that you should feel good about yourself and trust that we can do everything."* The care of teachers also caused children to repay the teacher with grades. The care was embodied in the "gloves" given by teachers in the winter (B1 & A4) or encouraging words (B7). These phenomena provided a new research direction about what role did teachers play in occurrence of FGCS, again comparing students from the rural and urban areas.

Apart from that, this research also found that the degree of parental involvement in children's learning can increase with the increased number of years of parental education in FGCS family. The degree of parental involvement is also related to the annual household income. However, these arguments are based on 30 samples. They

may not be representative. Thus, they need to be tested in by a larger sample.

The arguments of this research were based on a specific group of Chinese students. It may not apply to other families with different cultural backgrounds. The generalisation of this research still needs to be tested by using quantitative methods in a range of other countries.

6.3 Recommendations

Based on the findings and discussions in this study, we propose the following suggestions for families and schools:

- Parents should steer children to understand the importance of education, create learning motivation, develop their learning habits and qualities during elementary school and middle school. And then trust children adequately when they are in high school.
- Parent should accompany children when they study and act as role models to let children focus on studying via parental behaviours.
- Schools should focus on rural students' mental health.
- It is essential to establish an officially endorsed college selection information platform to provide accurate reference advice to FGCSs' families.

References

An, C. (2021). *Dragging up the Children: Historical Memory and Cultural Pedigree of Folk Pedagogy in the Past Century* (拉扯大的孩子：民间养育学的文化家谱). Beijing: Social Sciences Academic Press (China).

Arum, R., & Roksa, J. (2011). *Academically adrift: Limited learning on college campuses*. Chicago: University of Chicago Press.

Bao, W., (2013). *College Choice of Rural First Generation Student*(第一代农村大学生的升学选择). *Education Research Monthly*, 2013(01), 3-11

Beck, U., (1994) 'The Reinvention of Politics: Towards a Theory of Reflexive Modernization', in U. Beck, A. Giddens and S. Lash, *Reflexive Modernization: Politics, Tradition and Aesthetics in the Modern Social Order* (Cambridge: Polity), pp.1-55.

Bell, A. & Santamaría, L.J. (2018). *Understanding Experiences of First-generation University Students: Culturally Responsive and Sustaining Methodologies*, London.

Bernstein, B. (1962). *Social Class, Linguistic Codes and Grammatical Elements*. *Language and Speech*, 5(4), 221-240.

Bourdieu, P. (1986). *The Forms of Capital*. *Handbook of theory and research for the sociology of education*. New York. 241-258

Bourdieu, Bourdieu, P., Nice, R., & Bennett, T. (2010). *Distinction: A social critique of the judgement of taste* (Routledge classics). London: Routledge.

Cai, Z. L. & Kong, L. X. (2014). *Plight of and Solution to Rural Education under the Movement of School Closure and Merger*(撤点并校运动背景下乡村教育的困境与出路). *Tsinghua Journal of Education*, 35(2), 114-119

Carter, P. L. (2006). *Straddling boundaries: Identity, culture, and school*. *Sociology of Education*, 79(4), 304-328

Cheng, M., Lv Y. X., & Yang. Y. (2018). *A Re-inspection on Cultural Capital of Underclass*(“底层文化资本”再审视). *Journal of Soochow University (Educational Science Edition)* (04),52-59.

Cheng, M. (2018). “*Dushu de Liao*” and Their Cultural Production(“读书的料”及其文化生产：当代农家子弟成长叙事研究). Beijing: China Social Sciences Press

Cheng, M. & Kang, Y. J. (2016). “*Things Are Increased by Being Diminished*” : Another Discourse on the Cultural Capitals of Underclass (“物或损之而益” ----关于底层文化

资本的另一种言说). *Tsinghua Journal of Education*, 37(04), 83-91

Cohen, L., Manion, L., & Morrison, K. (2011). *Research Methods in Education* (7th ed.). Routledge.

Coleman, J. S. (1990). *Foundations of social theory*. Cambridge, MA: Harvard University Press.

Coleman, J. S. (1988). Social Capital in the Creation of Human Capital. *The American Journal of Sociology*, 94, S95-S120.

Collins, R., Cottom, T., & Stevens, M. (2019). *The Credential Society: An Historical Sociology of Education and Stratification* (Legacy Editions). New York, NY.

Crosnoe, R. (2004). Social capital and the interplay of families and schools. *Journal of Marriage and Family*, 66, 267 – 280.

Dewey, J. (2004). *Democracy and education*. Mineola, N.Y.: Dover Publications.

Ding, X. H. & Liang, Y. (2010). The Changes in Access to Higher Education in China (中国高等教育入学机会均等化程度的变化). *Journal of Higher Education*, 31(2), 1-5

Eckert, S. A. (2013). What Do Teaching Qualifications Mean in Urban Schools? A Mixed-Methods Study of Teacher Preparation and Qualification. *Journal of Teacher Education*, 64(1), 75-89.

Elliot, M., Fairweather, I., Olsen, W., & Pampaka, M. (2016). *Interpretivism. A Dictionary of Social Research Methods, A Dictionary of Social Research Methods*. Oxford University Press

Giddens, A., & Sutton, P. (2017). *Essential concepts in sociology* (Second ed.). Cambridge.

Gofen, A. (2009). Family capital: How first-generation higher education students break the intergenerational cycle. *Family Relations*, 58 (1), 104–120.

Guo, J. (2019). The Match between High Impact Practices and Post-graduation Goals of Undergraduates: Based on the 2019 China College Teaching & Learning Survey (本科生高影响力活动与其毕业后预期目标的匹配——基于 2019 年中国本科教与学调查数据). *Research in Educational Development*. 2019 (23), 18-26

Guo, J. (2020). Study on the Survey-Based Undergraduate Performance of First-Generation College Students(基于调查数据的家庭第一代大学生在校表现研究), *China Higher Education Research*, 2020(6), 13-19

Hannum, E., Wang, M.Y. and Jennifer H.A. (2008), "Urban-Rural Disparities in Access to Primary and Secondary Education Under Market Reforms." in Whyte, M. (2010). *One country, Two societies: Rural-urban inequality in contemporary China* (Harvard contemporary China series; 16). Cambridge, Mass.; London: Harvard University Press.

Holland, N.E. (2010), Postsecondary Education Preparation of Traditionally Underrepresented College Students: A Social Capital Perspective, *Journal of Diversity in Higher Education*, 3(2): 111.

Holzmann, R., & Jorgensen, S. (1999). *Social protection and social risk management: Conceptual underpinnings for the social protection sector strategy paper* (Social Protection Discussion Paper Series 9904). Washington, DC: World Bank.

Horn, L., & Nunez, A. (2000). *Mapping the road to college: First-generation students' math track, planning strategies, and context of support* (Report No. NCES 2000 –153). Washington, DC: National Centre for Education Statistics, U.S. Government Printing Office.

Hossler, D., Schmit, J., & Vesper, N., (1999). *Going to college: How social, economic, and educational factors influence the decisions students make*. Baltimore, MD: Johns Hopkins University Press.

Huang W., Yao, P.P. & Li, F. (2016). The Impact of Student Loans on the Academic Development of the First Generation of College Students in China(助学贷款对中国第一代大学生学业发展的影响), *China Higher Education Research*, 2016 (9),77-82

Hunt, C., Collins, B., Wardrop, A., Hutchings, M., Heaslip, V., & Pritchard, C. (2018). First-and Second-generation Design and Engineering Students: Experience, Attainment and Factors Influencing them to Attend University. *Higher Education Research and Development*, 37(1), 30-43.

Ke, X. (2018). *Succession and the Transfer of Social Capital in Chinese Family Businesses*. V&R unipress.

Kuh, G. D., Schuh, J. H., Whitt, E., Andreas, R. E., Lyons, J. W., Strange, C. C., Krehbiel, L. E., & MacKay, K. A. (1991). *Involving colleges*. San Francisco: Jossey Bass.

LaRossa, R. (2005). Grounded theory methods and qualitative family research. *Journal of Marriage and Family*, 67, 837 – 857.

Li, A. (2013). Fairness in the Allocation of Education Resources between Urban and Rural Areas and the Path to Achieve It (城乡教育资源配置的公平诉求与实现路径). *Education Exploration*. 2013(11), 23-24.

- Li, C.L. (2014). The Changing Trend of Education Inequality in China (1940-2010): Re-examining the Urban-rural Gap on Educational Opportunity(教育不平等的年代变化趋势 (1940-2010) ——对城乡教育机会不平等的再考察). *Sociological Studies*, (02),65-89+243
- Li, J. (2012). *Cultural foundations of learning: East and West*. Cambridge: Cambridge University Press.
- Li, Y. (2006). Institutional Change and Educational Inequality: Mechanisms in Educational Stratification in Urban China (1966 —2003)(制度变迁与教育不平等的产生机制——中国城市子女的教育获得(1966—2003)). *Social Sciences in China*. (04) 97-109+207
- Liu, J.M. (2005). *The State, Social Class and Education (国家, 社会阶层与教育)*. Beijing: China Renmin University Press
- Liu, K. & Guo, F. (2020). Urban and Rural Internal Stratification and Access to Higher Education:
With an Examination on the Influence of the Higher Education Enrolment Expansion Policy (城乡内部阶层分化与高等教育机会获得——兼谈高校扩招政策的影响). *Research in Educational Development*.23.22-29+58
- Liu, Z., & Gao Y. (2015). Family Capital Social Stratification, and Higher Education Attainment—An Empirical Study Based on Jiangsu Province(家庭资本、社会分层与高等教育获得——基于江苏省的经验研究). *Chinese Education & Society*, 48:3, 218-230.
- Lu, C. T., Li, Y. F. & Chen, L. (2019). Emotional Input or Economic Support: An Empirical Analysis of Family Education Investment (情感投入还是经济支持:对家庭教育投资的实证分析). *Journal of Social Development*, 6 (01), 50-67+243
- Marginson, S. (2018). Higher Education, Economic Inequality and Social Mobility: Implications for Emerging East Asia. *International Journal of Educational Development*, 63, 4-11.
- Marginson, S. (2018). *Higher education as self-formation*. London.
- Marginson, S. (2018, August). *Higher Education as Student Self-formation*. Unpublished internal document. University of Oxford. Prepared 19 August 2021 for B. Cantwell, S. Marginson, D. Platonova and A. Smolentseva (eds.), *The Contributions of Higher Education*.
- Marx, K. (1979). *Manuscript of Economics and Philosophy in 1844*. Beijing: People's

Publishing House

May, T. (2011) EBOOK: Social Research, McGraw-Hill Education. ProQuest Ebook Central, Retrieved from: <http://ebookcentral.proquest.com/lib/oxford/detail.action?docID=729519>. [17/08/2021]

McCarron, G. P., & Inkelas, K. K. (2006). The Gap Between Educational Aspirations and Attainment for First-generation College Students and the Role of Parental Involvement. *Journal of College Student Development*, 47, 534 – 549.

Meng, F. Q.; Chu, S. & Li, Q.H. (2017). Does the Expansion of Higher Education Alleviate the Urban-Rural Education Opportunity Inequality? (高等教育规模扩张是否缓解了城乡教育机会不平等?). *Education and Economy*, 33 (04), 9-16

Moschetti, R. V., & Hudley, C. (2015). Social Capital and Academic Motivation Among First-Generation Community College Students. *Community College Journal of Research and Practice*, 39(3), 235-251.

Neuman, W. L., & Biga, C. F. (2006). *Social Research Methods: Qualitative and Quantitative Approaches* (6th ed.). Pearson Education Limited.

Núñez, A. M., & Cuccaro-Alamin, S. (1998). First-Generation Students: Undergraduates Whose Parents Never Enrolled in Postsecondary Education (NCES statistical analysis report 98-082). Washington, DC: U.S. Department of Education.

Parcel, T. L., & Dufur, M. J. (2001). Capital at Home and at School: Effects on Child Social Adjustment. *Journal of Marriage and Family*, 63, 32 – 47.

Parks-Yancy, R. (2012). Interactions into Opportunities: Career Management for Low-Income, First-Generation African American College Students. *Journal of College Student Development*, 53(4), pp.510–523.

Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *Journal of Higher Education*, 75(3), 249–284.

Patton, M. Q. (2015). *Qualitative Research & Evaluation Methods: Integrating Theory and Practice* (Fourth ed.). Los Angeles.

Peng, B. (2014). On the Educational Achievement Gap between Urban and Rural Students in Compulsory Education Stage(城乡义务教育阶段学生学业差距研究——基于教育公平的视角). *Journal of Educational Science of Hunan Normal University*, 13(5), 73-79

Pike, G. R. & Kuh G. D. (2005). First-and Second-generation College Students: A Comparison of Their Engagement and Intellectual Development. *The Journal of Higher Education*, 76(3):276-300

Poon, K. (2020). The Impact of Socioeconomic Status on Parental Factors in Promoting Academic Achievement in Chinese Children. *International Journal of Educational Development*. 2020(75). 1-9

Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24, 1 – 24.

Robson, C., & McCartan, K. (2016). *Real world research: A resource for users of social research methods in applied settings* (Fourth ed.). Chichester.

Rodriguez, S. L., Garbee, K., & Martínez-Podolsky, E. (2021). Coping with College Obstacles: The Complicated Role of Familia for First-Generation Mexican American College Students. *Journal of Hispanic Higher Education*, 20(1), 75-90.

Sarah, O. (2016). Avoiding the Manufacture of "Sameness": first-in-family students, cultural capital and the higher education environment. *Higher Education*, 72(1), 59-78.

Spinath, B., Spinath, F. M., Harlaar, N.& Plomin, R. (2006). "Predicting School Achievement from General Cognitive Ability, Self-Perceived Ability, and Intrinsic Value." *Intelligence* 34 (4)

Shi, D. Q., Zhang, W. D. and Liu, J.J. (2018). Unequal Opportunities in Higher Education: Urban and Rural Difference in Family Background—Based on the Perspective of Micro Education Decision(高等教育机会数量与质量不平等——家庭背景作用的城乡差异). *Journal of Macro-Quality Research*, 6(4), 91-101

Simon, J. B., Murphy, J. J., & Smith, S. M. (2005). Understanding and Fostering Family Resilience. *Family Journal*, 13, 427 – 436.

Spiegler, T. & Bednarek, A. (2013). First-generation students: What we ask, what we know and what it means: An international review of the state of research. *International Studies in Sociology of Education*, 23(4), 318-337.

Stephens, N.M., Fryberg, S. A., Markus, H. R., Johnson, C.S., & Covarrubias, Rebecca. (2012). Unseen disadvantage: How American Universities' Focus on Independence Undermines the Academic Performance of First-Generation College Students. *Journal of Personality and Social Psychology*, 102(6), 1178-1197.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and*

- procedures for developing grounded theory (2nd ed.). Thousand Oaks, CA: Sage.
- Terenzini, P. T., Springer, L., Yaeger, P. M., Pascarella, E. T., & Nora, A.,(1996). First-generation college students: Characteristics, experiences, and cognitive development. *Research in Higher Education*, 37(1), 1–22.
- Thayer, P. B. (2000). Retention of Students from First-generation and Low-income Backgrounds. *Opportunity Outlook Journal*, 3(1):2-8
- Tian, J.& Yu, X. L. (2021). From Deficit perspective to Advantage perspective: A Literature Review on First-Generation College Students(从赤字视角到优势视角：第一代大学生文献综述). *Chongqing Higher Education Research*, (J/OL),1-16.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press.
- Tramonte, L., & Willms, J. D. (2009). Cultural Capital and Its Effects on Education Outcomes. *Economics of Education Review*, 29, 200–213
- Wang, Z.X. (2019). Unequal Childhood: A Literature Review on Educational Equity in Upward Mobility of Rural Children (不平等的童年：农村孩子向上流动中教育公平的文献综述). *Children’ s Study*, 2019 (08), 44-55
- Warburton, E. C., Bugarin, R., & Núñez, A.M. (2001). *Bridging the Gap: Academic Preparation and Postsecondary Success of First-generation Students* (NCES statistical analysis report 2001-153). Washington, DC: U.S. Department of Education
- Wadhwa, R. (2018). Unequal Origin, Unequal Treatment, and Unequal Educational Attainment. *Higher Education*, 76(2), 279-300.
- Wildhagen, T. (2015). “Not your typical student”: The social construction of the “first-generation” college student. *Qualitative Sociology*, 38(3), 285–303.
- Williams, S., & Ferrari, J. (2015). Identification among First - Generation Citizen Students and First - Generation College Students: An Exploration of School Sense of Community. *Journal of Community Psychology*, 43(3), 377-387.
- Willis, P. (2017). Learning to labour [electronic resource]: How Working-Class Kids Get Working Class Jobs. London. Retrieved from: https://solo.bodleian.ox.ac.uk/primo-explore/fulldisplay?docid=oxfaleph021044155&context=L&vid=SOLO&lang=en_US&search_scope=LSCOP_ALL&adaptor=Localper_cent20Searchper_cent20Engine&isFrbr=true&tab=local&query=any,contains,Learningper_cent20tooper_cent20labor&sortBy=rank&facet=frbrgroupid,include,304016250&offset=0 [13/08/2021]

Wright, S. L., Jenkins-Guarnieri, M. A., & Murdock, J. L. (2013). Career Development Among First-Year College Students. *Journal of Career Development*, 40(4), 292-310.

World Bank, (2020). School Enrolment, Tertiary (per cent gross) – China Retrieved from: <https://data.worldbank.org/indicator/SE.TER.ENRR?locations=CN> [12/08/2021]

Wu, Q. (2020). A Study on the Influence of Income and Characteristic of Family Education Expenditure (家庭的收入和特征对家庭教育支出的影响研究). *Journal of Central China Normal University (Humanities and Social Sciences)*, 59(5), 175-186

Wu, X. G. (2016). Higher Education, Elite Formation and Social Stratification in Contemporary China: Preliminary Findings from the Growth Tracking Survey of College Students in the Capital (中国当代的高等教育、精英形成与社会分层来自“首都大学生成长追踪调查”的初步发现). *Chinese Journal of Sociology*, 36 (3), 1-31

Wu, Y., X. (2013). Education Opportunities of Chinese Rural and Urban Residents in 1978-2008: Inequality and Evolution (中国城乡居民的教育机会不平等及其演变 (1978—2008)). *Social Sciences in China*. 34(03), 4-21+203

Xu, H. P. (2017) Family Capital and Access to Education: A Shadow Education Perspective (家庭资本与教育获得: 影子教育的视角). *Educational Science Research*, 2017(02):31-41+48

Yang, D. P. (2006). Access to Higher Education: Widening Social Class Disparities (高等教育入学机会:扩大之中的阶层差距). *Tsinghua Journal of Education*, 27(1), 19-25

Yang, D. Y. & Jiang T.H. (2011), Unbalanced Distribution of Educational Resources Between Town and Country: From the Case of Basic- Education in Heilongjiang Province (教育资源的城乡不均衡分布——以黑龙江省基础教育为例). *Education & Economy*, 2011(01), 19-24

Ye, X. Y. (2012). "Choosing schools by power": Parents' Political Capital and Their Children's Choice of Schools(“以权择校”: 父母政治资本与子女择校). *World Economic Paper*, 2012 (4): 52-73.

Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race Ethnicity and Education*, 8(1), 69–91

Zeng, D. X. (2019). "Starry Night in a Room": A Study on the Family Experience of the First-Generation College Students from Rural Poor Families(“斗室星空”: 农村贫困家庭第一代大学生家庭经验研究). *China Youth Research*. 2019(07), 38-43

Zhang, C. C. & Zhu, X. Z. (2018). How Can Disadvantaged Students Access to High-quality Higher Education (处境不利学生如何获得优质高等教育机会——“双一流”

建设高校农村学生学业抗逆历程研究). *Journal of Higher Education*. 39(12), 25-33

Zhang, H.F., Guo, F. & Shi, J.H. (2016), A Portrait of First-generation College Students in China: an Analysis Based on the China College Student Survey(第一代大学生的学习画像——基于“中国大学生学习发展和追踪调查”的分析). *Tsinghua Journal of Education*. 37(6),72-78(94)

Zhang, H.F., Guo, F. & Shi, J.H. (2017), On Improving First-generation College Students' Participation in High-impact Educational Practices (促进家庭第一代大学生参与高影响力教育活动的研究). *Education Research*.2017(6),32-43

Zhang, J.J. (2020), A Study of Rural Primary Schools' "School Abolishing and Merging Policy" from the Perspective of Family Education Cost—Taking X Town, M county, Henan Province as an Example. (家庭教育成本视角下农村小学“撤点并校”问题研究——以河南省 M 县 X 镇为例) [master's thesis]. Yunan Normal University.

Zhang, Q. (2020), A Narrative Study of the Educational Experience of the First Generation of Female College Students in Rural Families—In-depth interviews based on 12 cases (农村家庭第一代女大学生教育经历的叙事研究——基于 12 个个案的深度访谈). [master's thesis]. Central China Normal University.

Zhang W.J. (2019), Research on Career Planning Problems and Countermeasures of First-generation College Students(家庭第一代大学生职业生涯规划问题及对策研究). [master's thesis] Anhui Normal University.

Zhang, X. & Zhao, B.H. (2012), The Impact of Family Capital on Students' Academic Achievements: Current Situation and Trends(家庭资本对学生学业成就影响的研究:现状与趋势). *Education Research Monthly*. 2012 (03), 84-87.

Zhao, G. and Deng, Z. (2016). Introduction. In G. Zhao and Z. Deng (eds.), *Re-envisioning Chinese education: The meaning of person-making in a new age* (pp. 1-9). Abingdon: Routledge.

Zhu, Y. L. (2018), "Capital Replenishment" and "Conscious Empathy": Intergenerational Support for the Process of Obtaining Higher Education for the Children of Lower Classes ("资本补给"与"自觉共情":低阶层子代获得高层次高等教育过程的代际支持). *China Youth Study*. 2018(06), 91-98

Appendix A Ethnic Approval Form

CENTRAL UNIVERSITY RESEARCH ETHICS COMMITTEE (CUREC) Form CUREC 1A Checklist for the Social Sciences and Humanities



The University of Oxford places a high value on the knowledge, expertise, and integrity of its members and their ability to conduct research to high standards of scholarship and ethics. The research ethics clearance procedures have been established to ensure the University is meeting its obligations as a responsible institution. They start from the presumption that all members of the University take their responsibilities and obligations seriously and will ensure that their research involving human participants is conducted according to the established principles and good practice in their fields and in accordance, where appropriate, with legal requirements. Since the requirements of research ethics review will vary from field to field and from project to project, the University accepts that different guidelines and procedures will be appropriate.

- Please check "[Where and how to apply for ethical review](#)" and the [CUREC flowchart](#) first to see if you need ethics approval.
- Please complete this form using a word processor and email it, together with your [supporting documents](#), to your [Departmental Research Ethics Committee \(DREC\)](#) (if applicable). If you don't have a DREC please email this form to ethics@socsci.ox.ac.uk using your official [ox.ac.uk](#) email address. **Only type-written, emailed applications will be accepted.**

SECTION A: Filter for CUREC 2 application

This section determines whether your study raises more complex issues requiring the completion of a full application for ethical review, known as the CUREC 2 application. **(Please mark 'X' in the Yes/No column.)**

<p>1. Are research participants classed as people whose ability to give free and informed consent is in question? (This may include under 18s (although see "competent youths"), prisoners, or adults "at risk".) Your attention is drawn to the University's Safeguarding Code of Practice and its implications for researchers involving children or adults at risk. This includes the need for the work to be risk assessed and for researchers to undertake related training.</p> <p>(Note: If any of your participants are aged 16 or under, answer 'Yes' here and also answer question 5 below.)</p>	<p>Yes <input type="checkbox"/></p>	<p>No <input checked="" type="checkbox"/></p>
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2. By taking part in the research, will participants be at risk of criminal prosecution (e.g. by providing information on drug abuse or child abuse)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. Does the research involve the deception of participants?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
4. Does your research raise issues relevant to the Counter-Terrorism and Security Act (the Prevent duty) , which seeks to prevent people from being drawn into terrorism? Please see advice on this on our Best Practice Guidance web page .	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If you answered 'No' to <u>all</u> the questions above, go to Section B . If you answered 'Yes' to <u>any</u> question above, continue to question 5 below.		
5. Is your project covered by a CUREC Approved Procedure (formerly known as "CUREC Protocols")?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If yes, give the specific Approved Procedure number(s):		
<p>If you answered 'Yes' to ANY of questions 1-4, and answered 'No' to question 5, stop completing this checklist and do not submit it for ethical review. Instead, complete the CUREC 2 application form from the CUREC website, then submit that for ethical review.</p> <p>If you answered 'Yes' to ANY of questions 1-3, and answered 'Yes' to question 5, go on to Section B.</p>		

SECTION B: Contact details and project description	
Contact details:	
1. Principal investigator OR supervisor (if student research) (give title and full name)	Professor Simon Marginson
2. Name of student (if student research)	Songyang Cheng
3. Degree programme (if student research), e.g. BA, BSc, MSc, MPhil, DPhil	MSc in Higher Education
4. Department or Institute name	Department for Education
5. Address for correspondence (if different from above)	205 A Cowley Road, St Hilda's College accommodation, OX41XA
6. University (not private) e-mail address and telephone number	songyang.cheng@education.ox.ac.uk
7. Name and status of others taking part in the project (e.g. third year undergraduate; postdoctoral research assistant)	

Project description:	
8. Title of research project	What family capital aids rural and urban first-generation college students in China to realise intergenerational mobility in higher education.
9. List of location(s) where project will be conducted	Beijing
10. If your research involves overseas fieldwork or travel and your department requires a travel risk assessment, will you have completed and returned a risk assessment form beforehand? (This must be approved by your department before you travel. If you are travelling overseas, you are strongly advised to take out <u>University travel insurance</u> .) Please also address any physical or psychological risks for Oxford researchers and local fieldworkers in Section 16 below and discuss with your safety officer.	Yes <input type="checkbox"/> No <input type="checkbox"/> Not required in this instance <input checked="" type="checkbox"/>
11. Anticipated duration of overall research project	4 months

<p>12.a) Anticipated start and end dates of the part of the research project involving human participants and/or personal data</p>	<p>From: 20/02/2021 To: 20/6/2021</p> <p>Note: You will need ethics approval before you start your research. CUREC 1As may take up to 30 days to process. Retrospective ethics approval cannot be granted.</p>
<p>12. b) In the case of international or collaborative research, will you submit or have you submitted this project for ethical review or consideration elsewhere (e.g. collaborator's/local ethics committee, or other local approval)?</p>	<p>Yes <input type="checkbox"/></p> <p>No <input checked="" type="checkbox"/> NOT APPLICABLE</p> <p>If 'Yes', please attach ethics or other approvals and give more details below.</p> <p>If 'No', please explain your reasons below. Please also refer to the Best Practice Guidance on Ethical Review of social-sciences based research conducted outside the UK (BPG 16), which includes an Ethics Issues Checklist for International Research (Appendix A)</p>
<p>13. External organisation funding the research (if applicable)</p>	
<p>14. a) Title and brief description of research (about 150 words) in lay language. When describing the research, include your methodology, how you are applying professional guidelines, and the use to which results/data will be put. Please also declare any conflicts of interest here.</p>	
<p>What family capital aids rural and urban first-generation college students in China to realise intergenerational mobility in higher education.</p> <p>This inquiry seeks to define the family capital which aids first-generation university students from the rural and urban areas to enter top universities in China. Additionally, the rural-urban similarities and differences in family capital will also be studied. 20 students in top universities in Beijing will be interviewed in order to learn about how their family helped to support their academic achievement before they entered the universities. 10 students will be from rural areas and 10 students from urban areas. Their family background information will be recorded by questionnaire. The interview will be conducted and recorded with an online platform (Tencent meeting room) because of Covid-19 restrictions on travel and face to face activities. The interview transcript and interviewees' body language and feeling will also be recorded. In terms of analysing transcript, the grounded theory method will used. The transcript will be coded in three stages: open coding, axis coding and selective coding by Nvivo software. Via three-stages coding, we will identify the important aspects of family capital as revealed in the transcript. Then we can compare the rural family capital and urban family capital.</p>	

14.b) Description of participants and how you will [obtain informed consent](#) to take part in the research (about 200 words in total)

1. Description of participants **and** your criteria for inclusion/exclusion

The participants are undergraduates or Bachelor's degree students from "Double First-class" universities in Beijing. The list determined by the Ministry of Education of China specifies which universities are "Double First-class" universities. In the case of these students the elder members of their immediate family (parents, grandparents, and their older brothers or sisters) have had no personal experiences of higher education.

Students from rural families in this research who are regarded as fully rural should meet all three of the following standards: (1) Having an agricultural household status. (2) Having finished their elementary school in the country. (3) Both parents work in the country. If they only meet the first standard, their family will be classified into "parents from rural area working as workers in urban area." This will be a distinct group within the total sample, for analysis purposes.

Hence there will be three groups of students studied: a) Students who are fully urban, b) Students who are fully rural, c) Students with parents from rural area working as workers in urban area

2. Your method(s) of recruitment

First, I will contact university counsellors in Double First-class universities, that I know, via Wechat or E-mail. Then, the counsellor will contact students and send questionnaires to collect the students' family background information. When answering the questionnaire, they can decide whether or not they want to take part in the interview. If they are willing to attend the interview, they can provide their Wechat account or email. However, if volunteers are not enough, snowballing method will be used to accumulate the required number of interviews in the rural and urban groups.

3. Your processes for obtaining consent from participants

Before interview, the interviewees will receive the "Participant Information Sheet" and questionnaire which will explain the purpose and procedures of this study with Chinese. They will be told that they can stop the interview and retract their information at any time, if they so request, without penalty.

Please **attach separate supporting documents (in Word)** if appropriate for your research (English language versions only). Tick those you are submitting below. If appropriate supporting documents are not submitted, you will be asked to provide these separately, which may delay the ethical review process.

- [Recruitment and advertisement material](#) (e.g. a poster, social media recruitment text, or brief invitation letter/ email)

- Information for participants to read (or hear) before they agree to take part (e.g. [written information](#) or, if applicable, an outline [oral information script](#)).
- A document to record informed consent. Templates for [written consent forms](#) and/or [oral information scripts](#) (in case of an oral consent process) are available from the CUREC website
- Questions to be asked of participants (e.g. interview questions, or a preliminary scope of questions, or a sample questionnaire)
- (If relevant) debriefing document after participants have taken part
- If you feel the above approaches are not appropriate for your study, provide details on how you will obtain consent from participants
- Please complete section 15 if you cannot obtain informed consent

Please add any further details here.

15. If you cannot obtain informed consent from participants according to CUREC guidelines and good practice in your discipline, please give a brief explanation and justification of this decision below.

N/A

16. What are the ethical issues connected with your research and what steps have you taken to address them? **Please do not answer 'none'**. We need to see evidence that you have identified potential ethical issues with respect to your research and have taken steps to address them. If applicable, please address:

- Participant burdens and/or risks

Since interviewees will be first generation college student, some of them are likely to be from disadvantaged families. In the interview, they may be asked to recall bitter memories and their experiences in difficult situations. Participants will have the right to stop interview at any time.

- Your own physical and psychological safety as a researcher or of fieldworkers you may employ (see the [University's](#) and [Social Science Division's Safety in Fieldwork guidance](#))

Because of the Covid-19 pandemic, I have chosen to do one-to-one online interview with Tencent Meeting Room, to remain safe in health terms. For my psychological safety, I will maintain communication with my supervisor.

- Data protection/ confidentiality (also see Section 18).

All questionnaire data will be transcribed by computer, and the interviews will be recorded by computer. An encrypted folder will be used to store the details. It will be stored for three years and then promptly discarded. Participant contact details will be erased after the completion of the study. Participant responses will be anonymised.

For more guidance on ethical issues, please see <http://researchsupport.admin.ox.ac.uk/governance/ethics/resources>

Discuss other ethical issues here

17. Will your research involve discussing sensitive issues?

Yes

No

This could be information relating to race or ethnic origin, political opinions, religious beliefs, physical/mental health, trade union membership, sexual life or criminal activities.

If you answered 'Yes', make sure you include some supporting information (as directed in Section 14 b.) above, showing the range of questions covering these issues.

This research aims to find out how families aid first-generation college students to enrol in the top universities. Because the research may ask participants to recall their memories about family, this may lead to sensitive issues. The questionnaire also includes questions about family annual income which may be another sensitive issue for participants.

18. Management and handling of personal and other research data

For the purpose of completing this section, all information provided by participants is considered **research data**. Any research data from which participants can be identified is known as *personal data*; any personal data which is sensitive is considered *special category data*.

Management of [personal data](#) and [special category data](#) of human participants, either directly or via a third party, must comply with the requirements of the General Data Protection Regulation (GDPR) and the Data Protection Act 2018, as set out in the [University's Guidance on Data Protection and Research](#). In answering the questions below, please also consider the points raised in the [Data Protection Checklist](#). For advice on research data management and security, please consult with the University's Research Data Team (researchdata@ox.ac.uk) and/or your local IT department, and the University's [web pages on research data management](#).

a.) Please mark 'X' against the data you will collect for your research

Consent records (written consent forms, audio-recorded consent, assent forms (for research involving minors) including participant name

Online consent (may be anonymous)	<input checked="" type="checkbox"/>
Opt-out forms	<input type="checkbox"/>
Contact details for research purposes only (destroyed when no longer needed for this research)	<input type="checkbox"/>
Contact details kept for future studies	<input type="checkbox"/>
Audio recordings (preferably using PIN-protected audio recorder and stored on device's hard drive)	<input checked="" type="checkbox"/>
Video recordings	<input checked="" type="checkbox"/>
Transcript of audio/video recordings	<input checked="" type="checkbox"/>
Photographs	<input type="checkbox"/>
Task results (e.g. paper/online tasks, diary completion)	<input type="checkbox"/>
Questionnaire answers	<input checked="" type="checkbox"/>
Field notes	<input type="checkbox"/>
Other (please specify below)	<input type="checkbox"/>
b.) For each of the types of data selected above, state how this will be physically transferred from where it is collected to a local secure storage site (and backed up as necessary). This includes paper records and data captured electronically.	
All the types of data will be transcribed to a computer, and safely stored in an encrypted folder. The data will also be backed up on a secure folder within the mobile hard disk and Baidu Cloud	
c.) How and where will each type of data be stored during the research (until the end of all participant involvement)? Describe the arrangements for ensuring confidentiality, i.e. location of storage (e.g. Nexus 365 OneDrive for Business, SharePoint), security arrangements and de-identification of such data. Do not store unencrypted data in freely available cloud services or unprotected USB drives.	
My own mobile hard disk and my encrypted Baidu Cloud	

<p>d.) Will you use a unique participant number on research data instead of a participant name? If yes, state whether or not you will retain a list of participant names against numbers (i.e. pseudonymisation via a linkage list). Where will the list be stored, and when will it be destroyed?</p>		
N/A		
<p>e.) Who will have access to the research data?</p>		
Supervisor – Professor Simon Marginson and myself		
<p>f.) If research data is to be shared with another organisation, how will it be transferred / disclosed securely?</p>		
N/A		
<p>g.) When and how will identifiable data (including audio/video recordings & photos) be destroyed or deleted?</p> <p>Note: Records of consent should be retained for a minimum of three years after publication or public release. Some funders may require longer periods (see http://www.dcc.ac.uk/resources/policy-and-legal/overview-funders-data-policies). If you wish to retain contact details in order to re-approach participants about future studies, you must detail this in information provided to them and obtain specific consent for this.</p>		
Three years after completion of study		
<p>h.) Please confirm that you will store other research data safely for at least 3 years after final publication or public release and adhere to any additional research funder policies. For more information about the University policies, please see the University's web pages on research data management.</p>	<p>Yes <input checked="" type="checkbox"/></p>	<p>No <input type="checkbox"/></p>
<p>If 'Yes', please give details of who will store the data and on storage format, location and security. Note that open science is encouraged.</p> <p>Songyang Cheng will store the personal data, consent forms and research findings in his mobile hard disk and Baidu Cloud with Encrypted folder. These data will be stored for 3 years after completion of the work of the research, in the form of the MSc dissertation, and then destroyed.</p> <p>If 'No', please provide further details below.</p>		
Department of Education		
<p>i.) Does your research involve the use of secondary (i.e. previously collected) data? Common sources of secondary data include censuses, information collected by government departments, organisational records and data that was originally collected for other research purposes (If "No", please go to section 19.)</p>	<p>Yes <input type="checkbox"/></p>	<p>No <input checked="" type="checkbox"/></p>

j.) Do you have data access agreements for the use of this secondary data? (If so, please attach these.)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
k.) Is your use of this secondary data compatible with what data subjects/participants agreed that their data should be used for?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
l.) Could this data be linked back to an individual or individuals? If yes, address how securely any personally identifiable data will be transferred to you, and where and for how long it will be stored during or after the research. Who will have access to it?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
19. Publication and dissemination of research data		
How will you disseminate and feedback project outcomes at the end of the research?	Thesis publication Publication in academic publication and journal articles	

SECTION C: Methods and procedures to be used

Method used: Please ensure you have addressed any potential ethical issues related to these methods in Section 14 and in your Participant Information Sheet	Please mark 'X'
1. Analysis of existing records	<input type="checkbox"/>
2. Snowball sampling (recruiting through contacts of existing participants)	<input checked="" type="checkbox"/>
3. Use of casual or local workers e.g. interpreters	<input type="checkbox"/>
4. Participant observation	<input type="checkbox"/>
5. Covert observation	<input type="checkbox"/>
6. Observation of specific organisational practices	<input type="checkbox"/>
7. Participant completes questionnaire in hard copy	<input type="checkbox"/>
8. Participant completes online questionnaire or other online task	<input checked="" type="checkbox"/>
9. Using social media	<input checked="" type="checkbox"/>
10. Participant performs paper and pencil task	<input type="checkbox"/>
11. Participant performs verbal or aural task (e.g. for linguistic study)	<input type="checkbox"/>
12. Focus group	<input type="checkbox"/>
13. Interview	<input checked="" type="checkbox"/>
14. Audio recording of participant (you will generally need specific consent from participants for this)	<input checked="" type="checkbox"/>
15. Video recording of participant (you will generally need specific consent from participants for this)	<input checked="" type="checkbox"/>
16. Photography of participant (you will generally need specific consent from participants for this)	<input type="checkbox"/>
17. Others (please specify below)	<input type="checkbox"/>

SECTION D: Professional guidelines and training		
1. In this section, please mark 'X' against at least one of the following professional guidelines you aim to adhere to. You should use the principles listed in your chosen guideline(s) in conducting your own research. Note: this is not an exhaustive list.		Please mark 'X'
Research specialism/ methodology	Association and guidance document	
Anthropology	Association of Social Anthropologists of the UK and Commonwealth	<input type="checkbox"/>
Computer Sciences	ACM Code of Ethics and Professional Conduct	<input type="checkbox"/>
Criminology	http://www.britisoccrim.org/ethics/	<input type="checkbox"/>
Education	British Educational Research Association Ethical Guidelines for Educational Research	<input checked="" type="checkbox"/>
Geography	Association of American Geographers Statement on Professional Ethics	<input type="checkbox"/>
History	Oral History Society of the UK Ethical Guidelines	<input type="checkbox"/>
Internet-based Research	British Psychological Society: Conducting Research on the Internet Association of Internet Researchers Ethics Guide ACM Code of Ethics and Professional Conduct Also see our Best Practice Guidance on internet-based research	<input type="checkbox"/>
Law (Socio-Legal)	Socio-Legal Studies Association: Statement of Principles of Ethical Research	<input type="checkbox"/>
Management	Academy of Management's Professional Code of Ethics	<input type="checkbox"/>
Political Science	American Political Science Association (APSA) Guide to Professional Ethics in Political Science	<input type="checkbox"/>
Politics	Political Studies Association. Guidelines for Good Professional Conduct	<input type="checkbox"/>
Psychology	British Psychological Society Code of Ethics and Conduct	<input type="checkbox"/>
Social Research	Social Research Association: Ethical Guidelines	<input type="checkbox"/>
Sociology	The British Sociological Association: Statement of Ethical Practice	<input type="checkbox"/>
Visual Research	ESRC National Centre for Research Methods Review Paper: Visual Ethics: Ethical Issues in Visual Research	<input type="checkbox"/>
Other professional guidelines. Please specify the other guidelines used here:		<input type="checkbox"/>

2. Please indicate what training in research ethics (or research methodology) the researchers involved with this study have received, e.g. the title of the course and date completed (online training available at <http://researchsupport.admin.ox.ac.uk/support/training/ethics>), or discussions between researchers and supervisors, if applicable.

Foundation for Educational Research I, Researching Ethically – completed Michaelmas Term 2020

SECTION E: Signatures or email endorsements (The SSH IDREC Secretariat accepts either option below. If you have a [DREC](#), check which signature option it prefers.)

- **Option 1:** Email confirmations from a University of Oxford email address can be accepted. Separate emails should come from each of the relevant signatories as outlined below, indicating acceptance of the relevant responsibilities. **Pasted images of signatures cannot be accepted.**
- **Option 2:** Handwritten (wet-ink) signatures. Please scan them and the rest of the checklist pages to create a single PDF document and email to us.

Please ensure this checklist is signed by:

For staff research:	For student research:
1. Principal investigator	1. Principal investigator (project supervisor)
2. Head of Department (or nominee)	2. Head of Department (or nominee)
	3. Student researcher

1. Principal Investigator signature/supervisor signature (if student research)

I understand my responsibilities as [principal investigator](#) as outlined in the CUREC glossary and guidance on the CUREC website.

I declare that the answers above accurately describe the research as presently designed, and that a new checklist will be submitted should the research design change in a way which would alter any of the above responses so as to require completion of CUREC 2 (involving full scrutiny by an IDREC). I will inform the relevant IDREC if I cease to be the principal investigator on this project and supply the name and contact details of my successor if appropriate.

Signature (or email endorsement using the above declaration):

Print name (block capitals): ...

.....

Date: 8 March 2021

2. Departmental endorsement signature

I have read the research project application named above. On the basis of the information available to me, I:

- (i) consider the principal investigator to be aware of her/his ethical responsibilities in regard to this research;
- (ii) consider that any ethical issues raised have been satisfactorily resolved or are covered by relevant professional guidelines and/or CUREC approved procedures, and that it is appropriate for the research to proceed (noting the principal investigator's obligation to report should the design of the research change in a way which would alter any of the above responses so as to require completion of a CUREC 2 full application);
- (iii) am satisfied that: the proposed project design and scientific methodology is sound; the project has been/will be subject to appropriate [peer review](#); and is likely to contribute to existing knowledge and/or to the education and training of the researcher(s) and that it is in the [public interest](#).

Signed by Head of Department or nominee (example nominees for student research include the Director of Graduate Studies/ Director of Undergraduate Studies):

Signature (or email endorsement using the above declaration):

Print name (block capitals):

Date:

3. Student signature (if student research)

I understand the questions and answers that have been entered above describing the research, and I will ensure that my practice in this research complies with these answers, subject to any modifications made by the principal investigator properly authorised by the CUREC system.

Signature by student (or email endorsement using the above declaration):

Print name (block capitals): ...

Date: 9 March 2021

Dear _____ ,

Title: "What family capital aids rural and urban first-generation college students in China to realize intergenerational mobility in higher education."

The above application (reference number ED-CIA-21-174) has been considered on behalf of the Departmental Research Ethics Committee (DREC) in accordance with the procedures laid down by the University for ethical approval of all research involving human participants.

I am pleased to inform you that, on the basis of the information provided to DREC, the proposed research has been judged as meeting appropriate ethical standards, and accordingly, approval has been granted.

If your research involves participants whose ability to give free and informed consent is in question (this includes those under 18 and vulnerable adults), then it is advisable to read the following NSPCC professional reporting requirements for cases of suspected abuse

http://www.nspcc.org.uk/Inform/research/questions/reporting_child_abuse_wda74908.html

Should there be any subsequent changes to the project which raise ethical issues not covered in the original application you should submit details to research.office@education.ox.ac.uk for consideration.

N.B. Any data collection involving in-person interactions with participants must have an up-to-date COVID-19 fieldwork risk assessment in place. Please refer to the guidance at <https://researchsupport.admin.ox.ac.uk/governance/ethics/coronavirus> as the University's position on conducting in-person research may change.

Good luck with your research study.

Yours sincerely,

Member of DREC

Appendix B Participant Information Sheet

UNIVERSITY OF OXFORD

DEPARTMENT OF EDUCATION

15 Norham Gardens, Oxford OX2 6PY

Tel: +44(0)1865 274024 Fax: +44(0)1865 274027

general.enquiries@education.ox.ac.uk www.education.ox.ac.uk

[PI name] Professor



What family capital aids rural and urban first-generation college students in China to realise intergenerational mobility in higher education.

PARTICIPANT INFORMATION SHEET

Central University Research Ethics Committee (CUREC) Approval Reference: **[ED-CIA-21-174]**

1. Why is this research being conducted?

Based on literature review, there is lack of research about why Chinese first-generation college students can make intergenerational education breakthrough and what family capital aid them to enter top universities in China. Therefore, the aim of this study is to find the family capital which aids rural and urban first-generation students to enrol in top universities in China. The rural-urban similarities and differences in family capital will also be studied. We hope that this research can guide more family to cultivate first-generation college students to realise intergenerational education breakthrough and become reference to university or government when they design policy for first-generation students. The Principal Researcher is _____, who is attached to the Department of Education at the University of Oxford. This project is being completed under the supervision of _____

In this research, we will conduct online interview with you to ask your education experience and your family capital. This should take about 60 minutes. No background knowledge is required. We will use grounded theory to code your transcript and analyse the family capital that has aided you to enter top universities successfully. Only Prof. Simon Marginson and I can access these data.

2. Why have I been invited to take part?

You have been invited because you have met all these criteria below:

- 1) you are the undergraduates or Bachelor's degree earner from "Double First-class" universities in Beijing.
- 2) you are the first university students in your immediate family members
- 2) you elder members of their immediate family have no experiences in higher education, including: parents, grandparents, uncles, aunts and their older brothers or sisters.

3. Do I have to take part?

No. You can ask questions about the research before deciding whether or not to take part. If you do agree to take part, you may withdraw yourself from the study, without giving a reason, by advising me of this decision. The deadline by which you can withdraw any information you have contributed to the research is 1st July 2021.

4. What will happen to me if I take part in the research?

Firstly, you will finish a short online questionnaire about your family background, including: age, your parents' occupation, family annual income, category of Household Registration, your university, your major and an invitation of online interview. Secondly, you will be invited to conduct an online semi-structured interview which is about your education experience to find your family capital aiding you to enter to top university in China.

When you agree, I will talk you through the study procedures and give you the chance to ask any questions. If you are still happy to take part, I will ask you to sign a consent form. If you are happy to take part in the research, you will be interviewed online at Tencent Meeting.

The interview should take approximately 1 hour. You will be offered breaks at regular 10-15mins intervals. You can also ask to pause or stop the interview at any time. With your consent, I would like to video record you because I need to transcript your answers and record your performance during interview.

5. Are there any potential risks in taking part?

The following risks are involved breach of confidentiality. In interview, some experience that you dislike to recall may be asked.

To reduce any potential risks, your personal data will be pseudonymised or anonymised as appropriate. The transcripts will be stored in an encrypted folder. If you feel uncomfortable during interview, you can stop interview and ask to delete the video at any time

6. Are there any benefits in taking part?

There will be no direct or personal benefit to you from taking part in this research.

7. Expenses and payments

There will be no payment for taking part in this study.

8. What happens to the data provided?

The information you provide during the study is the **research data**. Any research data from which you can be identified including age, your parents' occupation, family annual income, category of Household Registration, your university, your major and a transcript from online interview is known as **personal data**.

Personal / sensitive data will be stored in my own mobile hard disk and Baidu Cloud with Encrypted folder. These data will be stored 3 years.

Other research data (including consent forms) will be stored for at least 3 years after publication or public release of the work of the research.

Your personal data may be transferred to, and stored at, a destination outside the UK and the European Economic Area. Identifiable data will be removed whenever possible and any data transfer will be done securely and with a similar level of data protection as required under UK law.

The researcher and supervisor will have access to the research data. Responsible members of the University of Oxford may be given access to data for monitoring and/or audit of the research.

I would like your permission to use direct quotes [attributed to a pseudonym] in any research outputs.

I would like your permission to use anonymised data in future studies, and to share data with other researchers (e.g. in online databases). All personal information that could identify you will be removed or changed before information is shared with other researchers or results are made public

9. Will the research be published?

The research will be written up as a student's thesis.

On successful submission of the thesis, it may be deposited both in print and online in the University archives to facilitate its use in future research. If so, the thesis will be openly accessible.

10. [Where the research is externally funded]: Who is funding the research?

No organisation fund this research

11. Who has reviewed this study?

This study has been reviewed by, and received ethics clearance through, the University of Oxford Central University Research Ethics Committee (Reference number: **ED-CIA-21-174**).

12. Who do I contact if I have a concern about the study or I wish to complain?

If you have a concern about any aspect of this study, please contact
at _____ and we will do our best to answer your query.
If you remain unhappy or wish to make a formal complaint, please contact the Departmental Research Ethics Committee Chair, Prof. Liam Gearon, at liam.gearon@education.ox.ac.uk

13. Data Protection

The University of Oxford is the data controller with respect to your personal data, and as such will determine how your personal data is used in the study.
The University will process your personal data for the purpose of the research outlined above. Research is a task that is performed in the public interest.
Further information about your rights with respect to your personal data is available from <http://www.admin.ox.ac.uk/councilsec/compliance/gdpr/individualrights/>.

14. Further Information and Contact Details

If you would like to discuss the research with someone beforehand (or if you have questions afterwards), please contact:

Department of Education, University of Oxford
15 Norham Gardens, Oxford OX2 6PY
University tel: +44 1865 270000

Appendix C Participant Consent Form

UNIVERSITY OF OXFORD

DEPARTMENT OF EDUCATION

15 Norham Gardens, Oxford OX2 6PY

Tel: +44(0)1865 274024 Fax: +44(0)1865 274027

general.enquiries@education.ox.ac.uk www.education.ox.ac.uk



PARTICIPANT CONSENT FORM

Central University Research Ethics Committee (CUREC) Approval Reference: **ED-CIA-21-174**

What Family Capital Aids Rural and Urban First-generation College Students in China to Realise Intergenerational Mobility in Higher Education

Purpose of Study: The aim of this study is to establish what kind of family capital aids rural and urban first-generation students who enrol in top universities in China, and how much capital. Rural-urban similarities and differences in family capital will also be studied. We hope that this research can guide more families to cultivate first-generation college students who realise the intergenerational education breakthrough and become reference points for university or government when they design policy for first-generation students.

Please initial each box

1 I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2 I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, and without any adverse consequences or penalty.

- | | | |
|------------------|--|---|
| 3 | I understand that research data collected during the study may be looked at by authorised people outside the research team. I give permission for these individuals to access my data. | <input style="width: 60px; height: 20px;" type="checkbox"/> |
| 4 | I understand that this project has been reviewed by, and received ethics clearance through, the University of Oxford Central University Research Ethics Committee. | <input style="width: 60px; height: 20px;" type="checkbox"/> |
| 5 | I understand who will have access to personal data provided, how the data will be stored and what will happen to the data at the end of the project. | <input style="width: 60px; height: 20px;" type="checkbox"/> |
| 6 | I understand how this research will be written up and published. | <input style="width: 60px; height: 20px;" type="checkbox"/> |
| 7 | I understand how to raise a concern or make a complaint. | <input style="width: 60px; height: 20px;" type="checkbox"/> |
| 8 | I consent to being audio recorded | <input style="width: 60px; height: 20px;" type="checkbox"/> |
| 9 | I consent to being video recorded | <input style="width: 60px; height: 20px;" type="checkbox"/> |
| 11 | I understand how audio recordings / videos / photos will be used in research outputs [please delete as appropriate] | <input style="width: 60px; height: 20px;" type="checkbox"/> |
| 12 b | I agree to the use of pseudonymised quotes in research outputs | <input style="width: 60px; height: 20px;" type="checkbox"/> |
| 13 | I agree to take part in the study ¹ | <input style="width: 60px; height: 20px;" type="checkbox"/> |
| Optional: | I agree for research data collected in this study to be given to researchers, including those working outside of the UK and the EU, to be used in other research studies. I understand that any data that leave the research group will be completely anonymised so that I cannot be identified. | <input style="width: 60px; height: 20px;" type="checkbox"/> |

	<u>dd / mm / yyyy</u>	
Name of Participant	Date	Signature

	<u>dd / mm / yyyy</u>	
Name of person taking consent	Date	Signature

Appendix D Questionnaire

1. Are you the first university students in your family?

Yes No

2. Your age

3. Your gender

F /M

4. your category of Household Registration

agricultural/ non-agricultural

5. What is your university?

6. What are your parents' occupation?

Father:

Mother:

7. Your father's educational background

8. Your mother's educational background

9. Your annual household income?

10. What is your major?

11. The location of your elementary school?

Rural/non-Rural

12. please type number "1" (this question aims to make sure that the informants do not fill in the questionnaire haphazardly)

13. We hope to do further online interview with Tencent meeting to learn more about your success in entering top universities. Would you like to attend it? If so, please type your email or Wechat

Appendix E Semi-structured Interview Outline

1. The beginning question: **Compare with your neighbourhoods, you enter the Double-first Class. How do you explain your success?**

2. If they do not mention:

Did your family impact you?

If they mention their parents or family, this question will be asked:
How did they do to make you understand the importance of university?

3. Then, try to ask more details:

For instance: **What experiences have impressed you most in your time with your parents?**



Which behaviours/words have the greatest impact on you?

(If they mention value/emotion/encourage/brief/other cognitive action gained from their parents, I will make them try to link these with at least one behaviour or action of their parents)

4. To learn more detail, **I will play their “children” and make them to “teach” me like their parent, in order to learn how their parents impact them.**

5. I will ask some questions about parents’ investment in education if they do not mention:
Whether your parents try to invest in your education and invest in what aspects?

6. Further questions about other factors:

(1) whether other members of the family (extended family) and surrounding neighbours have positive effects on your entering university

(2) whether school and teacher play important role in aiding you enter universities.



If so, the question: **how your parents communicate with your teacher?**

(3) Whether parents aid you to join in Extra-curricular tutorial? Do this contribute to your success?

(4) Whether parent’s friends impact you to enter top universities?