Family background, academic choices and projects of Brazilian and Chinese college students*

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Lucélia de Moraes Braga Bassalo♣

Abstract

Despite all the differences between BRICS countries, some similarities stand out, as the expansion of higher education in Brazil and China in the last decades. Both countries invested in educational policies and created new programs in science, technology, and innovation to promote socio-economic development. This expansion was responsible for a change in the socioeconomic profile of students who entered universities in the 2000s. This article analyzes the family background of students considering the education level of their parents and discusses aspects related to the academic path of students and their projects after they attain their bachelor’s degree. The data originated from a survey conducted in 2012 by the China Youth and Children Research Center (CYCRC), the China Youth and Children Research Association (Cycra), the Brazilian Institute for Applied Economic Research (Ipea), and by the Brazilian Society of Sociology (SBS). There is not much literature available on the influence of the educational and family background on academic choices and projects for the future of students, on aspects that are taken into account at the time they choose their degree and respective profession. In this respect, this article aimed at filling this gap and raising issues for future studies and reflections. However, the analyses also showed limits that are characteristic of comparative research if we do not want to incur the risk of producing generalized statements and of strengthening stereotypes of a culture or social environment.

Keywords: Higher education, social mobility, Brazilian college students, Chinese college students.

* This paper is a modified version of the article from Weller, Weidong & Bassalo published in Portuguese and Mandarin in Dwyer et al., 2016.

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INTRODUCTION

The relationship between poverty and education level, the impact of increased years of education on higher salaries, as well as the effects of the education level on life quality are issues that have been discussed by researchers in Brazil and other countries (Cacciamali, 2002; Manso; Barreto; Franca, 2010). Likewise, studies on family background have shown that children of mothers with more education achieve better results in national tests that those of women with a lower education level. At the same time, children of parents with lower education level are more likely to lag behind at school and have a grade-age mismatch (Curi; Menezes-Filho, 2008; Machado; Gonzaga, 2007). The awareness about the role of education in the construction of society has led, both in Brazil and in China, to government actions designed, among other aspects, to achieve compulsory education, decrease illiteracy rates, increase access to schools at all levels, as well as to increase enrollment in higher education. In Brazil, enrollment in higher education rose more than 100%, from 3,036,113 (around 3 million) in 2001, to 7,037,688 (7 million) in 2012 (Inep, 2012). In China, the first decade of the new millennium saw a three-fold increase in enrollment in undergraduate programs, going from 9,097,300 (around 9.1 million) in 2000 to 32,209,760 (32.2 million) in 2010 (EIC, 2011).

The expansion of the higher education institutions, as well as the diversification of types of financial support provided to students in both countries have led to a change in the socio-economic profile of the students who entered universities starting from the year 2000, consisting mainly of young people aged between 18 and 24 years. This article analyzes the family background of students considering the education level of their parents and discusses aspects related to the academic path of students and their projects after they attain their bachelor’s degree. The data originated from a survey conducted by the China Youth and Children Research Center (CYCRC), the China Youth and Children Research Association (Cycra), the Brazilian Institute for Applied Economic Research (Ipea), and the Brazilian Society of Sociology (SBS). In 2012 a paper-and-pencil questionnaire was administered to approximately 4,200 college students from 12 universities in the cities of São Paulo, Brasília, Beijing and Shanghai. It was a stratified random sampling with a proportional allocation of students per major and their field of study in each university. It is important to mention that the students randomly selected were between 17- and 24-years old and belonged to the second or third academic year.¹

¹ For more details see: Dwyer, 2015; Dwyer et al., 2016; Shuguang et al., 2016.
FAMILY BACKGROUND OF COLLEGE STUDENTS

In times of mass expansion of higher education in both countries it is crucial, in our opinion, to understand the family and social background of the students. Therefore, in this section we will look at aspects related to the education level, field of activity and professional status of the parents of students.

Table 1 - Education level of the parents

<table>
<thead>
<tr>
<th>Education level</th>
<th>Brazil</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mother</td>
<td>Father</td>
</tr>
<tr>
<td>Illiterate</td>
<td>0,3</td>
<td>0,3</td>
</tr>
<tr>
<td>Less then 8-9 years school education</td>
<td>9,0</td>
<td>9,4</td>
</tr>
<tr>
<td>Achieved compulsory education</td>
<td>4,4</td>
<td>5,8</td>
</tr>
<tr>
<td>Went to high school but didn't finish</td>
<td>5,1</td>
<td>5,9</td>
</tr>
<tr>
<td>Graduate from high school</td>
<td>28,5</td>
<td>26,5</td>
</tr>
<tr>
<td>Went to college but didn’t finish</td>
<td>7,2</td>
<td>9,8</td>
</tr>
<tr>
<td>Graduate from college</td>
<td>29,3</td>
<td>27,3</td>
</tr>
<tr>
<td>Have a Master or PhD</td>
<td>15,3</td>
<td>12,3</td>
</tr>
<tr>
<td>Don’t know or did not respond</td>
<td>0,8</td>
<td>2,6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100,0</strong></td>
<td><strong>100,0</strong></td>
</tr>
</tbody>
</table>

Source: Ipea, SBS, CYCRC & Cycra

According to data about the education level of the parents of college students (Table 1), 44.6% of Brazilian mothers attained a bachelor’s degree or graduate degree, whereas among the fathers of the students this percentage reaches 39.6%. Parents who have a high school diploma or some college education
Are the second most representative group, accounting for 35.7% of the mothers and 37.1% of the fathers of students. In the third group, consisting of mothers and fathers who have attained the minimum education level set forth in the Brazilian National Education Guidelines (9.394/1996) we found 9.5% of mothers and 11.7% of fathers with an elementary school degree or some high school education. The fourth group consists of mothers and fathers with an education level below that established by the Education Guidelines, accounting for 9.3% and 9.7% of the sample, respectively.

In China, the education level of the parents appears also to be a determining factor for their children to enter university. The largest group of Chinese students has mothers and fathers who have a high school diploma or who have some college education, representing 49.7% and 46.6%, respectively. In the second group, 32.4% of mothers and 39.1% of fathers have a bachelor’s degree. The third group, consisting of students whose mothers and fathers have the minimum compulsory education has a percentage similar to Brazil for the mothers (9%); fathers with the minimum education level account for 8.2%, thus 3.5% below the level found for the fathers of Brazilian students in this group. The figures for the last group, consisting of mothers and fathers who have not attained the compulsory basic education level, are below those found for their Brazilian counterparts, with 5.7% of the mothers and 4% of the fathers. Additionally, we found that the percentage of illiterate mothers and fathers (1.4% and 1.2%, respectively) is higher than among Brazilian college students (0.3%).

An aspect that stands out is that in China fathers are more likely to have access to higher education and to continue with graduate education than mothers. In Brazil, the situation is the opposite, i.e., a higher number of mothers have a bachelor’s or graduate degree. These data seem to indicate that the policies related to the expansion of higher education in both countries have reached the previous generations and genders differently: the achievement of higher education shows a gender difference in both countries, with Chinese fathers and Brazilian mothers attaining more years of education.
This comparison shows that the number of Brazilian couples with the same education level is significantly smaller than the number of couples with different education levels. The majority of parents of Brazilian college students have different education levels, with multiple characteristics, such as: father who is a high school graduate and mother with a bachelor’s degree, father with a bachelor’s degree and mother with a high school diploma, mother with a bachelor's degree and father with an elementary education degree, etc.

The families of Chinese students also have characteristics similar to those of their Brazilian counterparts, i.e., most couples have different education levels, as shown in graph 2.

Source: Ipea, SBS, CYCRC & Cycra.
Graph 2: China: couples with the same education level and different education level (in %)

Source: Ipea, SBS, CYCRC & Cycra.

The percentage of Chinese college students coming from families where both parents have an elementary education degree or some elementary education accounts for 5% of the total sample, thus 2.3% above their Brazilian counterparts. At the other end of the educational spectrum – mothers and fathers with a graduate degree – we found the opposite situation, i.e., only 1.8% of Chinese students live in families with these characteristics, 3.2% below Brazil. In China, the expansion of graduate education is more recent than in Brazil, which may explain this fact. However, if we look at the data on the number of mothers and fathers with identical education level, either high school or higher education, we see that percentages are well above the Brazilian reality: 35.2% of Chinese couples have a high school diploma or some high school education and 21.7% have a bachelor’s degree or at least some college education (respectively 17.5% and 8.8% above the Brazilian average). Therefore, we can argue that there is less heterogeneity among Chinese couples regarding their education level than in Brazil.
The university system in both countries does not take many students whose mothers and fathers have a low education level. Although there are differences between China and Brazil regarding the education level attained by the father and mother of the students, most couples with the same education level in both countries belong to the group who has a high school diploma. In second place, in both countries, are the couples where both partners have a bachelor’s degree. The difference is found in the third and fourth places, since in Brazil there are more couples with graduate and elementary education degrees, respectively and in China this relationship is reverse, where in third place we have the couples with elementary education and then couples with graduate degrees.

ACADEMIC PATHS TAKEN BY COLLEGE STUDENTS

In Brazil, although some universities are already adopting the National High School Exam (Enem) as an admission test, the entrance test called vestibular was still the main method adopted by the universities in 2012, the year when the research was conducted. The competition for a place in highly prestigious programs can reach an average of eighty to one hundred applicants for one place. The most competitive degrees in Brazilian public universities are the following: medicine, law and international relations (Weller, 2008).

The main procedure for admission to higher education in China, which has the world's largest education system, is a National College Entrance Examination taken at the end of the 12th grade (in June), known as gaokao. According to Yingshuang (2016, p. 38), it is a “relatively fair, unbiased and objective form of admission”.

The gaokao started being designed in 1952 and is considered the first standardized education test in the world (cf. Muthanna; Sang, 2016). It was first implemented between 1959 and 1966. In this respect, for many students, admis-

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2 More recently other forms of admission have been adopted such as the Independent Freshman Admission - IFA (cf. Liu et al., 2014).
sion to a top university is something that is planned by the parents since they are children. Despite of the expansion of higher education institutions, competition for admission to the best universities favors students who could take supplementary or private tutoring, a phenomenon Mark Bray calls shadow education (Bray, 2007). A similar situation is found in Brazil with the private courses designed to prepare students for college admission tests (vestibular) or for the National High School Exam (Enem). The education model focused on exams, in spite of criticisms that state, among other things, that it has been restraining creativity and the development of critical thinking of future generations, seems to be far from being abandoned or replaced by other forms of admission to higher education in both countries (Kirkpatrick and Zhang, 2011).

Reasons to choose a degree

The question related to the reasons why students choose their college degree was framed so that they could mention up to three items, without having to place them in any particular order of priority. No gender differences were found in both countries regarding the main reasons pointed out by students for choosing their degree (Table 2).

Enjoying the major, greater professional opportunities and importance of the respective profession for society were the reasons most frequently mentioned by young Brazilian college students. However, some differences were found between the choices of both genders: enjoying the major and the importance of the profession for society were more often mentioned by female students. More professional opportunities and economic advantages were more frequently mentioned by male students. Other reasons representing around 10% of the sample for both genders are related to family influence and job security.

The reasons most frequently cited by Chinese students were the fact that they liked the profession, more professional opportunities and family influence. The items chosen also vary according to gender: more female students mentioned professional opportunities and family influence; male college students had the highest percentage regarding the importance of the profession for society, while job security was most often cited by female students.
Table 2 – Reasons to choose a bachelor’s degree (In %)

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Brazil</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Influence of the parents</td>
<td>10,3</td>
<td>9,9</td>
</tr>
<tr>
<td>More professional opportunities</td>
<td>40,0</td>
<td>47,9</td>
</tr>
<tr>
<td>I like this Major</td>
<td>71,1</td>
<td>67,1</td>
</tr>
<tr>
<td>It’s a prestigious profession</td>
<td>6,6</td>
<td>8,3</td>
</tr>
<tr>
<td>It’s a secure profession</td>
<td>7,7</td>
<td>10,0</td>
</tr>
<tr>
<td>Economic advantages</td>
<td>7,4</td>
<td>15,2</td>
</tr>
<tr>
<td>Important profession for society</td>
<td>29,4</td>
<td>22,6</td>
</tr>
<tr>
<td>Previous work experiences in this area</td>
<td>6,6</td>
<td>7,3</td>
</tr>
<tr>
<td>Some of my friends also chose it</td>
<td>0,9</td>
<td>1,4</td>
</tr>
<tr>
<td>Allows me to work and study</td>
<td>5,2</td>
<td>4,2</td>
</tr>
<tr>
<td>It’s the course that I can afford</td>
<td>2,6</td>
<td>2,2</td>
</tr>
<tr>
<td>Easier to pass entrance exams</td>
<td>2,7</td>
<td>2,6</td>
</tr>
</tbody>
</table>

Source: Ipea, SBS, CYCRC & Cycra.
Note: Each respondent could mention up to three items; this is why percentages do not add up to 100%

Level of satisfaction and desire to change their major

Regarding the answers of the students to the question whether they were pursuing a bachelor's degree program that was their first choice when they first decided to go to college, what stands out is the fact that around 74% of Brazilian students, both male and female, were admitted to a major that was actually their first choice. We found that 24% of university students do not follow a linear path between their high school graduation and higher education.
Similarly to what happens in Brazil, most Chinese university students stated that they are attending the degree that was their first choice and this applied specially to male students.

Although most Brazilian students did not show any interest in changing their major, a larger number of female students were willing to change theirs if they had a chance. This difference is partially explained by the data shown in Table 4, which shows a higher percentage of male students who have already changed their college degree.

### Table 3 – First choice in the university entrance examination (in %)

<table>
<thead>
<tr>
<th></th>
<th>Brazil</th>
<th></th>
<th>China</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Yes</td>
<td>74,4</td>
<td>74,2</td>
<td>67,7</td>
<td>74,8</td>
</tr>
<tr>
<td>No, It wasn’t my first choice</td>
<td>15,3</td>
<td>12,0</td>
<td>23,4</td>
<td>16,7</td>
</tr>
<tr>
<td>No, I started studying another subject</td>
<td>8,4</td>
<td>12,4</td>
<td>6,4</td>
<td>4,2</td>
</tr>
<tr>
<td>No, I have already completed another degree</td>
<td>1,6</td>
<td>1,2</td>
<td>1,3</td>
<td>2,2</td>
</tr>
<tr>
<td>Not respond</td>
<td>0,3</td>
<td>0,3</td>
<td>1,2</td>
<td>2,0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100,0</strong></td>
<td><strong>100,0</strong></td>
<td><strong>100,0</strong></td>
<td><strong>100,0</strong></td>
</tr>
</tbody>
</table>

Source: Ipea, SBS, CYCRC & Cycra.

### Table 4 – Interest in changing the major

<table>
<thead>
<tr>
<th></th>
<th>Brazil</th>
<th></th>
<th>China</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Yes</td>
<td>18,1</td>
<td>14,8</td>
<td>38,7</td>
<td>25,4</td>
</tr>
<tr>
<td>No</td>
<td>81,3</td>
<td>85,1</td>
<td>60,3</td>
<td>72,5</td>
</tr>
<tr>
<td>Not respond</td>
<td>0,6</td>
<td>0,2</td>
<td>1,0</td>
<td>2,2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100,0</strong></td>
<td><strong>100,0</strong></td>
<td><strong>100,0</strong></td>
<td><strong>100,0</strong></td>
</tr>
</tbody>
</table>

Source: Ipea, SBS, CYCRC & Cycra.
In China, most students, both female and male, were not interested in changing their major (table 4). Like in Brazil, Chinese women represented the largest number of students who would change their major if they had an opportunity. This statement corroborates the pattern shown in table 3, in which most students that have already taken another bachelor’s degree are female, and they were also the ones who have failed to be admitted to another bachelor’s degree program.

We should stress the fact, that in China the family organization model and the weight of a culture that is over four thousand years old make decisions regarding the choice of the college degree more complex than in Brazil. In this respect, it is not uncommon that the first choice of many young college students results from a decision taken by the whole family, without necessarily corresponding to the interests and motivations of the student. Since the choice made by the parents has a significant weight and takes into account the profession and future of their son or daughter, the survey data showed that after entering the university a significant number of students realize that the degree they have chosen does not correspond to their personal expectations or professional achievement. However, finding a good job with a stable salary is important for college students and their families, since unemployment rates among young people with a college degree are also on the rise in China.

In both countries, male students are more satisfied with the major they chose, although the percentage is greater among Brazilian students. The number of women interested in changing their major is larger than the number of men in both countries. Data point to a gender bias that impacts women and men differently in the two countries, particularly among students who failed to be admitted to the major of their choice.
PROJECTS BY BRAZILIAN AND CHINESE STUDENTS AFTER THEY GRADUATE FROM COLLEGE

According to Leccardi (2005, p. 35), the “present is not only a bridge between the past and the future, but a dimension that prepares the future”. We can find commonalities and differences between generations and differences in the way they communicate in order to convey, accept, resist or reject meanings that circulate in a given context, identifying differences and similarities among young people from the same generation.

Project – according to the notion conceived by Alfred Schütz – is a conduct that is organized to reach specific goals which, in turn, is related to the field of possibilities an individual or group has to put them into practice (Schütz, 1979; Velho, 1994). The pursuit for higher education and the attainment of a college degree can be described as an organized conduct through which students expect to enter the labor market in the case of those who only study. For those who already have a job, a college degree can represent a possibility of changing job or a promotion and better salaries.

After graduating, students could choose up to two subjects for their project, without having to prioritize them, as shown in graphs 3 and 4.

Graph 3 – Brazil: projects after finishing college

![Graph 3](image-url)
What called our attention in Brazil was the large number of students who stated that they would proceed with their studies. The second choice respectively among female and male college students was to work for the public sector, followed by working for the private sector, start their own business and undertake other initiatives. Other prospects were mentioned, such as living some time abroad or simple traveling abroad.

Although working for the public sector was the most frequently cited option by both female and male students, young male students seem to feel more confident regarding building a professional career in the private sector or starting their own business. Young women, in turn, seem to be concerned with other situations they will experience in the future. Female students are more interested in living in another country for some time or simply traveling abroad.

Taking another degree does not seem to be a priority for students any longer. In general, young people seem to be aware of the fact that the requirement today is to proceed with studies at the graduate level.

Graph 4 – China: projects after finishing college

![Graph 4 Image]

*Source: Ipea, SBS, CYCRC & Cycra.*

*Note: Each respondent could mention up to three items; this is why percentages do not add up to 100%*
Pursuing a graduate degree was the number one choice among Chinese students (Graph 4). In second place, came work for the public sector, followed by work for the private sector, undertake other initiatives or start their own business or partnership. Other prospects such as living some time abroad, take another college degree and travel abroad were not chosen often by the Chinese students.

Thus, we found that this generation of Chinese and Brazilian students assigns great value to a higher level of education as shown by the large percentage of students that choose to pursue a graduate degree. However, choices not directly related to finding a job, such as taking a second degree, living or traveling abroad, are 10% more frequent among Brazilian university students than among their Chinese counterparts.

**Final remarks**

There is not much literature available on the influence of the educational and family background on academic choices and projects for the future of students, on aspects that are taken into account at the time they choose their degree and respective profession. In general, our universities do not assess the level of satisfaction of students with their respective majors. Aspects of the daily life of university students, their involvement in projects and academic and non-academic activities that go beyond the classroom are not well-known and studied in research on higher education. In this respect, this article aimed at filling this gap and raising issues for future studies and reflections. However, the analyses also showed limits that are characteristic of comparative research if we do not want to incur the risk of producing generalized statements and of strengthening stereotypes of a culture or social environment (see Weller, 2017).

The education level of the parents of the survey participants – both in Brazil and in China – has a positive impact on their access to the university. We found that only a small percentage of students had parents who were illiterate or who only had basic education. Additionally, most of these young people belong to a generation that managed to highly improve their education level. These characteristics possibly influence other types of opportunities and life decisions made by
students related to the paths they will take and the projects they will undertake in the future.

We can claim that the students assign great value to continue their studies after they graduate from college. It seems that the governmental policies by the in both countries have resonated with this young generation, since continuing with their studies after graduation is a project cited by most students participating in the research, which reaffirms their distinct status vis-à-vis their family background, making them part of the generation that has had the greatest access to higher education in the history of both countries.

The comparative research with young students aged between 18 and 24 years showed similarities and differences among those facing changes and challenges regarding their professional future. In both countries, a significant percentage of students said that they intend to find a job, either at the public or private sector. Among these students, the security provided by the public sector seems to be a central concern, since this was the second choice in both countries.

A larger number of Brazilian female students want to proceed with their studies or live some time abroad when compared with their counterparts in China and a similar trend was found among Brazilian and Chinese male students. Still regarding traveling abroad, more Brazilian female students than Chinese female students included this choice as part of their future projects and the same was true of young Brazilian men vis-à-vis their Chinese counterparts. Thus, it seems that looking at the youth just as an age group or a phase in life tends to disregard their present, their desires and projects.

Since the research involved different researchers and political actors, the pursuit of understanding – not only of one’s own point of view but also of the point of view of the other – represented a constant challenge within many lessons for the authors of this article. Research on college students can contribute to a better understanding of the similarities and differences between Brazil and China. Knowing the profile of the students and understanding their needs is key to advance the proposals for expansion and internationalization of universities in the BRICS countries (Brazil, Russia, India, China and South Africa). Comparative
studies like this can help us to understand the young population that will achieve leading positions in future. It challenged us to recognize problems in the university systems of both countries, especially for the first-generation students of non-academic families, and to develop possible strategies to overcome these barriers.

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