

Youth and higher education in Brazil

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Abstract

This article presents an educational profile of Brazilian youth population aged 18 to 24 years old, highlighting inequalities according to gender, race, income levels, place of residence (urban/rural), and main regions of the country, as well as an outline of institutions and students enrolled in higher education for the year 2012, aiming to allow for an assessment of the challenges posed to the fulfillment of goals established by the 2011-2020 PNE and to reducing inequalities in access to higher education. The inequalities in access to higher education shown in this article point to the need for investments to include a larger proportion of youth at this level of education.

Keywords: Inequalities in higher education. Brazilian youth. Access to higher education. Racial inequalities.

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Introduction

From the middle of the twentieth century, Brazilian population underwent major transformations, marked by demographic transition and an accelerated urbanization process. Brazil's demographic profile switched from a very young population, with median age of 18 and 42% of the population aged under 15 in the 1950s and 1960s, to a rapidly aging population. In 2010, the median age of the Brazilian population reached 27 years and the proportion of people under the age of 15 decreased to 24%. Consequently, there has been a substantial increase in working age and elderly populations. According to the 2010 demographic census, 65% of the Brazilian population was aged between 15 and 59, and 11% were over 60 years old (Vasconcelos; Gomes, 2012). The distribution of population over the territory has also suffered great changes: in 1950, 36% of the population resided in urban areas; in 2010, this percentage has risen to 84% (IBGE, 2010).

In this sixty-year period, the Brazilian population almost quadrupled in size: from 51.9 million in 1950 to 190.7 million in 2010. The youth population, aged 15-24, followed the pace of the total population growth up to the year 2000. Between 2000 and 2010, the growth of this age group halted, with its size remaining at about 34 million people. This halt was due to the drastic drop in fertility levels observed throughout the country, especially in the last three decades. The number of children per woman decreased from 4.4 in 1980 to 1.9 in 2010 (Vasconcelos; Gomes, 2012).

The current moment of demographic transition provides the country with very favorable conditions, known as demographic bonus (Alves, 2008). This special moment, which will last approximately another 20 years, is characterized by a lower dependency ratio regarding the working-age population (15 to 59 years). This means that the population at potentially productive age is relatively larger than those in the child-juvenile and elderly age groups. Investments in education and health in early life are lower, and those relating to population aging, such as health, pensions, and welfare, are not yet too costly for society.

However, recent population projections made by the Brazilian Institute of Geography and Statistics (IBGE) predict a much older population in the coming years,¹ with a reduction in size starting at the 2040s (IBGE, 2013). As the population ages, the dependency ratio tends to increase, and the “window of opportunity” will close. In this scenario of increasing dependency, high levels of education of the working-age population will contribute to higher rates of economic productivity, so that the challenges of aging populations can be more easily addressed.

In this sense, the 2011-2020 National Education Plan (*Plano Nacional de Educação* – PNE), proposed by the Brazilian federal government and sent as a bill for the National Congress in 2010, sets ambitious goals to increase and improve the education of children and youth, who will make up the potentially productive population segment in future years (Brazil, 2010). Government investment and changes in legislation since 1996 (Brazil, 1996; 2001), with the approval of the National Educational Bases and Guidelines Law (*Lei de Diretrizes e Bases da Educação Nacional* – LDB), have been focused on the universalization of compulsory and free basic education in

According to IBGE projections, by 2040, 24% of the Brazilian population will be 60 years old or over (IBGE, 2013).

the country in its three levels – pre-school, elementary, and high school –, seeking to ensure school attendance of children and youth aged 4 to 17 years old. At age 18, a young person would have completed basic education and would be ready to enter higher education.

With regard specifically to higher education, the 12th Goal of PNE is “to raise gross enrollment rate in higher education to 50% and the net rate to 33% of the population aged between 18 and 24, ensuring the quality of educational offer” (Brazil, 2010). Notwithstanding the recent significant expansion of higher education in the country, fostered by federal government assistance programs such as the University for All Program (*Programa Universidade para Todos* – Prouni) in the private sector, and the University Reform Program (*Reforma Universitária* – Reuni) in the public sector (Inep, 2012), there is still a long way to go for fulfilling the goal proposed by PNE, as can be seen from data presented in this article.

Besides the quantitative goal of expanding higher education, also at issue is the reduction of inequality of access based on socioeconomic conditions. This article presents an educational profile of Brazilian youth population aged 18 to 24 years old, and highlights inequalities according to gender, race, income levels, place of residence (urban/rural), and main regions of the country, based on data from the 2010 demographic census. Also, an outline of institutions and students enrolled in higher education for the year 2012² is presented, based on data from the census of higher education of the National Institute of Studies and Educational Research (Inep) of the Brazilian Ministry of Education (MEC).

² In 2012, a comparative study on Chinese and Brazilian university students was conducted.

1 Socioeconomic and demographic characteristics and access to higher education of youth aged 18-24 in Brazil

In 2010, the demographic census (IBGE, 2010) accounted for approximately 24 million youth aged between 18 and 24, with a distribution over the territory similar to that of total population: 85% in urban areas, and 54% in the most developed regions of the country – Southeast and South. In this age group, there is an equal distribution according to gender, and a higher proportion of Mixed Race (*pardos*) and Black youth (54%) as compared to White (43%).

Regarding levels of education, 53% of the young people had not completed high school, being therefore not qualified for entering higher education (Table 1). It should be noted that one in four youth had not even completed elementary school, which certainly poses considerable limitations to access the labor market. On the other hand, 28% of the youth had completed high school, but had not pursued further education. The obstacles to access public higher education and the lack of resources for attending private institutions certainly hinder the permanence of these young people in the education system.

As for higher education, only 19.0% (14.5% in progress and 4.2% completed) of people aged 18-24 had reached this level of studies (Table 1). This percentage, an approximation of the net enrollment rate in higher education, is much lower than the 33.0% established by the 2011-2020 PNE. However, as can be seen below, this proportion presents significant differences when disaggregated by socioeconomic and demographic characteristics.

Residing in urban areas greatly favors youth's access to school and higher education. Among residents of urban areas, 21.2% achieve higher education, compared to only 4.6% of residents of rural areas. It is worth noting that among the latter, 47.0% had not finished elementary school in 2010.

Table 1 - Brazil and regions: socioeconomic and demographic characteristics of youth aged 18-24, by education level (2010)

Characteristics	<i>n</i>	Basic education (%)			Higher education	
		Elementary (Not completed)	Elementary (completed)	Highschool (completed)	Higher ed. (not completed)	Higher ed. (completed)
Brazil	23,873,783	25.8	27.5	28.0	14.5	4.2
Area of residence						
Urban	20,263,076	22.0	27.1	29.6	16.5	4.7
Rural	3,610,710	46.7	29.4	19.3	3.6	1.0
Region						
North	2,179,363	35.3	28.9	23.7	9.8	2.4
Northeast	7,027,473	34.4	27.8	25.9	9.9	2.1
Southeast	9,603,118	19.8	27.0	31.2	16.6	5.5
South	3,262,617	20.0	27.7	27.4	19.5	5.4
Midwest	1,801,158	23.0	26.9	26.1	18.7	5.3
Gender						
Male	11,960,510	30.1	28.5	25.6	12.6	3.1
Female	11,913,277	21.4	26.4	30.4	16.5	5.2
Age						
18	3,370,998	27.7	41.5	19.5	10.7	0.6
19	3,261,924	25.8	32.1	25.6	15.5	1.0
20	3,392,380	25.3	27.6	28.1	17.4	2.7
21	3,425,855	24.7	24.9	30.0	17.6	2.7
22	3,505,030	25.6	23.4	30.5	15.6	5.0
23	3,416,675	25.6	22.1	30.9	13.4	8.0
24	3,500,924	25.7	21.4	31.4	11.7	9.9
Race						
White	10,654,189	18.1	24.7	29.0	21.5	6.6
Black	1,856,407	32.8	30.0	27.2	8.0	2.0
Asian	275,878	22.7	25.9	27.4	18.5	5.5
Mixed	10,978,045	31.8	29.8	27.4	8.9	2.2
Indigenous	103,557	55.3	24.9	14.6	4.5	0.7
<i>Per capita household income (minimum wage)</i>						
<1	13,284,566	35.1	31.9	26.2	5.7	1.1
01/mar	7,638,549	12.1	23.7	35.4	22.5	6.3
03/mai	1,033,075	4.1	12.5	20.2	45.6	17.3
05/set	570,682	3.3	9.6	13.1	52.7	21.3
10+	203,232	3.6	9.1	11.6	52.8	22.8

Source: IBGE (2010).

Regional inequalities are also observed: the proportion of young people who have access to higher education is larger in the Southeast, South, and Midwest regions than in the North and Northeast regions. In the latter two, 12% of youth had achieved higher education, compared to 22% in the Southeast, 24% in the Midwest and 25% in the South (Table 1). The percentages of conclusion for primary and secondary education are added to these differences: in the North and Northeast, more than 60% of young people did not meet the minimum requirement to enter higher education, 35% of which had not finished elementary school. In the Southeast and South regions, these proportions are around 47% and 20%, respectively.

Regarding disaggregation by sex, women pursue education longer than men; among women, 21.7% have achieved higher education, while for men this proportion drops to 15.8%. These differences can also be observed at the elementary school level: 30.1% of young males had not completed this level of education, compared to 21.4% of females.

The distinct profiles of schooling according to age reveal the transition between educational stages. At the ages of 18 and 19, young people are still in process of finishing high school and are seeking entry into higher education. As we look at older ages, the proportion of graduates from higher education increases, showing possible educational trajectories of later generations. It should be noted, however, that the proportion of young people who do not complete elementary school is stabilized at around 25.5%, which means that youth faces difficulties in making up for lost elementary school years after dropping out at a very young age.

As to race, the huge disparities in both schooling profiles and probability of achieving higher education are unambiguous. Young white people present much higher levels of education than mixed race, black or indigenous people. Among whites, 28.1% had achieved higher education,

compared to 11.1% among mixed race, 10.0% among blacks and only 5.2% among indigenous people. Those of Asian origin have schooling profiles closer to whites, with 24.1% in higher education. Among mixed race and blacks, more than 60.0% have not completed high school, a minimum requirement for access to higher education, and among indigenous people, this proportion rises to 80.0%.

Even more dramatic are the differences between schooling profiles according to income levels. Among young people with a *per capita* household income below the minimum wage (about USD \$ 295), corresponding to 58% of Brazilian youth, the prospects of achieving higher education are very little. Only 6.7% out of them had reached or completed this level of education in 2010. As to the income bracket with a *per capita* household income of three or more minimum wages, more than 60% had achieved higher education, and this proportion rises to more than 70% among those with *per capita* household income higher than five minimum wages. It becomes clear that the socioeconomic level of the family is one of the main factors for youth's success in school and their access to higher education.

In short, access to higher education is very unequal in Brazil, being more likely among youth living in urban areas, in the Southeast, South or Midwest regions, who are female, white or Asian, with a *per capita* household income higher than one minimum wage. Among youth with these characteristics, 25.4% attended higher education and 9.3% had completed it. On the other extreme are mixed race, black, or indigenous youth, with a *per capita* household income below a minimum wage, which represent 38.0% of the youth between the ages of 18 and 24 in the country. For these young people, higher education is a very distant dream, which is achieved by few: less than 4.1% of these youth attended higher education in 2010, and only 0.7% had completed it.

It is evident, therefore, that young people who attend higher education constitute a small part of the Brazilian youth, with a predominance of residents of urban areas and people from higher social classes.

2 Socioeconomic characteristics of students and higher education institutions in Brazil

Although access to higher education is unequal and much more likely among young people with higher levels of income, the growth in the number of enrollments in the last two decades is undeniable. From 1.5 million, in 1991, it raises to 6.4 million, in 2010, and to 7.1 million, in 2012 (Inep, 2012), reaching a gross enrollment rate of around 30%, although still far from the 50% rate established by the 2011-2020 PNE.³

According to the census of higher education, 2,416 educational institutions offered higher education courses in the country in 2012, among which 13.0% were public, 46.0% private non-profit and 41.0% private for-profit. These institutions offered 31,454 courses, 35.0% out of them offered by public institutions, which accounted for 27.0% of enrollments (Table 2). Hence the importance of the private sector in Brazilian higher education, which represented more than 70.0% of enrollments in 2012. This importance is even greater when considering distance education, which represents 15.8% of enrollments in higher education. In this modality, 59.0% of the enrollments were concentrated in private for-profit institutions, a fact that alerts for an evaluation of the quality of distance education offered by these institutions.

³ In fact, after a very rapid expansion from the 1950s to the 1980s, from 45,000 to 1.4 million enrollments in higher education, there is a slowdown in this growth in the following two decades, with a new rapid growth period starting in the year 2000.

Table 2 - Brazil: number of institutions, courses, and enrollments in higher education by modality and administrative category of the institution (2012)

Indicator	Administrative category			Total
	Public	Private non-profit	Private for-profit	
Institutions				
<i>n</i>	304	1,123	989	2,416
(%)	13	46	41	100
Courses				
<i>n</i>	10,857	11,562	9,035	31,454
(%)	35	37	29	100
Enrollments (total)				
<i>n</i>	1,897,818	2,601,821	2,558,445	7,058,084
(%)	27	37	36	100
Enrollments (on-site modality)				
<i>n</i>	1,716,194	2,329,116	1,898,816	5,944,126
(%)	29	39	32	100
Enrollments (distance modality)				
<i>n</i>	181,624	272,705	659,629	1,113,958
(%)	16	24	59	100

Source: Inep (2012).

Regarding the geographical distribution of enrollments in the country, it is observed that 46.0% refer to institutions located in the southeastern region, 20.0% in the South and 18.0% in the Northeast. However, the profile of the institutions that hold these enrolments is different according to the

the region, as seen in Table 3. In the Southeast, for example, 51.0% of enrollments are held in private non-profit institutions and only 19.0% pertain to public institutions. In the North and Northeast, the participation of public institutions is much larger, with 50.0% and 43.0%, respectively, of enrollments in 2012. In the South and in the Midwest, there is a greater participation of private for-profit institutions, being 43.2% and 46.3%, respectively. These higher percentages in these regions are explained by the higher proportion of enrollments in the distance learning modality, which are offered mainly by private for-profit institutions (33.4% in the South and 22.3% in the Midwest).

Table 3 - Brazil and regions: number of enrollments by institution's administrative category and type of education (2012)

Characteristic	Region					
	North	Northeast	Southeast	South	Midwest	Brazil
<i>n</i>	439.397	1.294.418	3.232.727	1.416.255	675.287	7.058.084
Public (%)	50,2	42,6	18,6	26	23,1	26,9
Private non-profit (%)	32,7	38,6	30,7	43,2	46,3	36,2
Private for-profit (%)	17,1	18,8	50,7	30,8	30,7	36,9
On-site learning (%)	90,6	93,5	88,7	66,6	77,7	84,2
Distance learning (%)	9,4	6,5	11,3	33,4	22,3	15,8

Source: Inep (2012).

Considering only the traditional on-campus modality (5,994,112 enrollments), 57% of the students were younger than 25 years old in 2012, the age limit established for the comparative study on Chinese and Brazilian university students. This proportion varied according to the administrative category of the educational institution, showing that students from public institutions are younger, on average, than those who study in private institutions (65.0% aged under 25 in public schools, compared to 56.1% and 50.4% in private for-profit and non-profit, respectively – Table 4).

Table 4 - Brazil: students enrolled according to age group, gender and study shift, by institution's administrative category (2012)

Characteristic	Administrative category			Total
	Public	Private non-profit	Private for-profit	
<i>n</i>	1.716.194	2.329.116	1.898.816	5.944.126
Age (%)				
<20	15,8	12,8	11,1	13,1
20-24	49,4	43,3	39,3	43,8
25-29	18,6	20,4	22,1	20,4
30+	16,3	23,4	27,5	22,7
Gender (%)				
Female	53,1	56,4	56,6	55,5
Male	46,9	43,6	43,4	44,5
Shift (%)				
Full-time	37,7	6,5	3,2	14,4
Morning	16,8	19,4	17,8	18,1
Afternoon	7	2,8	3,5	4,2
Night	38,5	71,4	75,5	63,2

Source: Inep (2012).

It is also noted that, although in all administrative categories there is predominance of female students (55.5%), in public institutions the relative presence of male students is slightly higher (47.0% against 43.0% in private institutions). This greater participation may be associated with the predominance of public institutions in enrollments for technological and hard sciences courses that have a larger proportion of male students.

With regard to the school shift, different profiles of students can also be observed depending on the administrative category of the educational institution. In public institutions, for example, 37.7% of students were enrolled in full-time courses, with a higher requirement for time dedicated to classes and lower possibilities of entering the labor market. In private institutions, full-time attendance is not very frequent, with more than 70.0% of the enrolled students attending the night shift, making it possible to reconcile work with study.

Therefore, the profiles of students differ according to both the geographical region of the country and the administrative category of the educational institution, public or private. In general, the requirement for full-time dedication in public institutions provides students with greater opportunities to be involved in research and extension activities, in addition to teaching activities, which can lead to a broader and better-quality education.

3 Final remarks

The descriptive analysis of the educational profile of Brazilian youth allows us to assess the challenges posed to the fulfillment of goals established by the 2011-2020 PNE and to reducing inequalities in access to higher education.

With regard to the quantitative aspect, the country should further increase the offer of enrollments in higher education to reach the 50% target for gross enrollment. This means an increase of about 5 million new enrollments, reaching a total of 12 million in 2020.

The inequalities in access to higher education shown in this article point to the need for investments to include a larger proportion of youth at this level of education, which should be carried out among lower-income young people, who tend to abandon the school system at early stages without reaching the minimum requirements to enter the university system. These youth are mostly black, mixed race, and indigenous people, whose opportunities for access to university should be improved through affirmative action policies aimed at their entry to public higher education institutions.

On the other hand, it is clear that women have better succeeded academically in Brazil, being more likely to achieve higher education in both public and private institutions. Why is school failure more frequent among young males? Is the school system unattractive to these youth? Are their efforts to pursue their studies being hampered by the need for early entry into the labor market? Would urban violence, which has a stronger impact on young males, be influencing this process? All these factors have certainly contributed to school failure among young men and should be taken into account in formulating policies aimed at improving inclusion in higher education.

As for the regional aspects, youth living in urban areas in the Southeast, South and Midwest regions have more opportunities to enter higher education than those living in the Northeast and North, the poorest regions of the country. These greater opportunities in more developed regions are mainly provided by the private sector, which gathers over 70% of

enrollments in this level of education. In these institutions, higher education is mostly attended at the night shift, making it possible for the student to enter the labor market.

However, the public institutions, generally with no tuition fee, are those which offer better-quality and more prestigious education, requiring students to dedicate more time to studies and offering opportunities for engaging in research and extension activities. Thus, the students' profiles differ significantly depending on the administrative category of the educational institution they attend. Young students in private institutions often work to pay for their livelihood and college, while students in public institutions have greater opportunities to devote themselves fully to their studies.

Data collection for the Comparative study on Chinese and Brazilian university students, considered the different profiles of university students according to the administrative category of the higher education institution. Of the six selected institutions, two were public and four private, which brought a closer approximation of the average profile of the young Brazilian university student.

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References

ALVES, J. E. D. *A transição demográfica e a janela de oportunidade*. São Paulo: Instituto Fernand Braudel de Economia Mundial, 2008.

BRASIL. *Lei no 9.394, de 20 de dezembro de 1996*. Estabelece as diretrizes e bases da educação nacional. Diário Oficial da União, Brasília, 1996.

BRASIL. *Lei no 10.172, de 9 de janeiro de 2001*. Aprova o Plano Nacional de Educação e dá outras providências. Diário oficial da União, Brasília, 2001.

BRASIL. Ministério da Educação. *O PNE 2011-2020: metas e estratégias*. Brasília: MEC, 2010.

IBGE - Instituto Brasileiro de Geografia e Estatística. *Estatísticas do século XX*. Rio de Janeiro: IBGE, 2006.

IBGE - Instituto Brasileiro de Geografia e Estatística. *Censo demográfico 2010*. Rio de Janeiro: IBGE, 2010.

IBGE - Instituto Brasileiro de Geografia e Estatística. *Projeção da população do Brasil por sexo e idade para o período 2000/2060 e projeção da população das Unidades da Federação por sexo e idade para o período 2000/2060*. Rio de Janeiro: IBGE, 2013.

INEP - Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira. *Censo da educação superior* (1991, 2000, 2010 e 2012). Brasília: Inep; MEC, oct. 2012.

MADURO JUNIOR, P. R. R. *Taxas de matrícula e gastos em educação no Brasil*. 2007. Dissertation (Master's in Economy) – Fundação Getúlio Vargas, Rio de Janeiro, 2007.

VASCONCELOS, A. M. N.; GOMES, M. M. F. Transição demográfica: a experiência brasileira. *Epidemiologia e Serviços de Saúde*, 21 (4): 539-548, 2012.

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