# Expansion of racial relations as a topic in Capes database of theses and dissertations

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#### **Abstract**

Over the last decades, there is an expansion of the access to graduate studies in Brazil. Characterizing those who attend and complete this stage of schooling has been the object of a varied set of research projects and publications. Studies on racial relations in this field can be analyzed, among several possibilities, by looking at the authorship of papers by Black students or as the topic being addressed in the theses and dissertations that have be written. In this paper, we analyze the evolution of the studies on racial relations taking as our data source the M.A. and PhD works submitted to Brazilian institutions with a record in the Capes theses and dissertations database. By defining 191 descriptors, we have characterized information from the records of dissertations and theses in a span of 25 years (1987-2011). In whole, 4,204 works were found about this topic, submitted to 800 graduate programs from 161 universities or research institutes. There is clear evidence that the growth in the amount of dissertations and theses dealing with racial relations is higher if compared to the average of works submitted in the same period, which shows an increasing interest on this theme that may be associated with the expansion of access of Black people to higher education and, even more restrictedly, to the graduate studies programs. Another key aspect we explored in this paper is the fact that there are more women than men in the productions identified in the theme of racial relations in Brazil.

### **Keywords**

Racial relations - Mapping - Graduate studies - Theses and dissertations - CAPES.

■- Conceiving this paper has had the valuable contribution by Prof Fúlvia Rosemberg, PhD, who died in September, 2014 and to whom we dedicate this work.

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# Expansão da temática relações raciais no banco de dados de teses e dissertações da Capes<sup>l</sup>

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### Resumo

Nas últimas décadas observa-se uma ampliação das taxas de acesso à pós-graduação no Brasil. A caracterização do público que frequenta e finaliza essa etapa de escolarização tem sido objeto de um conjunto variado de projetos de pesquisa e publicações. Os estudos sobre a temática das relações raciais nesse universo podem ser analisados, dentre outras possibilidades, a partir da autoria de trabalhos por pós-graduandos negros ou como temática de estudo nas dissertações e teses produzidas. Neste trabalho, analisamos a evolução dos estudos sobre relações raciais considerando como fonte de dados os trabalhos de mestrado e doutorado defendidos nas instituições brasileiras e registradas no banco de teses e dissertações da Capes. Por meio da definição de 191 descritores, caracterizamos informações dos registros das teses e dissertações no período de 25 anos (1987-2011). Ao todo foram identificados 4.204 trabalhos sobre a temática, defendidos em 800 programas de pós-graduação de 161 universidades ou instituições de pesquisa. Existem evidências claras de que o crescimento na quantidade de teses e dissertações sobre relações é maior quando comparado à média de trabalhos defendidos no mesmo período, mostrando assim um crescente interesse sobre a temática, que pode estar associado à ampliação do acesso de negros ao ensino superior e, de forma ainda mais restrita, aos programas de pós-graduação. Outro aspecto importante explorado neste trabalho é que as mulheres são maioria nas produções identificadas na temática das relações raciais no Brasil.

**I-** A concepção deste trabalho teve a participação valiosa da Profª. Dra. Fúlvia Rosemberg, falecida em setembro de 2014 e a quem dedicamos a publicação.

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Palavras-chave

Relações raciais – Mapeamento – Pós-graduação – Teses e dissertações – Capes.

### Expansion of graduate studies in Brazil

The expansion of graduate studies in Brazil over the last decades is a reality described by several authors (RAMOS; VELHO, 2011; MELO; LASTRES; MARQUES, 2004; CGEE, 2010). Among the major documents describing such growth are the National Graduate Plans (PNPG, in its original acronym). The analysis of the successive plans is of key importance to understand the structure and current picture of graduate studies. In short, the six plans that have already been made, starting with the first one in 1975 to the current plan that will be in force until 2020, have proposed a set of specific demands to the education and training of highly-qualified professors and researchers.

The five national plans preceding the current one cover a period of 35 years of expansions and consolidation of a National Graduate System, seen as a strategic factor in the social, political, economic, cultural, and technological development of the Brazilian society. The plan currently in force presents an updated overview of graduate studies in Brazil by indicating that, in 2009, there were:

[...] 2719 graduate programs in operation, in charge of 4101 courses, divided in: 2,436 M.A. courses (59.4%); 1422 PhD courses (34.7%) and 243 for a professional master degree (5.9%). There were 57,270 professors and 161,117 students registered by the end of 2009, divided in 103,194 students in M.A. or professional M.A. and 57,923 PhD candidates. (BRASIL, 2010, p. 45).

Ramos and Velho (2011) associate the expansion of graduate studies with the training of human resources in science and technology. According to the authors:

Brazil has made continued and remarkable investments in the training of human resources in science and technology over the last 40 years. Supported by the National Graduate Plans (PNPG), the process to expand graduate studies was a result of the State's planning and funding, and the public universities were its institutional basis. As a result, some 800 M.A. and PhD courses in the 1970's turned out to reach almost 3,700 courses in 2008. Such programs have assigned a degree, in 2008 only, to 33,360 M.A and 10,711 PhD candidates, with a total amount of students around 140,000. (RAMOS; VELHO, 2011, p. 942).

Thus, a measure of the expansion of graduate studies may be defined based on the expansion of the number of dissertations and theses submitted to the Higher Education Institutions along the last decades. A brief account of the history of graduate studies is necessary in order to contextualize such production.

Graduate studies began in Brasil in 1931, upon the publication of Decree No. 19,851, through which the then Secretary of Education, Francisco Campos, established: "scientific investigation in any realm of human knowledge (art. 1) as the purpose of higher education" (CURY, 2005, p. 7). As a result, courses for further training and specialization were then created whose aim was to expand knowledge in the professional and scientific fields. In the following years, several graduate programs were set up, including the PhD course at the University of Minas, currently the Federal University of Minas Gerais (in the 1930's) and those arising upon the establishment of the University of São Paulo (1941).

While graduate studies in Brazil take place predominantly in private educational institutions, as widely discussed in the literature (VONBUN; MENDONÇA, 2012; DOURADO, 2005; CARVALHO, 2002; CORBUCCI, 2002), graduate programs developed mostly in public universities, as the Brazilian State played a key role both in their organization and in defining their standard rules. This translated into multiple indicators: the systems for the

authorization and accreditation of courses and their funding, by granting scholarships and financial resources in order to foster research. This places the government bodies as the main actors for the expansion and consolidation of the Brazilian graduate system.

The unequal share of graduate courses and programs in the different geographic regions of Brazil is highlighted since the very first PNPG: the Southeast and South regions as presented as the most developed and North and Northeast are seen the neediest ones. Despite this fact, it will be only in the 5th plan (2005-2010) that tangible proposals will be presented as inductive policies to change such inequalities. In spite of the advancements observed in the expansion of graduate studies in the North and Northeast regions, the regional asymmetries persist and they remain as a challenge to overcome in order to consolidate a national integrates graduate system. According to Santos and Azevedo (2009), in 2008, 61.1 percent of the M.A. and PhD programs were provided in the Southeast region. Data from PNPG 2005-2010 indicate that, in 1996, the concentration in the Southeast area reached 83.2 percent of the PhD courses, and then falling down to 66.6 percent in 2004 (BRAZIL, 2004, p. 32).

Table 1 presents information about the growth of degree holders on a per region basis. Despite the efforts made by government agencies to de-centralize the programs, growth rates in the Northeast correspond to only 12.3 percent of graduate programs and courses in 2008, even though the variation rate in the period (1996 a 2008) was higher than 2000 percent.

**Table 1-** Growth of people with a degree per geographic region. Period 1996-2008

Geographic Region	Variation %
North	438
Northeast	2.487
Southeast	198
South	682
Center-West	840

Source: CGEE 2010. Table 2.2.3, p. 96.

On the other hand, the expansion of graduate studies required greater amounts of public funding in the area. According to data from the Department of Science and Technology, in 2003, public investment was of some 11 billion reals (Brazilian money), representing 0.65 percent of GNP. In 2008, the cipher of 22.6 billion reals represented 0.78% of GNP. According to Velho (2007), the challenge is still huge as Brazil yields a PhD person for each set of 28,000 inhabitants, although in countries that are members of the Organization for Economic Cooperation and Development (OECD) the ration is one PhD degree holder for every group of 5,000 inhabitants.

The history of the Coordination for the Higher-Level Personnel Improvement (Capes, in its acronym in Portuguese) also deserves special attention in building the context of this study. Established in 1951, by means of Decree No. 29,741, under the command of Anísio Teixeira, at first Capes was, in fact, a "campaign" intended to streamline priority demands in a nation in its early stage of industrialization, which required the training of specialize personnel and researchers in different branches of activity. Already in 1953, scholarships were granted for studies both in the country and abroad. A new decree, set forth in 1961, expanded the capabilities of Capes, which then began to influence, act and interfere in the higher-education institutions with the aim of improving teaching and research conditions in a variety of universities (MENDONÇA, 2003).

In the following decades, the increase in the funds for scholarships and the inducing policies taken by Capes had as an assumption the belief that investments in graduate studies were the best strategy to improve the quality of Brazilian universities, and as a result, to match the demands for economic and technological development which would ensure the nation's growth and its gradual inclusion in the international arena.

Capes, as a former branch of the Department of Education, is given the legal status of a public foundation in 1992, after an attempt to terminate it under the administration of Fernando Collor de Melo (1990 through 1992). Widespread mobilization in the academic and scientific milieu was successful, in less than a month, to not only reverse the possibility of termination but also to strengthen the institution. Over the last years, Capes has been focusing on providing scholarships and research grants to be used both in the country and abroad as well as in the evaluation of graduate studies programs.

Specifically, the Capes Dissertations and Theses Database, the material utilized in this study, was digitally made available by the institution in 2002, with bibliographical references1 and abstracts of the dissertations and theses submitted to graduate programs all over the country, with the purpose of providing access to information about intellectual productions. Sending information and the truthfulness of the data made available is under the responsibility of the graduate programs. In a first endeavor by the Capes IT team, over 125,000 abstracts from dissertations and theses submitted between 1996 and 2001 were made. Afterward, the database was supplemented with information from works that had been submitted since 1987 (SOUZA, 2010).

In 2012, reaching a total of over 607,000 publications, Capes dissertations and theses database is a privileged material to study the inclusion of any range of themes in the Brazilian field of science and graduate studies. The core topic of our study here, racial relations, is analyzed taking into account the dissertations and theses that were submitted between 1987 and 2011, as described below.

## Gender and racial relations in the graduate studies

Discussions on racial relations and gender in academic productions may be

analyzed in two perspectives: as a theme of research or based on the sex and/or color/race of the authors. In addition, it is important to highlight that the topics of racial relations and gender have been included in different social times: first, in the discussions about the presence or not of women in the academic milieu and only more recently in the absences and invisibilities of blacks in these areas. Considering the access to higher education as a preliminary and decisive stage for the entry into the academic and scientific world.

women entered the Brazilian universities in the 1910 s: "and, therefore, they are still consolidating their contribution to the academic field" (SAITOVICH, 2006). As for the Black people, access to higher education became more intense since the 1980's (ROSEMBERG, 2010).

A crucial aspect, especially for the Black people, is the collective visibility in different social spaces and, also, in the public statistics that have been produced. Paixão and Rossetto Giaccherino (2011) discuss how the item of color/race is presented in different sources of statistical data, giving rise to issues such as terminology and or underreported data. For the authors, higher statistical visibility of Black people is a result of the struggles taken by the black movement since the 1980's:

Thus, the advancements observed, both in terms of numerical expansion of statistical databases in Brazil including the variable of color or race, and the gradual increase in the rates of those who identify themselves as brown or black - especially in the Demographic Census and in PNAD -; it show that somehow the fight for statistical visibility has been one of the most successful struggles fought by the contemporary Brazilian black movement over the last years. (PAIXÃO; ROSSETTO GIACCHERINO, 2011, p. 27).

**<sup>1-</sup>** Since 2013, the information available is: author name, title, date of examination, number of pages, institution, supervisor, examiners, key words, funding agency, area of knowledge, related area(s) and line(s) of research.

According to Figueiredo and Grosfoguel (2007, p. 36), "the studies of the racial relations in Brazil are the object of knowledge historically produced by white scholars whose epistemology is based on the study on *Black people*".

Studies of Black people in Brazil date back from the early 20th century with the works by Gilberto Freire, Artur Ramos, and Florestan Fernandes, among others. A key issue presented by Claudia Miranda, Francisco Aguiar, and Maria Clara Di Piero (2004), in bibliographical search about the racial relations and education, edited by the Laboratory of Public Policies of Rio de Janeiro State University, in partnership with Ação Educativa, is the moment when the educational field starts looking at the racial issues as research theme. This concern may be understood as arising from different motivations including the fact that it was demanded by the Black movement and because male and female Black people are now going to college e taking graduate studies.

The first M.A. thesis dealing with ethnic/racial relations was submitted in 1945 by Virginia Leone Bicudo, at the Free School of Sociology and Politics of São Paulo, under the title of *Estudo de atitudes raciais de pretos e mulatos em São Paulo* (study of racial attitudes of blacks and browns in São Paulo). According to Santos, Schucman and Martins (2012):

The author concludes that there is prejudice of color as a Black person climbs to high social status. Rejection motivated by the color traumatizes and make the Black person to be conscious of his/her color, and as this awareness increases the effort to overcome the feeling of inferiority is strengthened as well as the search for education and more outstanding positions (SANTOS; SCHUCMAN; MARTINS, 2012, p. 170).

Along the 1950's, the Unesco funded a series of studies on racial relations in Brazil. The main purpose was to understand the "successful"

experiences of accommodation of racial differences in the country (SANTOS; SCHUCMAN; MARTINS, 2012). The conclusions of the study by Unesco (May, 1999) emphasizes that:

In the hope of finding the key to overcoming the racial evils existing in several international contexts, the intergovernmental agency would end up facing a set of systematize data revealing the racial prejudice and discrimination in Brazil (MAIO, 1999, p. 151).

An important reference in the topic of racial relations is the study by Carlos Hasenbalg and Nelson do Valle, and Silva in the 1980's who were pioneers in analyzing the databases in the perspective of color/race, showing that the inequalities found between whites and blacks were not limited to socioeconomic issues, as they should also be associated with the Brazilian social and historical structure (MIRANDA; AGUIAR; DI PIERO, 2004).

Between the late 1980's and the early 1990's, racial issues began to take a more defined highlight in social research, and this coincided with the expansion and consolidation of the graduate studies programs. In 1986, the Carlos Chagas Foundation organized the first event to review the theoretical production involving the topics of race, Black people and education (MIRANDA; AGUIAR; DI PIERO, 2004).

In order to comprehend how the number of Black people increased in graduate studies, it is essential to contextualize the distinctive policies which provided, since 2003², a more equitable access to underrepresented groups (Blacks and Indians) in the undergraduate courses. Affirmative actions, initially proposed in some state universities by way of the racial quotas and then supplemented with Prouni and Fies³

**<sup>2-</sup>** The first experiences of affirmative action for the access to undergraduate colleges were devised at UERJ, 2003; UNB, 2004; UEBA, 2004

**<sup>3-</sup>** The Program University for All (Prouni) is a program of the Department of Education, set up by the Federal Government in 2004, which grants *full* and partial scholarships (50%) in private higher-education institutions, in

expanded the presence of Blacks in undergraduate courses, a condition for the access to graduate studies (PAIXÃO, 2010; MOEHLECKE, 2002; SILVERIO, 2002). The discussions raised by institutionalizing a distinctive entry of Black students into higher education consolidated in the academic milieu and reached the graduate programs. Over the last years, some universities have already implemented quotas in their admission procedures to graduate studies (CERQUEIRA; ROBERTO, 2014). Innovating experiences had been developed previously (between 2000 and 2010) and fostered the access by Blacks and Indians to the very attractive and valued instance of Brazilian graduate studies: the Contest Black People and Education, organized by Ação Educativa and ANPEd (the National Association for Research and Graduate Studies in Education) which provided funds for undergraduate and graduate projects between 1994 and 2006; and the Scholarship Program, managed by the Carlos Chagas Foundation, which between 2001 and 2012, followed eight classes of scholarship holders in M.A. and PhD programs in the country. Both projected were financed with funds from the Ford Foundation. If the number of recipients in these programs has an impact of apparently low significance from the a numerical viewpoint, these programs were crucial in making it explicit that the presence of Blacks and Indians on this level of schooling was scarce, in enlarging the range of topics covered in undergraduate and graduate courses and in the access of Black researchers to research groups, study groups and/or as professors in higher-education institutions.

undergraduate courses and sequential courses for specific training, to Brazilian students without a higher-education degree. http://siteprouni.mec.gov.br/tire\_suas\_duvidas.php#conhecendo. The Students Financing Fund (FIES) is a program of the Department of Education whose purpose is to finance undergraduate students registered in not-for-free institution under Act 10,260/2001. Eligibility to the funds includes students registered in higher-education courses with a positive assessment in the procedures conducted by the Department of Education and who hold a higher-education degree in undergraduate courses and sequential courses for specific training, to Brazilian students without a higher-education degree. Available (in Portuguese) at: http://siteprouni.mec.gov.br/tire\_suas\_duvidas.php#conhecendo. Accessed on 17 March 2016.

A relevant aspect to understand the situation of racial inequality in the access to social goods is the availability of quantitative information separated into a set of sociodemographic characteristics. Every national government body producing statistics is required to present their data separately by sex and color/race, which has been demanded since Brazil participated in the Durban Conference (2001) and in the Report by the Brazilian Government to the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW - 2002) (SILVA, 2008).

A large mass of quantitative information about what is produced by the graduate studies can be obtained by exploring data provided by the geoprocessing tool made available by Capes, *GeoCapes* (http://geocapes.capes.gov.br), with present pieces of information that characterize the profile of scholarship holders according to the geographic region, states and cities, separated by type of scholarship and financial funds made available in the country and abroad. However, the characterization of data accessible in the database is limited to the regional asymmetries as well as in the description contained in the national graduate plans.

In order to characterize according to sex and color/race the public accessing and achieving a graduate degree, this study is supplemented with information from Demographic Censuses 2000 and 2010, conducted by the Brazilian Institute of Geography and Statistics (IBGE). Considering the academic production, in the perspectives of sex and color/race in the Brazilian field of graduate studies, literature has indicated some expansion in the production and participation of women and Black people (ARTES, 2013; ROSEMBERG; MADSEN, 2011; PAIXÃO, 2010). Table 2 presents the profile of graduate students per sex and color/race, and Chart 1, the growth rates for males and females and for whites and blacks who got a graduate degree in the period from 2000 through 2010 withdrawn from Demographic Censuses 2000 and 2010 (IBGE).

Table 2 - Profile of graduate students between the 2000 and 2010 Demographic Census per selected variables.

Variables	Graduate studies attendance				General in the population			
	2000		2010		Variation	2000	0010	Variation
Sex	N	%	N	%	%	2000	2010	%
Male	78,015	48.0	118,793	46.5	52.3	83,602,317	93,406,634	11.7
Female	84,496	52.0	136,441	53.5	61.5	86,270,527	97,348,530	12.8
Total	162,511	100.0	255,234	100.0	57.1	169,872,844	190,755,164	12.3
Color/race								
White	137,003	84.3	186,918	73.2	36.4	91,298,042 90,621,075		-0.7
Black*	21,567	13.3	63,546	24.8	194.6	75,872,417	97,171,184	28.1
Asian	2,838	1.7	4,319	1.7	52.2	761,583	2,105,353	176.4
Indian	319	0.2	452	0.2	41.7	734,127	821,501	11.9
Total	162,512	100.0	255,235	100.0	57.1	169,872,844	190,755,164	12.3

Source: Microdata from demographic census 2000 and 2010 - IBGE. \*Black: includes blacks and browns.

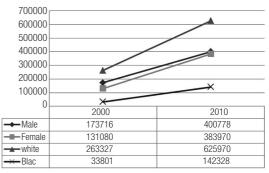
Comparing the results with the *population, in general,* allows us to check if the changes in the groups are due to demographic factors or ifthey are the outcome of changes in the students' profile. While the Brazilian population grew 12.3 percent, the number of students in graduate studies increased 57.1%.

Women, who in 2000 were already the majority in graduate studies, enhanced their presence: while the growth of male students share in the period was 52.3%, for the female students it reaches 61.5%.

The change in the share of Black people turns out to be more significant, with a variation of 194.6 percent in the relevant period. Unequal access to graduate studies maybe assessed by taking into account that Black people are only 24.8 percent of the total graduate students, against 50.9% in the population as a whole (ARTES, 2015).

The information regarding the students may be supplemented with data about those who have achieved a M.A. or a PhD degree. It should be emphasized that the degree holders includes the sum of respondents from the demographic censuses, regardless the time when they were awarded a degree. Therefore, as the access to graduate studies for Black people is more recent, lesser representation in this group is expected.

**Chart 1 -** Variation of M.A./PhD degree holders per sex and color/race between the 2000 and 2010 demographic census.



Source: Developed by the authors.

The variation of degree holders in the period is 157.5 percent; the rate for females has increased 192.9 percent<sup>4</sup> against 130.7 percent for males. Largest expansion is seen among Black people, with a growth of 321.1

**4 -** Calculation: 383,970 - 131,080/131,080 = 192,9 percent

percent against 137.7% for whites. A first review of data may suggest greater share of blacks among the degree holders, however, this impression is not sustained when one considers that blacks represent 44.6 percent of Brazilian population in 2000 and had a share of only 11.0 percent in the group of M.A. and PhD degree holders, an index that reaches 18.1 percent in 2010. This is evidence that for each Black person holding a degree there are four white people with the same status (ARTES, 2015).

As it was impossible to obtain data separated by color/race regarding the authors of theses and dissertations when looking in Capes database<sup>5</sup>, we decided to characterize the cluster of studies dealing with "racial relations" based on the theses and dissertations approved in Brazilian graduate programs over the last 25 years, that is, the period comprised between 1987 and 2011. Has the amount of works addressing this topic increased? In which areas of knowledge? With more or less presence of female authors? In the following sections we describe the mass of data and the methods adopted in order to characterize the theses and dissertations found in the Capes database.

### Mass of research data

The mass of data utilized in this paper corresponds to the records of works withdrawn from the Capes theses and dissertations database (BTD, http://www.capes.gov.br/servicos/banco-de-teses). In September, 2012, 607,389 records were digitally collected from the BTD website (MENA-CHALCO; ROCHA, 2014). Every record contains information regarding the

**5 -** Including the entry color/race in Capes forms, and especially in the Lattes Platform of CNPq - National Research Board, took place in April, 2013. This piece of information is requested at the moment when a researcher updates his/her data in the Lattes Curriculum. This set of information is not publicly available to other researchers.

bibliographic listing of a dissertation or thesis such as, for example, the student's name, title, number of pages, abstract, keywords, areas of knowledge it is associated with, academic institution, name(s) of supervisor(s), name of examiners and the funding agency of the scholarship. The records available refer to works approved from 1987 through 2011.

All records were stored and sorted out by separated items in a relational local database. Thus, it is possible to automatize the complex inquiries through the information pieces of the works submitted and approved both on M.A. and PhD levels. It is important to emphasize that, due to the computer-based process, some records might have not been collected in a complete manner. However, it is considered that, even though such possibility exists, the results herein described display a good approach to the reality that was found in the data gathering. In whole, the set of dissertations contains a record from 310 universities and 3,095 graduate programs.

### Identification of dissertations and theses

In this study, in whole, we have defined 191 descriptors (i.e., keywords or attributes) which were taken into consideration in order to search for dissertations and theses associated with the topic of racial relations. A descriptor is an attribute utilized to characterize a work based on the information contained in the title of the dissertation or thesis, abstract, keywords, area of knowledge, related area(s) and line(s) of research.

Based on such understanding and upon Reading the abstracts of the works approved, descriptors were refined and identified with variations in degree level and sex (male and female). Descriptors are listed (in Portuguese) as follows:

**Chart 1-** descriptors were refined and identified with variations in degree level and sex

adolescente negro, adolescentes negros, afirmação do negro, afirmação negra, aficanidade, afro-brasil, afrobrasileira, afro-brasileiras, afro-brasileiro, afro-brasileiros, afrodescendente, afrodescendentes, aluna negra, alunas negras, aluno negro, alunos negros, ativista negra, ativista negro, brancos e negros, categoria negro, comunidade afro-brasileira, comunidade negra, comunidades afro-brasileiras, comunidades negras, consciência negra, contra o negro, cor, cor negra, cor preta, criança negra, crianças negras, cultura negra, culturais negras, culturas negras, descendente de povo africano, descendentes de povos africanos, desigualdade racial, desigualdades raciais, discriminação racial, discriminações raciais, entidade negra, entidades negras, escrava negra, escravas negras, escravo negro, escravos negros, estudante negra, estudante negro, estudantes negras, estudantes negros, etnia, etnia negra, etnias, etnias negras, étnica, étnicas, etnicidade, etnicidades, étnico, étnico raciais, étnico raciai, étnico-raciais, étnico- racial, étnicos, etnográfica, etnográficas, etnográfico, etnográficos, família negra, famílias' negras, fator racial, fatores raciais, grupo de negras, grupo de negros, grupo negro, hab itante negro, habitantes negros, homem de cor, homem negro, homem preto, homens de cor, homens negros, homens pretos, iconografía do negro, identidade do negro, identidade dos negros, identidade negra, identidades dos negros, identidades negras, imagem do negro, indivíduo negro, indivíduo preto, indivíduos negros, indivíduos pretos, irmandade de negros, irmandade negra, irmandades de homens negros, irmandades de homens pretos, irmandades de mulheres negras, irmandades de mulheres pretas, irmandades de negra s, irmandades negras, irmãos negros, irmãs negras, jovem negro, jovens negros, juventude negra, luta do negro, lutas dos negros, mãe negra, mães negras, memoria negra, menina negra, meninas negras, menino negro, meninos negros, movimento negro, movimento preto, movimento pretos, movimentos negros, mulher de cor, mulher negra, mulher preta, mulheres de cor, mulheres negras, mulheres pretas, negra, negra brasileira, negras, negrice, negritude, negritudine, negro, negro do brasil, negro no brasil, negro-brasileira, negro-brasileiras, negro-brasileiro, negro-brasileiros, negroide, negroides, negros, negros do brasil, negros e brancos, orgulho negro, origem negra, origens negras, pai negro, pais negros, personagem negra, personagem negro, pessoa negra, pessoas negras, população negra, população seguina população negra, população n negras, povo negro, povos negros, pre-conceito racial, preconceito racial, presenca negra, pretidão, professor negro, professora negra, professoras negras, professores negros, profissionais negros, profissional negro, questao racial, questões raciais, raca, racas, raciais, racial, racismo, relação étnico-racial, relação racial, relações étnicoraciais, relações raciais, representação do negro, resistência negra, ser negro, situação do negro, sociedade negra, sociedades negras, temática negra.

Each dissertation or thesis was characterized by all of its descriptors using a textual search through the data available in the Capes dissertations and theses database (Capes-BTD). Thus, we maintained a mapping of precisely which descriptors are associated with each work. Some descriptors are quite generic and might be utilized to characterize works that did not necessarily involve racial relations.

From the total amount of 607,389 dissertations/theses only 6,655 works had at least one of the 191 descriptors. Upon analyzing the data set, we felt the need of detailed manual verification in order to remove the works which, despite having descriptors of our study, were not associated with the topics of color/race. For example, studies

in veterinary medicine which dealt with black animals, or in agronomy dedicated to black beans. These mistakes were considered "false positive". Along the progression of the manual check, we decided to utilize a filter in our own database with which the studies associated with botany, agronomy, vegetal improvement, phitopathology, food science, zoology, animal husbandry, animal reproduction, veterinary practice, animal nutrition, animal genetics, animal raising and related areas were discarded.

The new set of records totalized, upon filtering the "false positives," a mass of 4,204 works, which is now taken as the final corpus of the study. The totalization according to the number of descriptors is shown in Table 3.

**Table 3 –** Number of descriptors and amount of dissertations/theses identified.

	Works identified in BTD-Capes					
Descriptors	Initia	l search	After manual review			
	Amount Accumulated		Amount	Accumulated		
18	1	1	1	1		
17	2	3	2	3		
16	6	9	6	9		
15	5	14	5	14		
14	18	32	18	32		
13	23	55	23	55		
12	46	101	46	101		
11	61	162	61	162		
10	87	249	87	249		
9	110	359	110	359		
8	197	556	193	552		
7	257	813	255	807		
6	333	1.146	323	1.130		
5	493	1.639	473	1.603		
4	684	2.323	627	2.230		
3	1.228	3.551	933	3.163		
2	2.930	6.481	952	4.115		
1	174	6.655	89	4204		

Source: Developed by the authors.

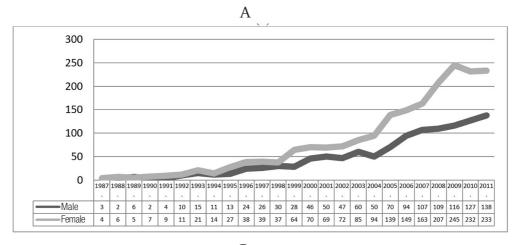
Mena-Chalco and Rocha (2014) utilized computer-aided procedures to identify the gender (sex) of a person by considering just the full name of the author of a PhD dissertation or an M.A. thesis. According to the tests performed, the identification has an accuracy level of over 95 percent for Brazilian names.

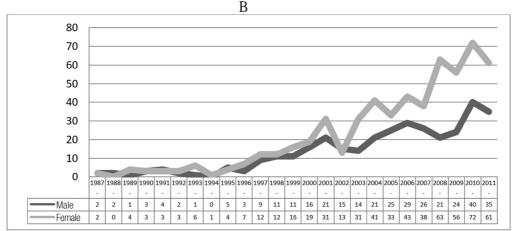
### **Research results:** expansion of the topic of racial relations in Brazilian science

Charts 2(a) and 2(b) describe the increase of productions along the period and the prevalence

of female authors both on the M.A. and on the PhD level. It should be noted that in graduate studies there are more women than men, as previously mentioned. The two charts clearly demonstrate that the expansion became higher in 2005. After that year, the distances favorable to women are expanded and indicate a growth in the female production of works dealing with racial relations, both on M.A. and PhD level. For the former, the variation rate in the period reaches 5,725 percent for females and 4,500 percent for males. The date corresponds to the beginning of the affirmative actions policy being implemented in the Brazils higher education.

**Chart 2** - Topic of racial relations per sex (1987 - 2011). Production of (a) M. A. theses and (b) PhD dissertations.



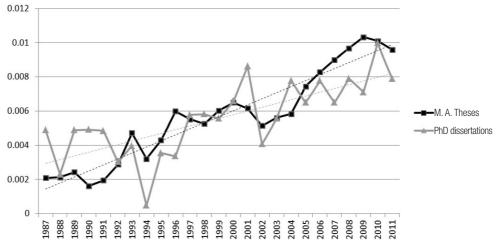


Source: Developed by the authors.

On the PhD level (Graph 2b), the variation rates in period reach 2,950 percent for women and 1,650 percent for men. As the number of PhD dissertations is lower, there is a steeper curve, resulting from a greater variation in the submission and approvals per year. Comparison between the two graphs must be taken with care, as they involve different scales in the Y axis. It should also be noted that M.A. theses represent 78 percent of the total productions with a record in the Capes BTD which is the basis for this paper.

Chart 3 indicates a variation of works on the topic of racial relations above the increase in graduates studies as a whole. In 1987, the share of this topic represented 0.2 percent of the total M.A. theses; such value reached 1 percent in 2011. This is the ratio between the number of works dealing with the topic and the total amount of works submitted and approved in the year and with a record in Capes BTD. A similar behavior can be observed on the PhD level. According to the trend displayed by dashed straight lines, one can see that the proportion of M.A. and PhD works gets higher in relation to the total works with a record in the database.

**Chart 3** – Proportion of works dealing with racial relations to the total set of works with a record in Capes BTD (1987-2011). The trend lines are displayed with straight dashed lines.

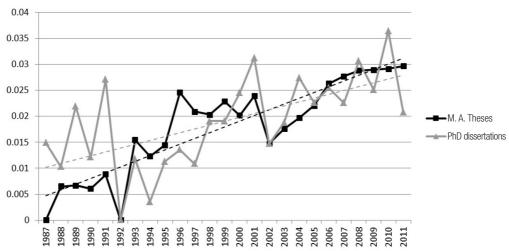


Source: Developed by the authors.

The area of human science, presented separately in Chart 4, concentrates the highest number of works. This is an expected result, whereas part of topics in human science research deals with and discusses the relations among people, their social groups, the instances where they are present and are represented. For this area, we have also found that the proportion of M.A. and PhD works is higher than that found in graduate studies at large. It must stress that, during the data collection, we discarded as

"false positives" the studies undertaken in the areas of agrarian science and biology. Likewise, the engineering area has few possibilities of intersection with the topic of racial relations. Another option of study would be crossing the color/race of the authors of such dissertations and theses. This new and important proposal of study is a forthcoming project, to be carried out as soon as the Lattes Curricula database containing the researcher's entry for color/race is made available.

**Chart 4 -** Proportion of works dealing with the topic of racial relations, in the human science area, in relation to the total set of works with a record in Capes database (1987-2011). The trend lines are represented by straight dashed lines.



Source: Developed by the authors.

Approximately 3 percent of M.A. theses in the human science area was involved with the topic of racial relations since 2010.

Tables 4a and 4b supplement the previous information and indicate the areas with higher presence of the works being reviewed. They display the distance between the sexes based on the Gender Parity Index (GPI) devised by Unesco in its reports of global monitoring on *Education for all*.

Both in theses and in dissertations, *Education* is the area with higher concentration

of works, regardless the author's gender. It is interesting to note that the area of Social Work in which the ratio is 10 theses submitted and approved by women for each work presented by a man. This result is in accordance with a greater presence of females in the graduate courses in social services, as described in the literature. There is an overlap of areas, in eight of them, the topics are present both for M.A. and PhD level, except for *Arts* and *Social Work* on the master's level which is replaced by *Genetics and Communication*, on the PhD level.

**Table 4** – Ten areas with greater share of works dealing with the topics of racial relations: (a) M.A. theses, (b) PhD dissertations, with a record in Capes BTD (1987-2011).

			(a)				
	M.A. Joyel	N	Male		Female		
	M.A. level	N	%	N	%	IPG	
1st	Education	207	19,6	458	25,2	2,2	
2nd	History	159	15,0	208	11,5	1,3	
3rd	Anthropology	136	12,9	192	10,6	1,4	
4th	Sociology	101	9,6	123	6,8	1,2	
5th	Language and Literature	66	6,2	118	6,5	1,8	
6th	Psychology	34	3,2	90	5,0	2,6	
7th	Arts	45	4,3	74	4,1	1,6	
8th	Medicine	18	1,7	59	3,3	3,3	
9th	Collective Health	12	1,1	59	3,3	4,9	
10th	Social Work	4	0,4	47	2,6	11,8	
	Total of 10 with greater share	782	73,9	1.428	78,7		
	Grand total	1.057		1.814		1,7	

(b) Male Female PhD level **IPG** Ν % Ν 20.3 Education 27 9.7 98 3.6 1st 46 15,1 2nd Anthropology 16.5 73 1.6 3rd Sociology 33 11,8 51 10,6 1,5 4th History 51 18,3 44 9,1 0,9 Language and Literature 15 5.4 40 8.3 2,7 5th Collective Health 12 4,3 23 4,8 1,9 5,7 4,3 7th Psychology 16 21 1,3 12 4,3 3,9 8th Genetics 19 1,6 14 5,0 17 3,5 1,2 9th Medicine 2,0 10th 7 2,9 Communication 2,5 14 Total of 10 with greater share 233 83,5 400 82,8 Grand total 279 483 1,7

Fonte: Elaboradas pelos autores.

When the GPI is used in the analysis, in the ten areas with greater share in the topic of racial relations, females prevail except in the area of history (on PhD level), where most of authors are male (GPI 0.9).

Finally, Table 5 presents the distribution of works per geographic region and the Brazilian states. As described in Table 1, the highest number of theses and dissertations is concentrated in the Southeast region, with a prevalence of the state of São Paulo,

where 26.7 percent of the theses and 45.6 percent of dissertations come from. The rate of 23.6 percent of theses in the Northeast region, where Bahia covers 12.9 percent of works, may indicate a tendency of change in the concentration found in the South East region, as proposed by the PNPGs. Comparing column "share in the population" stresses out the unbalance in the productions from the Southeast (overrepresented) and the North region (underrepresented).

**Tabela 5 –** Distribution of works in the topics of racial relations, per geographic region and state, with a record in the Capes Theses and Dissertations Database (1987-2011).

		Share in the	M.A.		PhD	
		population	N	%	N	%
	Amazonas		18	0,5	0	0,0
	Roraima		0	0,0	0	0,0
	Amapá		2	0,0	0	0,0
NI	Para		59	1,8	10	1,0
North	Tocantins		0	0,0	0	0,0
	Rondônia		12	0,3	3	0,3
	Acre		0	0,0	0	0,0
	Total	8,3	91	2,8	13	1,4
	Maranhão		50	1,5	0	0,0
	Piauí		17	0,5	0	0,0
=	Ceará		43	1,3	13	1,4
	Rio Grande do Norte		23	0,7	6	0,6
	Pernambuco		112	3,4	25	2,7
Northeast	Paraíba		73	2,2	7	0,7
	Sergipe		12	0,3	2	0,2
	Alagoas		15	0,4	1	0,1
	Bahia		420	12,9	71	7,7
	Total	27,8	765	23,6	125	13,6
	Mato Grosso		82	2,5	0	0,0
	Mato Grosso do Sul		34	1,0	1	0,1
Center-West	Goiás		54	1,6	3	0,3
	Distrito Federal		138	4,2	56	6,1
	Total	7,4	308	9,5	60	6,5
	São Paulo	:	865	26,7	418	45,6
	Rio de Janeiro		527	16,2	167	18,2
Southeast	Espirito Santo		21	0,6	4	0,4
	Minas Gerais		201	6,2	38	4,1
	Total	42,1	1614	49,8	627	68,4
	Paraná		111	3,4	5	0,5
0	Rio Grande do Sul		253	7,8	70	7,6
South	Santa Catarina		96	2,9	16	1,7
	Total	14,4	460	14,2	91	9,9

Source: Developed by the authors.

### **New challenges**

The results presented in this paper are unprecedented as we have dealt with records of dissertations and theses available in the Capes database and we were looking into a very specific topic, that is, racial relations in different fields of knowledge. There is an expansion of productions in graduate studies which attempt to unveil the presence, participation, and characterization of Black people in social areas. The following question is whether this expansion is a result of an increased presence of Black people in higher education: are Black people those who are investigating racial relations, or is this topic beyond selfclassification by graduate students? For such, it is intended, in a further study, to utilize and analyze the Lattes curriculum database and the information associated with the entry color/ race of graduate students.

In the period covered, we could also observe a greater share of productions carried out by women, and this is in accordance with what is found in literature. Women, who have been the majority of graduate studies since 2000, have enhanced the difference in the following decade (Table 2). The interface between sex and color/race is an important aspect in the analysis, especially when we look at the areas of interest for research: the production about women and

the topic of racial relations has been enhanced in human sciences. The analysis on a per area basis ends in an in-depth study which indicates that education has the largest concentration of productions, where once again women have a significant prevalence.

In the analysis on a per geographic region basis, despite the increase in the number of degree holders in the North and Northeast, as described in Table 1, the share of productions in these regions, especially in the North, is tiny, considering their populations. The highest concentration of M.A. works, in the state of Bahia, for instance, may indicate a change of productivity in these regions, which is also a consequence of graduate programs being set up outside the South-Southeast hub, as one of the actions proposed and implemented by graduate funding agencies carried out over the last few years in Brazil<sup>6</sup>.

Finally, there is still much to be explored in the interface: topics, authorship and racial relations in higher education and especially in graduate studies. An area to be taken and investigated by groups till then underrepresented in the highest range of schooling and academic prestige: Black people in graduate studies in Brazil.

**6-** Geographic de-concentration of bibliographical production is a current phenomenon in Brazilian science (SIDONE; HADDAD; MENA-CHALCO, 2016).

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