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Impact (s) of doctoral degrees held by faculty members in Portuguese higher education

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Abstract

In order to verify the impact(s) of doctoral programs processes of faculty members in higher education in Portugal, we applied a questionnaire survey to the completed PhD of teachers. This study is based on a questionnaire survey to the doctoral degrees of faculty members in Portuguese higher education, completed between 2007 and 2012, the survey was held between April 16 and May 6, 2012, to all teachers in Portuguese higher education having quickly reached 1001 answers that we briefly analyze here. It appears that in this period of analysis, there were many faculty members who have successfully completed their doctoral process, meeting the quality standards that enable the integration of higher education in the Portuguese panorama of internationalization, especially in view of the requirements of the Bologna process.

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INTRODUCTION

The conducted questionnaire survey was sent electronically to all teachers in Portuguese higher education, which corresponds to a universe of 25849 faculty members, distributed by public University and Polytechnic higher

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education and private University and Polytechnic higher education. As already mentioned, 1001 valid responses to the survey questionnaire were obtained.

In the sampling calculation, it was decided to use the method of "simple random sampling is a method characterized by giving the same probability of selection to all" (Vicente, 2012) the elements that make up the sample, considering a universe of 25849 (Ciência, 2012) faculty members that integrate the Portuguese higher education system, it would be necessary to receive 647 valid questionnaire surveys for a 99% confidence interval with a maximum error of 4.93%. Since the number of teachers who completed the doctorate between 2007 and 2012 is certainly less than the number of teachers that are a part of the system (25849) and with the number of valid questionnaires reaching 1001 questionnaire surveys, it was thus possible to be considered that the results are very reliable, since it is a randomly selected representative sample that meets the characteristics necessary to meet the objectives set for the study – to have held a doctorate between 2007 and 2012 - and the sample (647) far exceeded its size (1001 valid questionnaires), allowing to obtain estimates with the imposed level of accuracy and reliability.

1. Results Analysis

University faculty members represented 553 (55.2%) of the respondents and the polytechnic faculty members 448 (44.8%) of which 126 of these are linked to the universities' polytechnic subsystem. The effort of holding a doctoral degree by the polytechnic faculty members had already intensified, as it is now clear, even before the revision of the proper Career Statute. Demonstrating that the teaching staff of our higher education institutions always regarded their qualification, as its fundamental concern, as a way to ensure that the education given to students is, for their part, as best and most appropriate as possible.

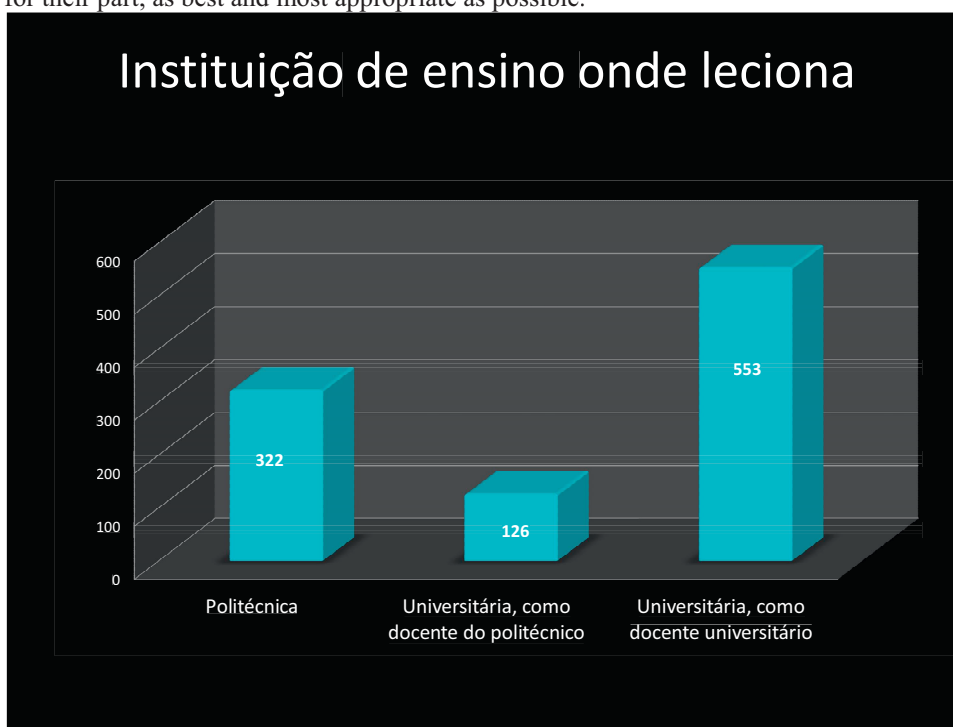


Figure 1 Institution where one teaches

Respondents report a mean of 13.6 years at the institution where they teach that is, they already held a significant teaching experience before moving towards a doctorate degree. In general the teachers who do the PhD do not have had experience at another institution, since the average length of teaching in higher education is 15.6 years, in other words, only slightly higher, corresponding to only two extra years. Demonstrating that these faculty members are far from meeting transient needs of the higher education system, although many of them have had and still have precarious contracts for many years with little or no guarantees, despite their effort and commitment in both seeking permanent qualification and cyclically spreading an understanding of excellence with a strong impact on the economy and society among their students. It is not determined the effect that the unceasing pursuit of knowledge by teachers in higher education, has in the transfer of knowledge that is done by teachers at various levels within and outside higher education institutions, on a daily basis, whose preferred recipients are their students.

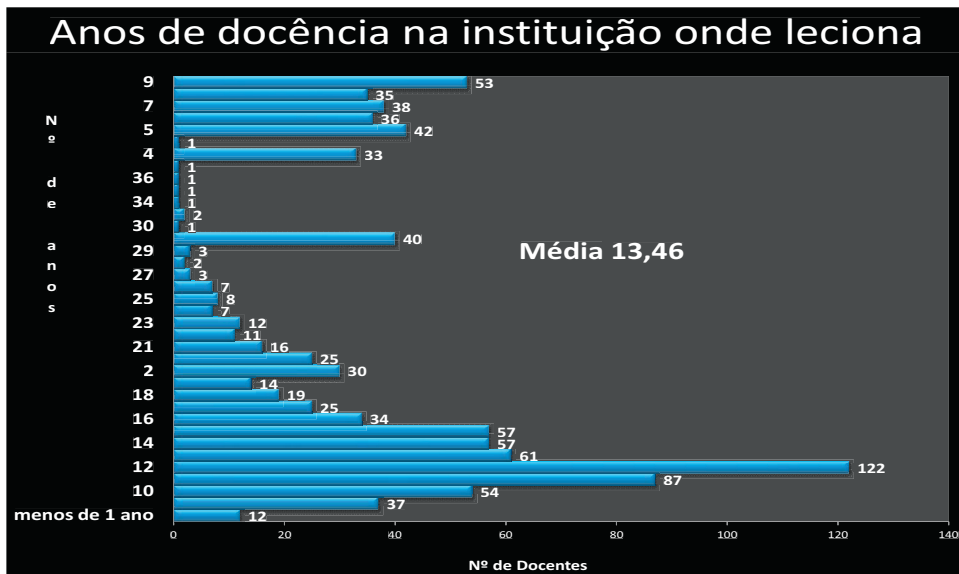


Figure 2 Years of teaching at their institution

The vast majority of teachers, that is, 712 (71.2%) when joining their present institution only had a graduate degree and 218 (21.8%) already held a master's degree. Only 51 have joined the institution with a doctorate degree. Since then the pursuit of higher qualifications, has been a constant goal by the faculty members of our higher education institutions, whose importance of skills and the impact it would have and has in the Portuguese social and economic fabric, deficient in higher qualifications, has always been understood by them.

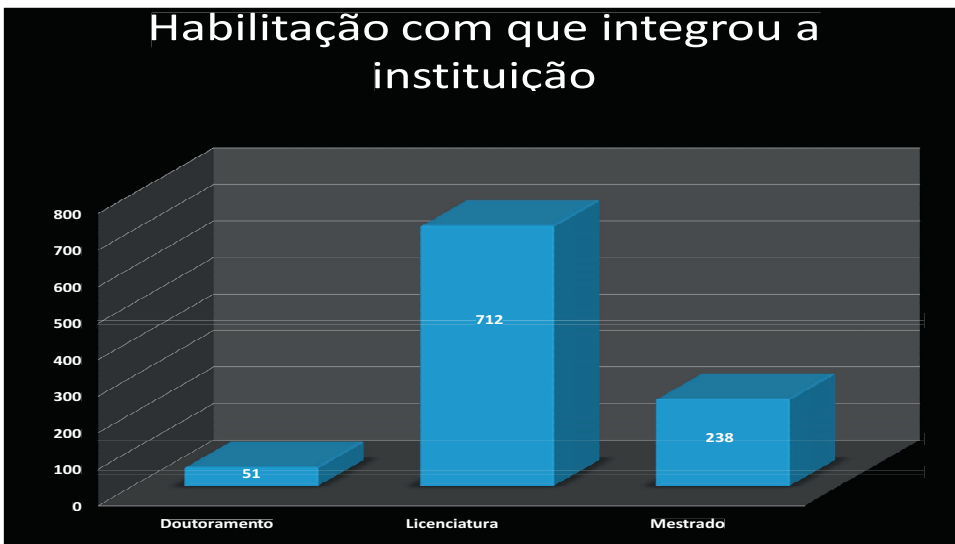


Figure 3 Degree with which one has integrated the institution

The start of the PhD is dated before 2007, in most cases, which is before the adoption of a legal statute by institutions, and 2006 is the year with the highest number of early doctoral degrees.



Figure 4 - Start of doctoral degree (year)

Of the respondents, 461 (46.1%) did not receive any leaves to undertake a PhD, a number that clearly shows the lack of conditions that many faced. Although there weren't encouraging conditions to a good performance in the doctoral process, considering all the psychosocial involvement that this type of stages in the lives of faculty members requires, the same motivation in actively contributing to the development of their country and its institutions, demonstrates a remarkable sense of responsibility and citizenship, still ensuring a competitive higher education at European and global level, in a very global market.

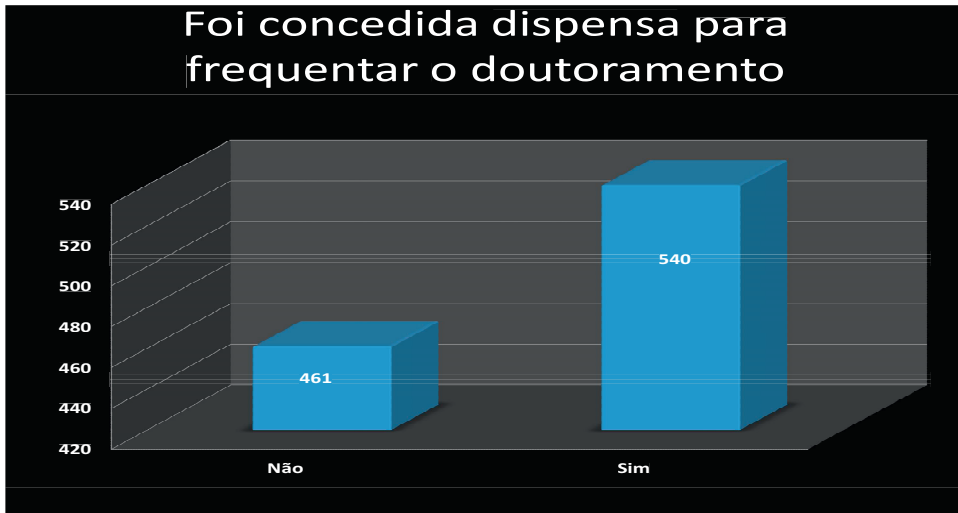


Figure 5- a leave was granted to undertake the doctoral degree

389 (38.9%) of respondents did not apply to any system of financing for their research project. Bearing all inherent costs in the process of doctoral programs, that are not depleted in fees, since they imply the constant need for updating literature, traveling to conferences, among others. Still they have taken up these costs, no doubt explaining their motivations and success in their doctoral project. However the impact of this education par excellence is directly and cyclically reflected in their students having a strong weight in the economy and society but also in the institutions where they work as faculty members, becoming more competitive and credible in attracting a greater number of students given the qualification of its faculty staff.

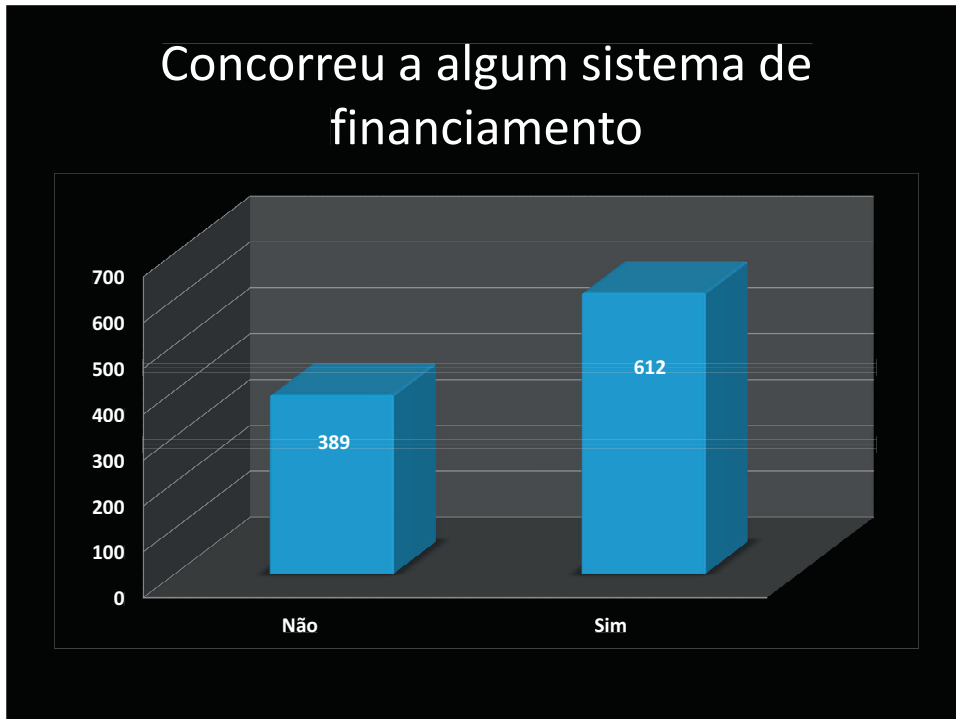


Figure 6 - Applied to any system of financing

Not only providing support falls far short of what is expected, as we have seen, but inbreeding is much more limited than what is suspected. 653 (65.2%) of respondents did not attend the Masters at the institution where they work and 544 (54.3%) did not undergo a doctorate program in their institution.

It is noted that in most cases teachers seek other higher education institutions, than their own, to make their doctoral programs, an issue that can relate to the educational offer by the institution where they teach (do not forget that only recently polytechnics have master programs to offer), freedom of decision, complement to the future educational offer of the institution where they teach, providing the institution with other future educational opportunities.

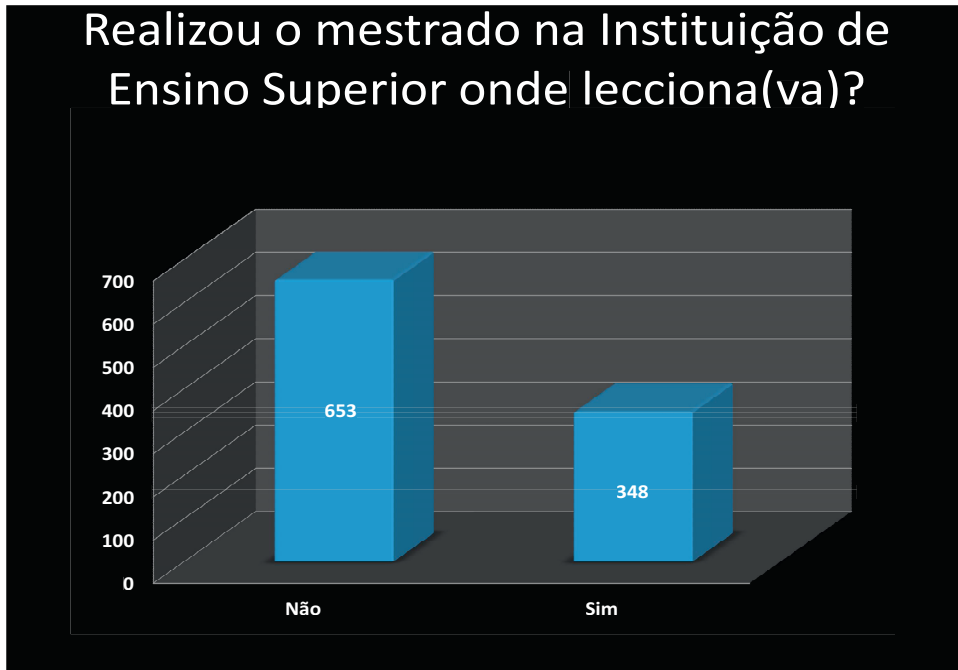


Figure 7 Carried out a master's degree in the Higher Education institution where they teach (taught)

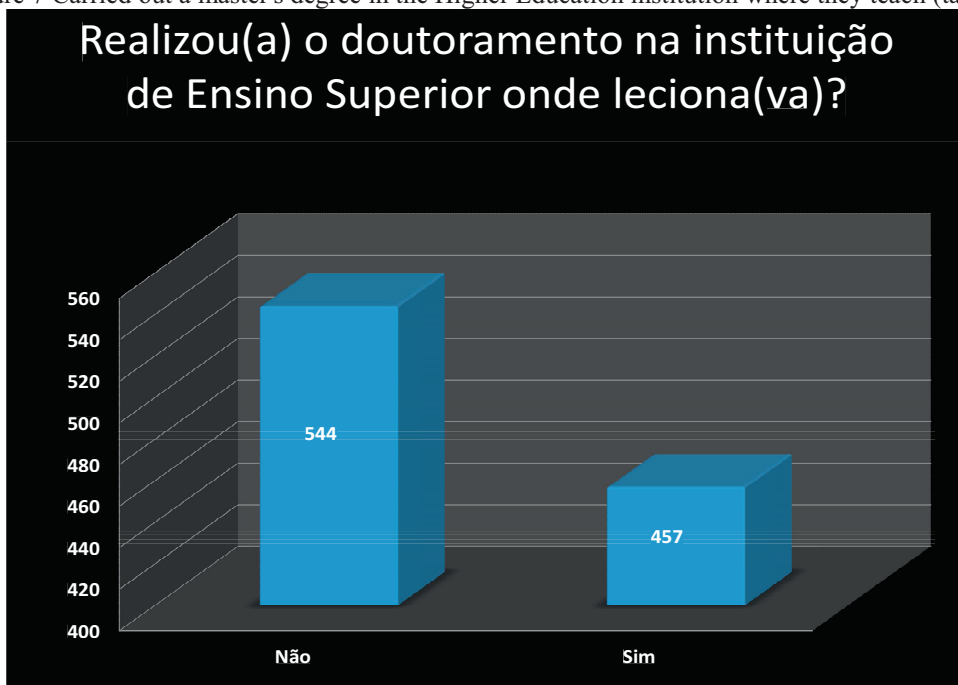


Figure 8 Carried out a Ph.D. in the Higher Education institution where they teach (taught)

However it is also worthy understanding that achieving a PhD by lecturers that is still the case of 473 (47.3%) of respondents, even it is still important; it is not yet a majority.

In the polytechnic, 123 of doctorates already belonged to "the permanent staff" on the date on which they got their doctorate, without it bringing them security or additional revenues. That immediately deflates the idea that the direct passage to associate professors or assistant professors that would heavily penalize the financial stability of the institutions, on the contrary he teachers are the first to understand that a quality higher education goes unequivocally through their qualification and nothing more because only then are they able to meet the international standards that govern these institutions. It is awkward if institutions whose core is based on skills and knowledge transfer, keeps the costs of human resources invariably low, it could mean two things: either they had not allowed intensive qualification the of their faculty members, or they didn't have the ability to maintain the most qualified resources, in both situations there would be a loss, since the differentiating character in these institutions is precisely the strong investment in knowledge capital.

And in the remaining cases of teachers of polytechnic Institutions and university lecturers, when respondents began their doctoral program, they lacked any guarantees in terms of career integration. Lecturers even today do not have that, that is, despite the precarious career of teachers in higher education, They will do whatever they can in favor of the institution where they work, enhancing it with their academic performances and the whole setting that results in the transfer of knowledge for their students.

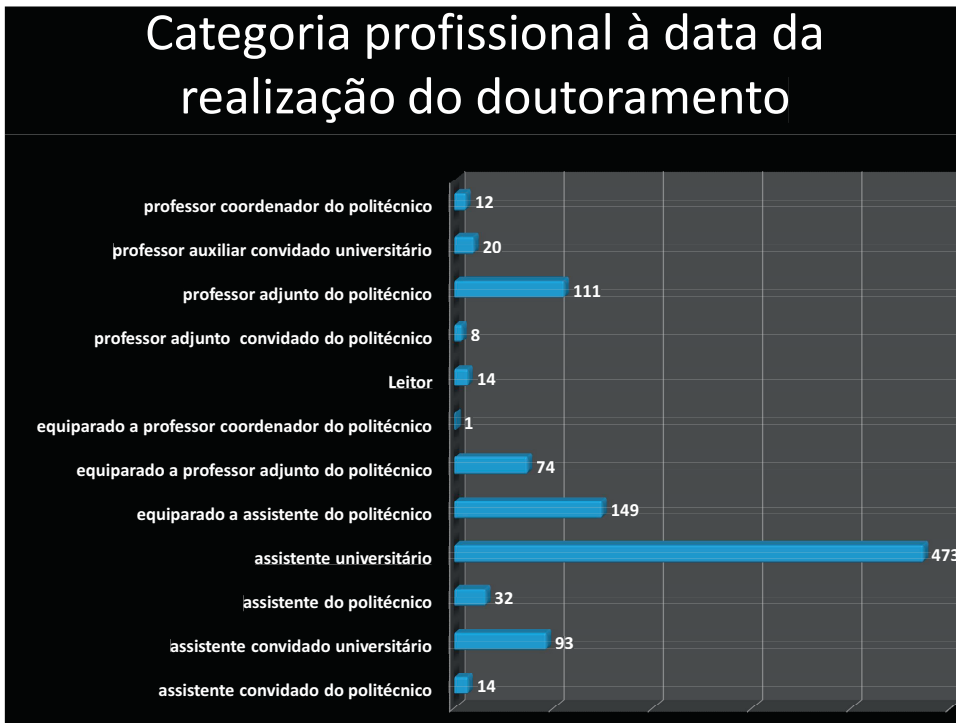


Figure 9 Professional category at the date of completion of the Ph.D.

2. Conclusion

Most teachers in Portuguese higher education responded affirmatively to the challenge of the Bologna process and to internationalization of our higher education institutions, having initiated and completed their doctoral projects before the approval of the institutions' legal statutes, which allows the transition of teachers with a PhD to a less precarious contractual relationship.

On average teachers integrate their higher education institution for thirteen years, which is a considerable time, taking into account the inertia of the system to generate conditions for carrying out the processes of doctoral programs by faculty members, aimed at attaining the standards required to our higher education system.

The overwhelming majority of teachers, who are part of the Portuguese higher education system, integrated the system with a graduate degree regardless the education subsystem where they provide service.

A significant number of teachers did not receive any type of leave of absence, to perform the demanding qualification process of a PhD, with which one aims to respond to the clear need for quality and internationalization of Portuguese higher education in accordance with the best international standards.

More than half of the faculty members did not apply for any source of funding to carry out their research project, which makes us question the expectation of teachers in relation to financial support systems for existing qualifications.

The vast majority of teachers choose other higher education units to carry out their doctoral program, than that where they teach, registering the same trend as it was verified when obtaining a master's degree.

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