Scopus Analysis of the Academic Research Performed by Public Universities in Galicia and North of Portugal

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ABSTRACT

Scopus is recognized by experts as one of the best, most rigorous, and most complete bibliometric databases. The present work used Scopus-based bibliometric analysis and Pearson correlation coefficients to analyse the research output of three universities in the Galicia region of Spain and three public universities of North of Portugal. The purpose of this study was to understand the current state of Galician and Northern Portugal academic and scientific research, to identify the main research fields in which the region stands out, and to compare and contrast the academic production of the six universities. The main conclusion to be drawn from this study is that scientific production in the Euroregion Galicia-North of Portugal is not concentrated on a few study fields, but covers a wide range of subjects, from medicine and chemistry, to computer science or engineering. The University of Porto stands out, both in scientific production and in the number of researchers.

KEYWORDS

Academic Research, Database, Galicia (Spain), Northern Portugal, Scopus, University

INTRODUCTION

The access to the Internet and the evolution of new technologies have made possible to disseminate information worldwide, as well as to access a large part of the scientific literature through the Internet (Asadi, 2017; Ravishankar, 2013). Internet’s outstanding growth has become a phenomenon of huge importance for economic, political and social life in contemporary societies (Curran, Fenton, & Freedman, 2016). Since 1989, Web is the highest data ordinance in existing world and providing main force for large scale of Information Communication Technology & Networking (ICTN) (Gohel, 2014). Within it, scientific and academic research is to be found, facilitating the work of other researchers in allowing the access to databases and repositories with large quantities of articles. It is also an important resource for students, as it allows them to expand their academic experience and access relevant information, at the same time they can communicate with other colleagues within the academic

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community (Tella, 2007). Accordingly, previous studies have shown that students (especially those in higher education institutions) used the Internet for different purposes, such as academic research, online socializing and entertainment (Ayub, Hamid, & Nawawi, 2014).

Research data accessibility has great potential for scientific progress. It makes easy the replication of research results and allows the application of old data in new contexts (McCullough, 2009). The current researcher has at his disposal numerous electronic resources through which he can obtain scientific literature. Hence the importance of understanding how it operates and how the most relevant information is selected (Navarro-Molina, González-Alcaide, Bolaños-Pizarro, de Dios, & Aleixandre-Benavent, 2011). To strengthen this position, national research associations have come together to promote data exchange in the academic world (Fecher, Friesike, & Hebing, 2015). Over and above, this process leads to a greater competition among researchers [10] and a higher quality standard that increases research productivity demands (Whitley, 2003). Besides, research activities are financed by public or private institutions, which invest a lot of money in providing technical and human resources to achieving higher-level goals (McNutt, 2014).

Scopus, considered by many the largest abstract and citation database of scientific, technical and medical peer-reviewed literature, is available since Elsevier started its operation in 2004. Links to full papers can be accessed and updated daily, in addition to many other resources that make it the preferred database for many academics (Arencibia, 2007). Comparing with other products, Scopus is ideal, since it has the largest global coverage in research, selected, relevant, with smart and simple tools that make easier to track, analyse and visualize research (FECYT, 2019).

The system automatically detects the publications to which an institution is subscribed. If a search is made from a university institution, Scopus identifies the origin and offers as results the link to the summary and citations or the full text of the publication. The working language is English and has the following search modalities (Navarro-Molina et al., 2011):

- Basic Search, offers the possibility of making a query using selection criteria that are usually associated with an advanced search. The temporal scope covers from 1960 to the present and includes citations since 1996. The results can be limited by source, author, type of document and study field;
- Author Search, allows the search of the publications by author. It incorporates a field to search by affiliation, thus helping in the case of authors with common surnames;
- Affiliation Search. This option will show all institutions related to the performed search, screening the institution details as identification number, city or country.

This study was conducted to provide an empirical analysis of the scientific research done in Galicia (northwest region of Spain) and Northern Portugal public universities. It starts by contextualizing the available scientific research databases, then by comparing some of them, making special reference to Scopus, as it has been the selected database to carry out the empirical part of the work given its wide coverage and prestige acknowledged by many researchers. The search was performed with the “Affiliation search” for each of the three Galician universities (University of Santiago de Compostela, University of A Coruña and University of Vigo) and for the three Northern Portugal universities (University of Porto, University of Trás-os-Montes e Alto Douro and University of Minho). The purpose of this study is to understand the current state of Galician and Northern Portugal academic and/or scientific research and to point out the main research fields in which the region stands out.

Databases as a Source of Academic Research: Scopus Database

In recent years, academic research has increased markedly, as have scientific journals. They have become more specialized, seeking higher quality indexes, as a journal’s prestige influences research performance evaluation in the academic community (Casal, 2002). Within scientific publications, the
A Comparison of Implementation Resistance Factors for DMSS Versus Other Information Systems
www.igi-global.com/article/comparison-implementation-resistance-factors-dmss/1230?camid=4v1a

Electronic Theses and Dissertations (ETDs)
www.igi-global.com/chapter/electronic-theses-and-dissertations-etds/215955?camid=4v1a