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RESEARCH ARTICLE

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NETWORK COLLABORATION ANALYSIS FOR STUDIES ON ORGANIZATIONAL BEHAVIOR AND MERIT

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ABSTRACT

The present study maps the international collaboration networks in the period 2015 to 1/2021, regarding publications on Meritocratic Organizational Behavior. The methodology relied on bibliometric techniques analyzing the sources, authors and countries. The R software was applied, which converted the bibliometric data set into graphs, highlighting the interconnections. They formed cluster 1 (United Kingdom and Germany), cluster 2 (China and Singapore), and cluster 3 (United States of America and Canada). A consolidated fact was the need for the expansion and consolidation of the viewpoint of the international study cooperation network in meritocratic organizational behavior.

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INTRODUCTION

In the contemporary world, there is a strong belief that meritocracy is largely responsible for success in society, in organizations, and in individual careers. In fact, we have a predilection for believing that those who reach the "top of the pyramid" are the ones who have more merit than those who don't. But the debate about meritocracy, especially in organizations, is now moving towards the construction of truly meritocratic systems, where everyone has an equal chance to develop and earn rewards solely as a result of their individual merits, regardless of gender, race, class or other non-meritocratic factors (Castilla & Benard, 2010). Studies with a bias toward inequality and diversity in organizations (Abraham, 2017; Amis, Mair, & Munir, 2020) continue to increase seeking to assess the ways in which organizational practices are related in the emergence of social and economic inequality. Another optic moving forward refers to the sense that organizations can benefit from using performance appraisal from the perspective of professional merit (Kim & Holzer, 2016). Since it is urgent to recognize that there is implicit bias in hiring and promotion, it is essential to develop clear criteria for hiring, compensation, and promotion that are not structured on subjective and/or ambiguous impressions (Ellemers, 2014).

With such a valuable contribution to the discipline of people management, the field of human behavior at work under the perspective of meritocracy gains space in the specialized literature, but the big research question that guides the actions of this investigation arises: How and with whom does the network of scientific cooperation structure itself in the production of knowledge about Meritocratic Organizational Behavior? Much to be unraveled on the topic, which collaborates in the pertinence of mapping the international collaboration networks of the recent period (2015 to 1/2021) of publications on Meritocratic Organizational Behavior (MOB) sourced from the Scopus and Web of Science (WoS) databases.

METHODOLOGY

A survey of the state of the art is an important step for better understanding a given field of study. In this research, the Web of Science - Clarivate Analytics and Scopus - Elsevier databases were used as sources, by applying bibliometric techniques (Hood & Wilson, 2001). The collaborative network for studying organizational behavior and merit, was the focus aiming to identify the interactions between the research, applying bibliometric technological tools to meet the author's scientific demand.

The Scopus and Web of Science databases were chosen because they are considered coherent and assertive, due to the relevance of their journals, since they group together journals of quality and reference (Galvão & Pereira, 2014). The methodological structure of the study relied on bibliometric techniques, with a view to statistically analyzing sources, authors and countries (Hood & Wilson, 2001). The mapping of the state of the art by bibliometric method is built by steps and action criteria that characterize them, and the author adopted as a reference the bibliometric approach method of Zupic & Ater (2014). In this approach and the structure of parameters for data collection followed the methodological design that was formatted into a reference framework to guide the execution of the work to be developed, following the essential criteria established by the author.

The paper portfolio was elaborated considering the terms to compose the search criteria (title, keywords and abstract) for the determination of the string, necessary for the search of exploratory nature in the databases. The theme "organizational behavior" and "merit" or "meritocracy" were addressed, being excluded: productions with the theme or context outside the organizational aspect; repeated productions; any other type of production that did not report to the inclusion criteria. Through this methodological design, the study can be characterized as theoretical-illustrative, because it uses a structured process for the selection of the bibliographic portfolio, which corresponds to the "state of the art" in scientific publications on the subject, as shown in Table 1 (Ensslin et al., 2014). The use of the two databases is important because they are recognized for the quality of their journals (Scopus and Web of Science). For the construction of the applied knowledge, it was used as a tool, a set of open source solutions, R software - Windows platform, version 4.1.0, using the graphical interface Rstudio version 1.4.1717, configured with Bibliometrix R package - Developers version is published on GITHUB repositior (Bibliometrix, 2018). The data analysis was performed from the pre-configured parameters of the software following the demonstrated path. Bibliometrix has five sections divided into:

- Descriptive analysis (sources, authors and documents);
- Social structure (analysis of authors' collaboration network, by universities and by country), as stated in Biblioshiny (2021).

RESULTS AND DISCUSSION

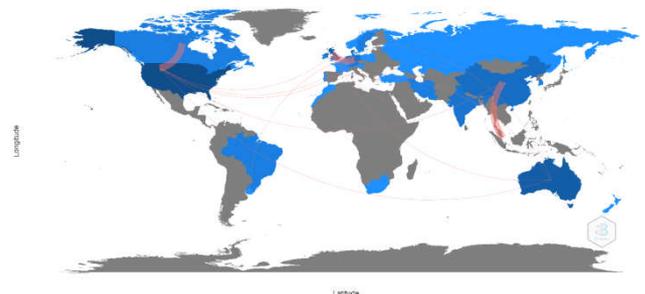
The results point to the formation of collaborative networks involving the authors, scientific institutions, and countries, in which they relate to each other in the specific field of meritocratic organizational behavior. The collaborative networks can be formed of regular study groups, hidden groups of scholars, and leading authors (Aria & Cuccurullo, 2017). Figure 1, reveals relevant countries in the specific research field studied here and their influential relationships. Network analysis methods are recognized as effective tools for gaining insights into the social structure of a field through its literature (Cuccurullo, Aria & Sarto, 2016).

Visualizations of these networks can support in obtaining an integrated and intuitive holistic view of the field and the interrelationships between authors, scientific institutions, and countries, contributing to query expansion, research refinement, and exploratory navigation. Our research brings results from an analysis that shows that the United States of America (USA), Canada, Australia, China, India, Singapore, United Kingdom and Germany are the main centers of concentration of research on Organizational Behavior and Merit (MOB). Brazil, Russia, South Africa, New Zealand, Morocco, Iran, Turkey, Portugal, and other European countries also stand out in the publications. Figure 2, the Louvain clustering algorithm was applied, from a mathematical family appropriate for detecting network communities. With Louvain Clustering it was applied a methodology that seeks to improve the existing modularity in a range of values (-1 to 1), comparing the volume of edges inside and outside the data community, performing an evaluation of the data set.

Table 1. Bibliometric portfolio selection process

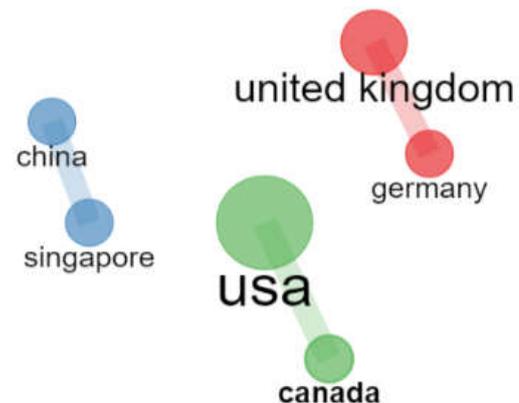
METHODOLOGICAL DESIGN	
Boolean Search	
Period: 2015 to 1/2021	
Keyword Matching(English String's)	
"organizational behavior" And "merit" or "meritocracy"	
WoS: Topics - SCOPUS: Title, Abstract, Keywords	
Categories: Management or Business or Public Administration or Industrial Relations Labor (Web of Science Categories)	
PORTFOLIO OF SELECTED ARTICLES	
ResearchedBases	
Scopus Document Types: Articles Collected number: 12	Web of Science DocumentTypes: Articles Collected number: 76
TOTAL ITEMS AFTER PORTFOLIO FILTERING: 63	

Source: elaborated by the author (2021)



Source: elaborated by the author (2021)

Figure 1. Collaboration World Map



Source: elaborated by the author (2021)

Figure 2. MOB's social structure of cooperation

Community in this context, can be understood as a grouping of individuals closer together who interact with each other more frequently than those outside (Bedi & Sharma, 2016). In this way, cluster formation can be visualized from the detection of clusters in the large network of social cooperation between the featured countries. One notices that the Louvain Clustering algorithm converted the bibliometric dataset into a graph, where the highly interconnected nodes stand out (Blondel et al., 2008). They formed three clusters, noticeable by the trails interconnecting the nodes, with networks in three colors: red (cluster 1), blue (cluster 2), and green (cluster 3). The size of the node for each item indicates the frequency of occurrence of publications in that country. The results identified that the international cooperation network on MOB is formed by three clusters, with cluster 1 consisting of UK and Germany; cluster 2 by China and Singapore; and cluster 3 by USA and Canada. Cluster 3 is the most intense in terms of relations and publications on the subject, leading us to understand that it forms a more specialized cluster in the world, which may arouse the interest of researchers from other countries to seek an interaction to broaden the scope and deepen the theme internationally.

It is clear that three continents managed to form clusters, which signals a global concern about the theme, but it can be inferred that the social network is still incipient in terms of capillarity, since the clusters are formed by only two countries each.

Conclusion

Scientific graph mapping is becoming a fundamental process in supporting bibliometric studies for researchers in various scientific fields. Especially considering the large number of publications continuously expanding at increasing rates. In this study it was detected that publications in the field of meritocratic organizational behavior develop in a fragmented manner, making the task of accumulating knowledge more complex. The determination of social structure in relation to global cooperation networks uncovered only three clusters as international research fronts. Despite being an important field not only for research for people management, the fact is that it needs to be expanded and consolidated from the point of view of international study interconnection.

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