Citizen Organizational Behavior In Public Administrative Management. A Bibliometric Analysis Of Performance And Scientific Mapping

Muman Andrés Rojas-Dávila (1), Cristian Oswaldo Guerra Flores (2), Olga Maritza Rodríguez Ulcuango (3), Isabel Maldonado Núñez (4)

1. Student of the Doctorate in Administration and Management of Organizations, ESAI Business School, Espíritu Santo University, Guayaquil Ecuador,muman_rojas@hotmail.com.EITHERrcid: https://orcid.org/0000-0001-6173-8349
2. Professor of the Higher Polytechnic School of Chimborazo Faculty of Business Administration, Marketing Career, Innova MKT Ecuador Research Group,cristiangf357@gmail.com. Orcid: https://orcid.org/0000-0001-7178-9940
3. Professor of the Higher Polytechnic School of Chimborazo Faculty of Business Administration, Finance Career, Innova MKT Ecuador Research Group,olmary@espoch.edu.ec. Orcid:https://orcid.org/0000-0003-2017-1096
4. Professor at the Faculty of Computer Science and Electronics, Polytechnic School of Chimborazo (ESPOCH), Ecuador. E-mail:alba.maldonado@espoch.edu.ec. Orcid: https://orcid.org/0000-0001-8673-0319

Summary

The purpose of this work is to carry out a systematic review of publications related to citizen organizational behavior (OCB) in public management. The method to carry out the review consisted of collecting data from 216 related articles from WoS and Scopus, these were analyzed through a bibliometric method using the Bibliometrix package. The results show a significant growth in the number of articles related to OCBs in public management from 2000, identifying the most relevant authors, journals, and references published up to 2022. In the articles analyzed, the references allowed us to identify a co-occurrence between the OCB and the theory of public service motivation. organizational commitment, job satisfaction and organizational justice also appear recurrently in the articles within the concepts developed according to the analysis of keywords. The bibliographic link and the thematic evolution up to 2022 support these findings and allow us to identify leadership and organizational ethics, ethics and commitment at the employee level, and motivation to serve and job satisfaction as similar lines of research among the articles analyzed. The implications of this study allow us to complement the previous literature reviews carried out regarding the progress of the study of CBOs in the public sector, and provide an additional approach by proposing a bibliometric processing method.

Keywords: Citizen Organizational Behavior, public management, bibliometric analysis, systematic review.

1. Introduction

Eisenberg & Sadovsky (2004, p. 1)establish that prosocial behaviors group those voluntary and intentional behaviors that seek the benefit of a third party and whose motives are not specified as good or bad. Organizational Citizenship Behavior (OCB) is defined as "behavior(s) of a discretionary nature that are not part of the formal requirements of the employee role, but which nevertheless promote the effective functioning of the organization".(Organ, 1988,

p. 4),However, both the concept and its field of analysis have evolved significantly over the last 30 years, becoming one of the main lines of research in organizational analysis.(Tabash et al., 2022). The topics of interest in the analysis of OCBs include mostly job satisfaction, leadership, organizational commitment, organizational support, organizational justice, organizational trust, job performance, social exchange theory, transformational leadership. and organizational identification among others (Guiling et al., 2022). In general, most of the advances can be grouped into reviews of the factors that influence employee motivation towards the organization, the intention to remain at work in relation to the employee-employer commitment, and the analysis of implicit relationships and Expressions of Employee Confidence with Job Satisfaction (Guiling et al., 2022; Lepine et al., 2002; Organ, 2018; Podsakoff et al., 2000, 2018).

On the other hand, public management is defined by Perry and Kramer in Parry (1992, p. 2) as the combination between the formal approach of traditional public administration and the applied approach of administration in its best known form, therefore, it is not alien to the analysis of the existence and motivation of prosocial behavior models related to OCBs.(Pandey et al., 2008). Although to a lesser extent than in the private sector, significant progress has been observed in recent years regarding the study of the antecedents and consequences of CBOs in the public sector (from Geus et al., 2020). This progress is consistent with what is indicated Vigoda-Gadot & Cohen (2004, p. 13) by posing citizen behavior as a critical component of all public systems and bureaucracy that have general objectives related to equity, effectiveness, efficiency, social justice, and growth and development.

Additionally, the post-COVID scenario has implied a greater interest on the part of organizations in the analysis of the motivation of prosocial behaviors at work. (Kniffin et al., 2021). However, the motivation of these prosocial behaviors, and the particular case of the CBOs, has identified differences between the public and private sectors that require the analysis of each sector separately (Ingrams, 2020), so that for the study of the advances achieved in the analysis and development of the OCB in public management, a specific systematic literature review must be carried out.

To carry out this systematic review, a bibliometric method of performance analysis and scientific mapping will be used based on the development guidelines established by Donthu et al. (2021), as well as the Bibliometrix library via R (Dervis, 2019). In addition to this introduction, this document will be organized according to the following structure: the detail of the bibliometric methodology that will be applied in conjunction with the information collected, the results of the bibliometric analysis carried out with the corresponding statistical summary and finally a discussion regarding the analysis carried out and possible future improvements to it.

2. Methodology

According to Donthu et al. (2021) performance bibliometric analysis is descriptive in nature and allows examining the contribution of the components of an area of knowledge while scientific mapping analysis considers the relationship between these components. Both performance analysis and scientific mapping require in the first instance to define the scope and objective of the bibliometric analysis. The scope of the analysis is associated with the components of the concept to be reviewed (authors, affiliations, journals, and references), while the objective is associated with the relevance of the bibliometric analysis considering the number of publications related to the concept.

To execute the analysis, version 4.0.1 of the Bibliometrix tool was used (Aria & Cuccurullo, 2017), an open source tool originally developed in R and executed through its Biblioshiny web interface. This tool was chosen over others available considering that due to its open source nature, code facilitates its access, distribution and replicability and that it has been used recurrently in articles related to bibliometric analysis in recent years (Radha & Arumugam, 2021).

Data Collected

The data collected for the analysis were extracted through article searches on the Web of Science (WoS) and Scopus websites separately and then joined into a single database, since the union of these sources allows to know the broadest possible way the knowledge generated and trends regarding a specific area (Echchakoui, 2020). For the extraction of the articles it was necessary to establish search conditions in both websites in an identical way, hence the Board 1 these conditions are indicated, the number of articles with matches found in each source, and finally the number of articles that will be used as the basis of analysis, after the database union procedure described by Caputo & Kargina (2022). After completing the process of union and elimination of duplicate articles, 216 publications were identified that were used as an analysis database.

Board 1. Selection Criteria Applied

Criterion	Web of Science	Scopus
consultation date	27-September-2022	
Document type	Articles	
Idiom	English	
search fields	Title, abstract and keywords	
Search terms	("organizational citizenship behavior" OR "organizational citizenship") AND ("public manag*" OR "public admin*" OR "public sector" OR "public employ*")	
Number of articles per site	150	139
Total number of articles	216	

Note. This table shows the fields that allowed the information search

3. Results

Indicators of performance

The Board 2 summarizes the most important indicators related to the production of articles according to the data obtained from the analysis base. It was possible to identify that the first article, according to the search conditions described, corresponds to the year 2000 (Vigoda-Gadot, 2000) and that it verifies the relationship between the perception of political organizations and the OCB. In general, between the year 2000 and 2022, an annual growth rate of 12.56% of the number of publications was obtained, which denotes the high interest in incorporating the concept in public management and its development over time.

Muman Andrés Rojas-Dávila (1), Cristian Oswaldo Guerra Flores (2), Olga Maritza Rodríguez Ulcuango (3), Isabel Maldonado Núñez (4)   594

Board 2. Main Article Production Indicators

| Indicator	Result
years of production	2000:2022
Sources (magazines)	111
Annual growth rate (%)	12.56
Number of references	13584
Average citations per article	21.6
Number of keywords (Author)	589
Number of authors	521
Number of authors of individual authorship	31
Co-authors per article	2.75
Percentage of international co-authorship (%)	22.22

Note. This table shows the indicators of scientific production in relation to the object of study

In a complementary way, the

Figure *1* allows to show three key moments of change in the trend of the number of article publications: the period 2000:2009 where an almost constant behavior is observed and with a smaller number of articles, the period 2010:2015 where a first significant increase is observed of the number of articles and the period 2016:2022 where it is observed again that the maximum number of articles published in the previous period is exceeded.

Figure 1. Historical Publications 2000:2022
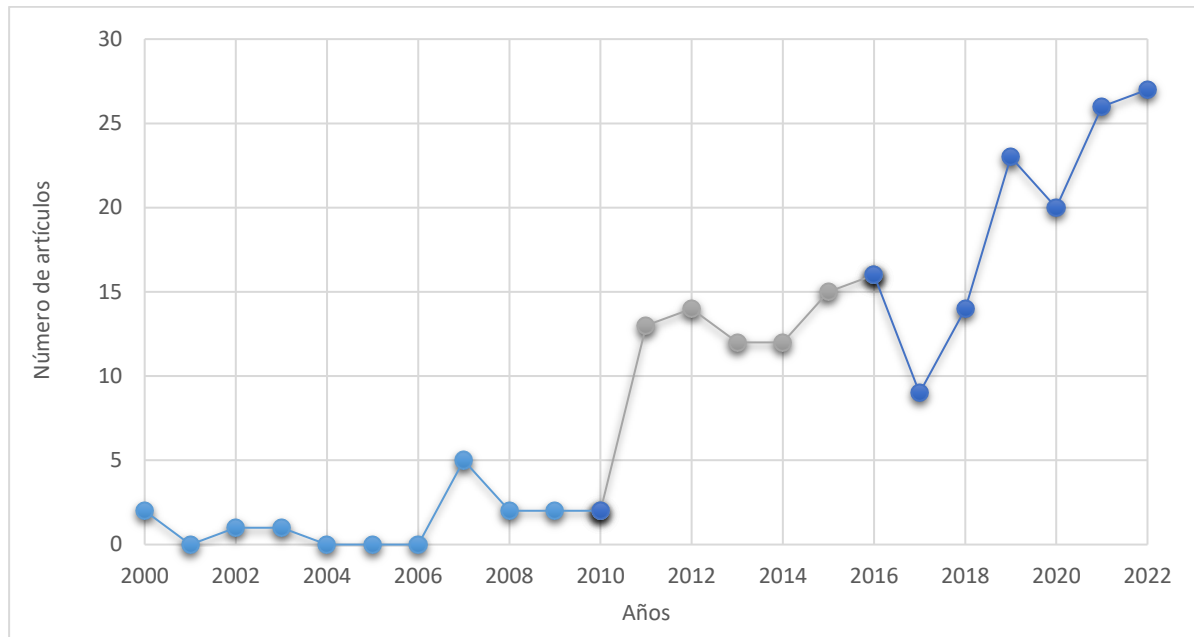
Note. The graph represents the evolution of years of scientific production from the Core Science tool.

Most Relevant Magazines

In the Board 3 it is possible to identify the list of the 10 most relevant journals based on the publication source of the articles analyzed. The quality indicators of the quartile associated with the Scimago Journal Rank (SJR) and the h-index registered in SJR were incorporated into this list as impact measures. The most relevant magazines are Public Administration Review whose main topics are public administration and management with a 5.09% participation and Review Of Public Personnel Administration whose main topics are the impact of human talent management on public policy and administration with 5.09 % participation.

It is important to indicate that the 10 main journals only group 36% of the published articles, hence the hegemony of a particular journal regarding the subject investigated cannot be assumed. If the Herfindahl index (HHI) is calculated for the percentage participation of the journals, a value of 189.90 can be obtained, which implies that there is no high concentration of the articles analyzed in a particular source (Larivière et al., 2009).

Board 3. Most relevant magazines

Magazine	Number of Articles published	% of total analyzed	Scimago Journal Rank 2021 (SJR)	h-index 2021
Public Administration Review	eleven	5%	Q1	149
Review Of Public Personnel Administration	eleven	5%	Q1	48
International Journal Of Public Administration	9	4%	Q2	47
Personnel Review	9	4%	Q2	77
Journal Of Business Ethics	8	4%	Q1	208
Public Management Review	7	3%	Q1	78

Public Personnel Management	7	3%	Q1	47
American Review of Public Administration	5	2%	Q1	62
International Journal Of Manpower	5	2%	Q2	61
Journal Of Public Administration Research And Theory	5	2%	Q1	119

Note. The table shows the most relevant journals where the articles have been published.

Most relevant authors

The hyg indices make it possible to establish a statistical measure of the relevance of an author's production in a specific area by measuring not only the volume of article generation but also the number of citations received (Egghe, 2006; Hirsch, 2005). The Board 4 summarizes the impact indicators for the 10 most relevant authors with respect to the analysis database. It can be seen that the author with the highest value corresponding to the hyg index indices is Eran Vigoda-Gadot from the University of Haifa (Israel) with 9 articles in the analysis database and published in high-impact journals according to the Scimago Journal Rank 2021 (SJR).

Board 4. Most relevant authors

Authors	h-index	g-index	Total, of citations	Number of Publications
They were Vigoda-Gadot	8	9	580	9
Ahmed Mohammed Sayed Mostafa	6	6	265	6
Itai Beeri	3	3	178	3
Liat Eldor	3	3	64	3
Julian Seymour Gould-Williams	3	3	238	3
jungin kim	3	3	60	3
bangcheng liu	3	4	68	4
qing miao	3	3	70	3
Nazim Ali	2	2	13	2
T. Alexandra Beauregard	2	2	106	2

Note. The table shows the most relevant authors who have published articles.

Most Relevant Affiliations

The evaluation of the affiliations makes it possible to determine the institutions with the highest production of articles in the analysis base. The data of the Board 5 allow us to verify that the institution that has generated the greatest volume of articles is the University of Haifa (Israel) with 18 articles, followed by the Shanghai Jiao Tong University (China) with 14 articles and in third place the University of Macedonia (Greece) and the Universiti Utara Malaysia (Malaysia), both with 8 articles. It is important to identify that, although the largest number of articles are concentrated in a single institution, most of the publications in the

relevant affiliations were generated from European universities. An important fact to highlight is also the representativeness achieved by Chinese universities in the number of publications.

Board 5. Most relevant affiliations

Institution	Number of Publications	Country
University of Haifa	18	Israel
Shanghai Jiao Tong University	14	China
University of Macedonia	8	Greece
University of Utara Malaysia	8	Malaysia
University of Almeria	7	Spain
Zhejiang University	7	China
Leiden University	6	Netherlands
Assyut University	5	Egypt
Monash University	5	Australia
Radboud University of Nijmegen	5	Netherlands

Note. The table shows the most relevant affiliations of Universities worldwide.

Most cited articles globally and locally

The relevance of a published article can be established from its co-citation within the analysis group (local citation) or the number of citations it has at the level of all areas of knowledge (global citation). The Board 6 summarizes, for the analysis database, the 10 articles with the highest global citations, which incorporate some of the most relevant authors previously identified (such as Vigoda-Gadot or Beeri). The most cited articles globally refer mainly to general topics such as performance measurement, application of the demand-resource model, motivation for public service or the correlation of said motivation with different mediating variables.

Board 6. Most cited articles globally

Article title	Reference	Number of global citations
Unlocking the black box: Exploring the link between high-performance work systems and performance.	(Messersmith et al., 2011)	3. 4. 5
A psychological contract perspective on organizational citizenship behavior.	(Coyle-Shapfro, 2002)	336

Muman Andrés Rojas-Dávila (1), Cristian Oswaldo Guerra Flores (2), Olga Maritza Rodríguez Ulcuango (3),
Isabel Maldonado Núñez (4)

Article title	Reference	Number of global citations
Public service motivation and organizational citizenship behavior in Korea.	(S.Kim, 2007)	199
Leadership style, organizational politics, and employees' performance: An empirical examination of two competing models.	(Vigoda-Gadot, 2007)	171
A Job Demands–Resources Approach to Public Service Motivation.	(Baker, 2015)	167
Internal Politics in Public Administration Systems.	(Vigoda-Gadot, 2000)	140
Employee Empowerment, Employee Attitudes, and Performance: Testing a Causal Model	(Fernandez & Moldogaziev, 2013)	118
Public service motivation and employee outcomes. in the Egyptian public sector: Testing the mediating effect of person-organization fit	(Gould-Williams et al., 2015)	106
Change-oriented organizational citizenship. Behavior in public administration: The power of leadership and the cost of organizational politics.	(Vigoda-Gadot & Beeri, 2012)	94
A Meta-Analysis of Job Satisfaction Correlates in the Public Administration Literature.	(Cantarelli et al., 2013)	85

Note.The table shows the articles published with the highest citations worldwide.

The Board 7 summarizes the most cited articles locally, that is, within the analysis group. Once again, some of the most relevant authors are identified, however, the articles refer to more specific topics applicable to public management such as organizational ethics, transformational leadership, philosophy in the public sector and administration policies in the public sector, with its corresponding differences and comparison with the private sector.

Board 7. Most Locally Cited Articles

Article title	Reference	Number of global citations
The Impact of Transformational Leadership on Organizational Citizenship Behaviors: The Contingent Role of Public Service Motivation	(Bottomley et al., 2016)	7

Unlocking the black box: Exploring the link between high-performance work systems and performance	(Messersmith et al., 2011)	6
Internal Politics in Public Administration Systems	(Vigoda-Gadot, 2000)	5
Organizational Citizenship Behavior and the Public Service Ethos: Where the Organization?	(Rayner et al., 2012)	4
Advancing Ethics in Public Organizations: The Impact of an Ethics Program on Employees' Perceptions and Behaviors in a Regional Council	(Beeri et al., 2013)	4
Organizational Citizenship Behavior in the Public and Private Sectors: A Multilevel Test of Public Service Motivation and Traditional Antecedents	(Ingrams, 2020)	4
Leadership style, organizational politics, and employees' performance: An empirical examination of two competing models.	(Vigoda-Gadot, 2007)	3
From Leadership to Citizenship Behavior in Public Organizations.	(Ritz et al., 2014)	3
A Meta-Analysis of Job Satisfaction Correlates in the Public Administration Literature	(Cantarelli et al., 2013)	3
Transformational Leadership and Organizational Citizenship Behavior in the Public Sector in South Korea: The Mediating Role of Affective Commitment	(H.Kim, 2012)	2

Note: The table shows the most cited articles within the analysis group.

Most relevant cited references

From the bibliometric approach, a relevant reference is considered to be a publication with a high number of citations from another article (Ding et al., 2009), where this relevance increases depending on the impact of the article that cites it. The Board 8 summarizes the 10 most cited references by the authors of the articles in the analysis database, where the number of citations according to Google Scholar and Scopus is included as an approximation of its general impact.

It is possible to preliminarily identify three groups of references to relevant publications in the identified articles: references to publications related to the development of OCBs (Organ, 1988; Podsakoff et al., 2000; Williams & Anderson, 1991), references to publications related to statistical techniques frequently used in the evaluation of the proposed models, measurement instruments and their assumptions (Fornell & Larcker, 1981; Podsakoff et al.,

2003) and finally the references to publications related to the development of the concept of motivation to public service (Pandey et al., 2008; Perry, 1996; Perry & Wise, 1990). An important addition to the relevant references is the quote corresponding to the theory of social exchange(Blau, 2017).

Board 8. Most Cited References

References	Number of Appointments		
	data group	Scopus	google scholar
(Podsakoff et al., 2003)	53	39496	61872
(Williams & Anderson, 1991)	44	2650	9150
(Organ, 1988)	43		15220
(Perry, 1996)	32	1037	2623
(Podsakoff et al., 2000)	31	2870	9455
(Perry & Wise, 1990)	30		4125
(S.Kim, 2007)	29	99	578
(Fornell & Larcker, 1981)	25		93622
(Pandey et al., 2008)	24	228	470
(Blau, 2017)	23		39379

Note: The table shows the most cited references within the analysis group.

Analysis of the most relevant keywords

Discarding the terms OCB and public sector because they are directly related to the subject reviewed, the highest frequencies in the keywords of the articles under analysis correspond to motivation for public service (21), job satisfaction (20), commitment to the organization (16), leadership (11) and transformational leadership (11). The word cloud of

Figure 2. It allows to visualize the most relevant frequencies found, and in the same way to know the terms of greatest interest that appear in the articles under analysis.

Figure 2. Information cluster

Note.This figure shows the clusters formed for the study of trends

Additionally, keyword co-occurrence analysis (van Eck & Waltman, 2014) It allows us to verify the relationships between the most relevant terms of the articles under study. This approach to the concepts in a systematic way allows us to visualize the most frequent Figure 3. where it can be seen that the concept of OCB coincides in a relevant way with the variables or research dimensions and their relationship through the keyword co-occurrence diagram in the

motivation to public service, organizational commitment, job satisfaction and organizational justice and through them a series of additional concepts frequent in the analysis of prosocial behaviors.

**Figure 3.** keyword concurrency diagram
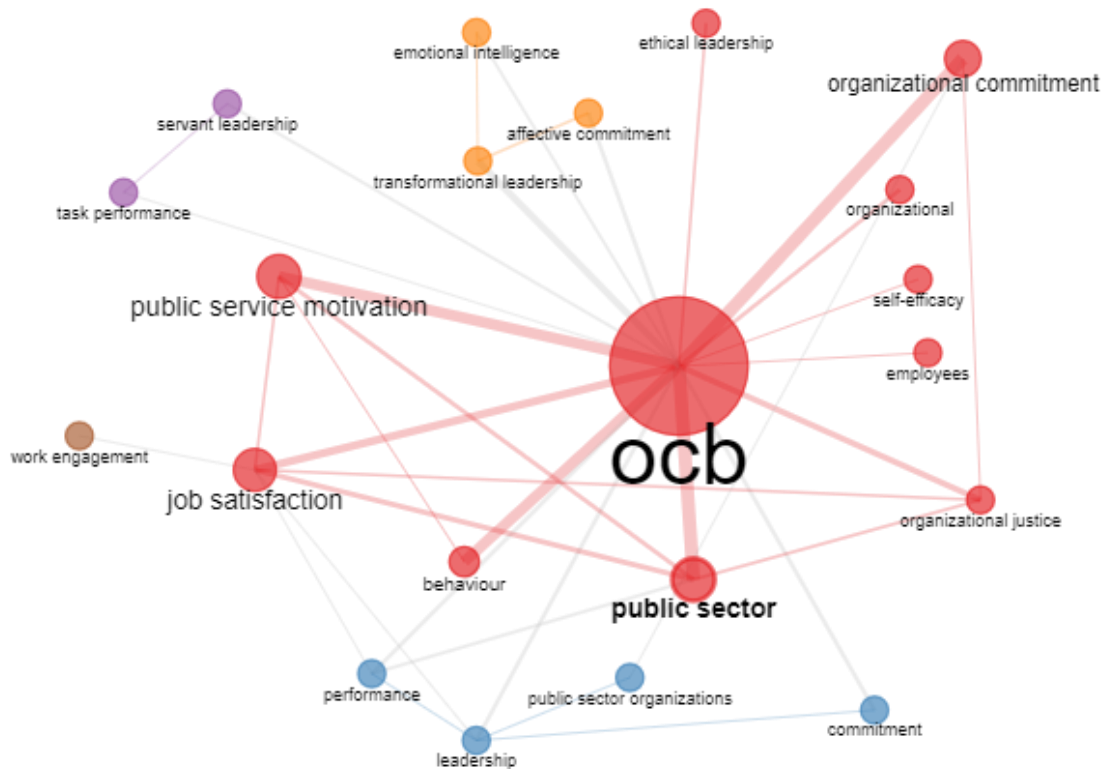
Note. This figure shows the concurrency of keywords

Thematic Evolution

One of the most important tools provided through Bibliometrix is the construction of Sankey diagrams or three-field diagrams (Linnenluecke et al., 2020) in which the relationships that exist between different attributes can be reviewed simultaneously through concatenated arrows and where the width of these arrows determines a higher frequency of occurrence of the relationship. Considering the three differentiated periods in the publication history as attributes in a 3-field diagram, an evolution will be built (Aria et al., 2022) of the most relevant keywords used by the authors.

Figure 4. T hematic Evolution 2000: 2022
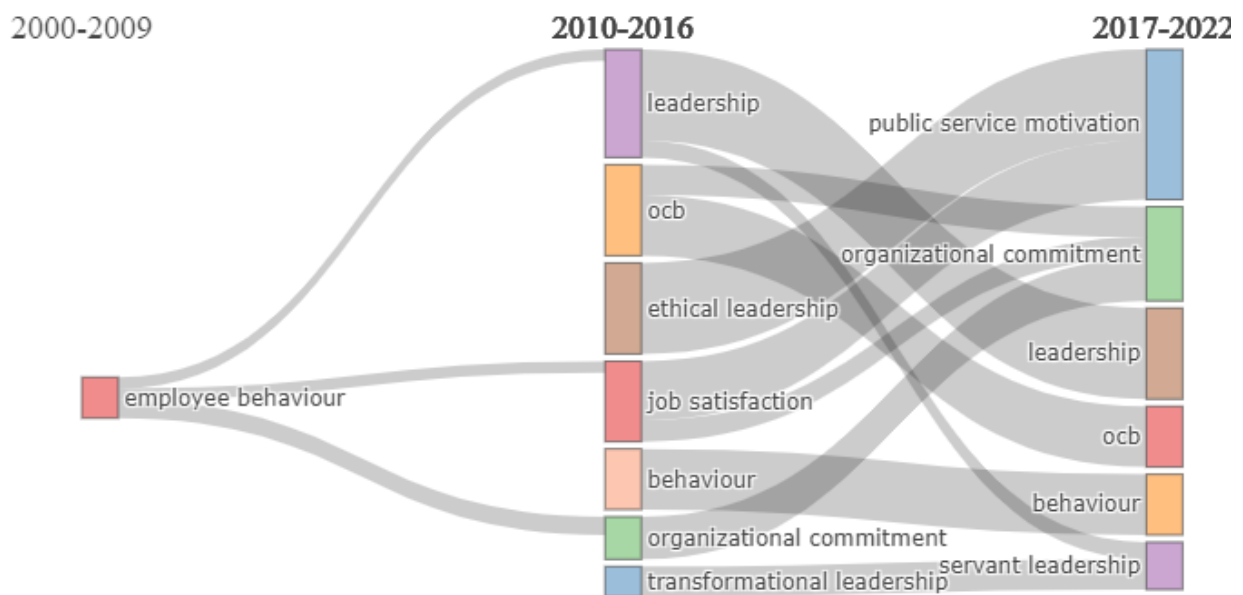
Note. This figure shows the evolution of the theme in terms of time.

Considering the thematic evolution described in the Figure 4 the change through time of the associated concept can be verified in a systematic way. In the first phase (2000:2009) there is an analysis of the employee's behavior, which is associated in the following period with leadership, job satisfaction and commitment (2010:2016). Finally, these concepts are associated in the last period (2017:2020) with service leadership and motivation for public service. An important point to highlight is that the OCBs are related in a complementary way to the organizational commitment and that their relevance appears from the period 2010:2016.

Grouping by bibliographic coupling

Grouping via clusters allows the identification of similar characteristics between subjects of interest and, when incorporated into the bibliometric analysis, allows the construction of a conceptual structure based on similar references between publications through the so-called bibliographic coupling (Zhang et al, 2021). The Figure 5 It graphically presents the 3 clusters generated by the coupling of the authors' keywords using the Walktrap method, where the articles with the greatest impact of each cluster will be analyzed in a grouped manner in order to characterize them.

Figure 5. Clusters of Articles (Grouping by Bibliographic Linkage)

Note.This figure shows the clusters formed by bibliographic coupling

The Board 9 summarizes the correspondence between the most relevant articles and the 3 clusters obtained, where the relevance was obtained based on the 5 best scores in the normalized local citation indicator (Bornman & Marx, 2015). Finally, a suggested denomination of the cluster is proposed based on the keywords used, so that it can approximate the existing lines of research in the articles analyzed.

Board 9. Clusters and articles with the greatest impact identified

Cluster: Suggested name	Most frequent keywords	Articles	Normalized Local Citations Indicator
1: Leadership and organizational ethics	organizational commitment ethical leadership public sector	(Alexandra Beauregard, 2012)	69
		(Eva et al., 2020)	26
		(Cassematis & Worthley, 2013)	67
		(Hirst et al., 2016)	41
		(Newman et al., 2015)	27

		(Vigoda-Gadot & Beeri, 2012)	94
2: Ethics and Commitment	work engagement citizenship behavior codes of ethics	(Murtaza et al., 2016)	70
		(Bottomley et al., 2016)	54
		(Beeri et al., 2013)	69
		(Hasan, 2015)	Four. Five
3: Service motivation and job satisfaction	public service motivationaltruism job satisfaction	(Gould-Williams et al., 2015)	106
		(Boyd et al., 2018)	35
		(Mostafa et al., 2015)	76
		(Liu & Tang, 2011)	85
		(Caillier, 2016)	3. 4

Note. This table shows the clusters and articles with the greatest impact

4. Conclusions

Consequently, the characteristics of the 216 articles identified in WoS and Scopus are summarized in relation to the concepts of OCB and public management jointly through a bibliometric analysis carried out through the Bibliometrix R package. In general, the related articles have had an average annual growth of 12.56% from the year 2000, which shows a growing interest in the study of its applications. Even when a concentration in a particular journal is not observed, these articles appear mostly in high-impact sources with topics related to public administration.

On the other hand, the articles that have had the greatest global impact are related to theoretical developments for both CBOs and the public sector, while those with the greatest local impact focus mostly on applications to leadership, ethics, and job satisfaction. Of the references cited by the articles, 3 groups of related citations could be identified: the theoretical ones related to the OCB, those associated with statistical techniques related to the evaluation of the proposed models and those that develop the concept of motivation for public service. Likewise, from the analysis of the most relevant keywords of the articles, an

approach was made to the conceptual development of the OCB in the public sector, where the motivation to public service, job satisfaction and organizational justice.

As a relationship measure of the reviewed articles, a cluster analysis was carried out as an application of bibliographic coupling. Three clusters of themes associated with their grouped articles with the greatest impact were identified: organizational leadership and ethics, ethics and commitment at the employee level, and service motivation together with job satisfaction. It is necessary, on the other hand, to consider the possible limitations of the analysis carried out considering that the initial selection criteria of the database are susceptible to future improvements in order to guarantee exhaustive coverage of the related articles, due to the fact that there is a risk of omission of specific publications that do not meet said criteria, even if they are related to the progress of the CBOs in public management.

Finally, it can be defined that the present investigation allows to complement the existing literary reviews of the concept of OCB in the public sector and proposes an alternative method of systematic review based on the

current trend of using bibliometric tools that allows identifying the lines current research and the most relevant topics addressed at the moment.

References

1. Alexandra Beauregard, T. (2012). Perfectionism, self-efficacy and OCB: The moderating role of gender. Personnel Review, 41(5), 590–608. https://doi.org/10.1108/00483481 211249120.

2. Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. Journal of Informetrics, 11(4), 959–975. https://doi.org/10.1016/j.joi.2017 .08.007.

3. Aria, M., Cuccurullo, C., D'Aniello, L., Misuraca, M., & Spano, M. (2022). Thematic Analysis as a New Culturomic Tool: The Social Media Coverage on COVID-19 Pandemic in Italy. Sustainability, 14(6), 3643. https://doi.org/10.3390/su140636 43.

4. Bakker, A.B. (2015). A Job Demands-Resources Approach to Public Service Motivation. Public Administration Review, 75(5), 723–732. https://doi.org/10.1111/puar.1238 8.

5. Beeri, I., Dayan, R., Vigoda-Gadot, E., & Werner, S.B. (2013). Advancing Ethics in Public Organizations: The Impact of an Ethics Program on Employees' Perceptions and Behaviors in a Regional Council. Journal of Business Ethics, 112(1), 59–78. https://doi.org/10.1007/s10551-012-1232-7

6. Blau, PM (2017). Exchange and Power in Social Life. Routledge. https://doi.org/10.4324/97802037 92643.

7. Bornmann, L., & Marx, W. (2015). Methods for the generation of normalized citation impact scores in bibliometrics: Which method best reflects the judgments of experts? Journal of Informetrics, 9(2), 408–418. https://doi.org/10.1016/j.joi.2015 .01.006.

8. Bottomley, P., Mostafa, AMS, Gould-Williams, JS, & León-Cázares, F. (2016). The Impact of Transformational Leadership on Organizational Citizenship Behaviors: The Contingent Role of Public Service Motivation. British Journal of Management, 27(2), 390–405. https://doi.org/10.1111/1467-8551.12108.

9. Boyd, N., Nowell, B., Yang, Z., & Hano, MC (2018). Sense of Community, Sense of Community Responsibility, and Public Service Motivation as Predictors of Employee Well-Being and Engagement in Public Service Organizations. American Review of Public Administration, 48(5), 428–443. https://doi.org/10.1177/02750740 17692875.

10. Caillier, J.G. (2016). Do Transformational Leaders Affect Turnover Intentions and Extra-Role Behaviors Through Mission Valence? The American Review of Public Administration, 46(2), 226–242. https://doi.org/10.1177/02750740 14551751.

11. Cantarelli, P., Belardinelli, P., & Belle, N. (2013). A Meta-

Analysis of Job Satisfaction Correlates in the Public Administration Literature. Review of Public Personnel Administration, 36(2), 115–144. https://doi.org/10.1177/0734371X15578534.

12. Caputo, A., & Kargina, M. (2022). A user-friendly method to merge Scopus and Web of Science data during bibliometric analysis. Journal of Marketing Analytics, 10(1), 82–88. https://doi.org/10.1057/s41270-021-00142-7.

13. Cassematis, P.G., & Wortley, R. (2013). Prediction of Whistleblowing or Non-reporting Observation: The Role of Personal and Situational Factors. Journal of Business Ethics, 117(3), 615–634. https://doi.org/10.1007/s10551-012-1548-3.

14. Coyle-Shapfro, JAM (2002). A psychological contract perspective on organizational citizenship behavior. Journal of Organizational Behavior, 23(8), 927–946. https://doi.org/10.1002/job.173.

15. de Geus, CJC, Ingrams, A., Tummers, L., & Pandey, S.K. (2020). Organizational Citizenship Behavior in the Public Sector: A Systematic Literature Review and Future Research Agenda. Public Administration Review. https://doi.org/10.1111/puar.13141.

16. Dervis, H. (2019). Bibliometric analysis using bibliometrix an R package. Journal of Scientometric Research, 8(3), 156–160. https://doi.org/10.5530/JSCIRES.8.3.32.

17. Ding, Y., Yan, E., Frazho, A., & Caverlee, J. (2009). PageRank for ranking authors in co-citation networks. Journal of the American Society for Information Science and Technology, 60(11), 2229–2243. https://doi.org/10.1002/asi.21171.

18. Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, WM (2021). How to conduct a bibliometric analysis: An overview and guidelines. Journal of Business Research, 133, 285–296. https://doi.org/10.1016/j.jbusres.2021.04.070.

19. Echchakoui, S. (2020). Why and how to merge Scopus and Web of Science during bibliometric analysis: the case of sales force literature from 1912 to 2019. Journal of Marketing Analytics, 8(3), 165–184. https://doi.org/10.1057/s41270-020-00081-9.

20. Egghe, L. (2006). Theory and practice of the g-index. Scientometrics, 69(1), 131–152. https://doi.org/10.1007/s11192-006-0144-7.

21. Eisenberg, N., & Sadovsky, A. (2004). Development of Prosocial Behavior. In CD Spielberger (Ed.), Encyclopedia of Applied Psychology (pp. 137–141). Elsevier. https://doi.org/10.1016/B0-12-657410-3/00076-3.

22. Eva, N., Newman, A., Miao, Q., Wang, D., & Cooper, B. (2020). Antecedents of Duty Orientation and Follower Work Behavior: The Interactive Effects of Perceived Organizational Support and Ethical Leadership. Journal of

Business Ethics, 161(3), 627–639. https://doi.org/10.1007/s10551-018-3948-5.

23. Fernandez, S., & Moldogaziev, T. (2013). Employee Empowerment, Employee Attitudes, and Performance: Testing a Causal Model. Public Administration Review, 73(3), 490–506. https://doi.org/10.1111/puar.12049.

24. Fornell, C., & Larcker, D.F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. Journal of Marketing Research, 18(1), 39. https://doi.org/10.2307/3151312.

25. Gould-Williams, JS, Mostafa, AMS, & Bottomley, P. (2015). Public service motivation and employee outcomes in the Egyptian public sector: Testing the mediating effect of person-organization fit. Journal of Public Administration Research and Theory, 25(2), 597–622. https://doi.org/10.1093/jopart/mut053.

26. Guiling, Y., Panatik, SA, Sukor, MSM, Rusbadrol, N., & Cunlin, L. (2022). Bibliometric Analysis of Global Research on Organizational Citizenship Behavior From 2000 to 2019. SAGE Open, 12(1). https://doi.org/10.1177/21582440221079898.

27. Hassan, S. (2015). The Importance of Ethical Leadership and Personal Control in Promoting Improvement-Centered Voice among Government Employees. Journal of Public Administration Research and Theory, 25(3), 697–719. https://doi.org/10.1093/jopart/muu055.

28. Hirsch, J.E. (2005). An index to quantify an individual's scientific research output. Proceedings of the National Academy of Sciences, 102(46), 16569–16572. https://doi.org/10.1073/pnas.0507655102.

29. Hirst, G., Walumbwa, F., Aryee, S., Butarbutar, I., & Chen, CJH (2016). A Multi-level Investigation of Authentic Leadership as an Antecedent of Helping Behavior. Journal of Business Ethics, 139(3), 485–499. https://doi.org/10.1007/s10551-015-2580-x.

30. Ingrams, A. (2020). Organizational Citizenship Behavior in the Public and Private Sectors: A Multilevel Test of Public Service Motivation and Traditional Antecedents. Review of Public Personnel Administration, 40(2), 222–244. https://doi.org/10.1177/0734371X18800372.

31. Kim, H. (2012). Transformational leadership and organizational citizenship behavior in the public sector in South Korea: The mediating role of affective commitment. Local Government Studies, 38(6), 867–892. https://doi.org/10.1080/03003930.2012.707617.

32. Kim, S. (2007). Public service motivation and organizational citizenship behavior in Korea. International Journal of Manpower, 27(8), 722–740. https://doi.org/10.1108/01437720610713521.

33. Kniffin, KM, Narayanan, J., Anseel, F., Antonakis, J., Ashford, SP, Bakker, AB, Bamberger, P., Bapuji, H., Bhave, DP, Choi, VK, Creary, SJ, Demerouti , E., Flynn, FJ, Gelfand, MJ, Greer, LL, Johns, G., Kesebir, S., Klein, PG, Lee, SY, … Vugt, M. van. (2021). COVID-19 and the workplace: Implications, issues, and insights for future research and action. American Psychologist, 76(1), 63–77. https://doi.org/10.1037/amp0000 716.

34. Larivière, V., Gingras, Y., & Archambault, É. (2009). Brief communication the decline in the concentration of citations, 1900-2007. Journal of the American Society for Information Science and Technology, 60(4), 858–862. https://doi.org/10.1002/asi.21011 .

35. Lepine, JA, Erez, A., & Johnson, DE (2002). The nature and dimensionality of organizational citizenship behavior: a critical review and meta-analysis. The Journal of Applied Psychology, 87(1), 52–65. https://doi.org/10.1037/0021-9010.87.1.52.

36. Linnenluecke, MK, Marrone, M., & Singh, AK (2020). Conducting systematic literature reviews and bibliometric analyses. Australian Journal of Management, 45(2), 175–194. https://doi.org/10.1177/03128962 19877678.

37. Liu, B.-C., & Tang, TL-P. (2011). Does the Love of Money Moderate the Relationship between Public Service Motivation and Job Satisfaction?

The Case of Chinese Professionals in the Public Sector. Public Administration Review, 71(5), 718–727. https://doi.org/10.1111/j.1540-6210.2011.02411.x.

38. Messersmith, JG, Patel, PC, Lepak, DP, & Gould-Williams, J. (2011). Unlocking the black box: Exploring the link between high-performance work systems and performance. Journal of Applied Psychology, 96(6), 1105–1118. https://doi.org/10.1037/a0024710 .

39. Mostafa, AMS, Gould-Williams, JS, & Bottomley, P. (2015). High-Performance Human Resource Practices and Employee Outcomes: The Mediating Role of Public Service Motivation. Public Administration Review, 75(5), 747–757. https://doi.org/10.1111/puar.1235 4.

40. Murtaza, G., Abbas, M., Raja, U., Roques, O., Khalid, A., & Mushtaq, R. (2016). Impact of Islamic Work Ethics on Organizational Citizenship Behaviors and Knowledge-Sharing Behaviors. Journal of Business Ethics, 133(2), 325–333. https://doi.org/10.1007/s10551-014-2396-0.

41. Newman, A., Allen, B., & Miao, Q. (2015). I can see clearly now the moderating effects of role clarity on subordinate responses to ethical leadership. Personnel Review, 44(4), 611–628. https://doi.org/10.1108/PR-11-2013-0200.

42. Organ, DW (1988). Organizational Citizenship Behavior: The Good Soldier

Syndrome (Lexington Books, Ed.).

43. Organ, DW (2018). Organizational Citizenship Behavior: Recent Trends and Developments. Annual Review of Organizational Psychology and Organizational Behavior, 5(1), 295–306. https://doi.org/10.1146/annurev-orgpsych-032117-104536.

44. Pandey, SK, Wright, BE, & Moynihan, DP (2008). Public service motivation and interpersonal citizenship behavior in public organizations: Testing a preliminary model. International Public Management Journal, 11(1), 89–108. https://doi.org/10.1080/10967490 801887947.

45. Parry, R. (1992). Concepts and Assumptions of Public Management. In The Evolution of Public Management (pp. 3–22). Palgrave Macmillan UK. https://doi.org/10.1007/978-1-349-11473-3_1.

46. Perry, JL (1996). Measuring Public Service Motivation: An Assessment of Construct Reliability and Validity. Journal of Public Administration Research and Theory, 6(1), 5–22. https://doi.org/10.1093/oxfordjou rnals.jpart.a024303.

47. Perry, JL, & Wise, LR (1990). The Motivational Bases of Public Service. Public Administration Review, 50(3), 367. https://doi.org/10.2307/976618.

48. Podsakoff, PM, MacKenzie, SB, Lee, J.-Y., & Podsakoff, NP (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal

of Applied Psychology, 88(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879.

49. Podsakoff, PM, MacKenzie, SB, Paine, JB, & Bachrach, DG (2000). Organizational citizenship behaviors: a critical review of the theoretical and empirical literature and suggestions for future research. Journal of Management, 26(3), 513–563. https://doi.org/10.1016/S0149-2063(00)00047-7.

50. Podsakoff, PM, Mackenzie, SB, & Podsakoff, NP (2018). Research on Organizational Citizenship Behavior: Where Do We Go From Here? (PM Podsakoff, SB Mackenzie, & NP Podsakoff, Eds.; Vol. 1). Oxford University Press. https://doi.org/10.1093/oxfordhb/ 9780190219000.013.41.

51. Radha, L., & Arumugam, J. (2021). The Research Output of Bibliometrics using Bibliometrix R Package and VOS Viewer. Shanlax International Journal of Arts, Science and Humanities, 9(2), 44–49. https://doi.org/10.34293/sijash.v9 i2.4197.

52. Rayner, J., Lawton, A., & Williams, HM (2012). Organizational Citizenship Behavior and the Public Service Ethos: Where the Organization? Journal of Business Ethics, 106(2), 117–130. https://doi.org/10.1007/s10551-011-0991-x.

53. Ritz, A., Giauque, D., Varone, F., & Anderfuhren-Biget, S. (2014). From Leadership to Citizenship Behavior in Public Organizations:

When Values Matter. Review of Public Personnel Administration, 34(2), 128–152. https://doi.org/10.1177/0734371 X14521456.

54. Tabash, MI, Kumar, A., Sharma, S., Vashistha, R., & el Refae, GA (2022). International journal of organizational analysis: a bibliometric review (2005–2020). International Journal of Organizational Analysis. https://doi.org/10.1108/IJOA-10-2021-2990.

55. van Eck, NJ, & Waltman, L. (2014). Visualizing Bibliometric Networks. In Measuring Scholarly Impact (pp. 285–320). Springer International Publishing. https://doi.org/10.1007/978-3-319-10377-8_13.

56. Vigoda-Gadot, E. (2000). Internal Politics in Public Administration Systems. Public Personnel Management, 29(2), 185–210. https://doi.org/10.1177/00910260 0002900203.

57. Vigoda-Gadot, E. (2007). Leadership style, organizational politics, and employees' performance: An empirical examination of two competing models. Personnel Review, 36(5), 661–683. https://doi.org/10.1108/00483480 710773981.

58. Vigoda-Gadot, E., & Beeri, I. (2012). Change-oriented organizational citizenship behavior in public administration: The power of leadership and the cost of organizational politics. Journal of Public Administration Research and Theory, 22(3), 573–596. https://doi.org/10.1093/jopart/mu r036.

59. Vigoda-Gadot, E., & Cohen, A. (2004). Citizenship and management in public administration: Integrating behavioral theories and managerial thinking (E. Vigoda-Gadot & A. Cohen, Eds.). Edward Elgar Publishing.

60. Williams, LJ, & Anderson, SE (1991). Job Satisfaction and Organizational Commitment as Predictors of Organizational Citizenship and In-Role Behaviors. Journal of Management, 17(3), 601–617. https://doi.org/10.1177/01492063 9101700305.

61. Zhang, JZ, Srivastava, P.R., Sharma, D., & Eachempati, P. (2021). Big data analytics and machine learning: A retrospective overview and bibliometric analysis. In Expert Systems with Applications (Vol. 184). Elsevier Ltd. https://doi.org/10.1016/j.eswa.20 21.115561.