

# Emerging leadership styles and organizational climate in higher education

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## Abstract

A documentary review was conducted on the production and publication of research papers related to the study of the emerging leadership variable and organizational climate in the context of higher education. The purpose of the bibliometric analysis proposed in this document is to know the main characteristics of the volume of publications registered in Scopus database during the period 2016 - 2021, achieving the identification of 676 publications. The information provided by said platform, was organized by means of tables and figures categorizing the information by Year of Publication, Country of Origin, Area of Knowledge and Type of Publication. Once these characteristics were described, the position of different authors regarding the proposed topic was referenced by means of a qualitative analysis. Among the main findings of this research, it is found that Brazil is the country with the highest production of publications with 251. The area of knowledge that made the greatest contribution to the construction of bibliographic material referring to the study of emerging leadership styles and organizational climate in higher education was the area of social sciences with 359 published documents, and the type of publication that was most used during the period indicated above was the journal paper, which represents 67% of the total scientific production.

**Keywords:** emergent leadership, organizational climate, higher education.

## I. INTRODUCTION

The work of the university professor is not only to impart knowledge through activities and methodological proposals. The scholar must have leadership skills that have changed or evolved in time. The previous century was characterized by the function of transmitting knowledge in a unidirectional way to students. XXI century is characterized by the recognition of the teacher as a guide in the academic training of students. For this reason, its leadership, which has evolved according to the

needs of education, has begun a difficult task within inclusive policies and the reduction of inequality gaps (Acosta & Ponce, 2019).

Within the above, Educational Leadership stands out by means of the scenarios that are created to promote innovation within the training process, which becomes bidirectional when understanding the capacity of students to develop new knowledge through academic exercises that promote the development of critical thinking in different situations created within the classroom. In this way the teacher

adopts a role of moderator within the teaching-learning process, away from the title of sole possessor of knowledge (Bauzá & Bello, 2016).

Similarly, in educational management, leadership styles that generate optimal conditions or not in the organizational climate are evaluated, depending on the qualities that the leader demonstrates in the way he/she manages the administration (Calderon, 2020). Within the emerging styles of leadership, authors currently speak of Transformational, highlighting characteristics in a charismatic leader, entrepreneurs who provide a vision and sense of mission, originating pride, gaining respect, trust, qualities that achieve in subordinates, inspiration and motivation that determines the organizational climate not only in the educational field, but in companies in general (Rojas, Vivas, Mota, & Quiñonez, 2020).

Another aspect that influences the organizational climate is the organizational culture, inspired, of course, by the leadership style that characterizes the person or persons who manage the institution, being of great importance not only for educational institutions, but for any company in any sector, as this represents an important factor in establishing strategies for the achievement of organizational goals and objectives (Seijas, 2020). Therefore, it is important to know the literature on emerging leadership styles as determinants of organizational climate in higher education institutions. The main objective of this article is thus established with

the purpose of answering the research question: How has been the production of research papers concerning Emergent Leadership and Organizational Climate in Latin American higher education institutions during the period 2016-2021?

## 2. General Objective

To analyze from a bibliometric and bibliographic perspective, the production of high impact research papers on the variable Emerging leadership styles and organizational climate in higher education during the period between 2016 and 2021.

## 3. Methodology

Quantitative analysis of the information provided by Scopus under a bibliometric approach on the scientific production concerning the emerging leadership styles and organizational climate in higher education is performed. Also, from a qualitative perspective, examples of some research papers published in the area of study mentioned above are analyzed from a bibliographic approach to describe the position of different authors on the proposed topic.

The search is performed through the tool provided by Scopus and the parameters referenced in Table 1 are established.

### 3.1 Methodological design

Table 1. *Methodological design*

	PHASE	DESCRIPTION	CLASSIFICATION
PHASE 1	DATA COLLECTION	Data was collected using the Scopus web page search tool, through which a total of 676 publications were identified.	Published papers whose study variables are related to emerging leadership and organizational climate in higher education. Research papers published during the period 20-202116. Limited to Latin

			American countries. Without distinction of area of knowledge. Without distinction of type of publication.
<b>PHASE 2</b>	CONSTRUCTION OF ANALYSIS MATERIAL	The information identified in the previous phase is organized. The classification will be made by means of graphs, figures and tables based on data provided by Scopus.	Word Co-occurrence. Year of publication Country of origin of the publication. Area of knowledge. Type of publication
<b>PHASE 3</b>	DRAFTING OF CONCLUSIONS AND FINAL DOCUMENT	After the analysis carried out in the previous phase, we proceed to the drafting of the conclusions and the preparation of the final document.	

Source: Own elaboration (2022)

Figure 1 shows the co-occurrence of keywords within the publications identified in the Scopus database.

## 4. Results

### 4.1 Co-occurrence of words



taking into account that the period from 2016 to 2021 is taken.

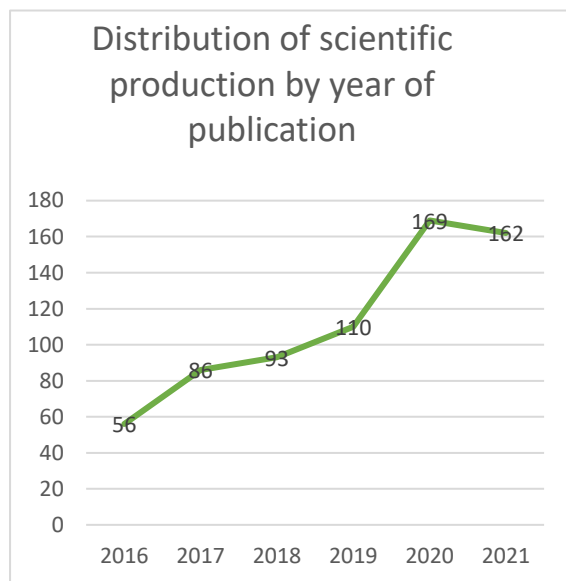


Figure 2. *Distribution of scientific production by year of publication.*

Source: Own elaboration (2022); based on data provided by Scopus.

Figure 2 shows how the year 2020 is the year with the highest scientific production with a total of 169 on the variable Emerging Leadership and Organizational Climate, among which is the one entitled “Leadership in sustainability in higher education institutions: an overview of the challenges”, whose object was focused on identifying the main characteristics of sustainability leaders in higher education institutions (Filho et al., 2020).

The purpose of this study was to identify the main characteristics of sustainability leaders in Higher Education Institutions (HEI) and the main challenges they face. For which an online questionnaire was developed among leaders from 29 countries, which was exploratory in nature and for its analysis descriptive statistics were used and for which it was obtained that from this self-assessment the respondents considered that their leadership style was inclusive and systematic.

Likewise, the different factors that impede sustainability in higher education institutions were determined, which would be the lack of interest of the university administration, as well

as of some members of the academic community, such as the lack of materials or of the experience itself; however, strengths were identified in the institutions included in the sample, such as gender issues (inclusion) and the knowledge of the leaders of the globalized scenarios in the world of higher education. The 2021 article entitled “Transformational Leadership and Innovative Culture: Effects on Institutional Quality” (Pedraja-Rejas, Rodríguez-Ponce, & Muñoz-Fritis, 2021), whose object consisted in the analysis of 52 institutions of higher education accredited by the National Accreditation Commission of Chile, to determine the relationships between transformational leadership, innovative culture and quality in higher education institutions, using multiple linear regression models. This research showed that leadership is one of the variables required by any institution of higher education to obtain quality results, as well as the innovative culture taught by the faculty of these institutions.

#### 4.3 Distribution of scientific production by country of origin.

Figure 3 shows the distribution of scientific production according to the nationality of the authors.

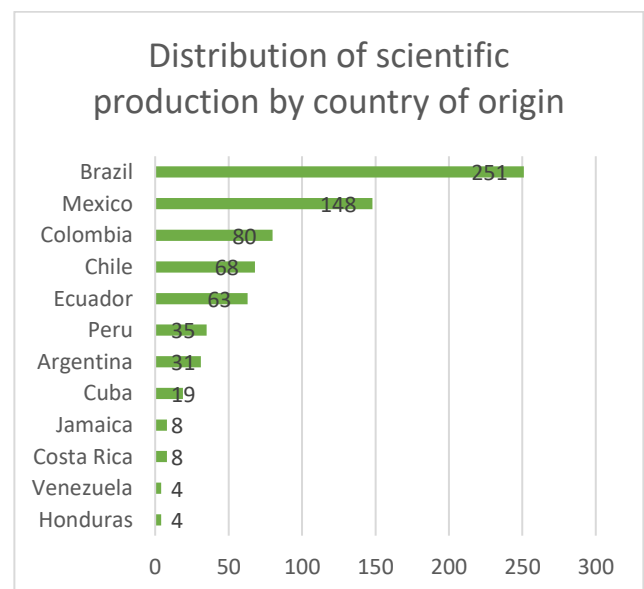


Figure 3. *Distribution of scientific production by year of publication.*

Source: Own elaboration (2022); based on data provided by Scopus.

Figure 3 shows how Brazil is the country with the highest scientific production on the variable of Emerging Leadership and Organizational Climate with a total of 251 publications, among which the article of 2020 entitled “Academic Procrastination: Relationships with environmental support and self-leadership” (de Melo & Mendonça, 2020) has a strong presence, whose objective was based on evaluating the mediating effect of self-leadership strategies on the relationship between academic procrastination and environmental support, for which different methods of learning support scale, academic procrastination scale and revised self-leadership questionnaire were used, applied to 1436 students. The study determined that the more self-leadership strategies were used by the students, the less academic procrastination and environmental support. Result of a cross-sectional correlational analysis of participation, in this sense, it is important to impart knowledge based on leadership and self-knowledge of skills and weaknesses of our students, strengthening skills generates certain security in individuals and also leads to the generation of an optimal organizational climate in our society.

Similarly, Colombia has a production of 80 publications, among which is the one entitled “Evaluation of managerial practices in school principals: validity and reliability of a rubric”

(Tobon, Juarez-Hernandez, Herrera-Meza, & Nunez, 2020). The main objective of this study was the design and validation of a rubric that could be used by the members of the academic community to determine and self-evaluate their practices, thus finding points for improvement that would benefit the learning processes in the educational institutions. The rubric was applied to 645 elementary school principals and evaluated by 10 judges through a factorial analysis, for which a reliability of 0.877 was found. From these studies, it can be concluded that education is going through several challenges in the transformation of traditional pedagogical practices to the construction of more inclusive educational environments focused on academic self-leadership.

At this point, it should be noted that the production of scientific publications, when classified by country of origin, presents a special characteristic and that is the collaboration between authors with different affiliations to both public and private institutions, and these institutions can be from the same country or from different nationalities, so that the production of an article co-authored by different authors from different countries of origin allows each of the countries to add up as a unit in the overall publications. This is best explained in Figure 4, which shows the flow of collaborative work from different countries.

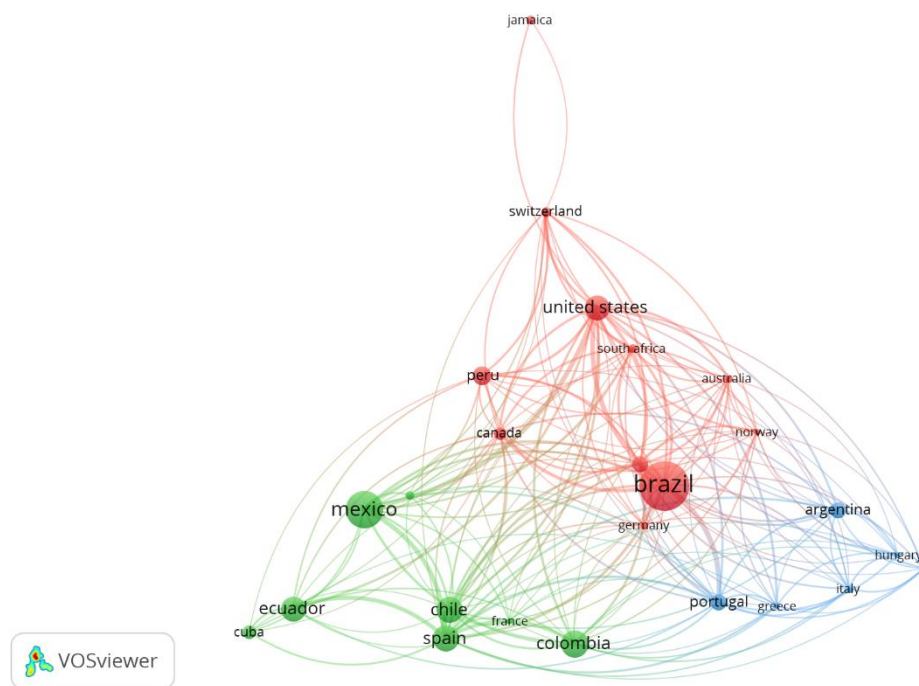


Figure 4. *Co-citations between countries.*

Source: Own elaboration (2022); based on data provided by Scopus.

Figure 4 shows Brazil as the Latin American country with the highest production registered in Scopus data on Emerging Leadership and Organizational Climate in Higher Education, with authors affiliated to countries such as Germany, Portugal, South Africa and Canada, in second place is Mexico on this topic, with authors affiliated to countries such as Ecuador, Chile and Canada, among which is the Mexican journal article entitled “Diagnosis of educational leadership in Higher Education Institutions in the Toluca Valley” (Botello, Velázquez, & Salinas, 2016). The research focused on the application of an information gathering instrument using the Likert measurement scale to a representative sample of 387 teachers from Higher Education Institutions (HEI) in Valle de Toluca, in order to determine whether the leadership model is practiced and to identify the variables that make up this model. For this, it was determined that there is no application of such methods and dogmas, a result that gives way to state intervention and various agencies, to achieve the implementation of measures to optimize a modern education, which promotes an

organizational climate suitable for future generations. There are also publications from Chile, Ecuador and Peru, and with fewer records from countries such as Venezuela and Honduras.

#### 4.4 Distribution of scientific production by area of knowledge

Figure 5 shows how the production of scientific publications is distributed according to the area of knowledge through which the different research methodologies are executed.



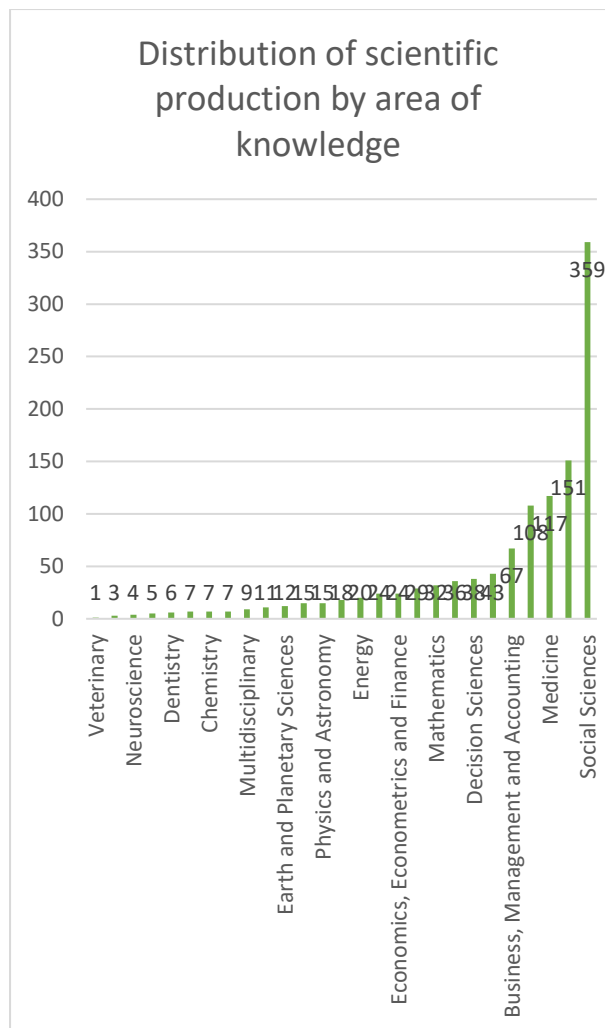


Figure 5. *Distribution of scientific production by area of knowledge.*

Source: Own elaboration (2022); based on data provided by Scopus.

As shown in Figure 5, the area of knowledge that has the largest number of publications on the variables of Emerging Leadership and Organizational Climate in higher education in Latin America is the social sciences with a total of 359 publications registered in the Scopus database, among which the article entitled “Leadership and psychosocial risk in higher education institutions in Mexico” stands out (Saldaña, Bustos Saldaña, Barajas Martínez, & Ibarra Rentería, 2019). The purpose of this research was to determine the relationship between stress and psychosocial risk factors and these with leadership styles. The stress questionnaire, the Mexican norm 035 and the leadership questionnaire were applied to the staff of the university center of Southern

Mexico, yielding unfavorable results in the presence of Laissez Faire and positive results in the presence of a transformational leadership method.

Therefore, it is concluded that the objective application of Leadership is important in the different educational spaces, to achieve favorable results and quality of Higher Education Institutions. On the other hand, the article entitled “Theoretical approach for the praxis of advanced management of the university system” is also highlighted (Marcial, 2021), whose objective was focused on the revision of the practice of advanced management of university leaders, through an ontological praxis for the formation of leaders in the university system of Chile. In the same way, the theories of the communicative action of Habermas, epistemological obstacles according to Bachelard and the Bureaucratic theory of Weber were used to develop the concepts of advanced educational management and leadership in university systems. It is for this reason that the study of the different styles of Leadership in the academic praxis should be of general knowledge by the HEIs, to determine which is the most suitable in the application of the different pedagogical processes, for the sake of the student's improvement and the academic level of each institution.

#### 4.5 Type of publication

Figure 6 shows how the bibliographic production is distributed according to the type of publication chosen by the authors.



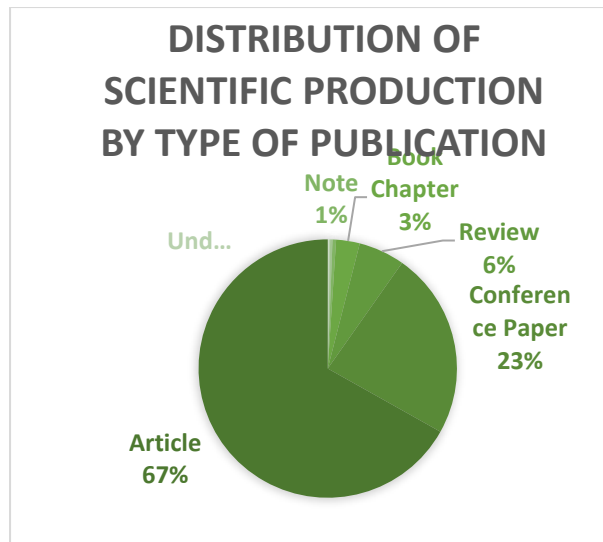


Figure 6. Type of publication

Source: Own elaboration (2022); based on data provided by Scopus.

After analyzing Figure 6, it is evident that the type of publication with the highest number of records is the journal article with a 67% of the total, among which the Peruvian article of 2021 entitled “Influence of leadership styles in innovative behavior of students of technological higher military education” stands out (Norena-Chavez, Moncada, & Zúñiga, 2021). The purpose of this article was to understand the relationship between leadership styles and innovative behavior in the armed forces, through a sample of 200 students of Tecnológico Público del Ejército de Lima, Peru, using partial least squares models (PLS-SEM) and replicating the studies on the influence of leadership styles on the innovative behavior of cadets conducted by Norena-Chavez et al. (2021), for which, 47% of positive influence was obtained in Transformational Leadership and 59% in the type of transactional Leadership contributing to innovative behavior.

On the other hand, it becomes important to mention the Conference Proceeding as a type of publication of 2017 entitled “Transformational Leadership in University Management. Characteristics in universities in Colombia” (Ortega, Freitas, & Palomino, 2017). with a quantitative, rational and positivist approach implementing the transformational model of

Kouzes and Posner and the inventory of practices, was conducted to 31 Universities in Colombia, and was intended to highlight the characteristics of Transformational Leadership perceived by the managers of university spaces and the recognitions of its challenges in the XXI century. The above as a product of the research project “Theoretical Construction for University Management from the perspective of Transformational Leadership”, finding some conclusions regarding this research topic.

On the other hand, it is identified that from phase I of the data collection phase of the methodological design of this paper, there are also Conference Articles in 23%, Reviews in a 6% of the total number of publications and book chapters in a 3% of the total number of registered publications and object of research.

## 5. Conclusions

According to the bibliometric analysis carried out in this research, Brazil can be established as the country of origin with the highest number of scientific production regarding the variables of Emerging Leadership and Organizational Climate in higher education in Latin America with a total of 251 publications, followed by countries such as Mexico and Colombia with a total of 148 and 80 publications respectively in Scopus database.

On the other hand, it is found that the production in the period between 2016-2021, with a considerable increase from 56 to 162 publications in 2021. However, in the period of 2020 the highest scientific production was recorded with a total of 169 publications, information that allows to deduce that the knowledge of the different styles of Leadership in the student population of Latin America is of utmost importance for the formation of objective, consistent and coherent opinion leaders in the professional development of any society, so much so that of the areas of knowledge, which has a significant number of productions is the social sciences with 359 publications that allow spaces for discussion of these variables and the importance of their knowledge and application.

Now, it is necessary, not only the application of academic dogmas that potentiate our student body, but the training and development of trainers in the teaching of higher education who are true leaders, who are consistent in the implementation of Transactional and Transformational Leadership, also facing the challenges of non-presence and the implementation of new technologies, which does not detract from the particular purposes that lie in each student.

The practice of teaching should have a positive impact on the students, not only in academic spaces but also in life itself. It is imperative to have access to all the scientific production that is thrown in attention to these variables, for the achievement of quality education, intellectual stimulation and rational empowerment of new leaders to help forge a competitive and effective society. It is important to emphasize the recognition of sacrifice, courage and determination of students, in order to encourage the rest. Latin America must focus its efforts on education, an integrated, responsible and motivating formation.

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