

Education and COVID 19: Collaboration of the Family in the Teaching-Learning process

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Abstract

The purpose of the bibliometric analysis proposed in this document is to know the main characteristics of the volume of publications registered in the Scopus database during the period 2016-2021 in Latin American countries, achieving the identification of 1794 publications. The information provided by the said platform was organized through 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 employing a qualitative analysis. Among the main findings of this research, it is found that Brazil, with 727 publications, is the Latin American country with the highest production. The Area of Knowledge that made the greatest contribution to the construction of bibliographic material referring to the study of Family Collaboration in School Tasks during COVID 19 was Medicine with 729 published documents, and the Type of Publication that was most used during the above-mentioned period was the Journal Article, which represents 51% of the total scientific production.

Keywords: energy certifications, sustainable cities

I. Introduction

The pandemic declared by COVID-19 in early March 2020 represented a lot of challenges in society and the way people relate to each other, not being the educational system an exception. For this reason, an abrupt transition was made from the traditional educational model 100% face-to-

face to the online educational model mediated by ICT to continue with the pedagogical processes without putting health at risk and to comply with the biosafety standards imposed by governments as prescribed by the World Health Organization (WHO). All this implied a change in the educational methodologies carried out by both

synchronous and asynchronous meetings to complete the educational plan being a fundamental part of the accompaniment of the students by a family member who could guide them in the realization of their school activities, so there was a need for parents or guardians to be involved and committed to the educational development of children and adolescents.

This changed the family dynamics since there was also teleworking so it was difficult to divide the time and make a differentiation between work time and family time as this was implemented in a disorganized way by not having previous experience with this mode of work and study accompanied by implications of both physical and mental health because being confined and forced to adapt to new modalities increased the likelihood of suffering from anxiety, stress, and depression due to the conjunctural situation. This change of educational modality affected the motivation of the students as they had changes in the schedule, in the way they related with their peers and extracurricular activities, so the accompaniment by the families was essential in the educational processes during the confinement to guarantee a good academic level.

Thanks to the above, it can be said that the accompaniment of the Families in the School activities during the confinement played an important role in the educational process during the online modality since the asynchronous sessions implied tutoring and accompanying the children to guarantee the fulfillment of the objective of the sessions. Similarly, it is important to know in terms of bibliographic resources, the current state of research on the Collaboration of Families in School Tasks during COVID 19, so a

bibliometric analysis of the scientific production registered in the Scopus database during the period 2016-2021 is proposed to answer the question: How has been the production and publication of research papers related to the study of the variable Collaboration of Families in School Tasks during COVID 19 in Latin America 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 Management Accounting for Decision Making in Latin American organizations during the period 2016-2021.

3. Methodology

A quantitative analysis is made of the information provided by Scopus under a bibliometric approach to the scientific production regarding the Collaboration of Families in School Tasks during COVID-19. Likewise, from a qualitative perspective, examples of some research papers published in the area of the study mentioned above are analyzed from a bibliographic approach to describe the position of different authors regarding the proposed topic.

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

3.1 Methodological design

	PHASE	DESCRIPTION	CLASSIFICATION
PHASE 1	DATA COLLECTION	Data was collected using the Scopus web page search tool, through which a total of 1794 publications were identified.	Published papers whose study variables are related to Family Collaboration in School Tasks during COVID-19.

			<p>Research papers published during the 2016-2021 period.</p> <p>Without distinction of country of origin.</p> <p>Without distinction of area of knowledge.</p> <p>Without distinction of type of publication.</p>
PHASE 2	CONSTRUCTION OF ANALYSIS MATERIAL	<p>The information identified in the previous phase is organized. The classification will be made through graphs, figures, and tables based on data provided by Scopus.</p>	<p>Word Co-occurrence.</p> <p>Year of publication</p> <p>Country of origin of the publication.</p> <p>Area of knowledge.</p> <p>Type of publication</p>
PHASE 3	DRAFTING OF CONCLUSIONS AND FINAL DOCUMENT	<p>After the analysis carried out in the previous phase, we proceed to the drafting of the conclusions and the preparation of the final document.</p>	

Table 1. Methodological design.

Source: Own elaboration (2022)

4. Results

4.1 Co-occurrence of words

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

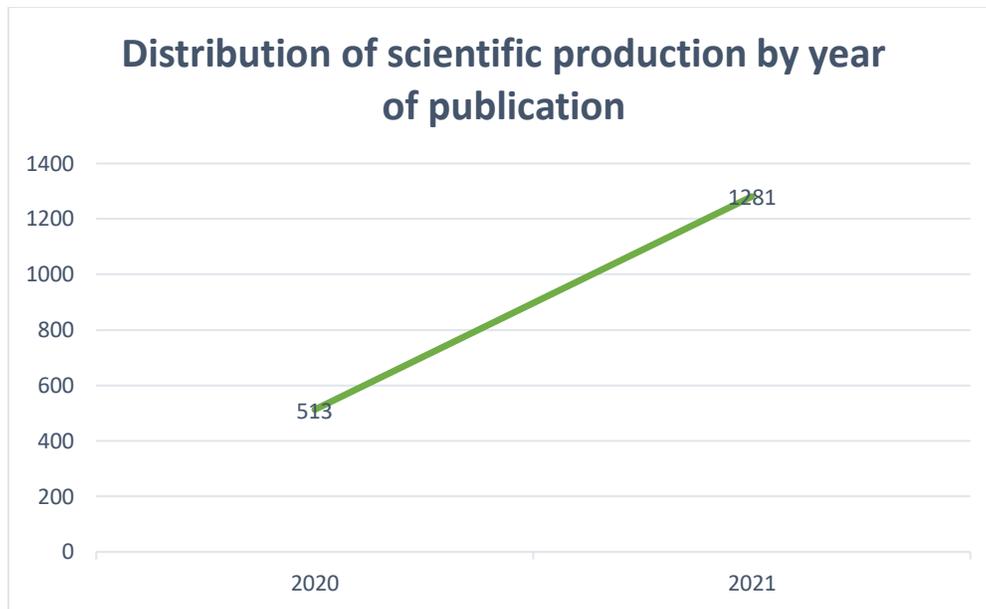


Figure 2. Distribution of scientific production by year of publication.

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

2021 is the year with the highest number of publications related to the variables under study presenting 1281 documents, within which is the title “Student academic engagement in times of COVID-19: challenges and opportunities for online education” (Tristán-Monrroy *et al.*, 2021). This document has as its main objective to determine how online education affected the levels of academic engagement depending on the sociodemographic characteristics of online students. In this paper, two groups of students were identified, encouraged, and discouraged and one of the main factors that determine this classification is the educational institution in addition to how satisfying is the career they are studying.

In second place is 2020 with 513 documents registered in Scopus within which one can find

“Perceptions of teachers and students on remote teaching during the COVID-19 pandemic: the case of Misael Pastrana Borrero School” (Rodríguez *et al.*, 2020) this document identifies the conceptions and strategies that teachers and students have made to continue with the pedagogical processes so a study was conducted with 2 teachers and 60 students where it was shown that a good attitude and disposition is a critical factor in distance education, but this does not replace the spaces of interaction by students creating an academic demotivation that can affect their school performance.

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.

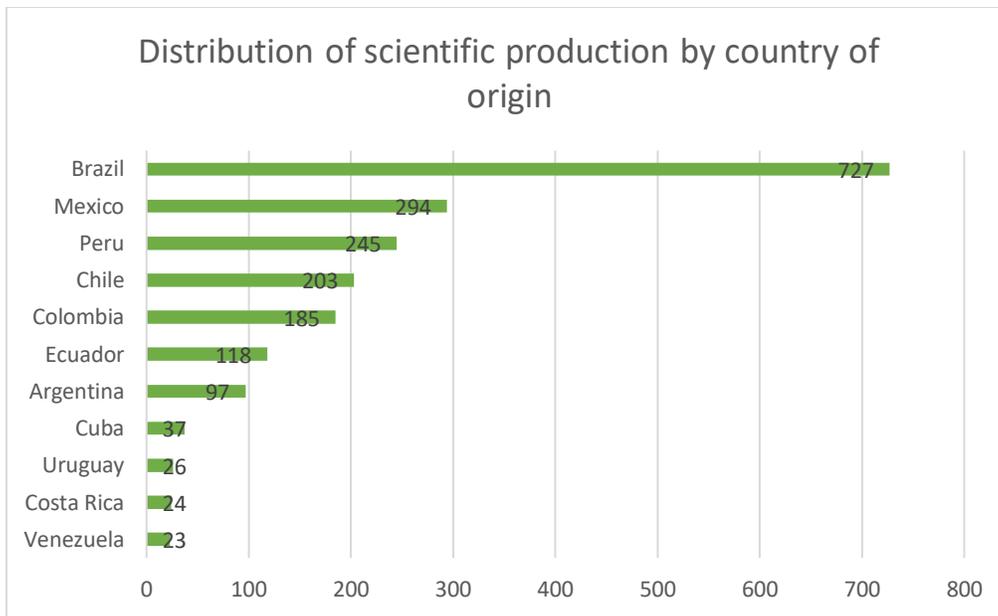


Figure 3. Distribution of scientific production by country of origin.

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

Brazil is the country with the highest number of documents within the period 2016-2021 in Scopus related to the variables under study presenting 727 documents within which one can find the title “Covid-19 and child development: Educational material for relatives” (Figueiredo *et al.*, 2021). This document aims to explain an educational material designed for relatives with a focus on the development of infants and children from 0 to 5 years old during the pandemic period. This study consists of validation by experts, a review of the literature taking into account the principles of child development, so it was possible to determine a higher quality to guide and help families in the daily stimulation of their children and the management of labor disruption, thus helping the management of time in the family dynamics by determining specific times for homework.

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 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.

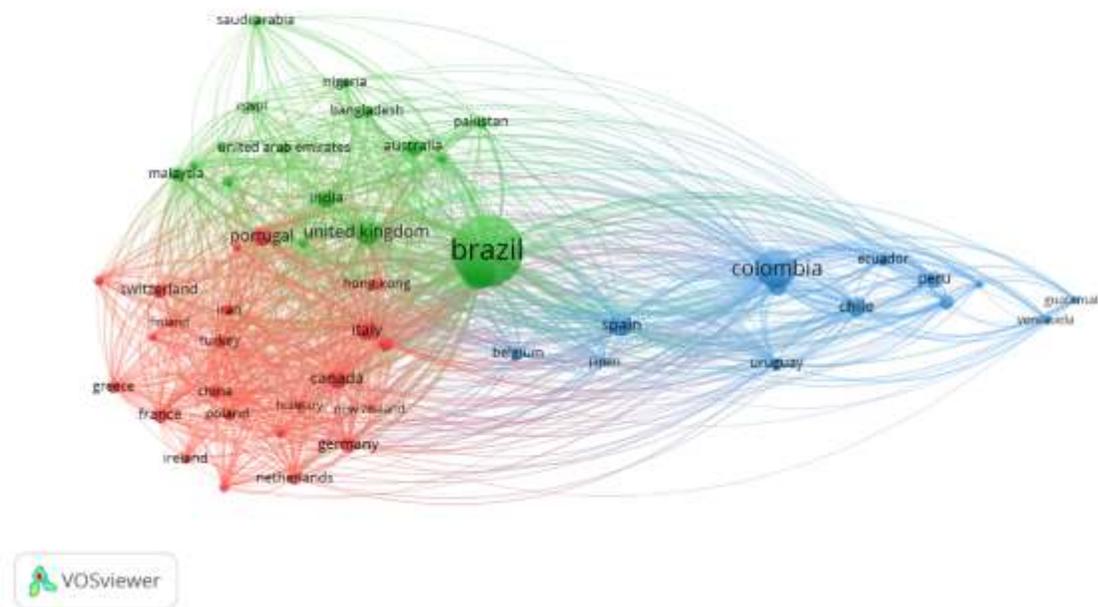


Figure 4. Co-citations between countries.

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

As mentioned above, Brazil is the country with the largest number of documents, including publications in collaboration with authors from countries such as the United Kingdom, Portugal, Italy, Hong Kong, and Australia, which are countries that do not belong to Latin America, demonstrating the interest in learning how online education has developed and how family dynamics have changed over this time in Latin American countries. In second place is Mexico with 294 documents, in which documents are presented in co-authorship with countries such as Spain, Uruguay, Colombia, Ecuador, and Peru, carrying out comparative studies where the progress of each country is analyzed based on the system of others. Among these documents is the

title “How the COVID-19 contingency affects children” (Reséndiz-Aparicio, 2021). The main objective of this document is to present the main effects on children, the main one being online education and the increase in the use of screens; therefore, as solutions, the use of games at home, and physical activity among others are presented to reduce screen time and improve sleep schedules by implementing specific timetables in the tutoring of academic activities for children and adolescents.

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.

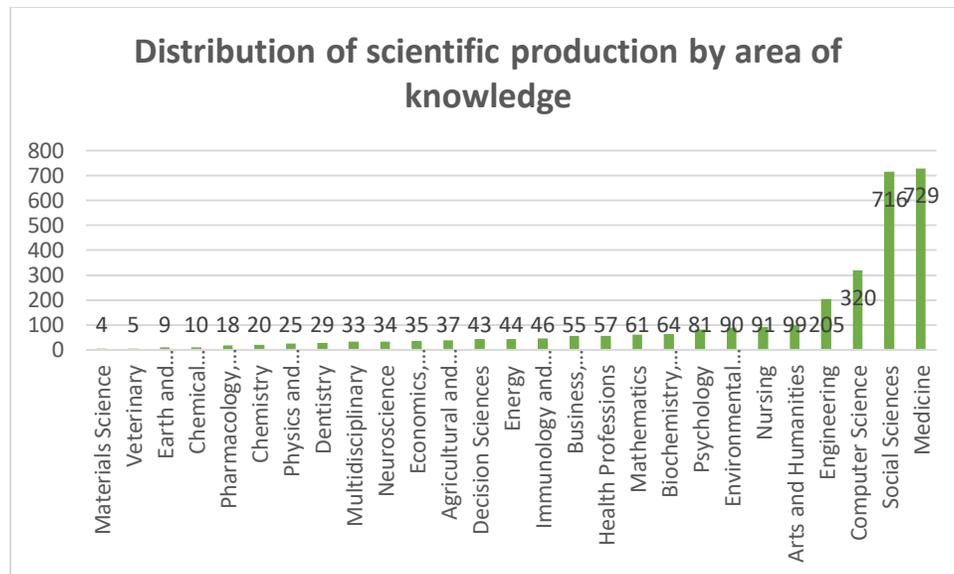


Figure 5. Distribution of scientific production by area of knowledge.

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

Medicine is the area of knowledge with the greatest number of contributions through the theories that are framed in it, in the search for new knowledge on the Collaboration of Families in School Tasks during COVID-19 within which is the title “Psychosocial Characterization and Mental Health in Families of Chilean Schoolchildren during Physical Isolation by Covid-19” (Sáez-Delgado *et al.*, 2020). This document aims to examine psychosocial and academic variables in families of primary and secondary school children from southern Chile in physical isolation and to analyze the mental health of the parents, so a study was conducted in which it was determined that school children have felt anxiety, night fears, bad mood or aggressiveness, several of them have not finished their homework and report motivational difficulties, concluding that socioeconomic factors affect the educational and work situations in the families.

In second place is social sciences where 716 documents were written following the guidelines of the topics related to that area within which is the title “A lean ux process model for virtual reality environments considering ADHD in elementary school students in contingency covid-19” (Cardona-Reyes *et al.*, 2021). This paper analyzes the use of virtual reality environments as an alternative to support the learning process in children with special educational needs such as Attention Deficit Hyperactivity Disorder (ADHD) and other associated disorders that occur in basic education taking into account the family support that these students need by creating specific schedules that help them minimize screen time during the pandemic.

4.5 Type of publication

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

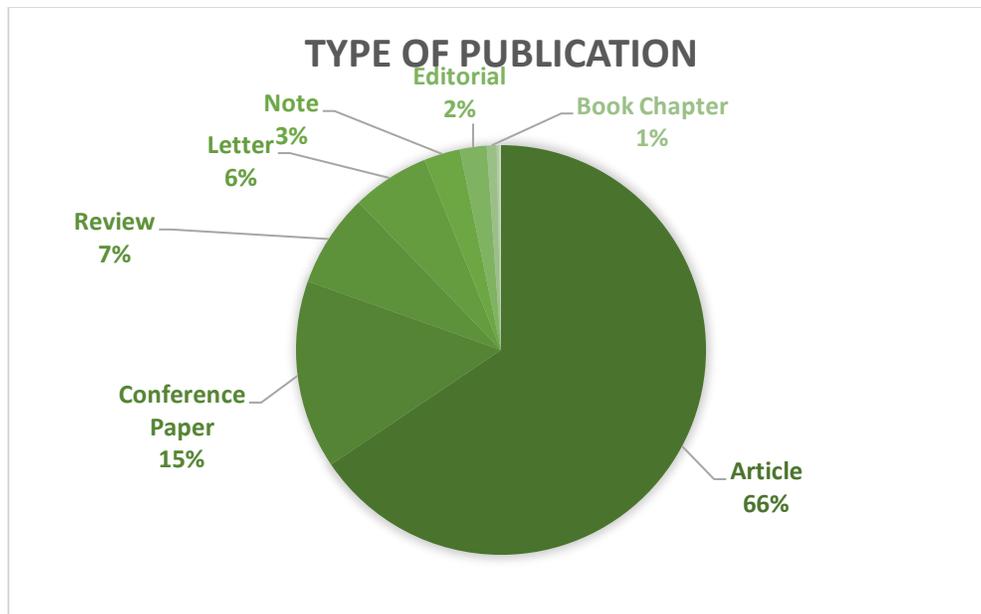


Figure 6. Type of publication

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

As shown in Figure 6, within the different types of publications, 66% of the total number of documents identified through Phase 1 of the Methodological Design, correspond to Journal Articles, among which is the one entitled “Development and evaluation of a massive open online pilot course in Brazil on planetary health education: An innovative model for primary care professionals and community training” (Floss *et al.*, 2021). This paper seeks to describe the process of creation and development of the course and evaluates the impact evaluation data and student outcomes of the PH MOOC during the pandemic where primary school teachers were trained to present action plans for setting student schedules for their learning.

In second place are the conference proceedings which represent 15% of the total number of papers registered in this study within which is the title “Statistical modeling of factor analysis to establish causalities of hybrid learning success during confinement by COVID-19” (A.a *et al.*, 2021) in this paper presents a roadmap of statistical modeling and testing for the analysis of several

causal dimensions most effective in the success of the implementation of the forced online education paradigm to determine the factors involved in online education and how times should be coordinated in after-school activities and family dynamics.

5. Conclusions

Thanks to the bibliometric analysis proposed in the present research, it can be determined that Brazil is the Latin American country with the highest number of bibliographic records in the Scopus database during the period from 2016 to 2021 with a total of 727 documents. The scientific production related to the study of Collaboration of Families in School Tasks during COVID 19 in Latin America, has presented an important growth during the previously mentioned period, going from 513 publications in 2020 to 1281 units in 2021, that is, it was possible to double the creation of bibliographic records in 2 years, which indicates the importance of the accompaniment of family members to students during their asynchronous classes to maintain a good academic performance since not being adapted to this educational modality may present difficulties in its realization and need greater support.

As a result of COVID 19, certain adjustments had to be made at the educational level to continue with these activities, making an accelerated transition to online education, which implied certain challenges for students and families as well as for teachers, adapting to new educational strategies that allow them to adapt to the new needs of this educational model that is here to stay. Among these challenges is the accompaniment of family members to children and adolescents in the completion of schoolwork, since they are not used to this educational strategy and may present certain shortcomings which require support in asynchronous activities to maintain good academic performance. This part was difficult because the schedules were stipulated for other types of activities outside the home, and having an abrupt change of environment can generate conflict in the students resulting in a lack of motivation and affecting their school performance. Another factor that affects this family collaboration is telework because thanks to this there is no clear separation between family and work time, which can lead to neglect of these activities. All the above allows this article to conclude, highlighting the importance of family accompaniment in the academic activities of students to provide support in carrying out activities in a different environment to which they are accustomed helping a transition to this model. That is why it highlights the need for studies such as the one presented in this paper, which make a tour of those texts that address the aforementioned topic, to give the reader a broad view of the current situation of the literature on the Collaboration of Families in School Tasks during COVID 19 in Latin America.

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