

LEARNING PROBLEMS FOR CHILDREN AND ADOLESCENTS AFTER THE PANDEMIC

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Abstract

A documentary review was carried out on the production and publication of research papers related to the study of the Early Learning and Post-pandemic variable. The purpose of the bibliometric analysis proposed in this document was to know the main characteristics of the volume of publications registered in the Scopus database during the period 2020-2023, achieving the identification of 82 publications. The information provided by this platform was organized through graphs and figures, categorizing the information by Year of Publication, Country of Origin, Area of Knowledge and Type of Publication. Once these characteristics have been described, the position of different authors on the proposed topic is referenced through a qualitative analysis. Among the main findings made through this research, it is found that the United States, with 18 publications, was the country with the highest scientific production registered in the name of authors affiliated with institutions in that nation. The Area of Knowledge that made the greatest contribution to the construction of bibliographic material related to the study of Academic Performance in infants after the pandemic generated by Covid-19, was Social Sciences with 53 published documents, and the most used Type of Publication during the period indicated above were Journal Articles with 76% of the total scientific production.

Key words: Early Childhood Learning, Post-pandemic, Education.

1. Introduction

The global pandemic of COVID-19 is cataloged as one of the most tragic events in the 21st century that directly affected the facet of society, this tragic event left indelible marks in different sectors of the economy, the educational panorama was no exception which had a negative impact on how the learning processes in children and adolescents have been managed. As this pandemic passed and millions of schools worldwide closed their doors, the rapid transition to new learning models such as remote schooling or the hybrid learning style took more force in schools, these new learning systems ushered in a new era of schooling based on digital education. While these changes to school closures and higher education were necessary measures to mitigate the spread of the Covid-19 virus, these

levels of isolation generated thousands of challenges in traditional education systems, leaving many children and adolescents with learning disabilities at various levels of schooling.

As a result of the events of the pandemic, this has resulted in complex situations in education as it encompasses dimensions such as academic load and socio-emotional situations that affect the student population. At the time of implementing online education, an important challenge was identified for those students who did not have access to the internet, technological devices or digital resources or were therefore suitable for hybrid learning. Consequently, a stark digital divide has deepened existing inequalities, disproportionately affecting marginalized communities and widening the gap in educational attainment.

However, the interruption of traditional teaching methods in training classrooms has led to difficulties at the socio-emotional levels of children and adolescents. The absence of face-to-face communication between students and educators resulted in a negative process in socialization levels, which resulted in deficient processes in the development of interpersonal skills and emotional intelligence, which resulted in a negative impact on learning outcomes.

Beyond the present consequences, learning disruption has raised concerns about academic regression and learning loss. Being able to implement a hybrid learning model required students to be able to adapt quickly to new digital platforms and new learning methodologies.

Starting from this context, a much more complex educational landscape can be evidenced, which faces more diverse challenges for educators, who are in the constant search to implement more proactive teaching methods in the digital sphere. A holistic approach to virtual training methods has redefined innovative processes in terms of teaching pedagogy, professional development, and focusing on the technological skills of each student. This more dynamic approach to education in order to ensure the teaching processes of children and adolescents focuses on improving learning problems as a result of the pandemic and addressing the needs of students in a more effective way. For this reason, this article seeks to describe the main characteristics of the compendium of publications indexed in the Scopus database related to the variables Early Learning and Postpandemic, as well. Such as the description of the position of certain authors affiliated with institutions, during the period between 2020 and 2023.

2. General Objective

To analyze, from a bibliometric and bibliographic perspective, the preparation and publication of research papers in high-impact journals indexed in the Scopus database on the variables Early Learning and Post-pandemic during the period 2020-2023.

3. Methodology

This article is carried out through a research with a mixed orientation that combines the quantitative and qualitative method.

On the one hand, a quantitative analysis of the information selected in Scopus is carried out under a bibliometric approach of the scientific production corresponding to the study of Early Childhood and Post-Pandemic Learning. On the other hand, examples of some research works published in the area of study mentioned above are analyzed from a qualitative perspective, based on a bibliographic approach that allows describing the position of different authors on the proposed topic. It is important

to note that the entire search was carried out through Scopus, managing to establish the parameters referenced in *Figure 1*.

3.1. Methodological design

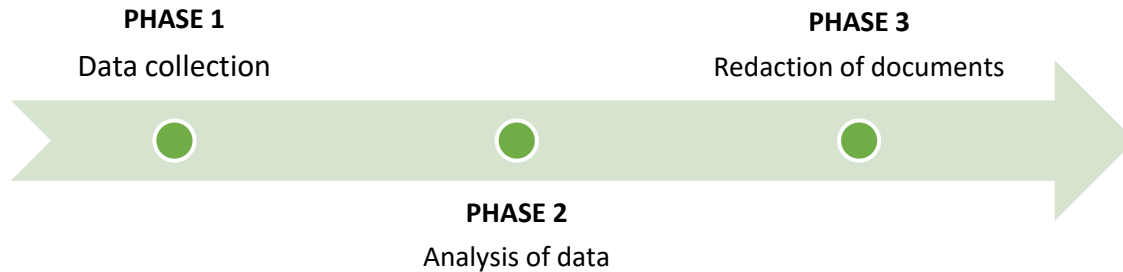


Figure 1. Methodological design
Source: Authors' own creation

3.1.1 Phase 1: Data collection

Data collection was carried out from the Search tool on the Scopus website, where 82 publications were obtained from the following filters:

- TITLE-ABS-KEY (children AND learning, AND post-pandemic)
- Published documents whose study variables are related to the study of the Early Learning and Post-pandemic variables.
- Limited to the years 2020-2023.
- Without distinction of country of origin.
- Without distinction of area of knowledge.
- No distinction of type of publication.

3.1.2 Phase 2: Construction of analytical material

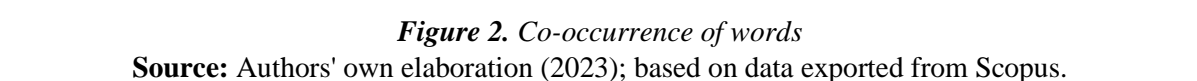
The information collected in Scopus during the previous phase is organized and then classified by graphs, figures and tables as follows:

- Co-occurrence of words.
- Year of publication.
- Country of origin of the publication.
- Area of knowledge.
- Type of publication.

3.1.3 Phase 3: Drafting of conclusions and outcome document

In this phase, the results of the previous results are analysed, resulting in the determination of conclusions and, consequently, the obtaining of the final document.

4.1 Co-occurrence of words



4.2 Distribution of scientific production by year of publication

Figure 3 shows how scientific production is distributed according to the year of publication.

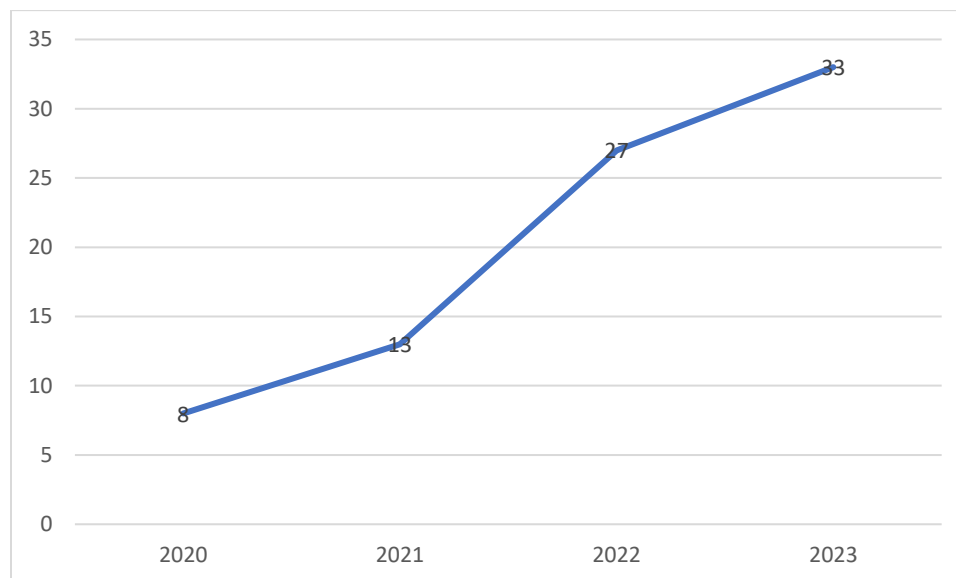


Figure 3. Distribution of scientific production by year of publication.

Source: Authors' own elaboration (2023); based on data exported from Scopus

Among the main characteristics evidenced through the distribution of scientific production by year of publication, the number of publications registered in Scopus was in 2023, reaching a total of 38 documents published in journals indexed on this platform. This can be explained by articles such as the one titled "Sensory Spaces: Sensory Life – Study Teaching Autism-Adapted Adult Accommodation Design" The study aims to assess: (1) How university students of interior architecture can create a forward-thinking summary of "sensory life" informed by external autism experts and a specialist tutor, evidenced through Leeds City Council's live autism accommodation project. (2) Issues related to moving an experimental studio teaching model online during the COVID-19 pandemic. Design/methodology/approach: A grounded theory approach informs an innovative teaching model, executed over two years, to create a better normal; Challenges and opportunities are criticized. Findings: Feedback from specific autism experts raises recurring sensory and communication issues that frame a number of design issues to help inform student summaries. Students learn that the designer as an advocate for vulnerable users is imperative. Aspects of online teaching that may benefit an experimental teaching model under study are identified. Practical implications: Identifying the responsive "sensory life model" illustrates (1) how local authorities can avoid isolation and integrate meaningful "continuous learning opportunities" into autism-adapted adult accommodations for post-pandemic health and well-being. (2) How to incorporate autism-friendly design into the college curriculum.(Love, 2022)

4.3 Distribution of scientific output by country of origin

Figure 4 shows how scientific production is distributed according to the country of origin of the institutions to which the authors are affiliated.

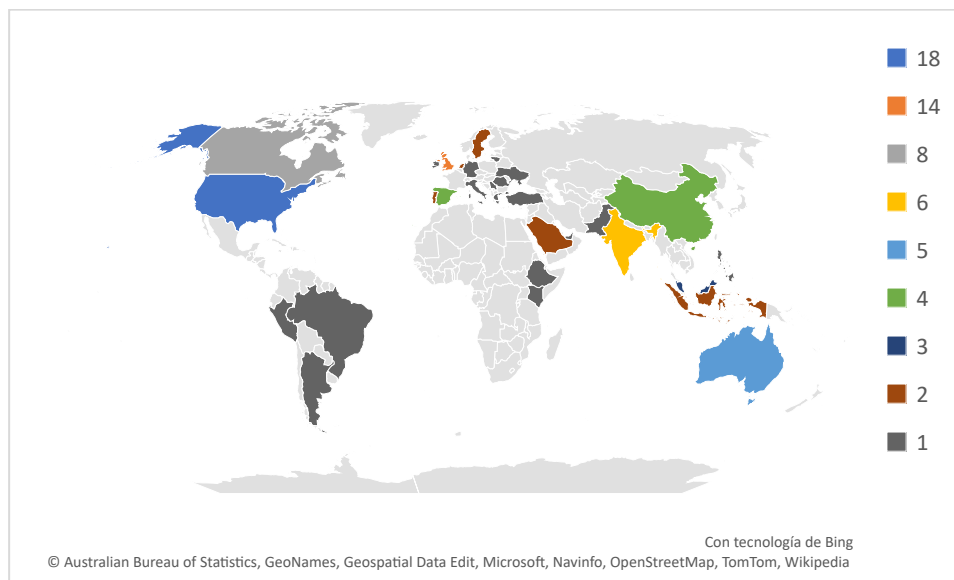


Figure 4. Distribution of scientific production by country of origin.

Source: Authors' own elaboration (2023); based on data provided by Scopus.

Within the distribution of scientific production by country of origin, the records from institutions were taken into account, establishing the United States as the country of that community, with the highest number of publications indexed in Scopus during the period 2020-2023, with a total of 18 publications in total. In second place, the United Kingdom with 14 scientific papers, and Canada occupying the third place presenting to the scientific community, with a total of 8 papers among which is the article entitled "Implementation and Challenges of Online Education during the COVID-19 Outbreak: A National Survey of Children and Parents in China" This study aims to explore the implementation and challenges of the national online education strategy of China – "Suspend Classes Without Stopping Learning" (SCWSL) – during the COVID-19 pandemic from the perspective of children and their parents. In total, random samples were taken from 28,334 children (aged 6 to 8 years) and their parents from nine cities in five provinces of China, and a mixed-method design was used that included a questionnaire and interviews. The results indicated that: (1) most children had participated in online education characterized by wide-ranging content, teacher-led interaction, and rich learning platforms; (2) online education had an effect on children's physical and mental health; (3) parental pressure was medium to high due to online education; and (4) parents perceived offline education to be more effective than online education, and this perception varied significantly across geographic regions, housing areas, and types of schools. These findings reveal that the sudden implementation of online education at the national level created many challenges and also had practical implications for countries delivering online education in the post-pandemic era. (Zhu, 2022)

4.4 Distribution of scientific production by area of knowledge

Figure 5 shows the distribution of the elaboration of scientific publications based on the area of knowledge through which the different research methodologies are implemented.

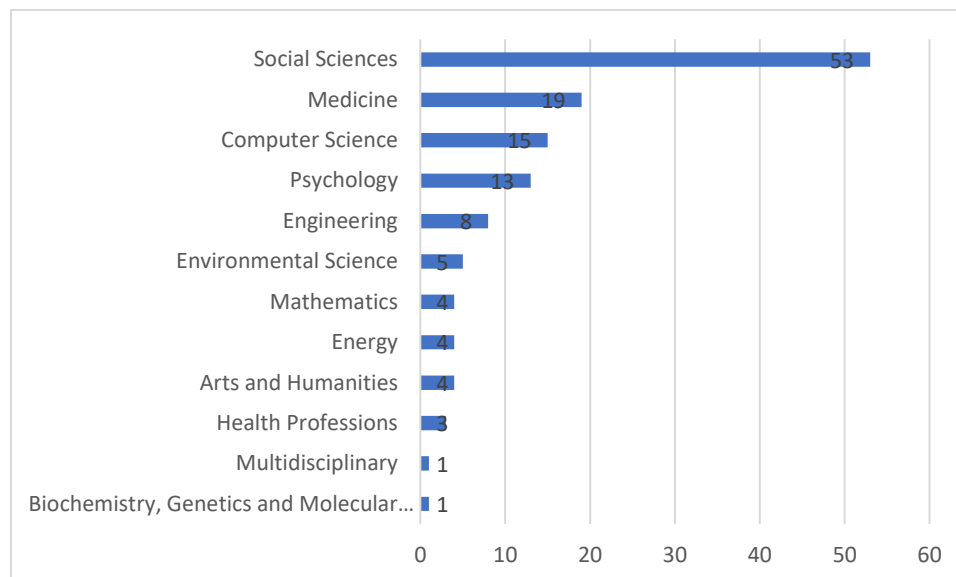


Figure 5. Distribution of scientific production by area of knowledge.

Source: Authors' own elaboration (2023); based on data provided by Scopus

Social Sciences was the area of knowledge with the highest number of publications registered in Scopus with a total of 53 documents that have based their Early Learning and Post-pandemic methodologies. In second place, Medicine with 19 articles and Computer Science in third place with 15. The above can be explained thanks to the contribution and study of different branches, the article with the greatest impact was registered by Social Sciences entitled "COVID-19 and Australian School Psychology: Qualitative Perspectives to Improve Future Practice" The aim of this study is to investigate the practices of Australian school psychologists during COVID-19 related school closures, focusing on their experiences and challenges and how they adapted their practices. Twelve Australian school psychologists were interviewed and, after conducting member checks, the interview transcripts were analysed using thematic analysis. Six interrelated themes were identified including: (a) increased psychological stress of students, (b) alternative modes of delivery and associated challenges, (c) close collaboration with families, (d) participants' personal challenges during COVID-19, (e) assessment during COVID-19, and (f) potential long-term practice changes after the pandemic. The results of this study have implications for policies that support students in future pandemics or when physical attendance at school is disrupted (e.g., natural disasters).(Reupert, 2022)

4.5 Type of publication

In the following graph, you will see the distribution of the bibliographic finding according to the type of publication made by each of the authors found in Scopus.

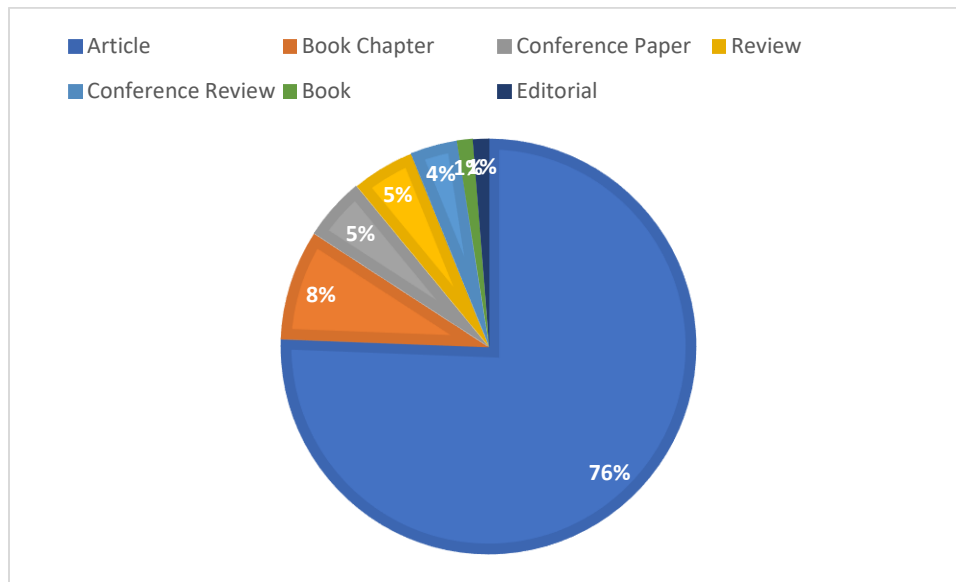


Figure 6. Type of publication.

Source: Authors' own elaboration (2023); based on data provided by Scopus.

The type of publication most frequently used by the researchers referenced in the body of this document was the one entitled Journal Articles with 76% of the total production identified for analysis, followed by Book Chapter with 8%. Session papers are part of this classification, representing 5% of the research papers published during the period 2020-2023, in journals indexed in Scopus. In this last category, the one entitled "Electronic tools to personalize learning during the pandemic: case study of an innovative solution for remote teaching" stands out. In this article we propose a solution to this problem, an approach based on a platform initially developed by tactileimages.org for visually impaired students and which became a tool in the universal design of learning materials. This e-learning tool includes an Editor, a browser-based software developed to allow the creation or adaptation of drawings to vector images; the QR code through which areas of educational and therapeutic interest are assigned to the images for the personalization of tasks; and the companion app's voiceover feature. The personalized material is identified by image recognition algorithms and the user's gesture is recognized by artificial intelligence algorithms, which receive (by voice-over) details about therapeutic tasks in distance learning. The article illustrates the personalization of the therapeutic and educational path. The process starts with the definition of the child's functioning profile and the comparison of their role with the curricular elements as found in the Erasmus+ project "Cognitive Resources for Young Children, Adolescents and Experts", stored in the virtual library. Information and communication technologies are currently an important vector for achieving the vision of the SDGs. The proposed solution will be enhanced to further personalize the educational and therapeutic intervention also in the post-pandemic period.(Patrascoiu, 2022)

5. Conclusions

Through the bibliometric analysis carried out in this research work, it was possible to establish that the United States was the country with the highest number of published records for the variables Early Learning and Post-pandemic with a total of 18 publications in the Scopus database. In the same way, it was possible to establish that the application of theories framed in the area of Social Sciences,

Social Sciences, were used more frequently in the learning challenges presented by children and adolescents after the events of the Covid-19 pandemic. The consequences caused by the isolation of the population and the closure of schools at an international level, caused drastic changes in the traditional methodology in education, these events of the pandemic resulted in an improvement in educational curricula, allowing educators to teach learning methods more remotely and improving the learning experience. As we reflect on these challenges, it is crucial to recognize the resilience and adaptability shown by young students during these unprecedented times. The lack of equity in technological resources has had negative consequences in access to learning and inequality gaps in the student environment. In order to address this deficiency in the education sector, the aim is to ensure that access to teaching and education is given in a comprehensive way where the opportunities to prosper academically are equal. The emotional toll of the pandemic, along with the uncertainties it brought, has taken a toll on the mental well-being of many students, influencing their ability to engage in learning effectively. Taking into account the processes of change in education due to the effects of the pandemic, it is essential that in the long term teachers, future educational policies and the collaboration of society allow specific plans to be implemented in order to address the collective needs of each student. Flexibility in educational approaches, innovative teaching methods, and increased support for mental health services are crucial components of a comprehensive strategy to mitigate the learning challenges that persist.

To conclude, we can affirm that it is essential to observe how the education sector, after the effects of the post-pandemic, brought as a result new opportunities for growth and innovation processes in education. While we know the challenges we face and adapt our approaches, we can build a more resilient and inclusive education system that prepares children and adolescents for the changing demands of the future. Starting from the need for a collective commitment in which it seeks to prioritize education and promote a much more conducive educational environment in which it seeks to guarantee a more equitable future for future generations.

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