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LEARNING PROBLEMS IN CHILDREN AND ADOLESCENTS AFTER THE PANDEMIC

Nancy Jaqueline Macías Alvarado^{1*}, Jessica Mariuxi Macias Alvarado², Hugo Fabricio García Arteaga³, Katherine Anabel Granizo López⁴, Jessica Georgina Vaca Vera⁵, Inés Ivis Iñiguez Salinas⁶, Mayra Janeth Barrionuevo Acosta⁷

¹Magíster en Diseño Curricular, Unidad Educativa Mariscal Sucre, Universidad Estatal de Milagro (UNEMI).
Email: nmaciasa@unemi.edu.ec, ORCID iD: <https://orcid.org/0000-0003-0560-9598>

²Magíster en Gerencia Educativa, Universidad Estatal de Milagro.

Email: jmaciasa3@unemi.edu.ec, ORCID iD: <https://orcid.org/0000-0003-0379-6246>

³Magíster en Educación mención Tecnología e Innovación Educativa, Unidad Educativa Mariscal Sucre.

Email: hugof.garcia@educacion.gob.ec, ORCID iD: <https://orcid.org/0009-0009-6669-3034>

⁴Máster Universitario en Educación Inclusiva e Intercultural, Unidad Educativa Mariscal Sucre.

Email: katherine.granizo@educacion.gob.ec, ORCID iD: <https://orcid.org/0009-0006-9891-1233>

⁵Máster en Gerencia Educativa, Unidad Educativa Mariscal Sucre.

Email: georgina.vaca@educacion.gob.ec, ORCID iD: <https://orcid.org/0009-0006-4471-1711>

⁶Magíster en Gestión Educativa, Unidad Educativa Mariscal Sucre.

Email: ines.iniguez@educacion.gob.ec, ORCID iD: <https://orcid.org/0009-0003-7596-5755>

⁷Maestría en Educación mención en Orientación Educativa – UNAE, Unidad Educativa Mariscal Sucre.

Email: janeth.barrionuevo@educacion.gob.ec, ORCID iD: <https://orcid.org/0009-0001-7199-1273>

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Corresponding Author: Nancy Jaqueline Macías Alvarado

(nmaciasa@unemi.edu.ec)

ABSTRACT

A documentary review was conducted on the production and publication of research articles related to the study of the variable Early Learning and Post-Pandemic. The objective of the bibliometric analysis proposed in this document was to identify the main characteristics of the volume of publications registered in the Scopus database during the period 2020-2023, identifying 82 publications. The information provided by this platform was organized using graphs and figures, categorizing the information by year of publication, country of origin, area of knowledge, and type of publication. Once these characteristics were described, reference was made to the position of different authors on the proposed topic through a qualitative analysis. Among the main findings of this research was that the United States, with 18 publications, was the country with the highest scientific output registered in the name of authors affiliated with institutions in that nation. The area of knowledge that contributed most to the construction of bibliographic material related to the study of academic performance in children after the COVID-19 pandemic was the social sciences, with 53 published documents, and the most used type of publication during the period indicated above was journal articles, with 766 of the total scientific output.

KEYWORDS: Early Childhood Learning, Post-Pandemic, Education.

1. INTRODUCTION

The global COVID-19 pandemic is considered one of the most tragic events of the 21st century, directly affecting society. This tragic event left indelible marks on different sectors of the economy, and education was no exception, as it had a negative impact on the management of learning processes for children and adolescents. As the pandemic subsided and millions of schools around the world closed their doors, the rapid transition to new learning models, such as distance learning or hybrid learning, gained momentum in schools. These new learning systems marked the beginning of a new era of schooling based on digital education. Although these changes in school closures and higher education were necessary measures to mitigate the spread of the Covid-19 virus, these levels of isolation created thousands of challenges for traditional education systems, leaving many children and adolescents with learning difficulties at various levels of schooling.

As a result of the pandemic, this has led to complex situations in education, as it encompasses dimensions such as academic workload and socio-emotional situations that affect the student population. When implementing online education, a significant challenge was identified for those students who did not have access to the internet, technological devices, or digital resources and were therefore not suited to hybrid learning. Consequently, a marked digital divide has deepened existing inequalities, disproportionately affecting marginalized communities and widening the gap in educational performance.

However, the disruption of traditional teaching methods in classrooms has caused socio-emotional difficulties in children and adolescents. The absence of face-to-face communication between students and educators has led to a negative process in socialization levels, resulting in deficiencies in the development of interpersonal skills and emotional intelligence, with a consequent negative impact on learning outcomes.

Beyond the current consequences, the disruption of learning has raised concerns about academic regression and learning loss. In order to implement a hybrid

learning model, students had to quickly adapt to new digital platforms and new learning methodologies.

Given this context, the educational landscape has become much more complex, presenting educators with a wider range of challenges as they constantly seek 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 a focus on each student's technological skills. This more dynamic approach to education, aimed at ensuring the teaching processes of children and adolescents, focuses on improving learning problems resulting from the pandemic and addressing students' needs more effectively. 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 Post-Pandemic, as well as the description of the position of certain authors affiliated with institutions, during the period between 2020 and 2023.

General Objective

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

2. METHODOLOGY

This article is based on mixed-method research combining quantitative and qualitative methods. On the one hand, a quantitative analysis of the information selected in Scopus is carried out using a bibliometric approach to scientific production corresponding to the study of early childhood and post-pandemic learning. On the other hand, examples of some research papers published in the area of study are analyzed from a qualitative perspective, based on a bibliographic approach that allows the position of different authors on the proposed topic to be described. It is important to note that the entire search was carried out through Scopus, establishing the parameters referenced in Figure 1.

Methodological Design

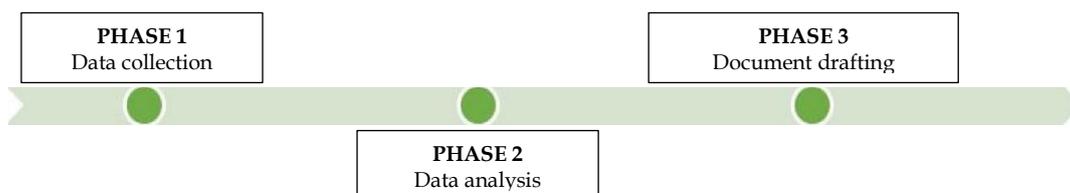


Figure 1: Methodological design.

Source: Own elaboration

Council's housing project for people with autism. (2) Issues related to improving an experimental model of online study teaching during the COVID-19 pandemic. Methodology/design approach: A grounded theory approach leads to an innovative teaching model, implemented over two years, to create a new normal; challenges and opportunities are analyzed. Findings: Feedback from autism experts raises recurring issues related to the senses and communication, leading to a series of design questions that help to develop meaningful summaries. Students learn that it is essential for the designer to be an advocate for vulnerable users. Aspects of online teaching are identified that can benefit the experimental teaching model under study. Practical implications: The identification of the responsive "sensory life model" illustrates (1) how local authorities can avoid isolation and integrate meaningful "continuous learning opportunities" into autism-friendly adult housing for post-pandemic health and well-being. (2) How to incorporate autism-friendly design into the university curriculum (Love, 2022).

Distribution of scientific output by institution origin

Figure 4 shows how scientific output is distributed according to the country of origin of the institutions to which the authors belong.



Figure 4: Distribution of scientific output by country of origin.

Source: Own elaboration (2023); based on data provided by Scopus.

In the distribution of scientific output by country of origin, institutional records were taken into account, placing the United States as the country in that community with the highest number of publications indexed in Scopus during the period 2020-2023, with a total of 18 publications. The United Kingdom ranked second, with 14 scientific articles, and Canada ranked third, presenting the scientific community with a total of eight articles, including

one 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 China's national online education strategy—"Suspending Classes Without Stopping Learning" (SCWSL)—during the COVID-19 pandemic from the perspective of children and their parents. In total, random samples of 28,334 children (aged 6-8) and their parents were taken from nine cities in five provinces in China, and a mixed-method design including a questionnaire and interviews was used. The results indicated that: (1) most children had participated in online education, characterized by broad content, teacher-led interaction, and rich learning platforms; (2) online education had had an effect on children's physical and mental health; (3) parental pressure was moderate to high due to online education; and (4) parents perceived face-to-face education to be more effective than online education, and this perception varied significantly across different geographic regions, residential areas, and school types. These findings reveal that the sudden implementation of online education at the national level created many challenges and also had practical implications for countries providing online education in the post-pandemic era (Zhu, 2022).

Distribution of scientific output by field of knowledge

Figure 5 shows the distribution of scientific publications by area of knowledge through which different research methodologies are applied.

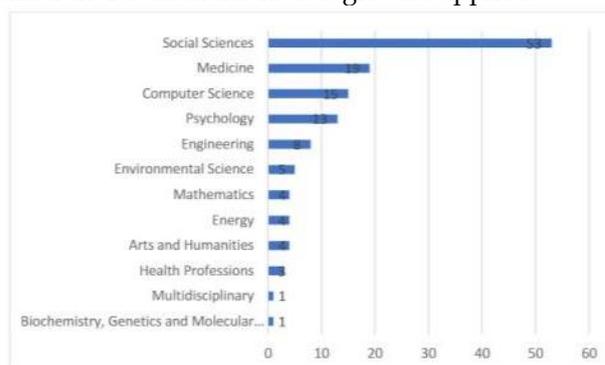


Figure 5: Distribution of scientific output at the end of the degree program.

Source: Own elaboration (2023); based on data provided by Scopus

The social sciences were the area of knowledge with the highest number of publications registered in Scopus, with a total of 53 documents that have based their methodologies on early learning and the post-pandemic period. In second place was medicine,

with 19 articles, and in third place was computer science, with 15. This can be explained by the contribution and study of different branches. The article with the greatest impact was recorded by Social Sciences, entitled "COVID-19 and Australian school psychology: qualitative perspectives for improving 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 member checks, the interview transcripts were analyzed using thematic analysis. Six interrelated themes were identified, including: (a) increased psychological stress among students; (b) alternative modes of teaching 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 changes in practice following the pandemic. The results of this study have implications for policies that support students in future pandemics or when physical school attendance is disrupted (e.g., in the event of natural disasters) (Reupert, 2022).

Type of publication

Figure 6 shows the distribution of bibliographic results according to the type of publication produced by each of the authors found in Scopus.

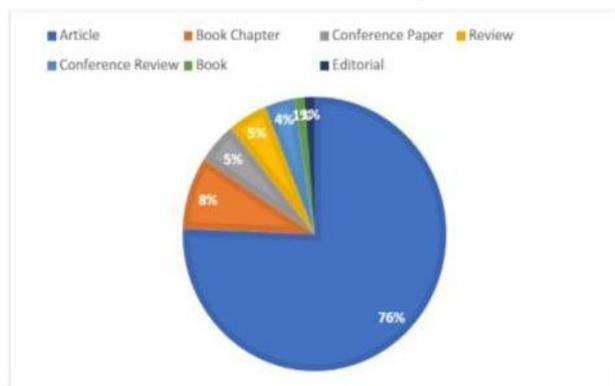


Figure 6: Type of publication.

Source: Prepared by the authors (2023); based on data provided by Scopus.

The type of publication most used by the researchers mentioned in the body of this document was "Journal articles," accounting for 76% of the total output identified for analysis, followed by "Book chapters," accounting for 8%. Session papers are part of this classification and represent 5% of the research articles published during the period 2020-2023 in

journals indexed in Scopus. Noteworthy in this latter category is the article entitled "Electronic tools for personalizing learning during the pandemic: a case study of an innovative solution for distance learning." In this article, we propose a solution to this problem, an approach based on a platform initially developed by tactileimages.org for students with visual impairments, which became a tool in the universal design of learning materials. This e-learning tool includes an editor, browser-based software developed to enable the creation or adaptation of drawings into vector images; the QR code through which areas of educational and therapeutic interest are assigned to images for task personalization; and the voice-over function of the complementary application. The customized material is identified by image recognition algorithms, and the user's gestures are recognized by artificial intelligence algorithms, which receive (via voice-over) details about therapeutic tasks in distance learning. The article illustrates the personalization of the therapeutic and educational pathway. The process begins with defining the child's functioning profile and comparing their role with the curricular elements found in the Erasmus+ project "Cognitive Resources for Young Children, Adolescents, and Experts," stored in the Viminal library. Information and communication technologies are currently an important vector for achieving the SDG vision. The proposed solution will be improved to further personalize educational and therapeutic intervention also in the post-pandemic period (Patrascoiu, 2022).

4. CONCLUSIONS

Through the bibliometric analysis carried out in this research work, it was established 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. Similarly, it was established that the application of theories framed in the area of Social Sciences, Social sciences were used most frequently in the learning challenges presented to children and adolescents following the events of the COVID-19 pandemic. The consequences of population isolation and school closures internationally led to drastic changes in traditional education methodology. These pandemic events led to improvements in curricula, enabling educators to teach distance learning methods and enhance the learning experience. When reflecting on these challenges, it is essential 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 on access to learning and has exacerbated inequalities in the educational environment. To address this shortcoming in the education sector, the goal is to ensure that access to teaching and education occurs in a comprehensive manner, with equal opportunities to thrive academically. The emotional impact of the pandemic, coupled with the uncertainties it has brought, has affected the mental well-being of many students, influencing their ability to participate effectively in learning. Given the processes of change in education due to the effects of the pandemic, it is essential that, in the long term, teachers, future education policies, and collaboration from society enable the implementation of specific plans 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.

In conclusion, it is clear that the education sector has brought new opportunities for growth and innovation in the wake of the pandemic. By recognizing the challenges and adapting our approaches, it is possible to build a more resilient and inclusive education system that prepares children and adolescents for the evolving demands of the future. This begins with a collective commitment to prioritizing education and promoting a more conducive educational environment to ensure an equitable future for future generations.

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