



Research Article

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Received: 12 July 2024 / Accepted: 25 October 2024 / Published: 05 November 2024

Interactions Between Children in Educational Services and their Implications for Learning at the Preschool Education Level: A Literature Review

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DOI: <https://doi.org/10.36941/jesr-2024-0154>

Abstract

This research addresses the interactions of children at the preschool education level in educational services and their implications for or repercussions for learning. We aimed to determine the state of the art of interactions of children at the preschool education level in educational services and their implications for learning. The results of the bibliographic review indicate that this topic has been scientifically approached since 1975, with a growing and fluctuating trend. The countries that theoretically contribute the most to these topics are the United States, the United Kingdom, Australia, Russia, Canada, Italy, Taiwan, Brazil, Germany and Norway. Research results are shared through original scientific articles and are approached from the perspective of the social sciences, medicine and psychology. Finally, the clusters in the scientific maps show variables such as social interaction, education, learning, interpersonal relationships, emotions and cooperation. The analytical reading of the publications indicates the need for a comprehensive approach to children at the preschool education level in educational services, where it is key to educating children in the future. A broader approach that takes into account various needs, which involves social-emotional competencies for children, which are vital components of the comprehensive development of children, is needed.

Keywords: educational services, learning, children, bibliometrics, learning theory

1. Introduction

Children's interactions within early childhood educational services play a pivotal role in their development and learning. These interactions, encompassing relationships between educators and children, among peers, and between children and their educational environment, significantly impact various aspects of child development (Díaz et al., 2023; Smith et al., 2023; Trifonova, 2023). Early childhood education services are essential for fostering children's holistic development, and the quality of these interactions can have a lasting effect on their well-being and learning ability (Blewitt, Morris, et al., 2020; Egert et al., 2020; OECD, 2020).

Despite the importance of these interactions, gaps and challenges persist in addressing and understanding them. Golley et al. (2010) emphasized the need for new educational structures and approaches to address differences and inequalities, highlighting the importance of reaching families

through distance learning with information and opportunities to improve their children's education. Conversely, Clarke et al. (2007) point to a lack of empirical understanding of the effectiveness of providing communication technologies to children with communicative disabilities, which is a pertinent resource in learning.

The OECD (2020) underscores the issue of the quality of educational services as a critical factor for the development, learning, and well-being of young children. This highlights the importance of considering the dynamic characteristics of children's interactions with materials, peers, and educators and the need to provide high-quality daily experiences in the classroom or playgroup. Furthermore, this study highlights the relevance of understanding the relationships between the preparation and qualifications of professionals, process quality, and child development.

These problems include insufficient educational relationships, a lack of cognitive stimulation, a lack of empathy and affection, educational environments with limited resources, poor affective communication, little family communication, gaps in educator training, economic inequalities, and a technological divide that directly affects children's learning (Lehman, 2017; Leunga et al., 2019; Molloy et al., 2019; Shears, 2010).

In this context, there is an identified conceptual gap in the comprehensive understanding of interactions in early childhood educational services and their implications for children's learning. An approach that considers not only pedagogical and resource aspects but also socioemotional attitudes manifested in educational settings and how these attitudes contribute to improving students' academic, social, and emotional outcomes is needed (Hay et al., 2021; Nkhoma et al., 2013; Perlman et al., 2016; Qie, 2022; Sant'Anna et al., 2018; Schertz et al., 2022).

Thus, the present study seeks to address the following research question: What is the theoretical approach to the implications of interactions among children in early childhood educational services and their implications for learning? The findings contribute to filling the identified theoretical gap and provide a more comprehensive understanding of this topic, with the aim of improving the quality of interactions in early childhood educational services and enhancing children's holistic learning and development.

2. Methodology

This study employed a qualitative approach through a comprehensive documentary review. The methodology consisted of two primary components: a bibliometric analysis and an analytical reading of selected documents.

2.1 Search strategy

We conducted a systematic literature search using three prominent databases: Scopus, Web of Science (WOS), and Google Scholar. The search was not restricted by publication date to ensure a comprehensive overview of the field's evolution. The following Boolean operators were used for information retrieval:

- Scopus: (TITLE-ABS-KEY (interactions in educational services) AND TITLE-ABS-KEY (learning in children))
- WOS: ("interactions in educational services" AND "learning in children")
- Google Scholar: (Intitle: "Interactions in educational services and learning in children")

Inclusion and exclusion criteria Studies were included if they met the following criteria:

1. Focused on interactions in educational services for preschool-aged children
 2. Addressed implications for learning
 3. Published in peer-reviewed journals, books, or conference proceedings
 4. Available in English or Spanish
- Studies were excluded if they:

1. Focused solely on primary or secondary education
2. Did not address learning outcomes
3. Were not available in full text.

2.2 Selection process

The initial search yielded 173 documents specifically addressing the interaction between the two variables under study. After removing duplicates and applying the inclusion and exclusion criteria, 32 documents were selected for full-text review. The selection process is illustrated in Figure 1 via the PRISMA flow diagram.

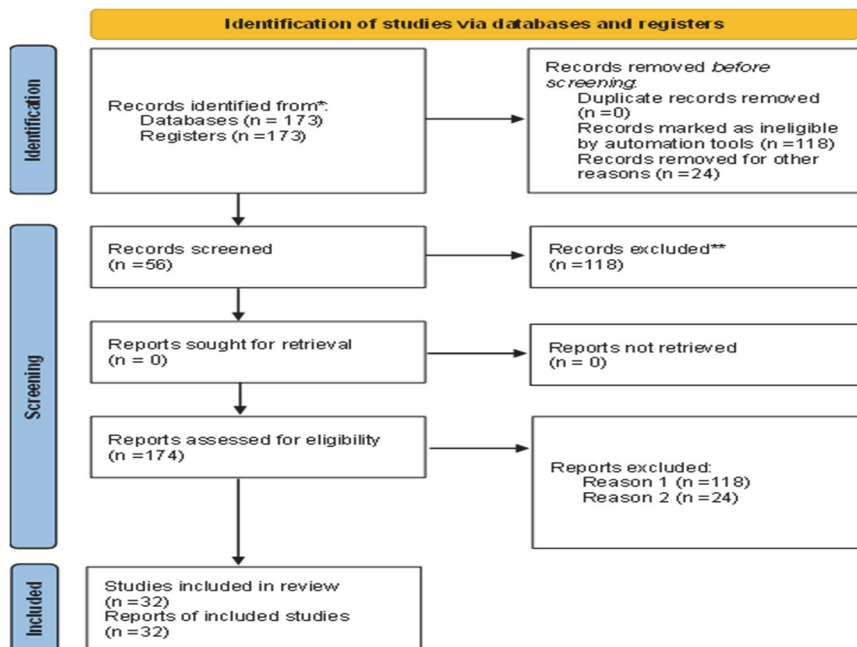
2.3 Data Extraction and Analysis

For the bibliometric analysis, we extracted metadata, including publication year, author affiliations, countries of origin, and keywords. These data were analyzed via VOSviewer software to generate semantic maps and identify research clusters.

The analytical reading involved a thorough review of the selected documents, focusing on theoretical contributions, empirical findings, and implications for practice. We paid particular attention to recurring themes, methodological approaches, and gaps in the literature.

2.4 Quality Assessment

To ensure the rigor of our review, we assessed the quality of the included studies via a modified version of the Critical Appraisal Skills Programme (CASP) checklist. This assessment considered factors such as methodological rigor, clarity of research questions, and relevance to our study objectives.



Note. Article selection process for the systematic literature review via the PRISMA scheme.

Figure 1: Diagram of the flow of information through the different phases of a systematic review.

3. Results

3.1 Results of the bibliometric analysis

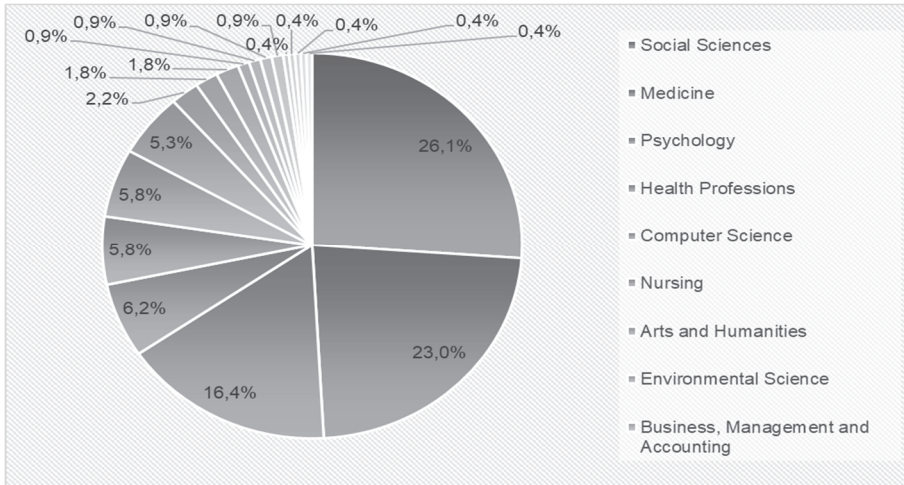


Figure 2. Publications by area of early childhood interactions in educational services and their implications for learning.

Source: Scopus database.

The results are presented considering the theoretical and epistemological approach to the research topic, for which bibliometrics were used as part of the heuristics of the state of the art to subsequently use hermeneutics in the immersion to the content of the related literature (Londoño et al., 2016).

To identify how knowledge is generated, the epistemological process in relation to the document under study includes social sciences (26.1%), medicine (23%), psychology (16.4%) and health professionals (6.2%) (see Figure 2).



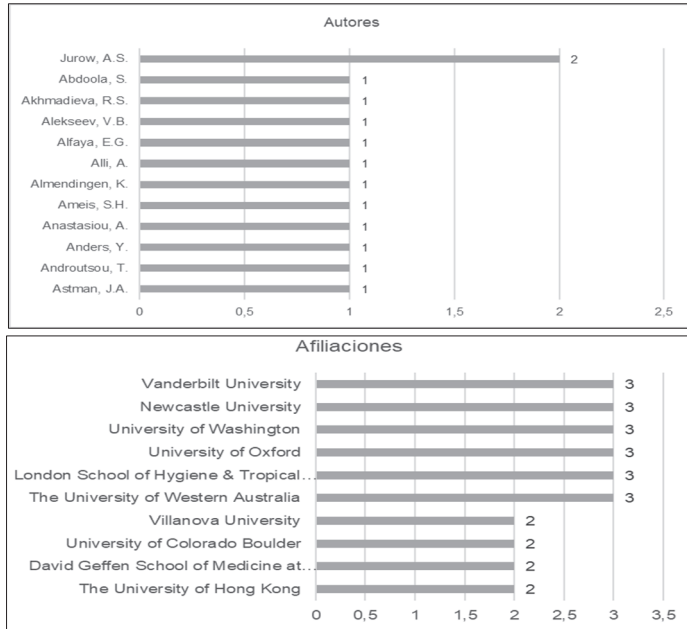


Figure 3: Evolution of publications by year, countries, authors and affiliations of the interactions of children at the initial level in educational services and their implications for learning. Note. Scopus database.

Figure 3 shows that since 1975, studies on interactions among children in early childhood educational services and their implications for learning have been conducted. This indicates a growing and volatile dynamic over the years, highlighting interest in addressing this topic. Noteworthy affiliations include Vanderbilt University, Newcastle University, University of Washington, University of Oxford, London School of Hygiene & Tropical Medicine, University of Western Australia, Villanova University, University of Colorado Boulder, David Geffen School of Medicine at UCLA, and University of Hong Kong. Additionally, prominent authors include Jurow, A.S., Abdoola, S., Akhmadieva, R.S., Alekseev, V.B., Alfaya, E.G., Alli, A., Almendingen, K., Ameis, S.H., Anastasiou, A., Anders, Y., Androutsou, T., and Astman, J.A., among others.



Figure 4: Publications on the interactions of children at the early childhood level in educational services and their implications for learning, by country produced

Source: Scopus database

In Figure 4, the bibliometric analysis also makes it possible to identify the countries with the greatest contribution to research on the topic under analysis. The top contributors are the United States, the United Kingdom, Australia, Russia, Canada, Italy, Taiwan, Brazil, Germany and Norway.

3.2 *Semantic analysis on the basis of key terms*

Following the use of bibliometrics to approach the epistemology of interactions among early childhood children in educational services and their implications for learning, a semantic analysis is presented. This analysis is based on key terms used in the research and the relationships among authors, journals, sponsors, institutional affiliations, and other metadata, which collectively create a dynamic in a research ecosystem and reveal trends that can be appreciated via the artificial intelligence program VOSviewer. This analysis demonstrated the close relationship between the two variables. The clusters indicate connections between variables such as social interaction, education, learning, interpersonal relationships, emotions, and cooperation. Additionally, the analysis addresses the classroom environment, psychological aspects, and socioemotional competencies of teachers, which are fundamental because they enhance the classroom climate and can improve students' academic, social, and emotional outcomes.

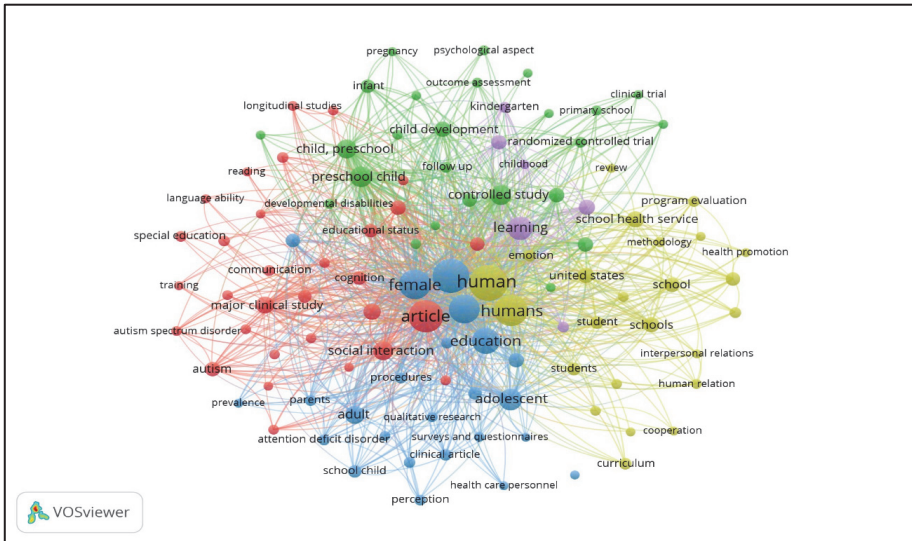


Figure 5. Semantic map of the interactions of children at the initial level in educational services and their implications or repercussions for learning.

Source: Prepared with the open source program VOSviewer from the Scopus database.

childhood education and care settings.

Clarke et al. (2007) focused on the provision of communication aids for children in England. Historically, there has been inequity in the provision of these aids, with fragmented systems wasting resources and denying children the appropriate equipment and support. The need for communication aids for children with communicative difficulties is broad and diverse, encompassing a variety of disabilities and specific needs (Leunga et al., 2019).

Egert et al. (2020) reported that professional development can significantly improve the quality of teacher–child interactions in the areas of emotional support, classroom organization, and instructional support. Extensive programs with multiple components appear to be more effective than single-component programs. Most professional development interventions provide individual support combined with a workshop or course.

Guran et al. (2022) propose a new generation of emotion-aware educational entertainment applications for young children and the challenges and possible solutions for their design and effective use. They mention previous studies related to emotion recognition in e-learning but do not present specific results. The document provides an overview and a proposal for the development of educational entertainment applications for young children, without presenting empirical results.

Importantly, interactions in educational services also involve prosocial and aggressive behavior in children, with a focus on understanding the development and interrelation of these behaviors in the early years. The goal is to understand individual differences in prosocial and aggressive behavior, as well as their stability over time (Hay et al., 2021).

Kuru & Taskin (2016) indicated that parents participate in activities such as charity sales and contests, focusing on how learning is promoted at home and the support provided to parents in this respect.

Educating children for the future requires a broader approach that considers various needs. While the lack of uniforms or school supplies can be easily identified, other challenges may arise from home situations and may not be immediately evident to teachers. Teachers should not rely solely on visual observations to understand a child's needs, as these may not align with what parents identify as necessary (Lehman, 2017; Shears, 2010).

Teachers and teacher educators must be prepared to address the challenges posed by globalization and multicultural communities. They should impart cultural sensitivity and equality to all students while teaching or preparing to teach (Molloy et al., 2019).

Nkhoma et al. (2013) identified various challenges in the learning process, including cognitive, emotional, and social aspects that influence development. A major challenge is the diversity in the learning styles and individual paces of each child.

Cognitively, some children may struggle with acquiring certain academic skills, such as reading, writing, or math. It is crucial to consider these differences and adapt pedagogical approaches to meet individual needs (Strauss & Bipath, 2020).

Emotionally, early childhood is crucial for socioemotional development. Managing emotions and empathy and building relationships are fundamental skills that should be nurtured. Additionally, some children may face emotional challenges due to external factors, such as family situations or changes in the environment (Perlman et al., 2016; Qie, 2022).

Socially, interaction with peers and participation in group activities are essential. Educators should work to create an inclusive environment that promotes collaboration and effective communication among children (Sant'Anna et al., 2018).

Effective communication among educators, parents, and professionals involved is key to addressing these challenges comprehensively. Early identification of potential difficulties and the implementation of personalized strategies are essential to support the optimal development of each child in early childhood education.

3.4 Learning theories

In terms of learning theories, Peñafiel et al. (2023) address attachment theory, a conceptual framework developed to understand emotional and affective relationships among humans, especially in early childhood. John Bowlby, a British psychologist and psychiatrist, was the primary proponent of this theory. It has evolved and been refined over time, with significant contributions from Mary Ainsworth through her studies and observations (Peñafiel et al., 2023).

Attachment theory posits that humans are genetically predisposed to form strong emotional bonds with others, particularly with primary caregivers, such as parents or guardians (Peñafiel et al., 2023).

Santoyo et al. (2023) discussed cooperative learning theories, which involve a pedagogical strategy that requires the active collaboration of students in small groups to achieve common learning goals. Unlike traditional teaching methods, where students work individually and compete against each other, cooperative learning is based on the idea that teamwork and collaboration can significantly enhance the understanding and retention of material.

Positive interdependence is encouraged, meaning that group members depend on each other to achieve group success. Individual performance is tied to the group's performance.

Pimazzoni (2023) highlights the theoretical contributions of the constructivist approach, which focuses on the active construction of knowledge by the student through interaction with the environment and participation in meaningful activities.

Constructivism is a pedagogical theory based on the idea that students actively construct their own knowledge through interaction with the environment and participation in meaningful experiences. Unlike more traditional teaching methods that focus on information transmission by the teacher, constructivism emphasizes the student's active role in the learning process (Pimazzoni, 2023).

Learning is more effective when it is related to the student's prior experience and is relevant to their life. New knowledge is built upon existing knowledge (Sánchez, 2023).

Constructivism recognizes the importance of social learning. Interactions with other students, teachers, and the social environment contribute to the construction of knowledge (Espinoza et al., 2023).

The teacher acts as a facilitator or guide, providing opportunities and resources for learning. The student assumes an active role, participating in decision-making and actively exploring content (Pimazzoni, 2023).

4. Discussion

The findings of the present study suggest that interactions among young children in educational services have significant implications for their learning and overall development. These results are consistent with previous research highlighting the importance of interaction quality in early educational settings (Blewitt, Morris, et al., 2020; OECD, 2020; Perlman et al., 2016).

The bibliometric analysis revealed a growing yet fluctuating trend in the study of this topic since 1975, demonstrating sustained interest in understanding interactions within educational services and their impact on learning. This suggests that the scientific community is aware of the relevance of this phenomenon and that further in-depth research is needed.

The clusters identified in the scientific maps revealed a close relationship between variables such as social interaction, education, learning, interpersonal relationships, emotions, and cooperation. These findings complement those of Blewitt, O'Connor, et al. (2020), who emphasized the importance of teachers' socioemotional competencies in fostering a positive classroom climate and improving student outcomes.

A thorough analysis of the literature reinforces the need for a comprehensive approach to interactions in educational services, considering not only pedagogical aspects and resources but also

the diverse needs of children, including challenges from home that may not be apparent to teachers (Lehman, 2017; Shears, 2010). This broadens the perspective on the complexity of interactions and their impact on learning.

Additionally, the results underscore the relevance of socioemotional competencies for children as a vital component of their holistic development (Hay et al., 2021; Qie, 2022; Schertz et al., 2022). This finding aligns with the conclusions of Blewitt, Morris, et al. (2020), who stress the importance of integrating educational and health perspectives to promote socioemotional learning in preschoolers.

However, it is important to note that gaps and challenges persist in addressing interactions within educational services. Golley et al. (2010) and Clarke et al. (2007) highlight the need for new educational structures and adequate technological resources to address disparities and inequalities in learning.

4.1 Geographical and Cultural Contexts

The international scope of this review reveals significant variations in early childhood education approaches across different geographical and cultural contexts. In Western countries, particularly in the United States and Western Europe, there is a strong emphasis on child-centered approaches and play-based learning (Blewitt et al., 2020). In contrast, East Asian countries often prioritize academic readiness and structured learning environments (Qie, 2022).

Cultural differences in educational practices significantly impact the nature of interactions and learning outcomes. For example, in Nordic countries, the concept of "friluftsliv" or outdoor life is deeply embedded in early childhood education, promoting unique patterns of interaction between children and their environment (Nielsen et al., 2016). Conversely, urban environments in countries such as Singapore or Japan may prioritize different types of interactions because of space constraints and cultural norms.

Socioeconomic factors also play a crucial role in shaping educational practices and interactions. Low- and middle-income countries often face resource constraints that impact the quality of educational services. The study by Nkhoma et al. (2013) in Malawi highlights how school feeding programs can significantly influence children's learning outcomes, emphasizing the interconnections among nutrition, education, and socioeconomic status in developing contexts.

Moreover, cultural attitudes toward authority and hierarchy shape teacher-child interactions. In cultures with high power distance, such as many Asian and African societies, interactions may be more formal and teacher directed. This contrasts with the more egalitarian approaches often observed in Scandinavian countries, where child-led activities are more prevalent.

The review also revealed regional differences in research focus. While North American and European studies often emphasize individual child outcomes, research from collectivist cultures tends to focus more on group dynamics and social harmony within educational settings.

5. Theoretical Implications

This study analyzed the theoretical approach to interactions among early childhood children in educational services and its implications for learning. A bibliometric review and an analytical reading of the publications revealed that this topic has been scientifically studied since 1975, with a growing and fluctuating trend over the years. This demonstrated sustained interest in investigating this phenomenon.

The bibliometric analysis revealed that the countries contributing most theoretically to this topic were the United States, the United Kingdom, Australia, Russia, Canada, Italy, Taiwan, Brazil, Germany, and Norway. Additionally, knowledge was generated primarily from the fields of social sciences, medicine, psychology, and health professions.

The clusters identified in the scientific maps indicated a close relationship between variables such as social interaction, education, learning, interpersonal relationships, emotions, and

cooperation. Furthermore, an approach concerning the classroom environment, psychological aspects, and teachers' socioemotional competencies, which are considered fundamental for fostering a positive classroom climate and improving students' academic, social, and emotional outcomes, was incorporated.

The analytical reading of the publications highlighted the need for a comprehensive approach to interactions in educational services, emphasizing the importance of educating children by considering their diverse needs. This involves not only material aspects but also home challenges that may not be evident to teachers. Additionally, the importance of socioemotional competencies for children was emphasized as a vital component of their holistic development.

5.1 Practical implications

The findings of the study have significant practical implications for early childhood educational services. First and foremost, the importance of adopting a comprehensive approach to interactions with children was highlighted, taking into account not only pedagogical and resource aspects but also the socioemotional attitudes manifested in educational environments. This means that teachers and educational services must be prepared to address the diverse needs of children, both material and emotional.

Additionally, the relevance of teachers' socioemotional competencies was emphasized, as these can enhance the classroom climate and improve students' academic, social, and emotional outcomes. This suggests the need for teacher training and professional development programs that emphasize the development of these competencies.

Another practical aspect is the importance of considering individual and family factors that can influence children's socioemotional adjustment. Educational services need to be prepared to address these factors through interventions at different levels (universal, specific, and intensive), adapting pedagogical approaches to the individual needs of each child.

Furthermore, the study underscores the necessity of effective communication between educators, parents, and involved professionals to address challenges comprehensively. This involves establishing smooth and collaborative communication channels among various educational stakeholders.

6. Conclusion and Future Directions

The present study explored the interactions among young children in educational services and their implications for learning via a bibliometric approach and an analytical review of scientific publications. The findings have significant implications for future research in this field and offer a comprehensive understanding of the complexity of these interactions.

The bibliometric analysis revealed a growing yet fluctuating trend in the study of this topic since 1975, emphasizing the sustained interest of the scientific community in understanding interactions within educational services and their impact on learning. This finding not only highlights the relevance and timeliness of this research area but also suggests the need for continued in-depth exploration of the field.

The clusters identified in the scientific mapping revealed a close relationship between variables such as social interaction, education, learning, interpersonal relationships, emotions, and cooperation. This interconnection suggests that future research should adopt a multidimensional approach that goes beyond purely pedagogical aspects, incorporating socioemotional and contextual factors into its analyses.

The analytical review of publications reinforced the importance of a comprehensive approach to interactions within educational services. This approach should consider the diverse needs of children and the challenges they face at home that may influence their learning. These findings underscore the need to adapt research methodologies and techniques to capture the complexity of these

interactions and their impact on the holistic development of children.

Additionally, the results highlighted the importance of socioemotional competencies for children as a vital component of their holistic development. This finding suggests the need to incorporate this dimension not only in future research but also in the design of teacher training programs and educational policies.

7. Study Limitations and Future Research Directions

Despite the thorough literature review conducted, it is important to acknowledge the limitations of this study. The potential exclusion of some relevant publications due to the limitations of the databases used and the primary focus on studies published in English may limit the global representativeness of the findings.

On the basis of these limitations and the study's findings, several specific recommendations for future research are proposed. These include conducting longitudinal empirical studies to examine the long-term impact of quality interactions, implementing cross-cultural research to understand cultural differences in educational interactions, and employing mixed methods approaches to capture both general patterns and individual experiences.

Moreover, investigating the role of emerging technologies in facilitating quality educational interactions, assessing the effectiveness of various teacher training models, delving deeper into how contextual factors influence the quality of interactions, and exploring targeted strategies for children with special educational needs in inclusive settings are recommended. It is also suggested that policy evaluation studies be conducted to determine the impact of different governmental initiatives on the quality of interactions and learning outcomes in early childhood.

In conclusion, this study provides a comprehensive perspective on the interactions among young children in educational services and their implications for learning. The findings hold significant implications for the future of research in this area, emphasizing the need to adopt multidimensional approaches, address the diverse needs of children, and promote socioemotional competencies. These results are expected to drive new research efforts and contribute to the design of policies and educational practices that support the holistic development of children in early childhood educational services. Implementing these recommendations could lead to a more nuanced and in-depth understanding of interactions in early education, which, in turn, could inform more effective practices and stronger policies in this critical field of child development.

References

- Blewitt, C., Morris, H., Jackson, K., Barrett, H., Bergmeier, H., O'Connor, A., Mousa, A., Nolan, A., & Skouteris, H. (2020). Integrating health and educational perspectives to promote preschoolers' social and emotional learning: Development of a multifaceted program using an intervention mapping approach. *International Journal of Environmental Research and Public Health*, 17(2), Article 575. <https://doi.org/10.3390/ijerph17020575>
- Blewitt, C., O'Connor, A., Morris, H., Mousa, A., Bergmeier, H., Nolan, A., Jackson, K., Barrett, H., & Skouteris, H. (2020). Do curriculum-based social and emotional learning programs in early childhood education and care strengthen teacher outcomes? A systematic literature review. *International Journal of Environmental Research and Public Health*, 17(3), 1049. <https://doi.org/10.3390/ijerph17031049>
- Clarke, M. T., Donlan, C., Lister, C., Wright, J., Newton, C., & Cherguit, J. (2007). The provision of communication aids to children in England: An analysis of applications to the Communication Aids Project. *Child: Care, Health and Development*, 33(5), 569-575. <https://doi.org/10.1111/j.1365-2214.2006.00712.x>
- Cottle, T. V., Krushelnitskaya, O. B., & Orlov, V. A. (2018). Interaction of a psychologist with subjects of the educational process in US schools. *Social Psychology and Society*, 9(2), 165-178. <https://doi.org/10.17759/sp.s.2018090211>
- Díaz, M., Claver, A., & García, M. (2023). Robots for inclusive classrooms: A scoping review. *Universal Access in the Information Society*. <https://doi.org/10.1007/s10209-023-01065-z>

- Eckhardt, A., & Egert, F. (2017). Differences in childcare quality – a matter of personality traits, socialization goals and preservice curriculum? *Early Child Development and Care*, 188(50), 1-12. <https://doi.org/10.1080/03004430.2016.1278372>
- Egert, F., Dederer, V., & Fukkink, R. G. (2020). The impact of in-service professional development on the quality of teacher-child interactions in early education and care: A meta-analysis. *Educational Research Review*, 29, Article 100309. <https://doi.org/10.1016/j.edurev.2019.100309>
- Espinoza, M. L. L., Mendoza, D. E. C., & Briones, M. F. B. (2023). Estrategia de orientación familia para el desarrollo de convivencia del niño del subnivel II de inicial. *Polo del Conocimiento*, 8(6), Article 6. <https://doi.org/10.23857/pc.v8i6.5697>
- Golley, R., Baines, E., Bassett, P., Wood, L., Pearce, J., & Nelson, M. (2010). School lunch and learning behavior in primary schools: An intervention study. *European Journal of Clinical Nutrition*, 64(11), 1280-1288. <https://doi.org/10.1038/ejcn.2010.150>
- Guran, A.-M., Cojocar, G.-S., & Dioşan, L.-S. (2022). The next generation of edutainment applications for young children—A proposal. *Mathematics*, 10(4), 1-16. <https://doi.org/10.1080/03004430.2016.1278372>
- Hay, D. F., Paine, A. L., Perra, O., Cook, K. V., Hashmi, S., Robinson, C., Kairis, V., & Slade, R. (2021). Prosocial and aggressive behavior: A longitudinal study. *Monographs of the Society for Research in Child Development*, 86(2), 7-103. <https://doi.org/10.1111/mono.12427>
- Ko, H. C., Hu, S. T., & Cheng, S. M. (2023). Constructing special education support systems in outlying Taiwanese islands. *Journal of Research in Education Sciences*, 68(3), 1-34. [https://doi.org/10.6209/JORIES.202309_68\(3\).0001](https://doi.org/10.6209/JORIES.202309_68(3).0001)
- Korlimarla, A., Spiridigliozzi, G. A., Stefanescu, M., Austin, S. L., & Kishnani, P. S. (2020). Behavioral, social and school functioning in children with Pompe disease. *Molecular Genetics and Metabolism Reports*, 25, 100635. <https://doi.org/10.1016/j.ymgmr.2020.100635>
- Kuru, S., & Taskin, P. (2016). Parent involvement in education in terms of their socioeconomic status. *Eurasian Journal of Educational Research*, 16(66), 1-30. <https://doi.org/10.14689/ejer.2016.66.6>
- Lehman, C. L. (2017). Multicultural competence: A literature review supporting focused training for preservice teachers teaching diverse students. *Journal of Education and Practice*, 8(10), 109-116.
- Leunga, C., Leunga, J., Leungb, S., & Karnilowicz, W. (2019). Effectiveness of the Whole Inclusive School Empowerment (WISE) project in supporting preschool children with diverse learning needs. *Research in Developmental Disabilities*, 92, Article 103433. <https://doi.org/10.1016/j.ridd.2019.103433>
- Molloy, C., O'Connor, M., Guo, S., Lin, C., Harrop, C., Perini, N., & Goldfeld, S. (2019). Potential of 'stacking' early childhood interventions to reduce inequities in learning outcomes. *Journal of Epidemiology and Community Health*, 73(12), 1078-1086. <https://doi.org/10.1136/jech-2019-212282>
- Murray, R., Ramstetter, C., Council on School Health, & American Academy of Pediatrics. (2013). The crucial role of recess in school. *Pediatrics*, 131(1), 183-188. <https://doi.org/10.1542/peds.2012-2993>
- Nielsen, G., Mygind, E., Bølling, M., Otte, C. R., Schneller, M. B., Schipperijn, J., Ejbye-Ernst, N., & Bentsen, P. (2016). A quasiexperimental cross-disciplinary evaluation of the impacts of education outside the classroom on pupils' physical activity, well-being and learning: The TEACHOUT study protocol. *BMC Public Health*, 16(1), 117. <https://doi.org/10.1186/s12889-016-3780-8>
- Nkhoma, O. W. W., Duffy, M. E., Cory-Slechta, D. A., Davidson, P. W., McSorley, E. M., Strain, J. J., & O'Brien, G. M. (2013). Early-stage primary school children attending a school in the Malawian School Feeding Program (SFP) have better reversal learning and lean muscle mass growth than those attending a non-SFP school. *The Journal of Nutrition*, 143(8), 1324-1330. <https://doi.org/10.3945/jn.112.171280>
- OCDE. (2020). Literature review on early childhood education and care for children under the age of 3 (OECD Education Working Papers No. 243). OECD Publishing. <https://doi.org/10.1787/a9cef727-en>
- Peñafiel, M. P., Morales, M. B. P., Cadena-Figueroa, M. E., & Proaño, J. V. R. (2023). Teoría del apego en el desarrollo de la autonomía en los niños de Inicial II. *Polo del Conocimiento*, 8(3), Article 3. <https://doi.org/10.23857/pc.v8i3.5326>
- Perlman, M., Falenchuk, O., Fletcher, B., McMullen, E., Beyene, J., & Shah, P. S. (2016). A systematic review and meta-analysis of a measure of staff/child interaction quality (the Classroom Assessment Scoring System) in early childhood education and care settings and child outcomes. *PLOS ONE*, 11(12), Article e0167660. <https://doi.org/10.1371/journal.pone.0167660>
- Pimazzoni, D. R. N. (2023). El proceso de enseñanza-aprendizaje en los alumnos basado en el enfoque constructivista. *Interpretextos*, 1(29), Article 29 Año.
- Qie, D. (2022). The relevance of virtual-assisted early childhood education and occupational psychotherapy based on emotional interaction. *Occupational Therapy International*, 2022, Article 2785987. <https://doi.org/10.1155/2022/2785987>

- Sánchez, D. R. (2023). Teoría de las Inteligencias Múltiples: Una estrategia para retroalimentar y apoyar el rendimiento académico en contextos rurales. *Ciencia Latina Revista Científica Multidisciplinar*, 7(2), 5465-5475. https://doi.org/10.37811/cl_rcm.v7i2.5731
- Sant'Anna, M. M. M., Manzini, E. J., Vosgerau, D. S. R., Capellini, V. L. M. F., & Pfeifer, L. I. (2018). Desafios dos professores na mediação das brincadeiras de crianças com necessidades educacionais especiais na educação infantil. *Revista Portuguesa de Educação*, 31(2), 100-114.
- Santoyo, A. del C. V., Peñuelas, S. A. P., González, O. U. R., & Aguirre, E. I. (2023). Caracterización del profesorado de educación primaria According to su enfoque de enseñanza. *Dilemas contemporáneos: Educación, Política y Valores*. <https://doi.org/10.46377/dilemas.v10i3.3580>
- Schertz, H. H., Liu, X., Odom, S. L., & Baggett, K. M. (2022). Parents' application of mediated learning principles as predictors of toddler social initiations. *Autism*, 26(6), 1536-1549. <https://doi.org/10.1177/13623613211061128>
- Shears, J. (2010). Benefits of a male's presence in the classroom. *NHSA Dialog*, 13(1), 66-70. <https://doi.org/10.1080/15240750903466033>
- Smith, R. C., Schaper, M.-M., Tamashiro, M. A., Van Mechelen, M., Petersen, M. G., & Iversen, O. S. (2023). A research agenda for computational empowerment for emerging technology education. *International Journal of Child-Computer Interaction*, 38, Article 100616. <https://doi.org/10.1016/j.ijcci.2023.100616>
- Strauss, A. M., & Bipath, K. (2020). Expanding vocabulary and sight word growth through guided play in a preprimary classroom. *South African Journal of Childhood Education*, 10(1), Article 1. <https://doi.org/10.4102/sajce.v10i1.738>
- Trifonova, M. P. (2023). Quality of education and care in kindergartens and their readiness for inclusive education in Bulgaria. *European Journal of Special Needs Education*, 38(2), 260-275. <https://doi.org/10.1080/2154896X.2022.2062905>