

THE IMPORTANCE OF AUTONOMY IN MEANINGFUL LEARNING WITH FAMILY ENGAGEMENT: A BIBLIOMETRIC ANALYSIS IN SCOPUS USING PRISMA

Mikeyla Zumba, Michelle

Universidad Nacional de Educación UNAE

Email: mczumba2@unae.edu.ec, mebacuilima@unae.edu.ec

ABSTRACT

The aim of this study was to analyse the scientific literature on children's autonomy and family engagement in meaningful learning within the Early Childhood Family Care Service (SAFPI) programme. A quantitative, bibliometric and descriptive study was conducted through a systematic review of documents indexed in the Scopus database. The analysis identified trends in publications, the main countries producing research, the predominant document types and the thematic areas related to the subject. The results show a sustained growth in scientific output between 2022 and 2025, with research predominantly originating from the United States, the United Kingdom and Canada. Furthermore, scientific articles constitute the main means of dissemination, and the fields of medicine, social sciences and psychology accounted for the largest number of publications. The evidence reviewed highlights that family involvement promotes the development of autonomy, meaningful learning and the holistic development of children, particularly when there is constant communication and collaboration between the family and teachers. It is concluded that, although scientific output on this topic continues to increase, research gaps still exist, particularly in Latin America; therefore, further empirical studies are required empirical evidence to strengthen educational practices and family involvement.

Keywords: *child autonomy, family involvement, meaningful learning, Scopus, bibliometric analysis, Early education*

1. INTRODUCTION

The contemporary educational landscape sees the active participation of the family in early childhood formative processes consolidating as a cornerstone of holistic development and meaningful learning, especially in flexible modalities. In various contexts, it is recognized that the participation between family and school not only enhances cognitive achievements but also strengthens essential socio-emotional and communicative dimensions in the early years of life. In this sense, it has been evidenced that family participation in early childhood education is a cornerstone of the educational process, significantly influencing the holistic development of children (Otero-Mayer et al., 2026). Complementarily, it is argued that active collaboration between families and educators fosters a supportive learning environment that extends beyond the classroom (Dardanou & Brito, 2024), which allows for the understanding that meaningful learning transcends the classroom and is built in shared scenarios.

From this perspective, research conducted in various countries demonstrates successful experiences where family involvement is systematically integrated into pedagogical practices, creating enriching environments that promote language acquisition, autonomy, and social interaction. In these contexts, the bond between parents and teachers is characterized by constant, collaborative communication based on mutual trust. In agreement, it is stated that constant and trusting interaction between parents and teachers benefits students' learning and their social adaptation to school (Paizan et al., 2026). It is also recognized that parental involvement is a critical determinant of academic performance and developmental outcomes for children in early childhood education (Kaya et al., 2026). These pieces of evidence allow for comparisons with the Ecuadorian context, where initiatives aimed at strengthening the role of the family as an educational agent have also been promoted, particularly in non-formal education settings.

In Latin America, the context of family involvement presents diverse nuances. On one hand, different countries promote the active participation of families in educational processes, integrating strategies for support, parental training, and pedagogical follow-up. On the other hand, in other realities, family participation is limited, conditioned by socio-emotional, cultural, and structural factors. Within this context, it is recognized that the level of family participation in school processes is a critical element for the development and learning outcomes of children during the early years of schooling (Kaya et al., 2026; Saracosti et al., 2019), highlighting the need to understand the specific dynamics that influence such participation.

In the particular case of Ecuador, significant challenges have been identified that must be addressed with rigorous research. There are limitations in the level of commitment, monitoring, and shared responsibility of parents in their children's learning, despite institutional efforts to promote the connection between family and educational processes. In many cases, the proposed activities are not effectively supported within the family context, which directly impacts the quality and learning. In this sense, it has been noted that experiences are meaningful for the child when they engage in activities supervised and guided by their parents, allowing them to strengthen developmental areas (Vélez & Chavarria, 2022), which highlights a gap between the pedagogical proposal and its implementation at home.

It is also observed that communication between teachers and families is not always established systematically or effectively, which limits the construction of sustained collaborative work. This situation is exacerbated by factors such as the lack of time, parents' unfamiliarity with pedagogical strategies, and in some cases, the low appreciation of the family's educational role. In this way, a scenario is created where meaningful learning is compromised, affecting the holistic development of children in their early stages. In this sense, it is important to highlight that the level of relationship, collaboration, and understanding between families and schools has a direct correlation with the level of success of the educational process (Muñoz-Herrera et al., 2024), which underscores the urgent need to strengthen these ties at the local level.

If this issue is not addressed from a systematic research perspective, there is a risk that gaps in children's learning and development will deepen, affecting not only their future academic performance but also their social and communication skills. The absence of bibliometric studies analyzing the scientific production around family commitment limits the understanding of research trends, existing gaps, and opportunities for improvement in this field. Therefore, it is necessary to rigorously and systematically investigate how this topic has been addressed in the scientific literature indexed, especially in high-impact databases like Scopus and Elsevier.

In this sense, the need arises to formulate the following question: What is the current state of scientific production on the importance of family involvement in meaningful learning, according to the studies indicated in Scopus and Elsevier, and what are the identified trends, approaches, and research gaps in this field?

In correspondence with this question, the present study aims to bibliometrically analyze the scientific production related to the importance of family commitment, based on sources indexed in Scopus and Elsevier, in order to identify research trends, production levels, collaboration networks, and main theoretical contributions that contribute to the understanding and strengthening of this topic in the educational context.

2.THEORETICAL FOUNDATION

The research was conducted using a quantitative approach, as it allowed for the collection, organization, and analysis of scientific information thru systematic procedures and verifiable data. This approach facilitated the bibliometric study of publications related to family involvement and meaningful learning, considering indicators such as publication frequency, thematic trends, and scientific production. Additionally, A descriptive and basic statistical analysis was employed to interpret the results obtained from the documents indexed in the Scopus database.

Type of research

The study corresponded to a quantitative investigation of a bibliometric and descriptive type. The bibliometric component allowed for the analysis of scientific indicators related to academic production, temporal evolution of publications, frequency of studies, and main thematic lines on participation and meaningful learning. Additionally, various studies indicated that parental family involvement maintains a significant relationship with academic performance and the holistic development of students. In this regard, it was stated that parental involvement is a strong positive predictor of academic performance, highlighting the importance of active family participation. (Abera et al., 2026).

Similarly, it was argued that parental involvement is one of the most important factors in the student's educational process, including academic performance (Sujarwo & Herwin, 2023), which demonstrated the relevance of family commitment within educational processes.

Sources of information

The main source of information corresponded to the Scopus database. The selection of this database was based on criteria of scientific quality, academic visibility, and multidisciplinary reach. Likewise, Scopus allowed access to peer-reviewed scientific articles, systematic reviews, and high-impact indexed studies related to family involvement and secondary sources were considered, including the bibliographic references contained within selected articles, which allowed for the complementing of the theoretical foundation and the strengthening of the conceptual understanding of the studied phenomenon.

Techniques and instruments

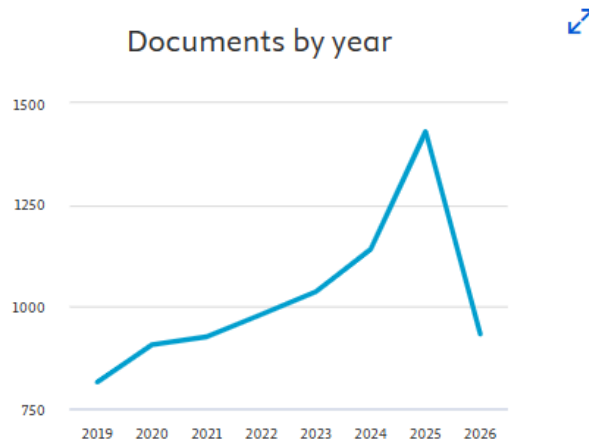
The technique used was a systematic documentary review. This allowed for the identification, collection, and selection of relevant scientific studies for bibliometric analysis. As an information collection instrument, a data registration and systematization matrix was used, in which aspects related to authors, publication years, country, methodology, objectives, main findings, and scientific contributions of each selected research were organized.

Analysis technique

The analysis technique was developed thru descriptive quantitative procedures complemented by a critical interpretation of scientific findings. Thru the bibliographic analysis, publication trends, research frequency, thematic relationships, and predominant approaches of the reviewed scientific literature were identified. Likewise, an interpretive analysis of a scientific and reflective nature was conducted, allowing for an understanding of the impact of family commitment on meaningful learning and the holistic development of students. In this regard, it was recognized that parents who set high standards and actively participate in their children's education can provide valuable support and resources that contribute to their children's success (Jin, 2026, p. 196).

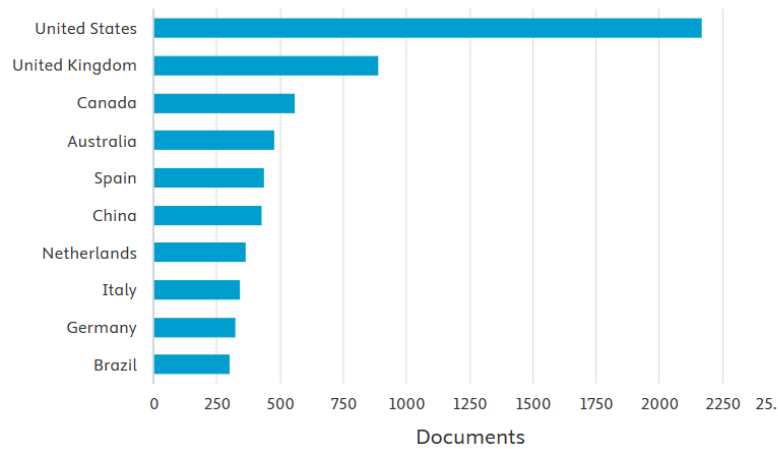
3. RESULTS

In this section, the results obtained from the bibliometric analysis of scientific production related to language development in early education, indexed in the Scopus database, during the period 2019-2026 are presented. The study was organized thru descriptive indicators which allowed for the examination and identification of the temporal evolution of publications, the distribution by countries, the predominant document types, and the main thematic research areas. The results were presented thru statistical graphs that facilitate the interpretation of the trends observed in the field of study.



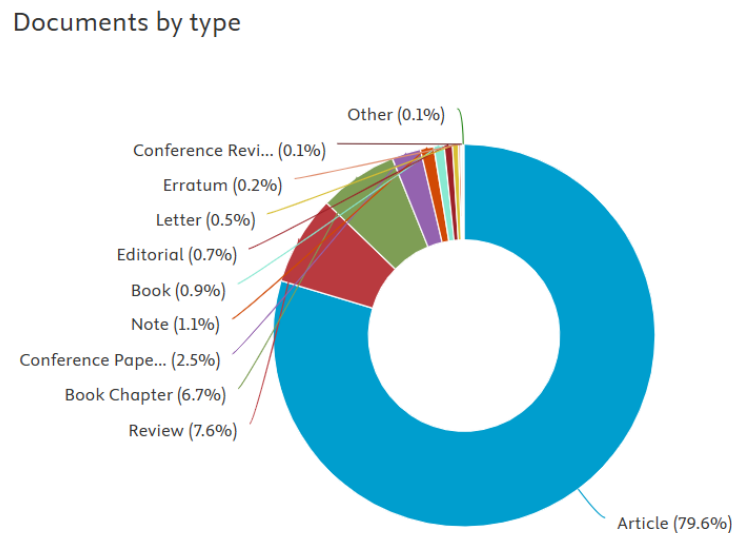
Picture 1. Documents per year on children's autonomy and family involvement in their learning, obtained from the Scopus database.

Figure 1: corresponding to the documents published per year, showed the behavior of scientific production related to autonomy in children during the study period 2022-2026. In 2022, approximately 980 documents indexed in Scopus were recorded, while in 2023, the production rose to around 1040 documents. By 2024, around 1,145 publications were identified, indicating a sustained increase in the number of registered research studies. The highest volume of documents was reached in 2025 with approximately 1430 publications. In 2026, around 935 documents were observed, reflecting a reduction in the number of records available for that year within the analyzed database.



Picture 2. Documents by country obtained from the Scopus database between 2019 and 2026.

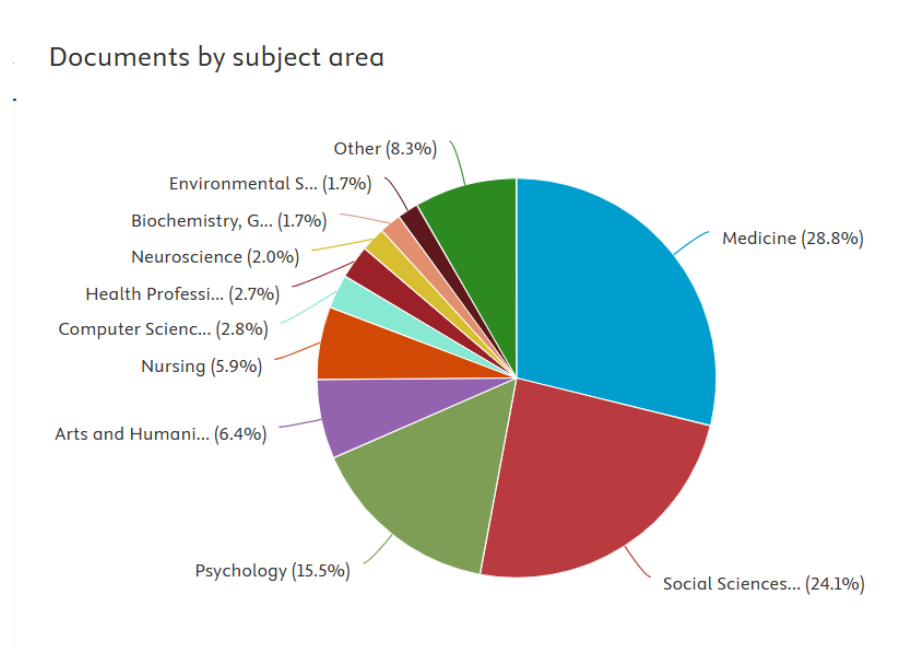
Figure 2: The distribution of scientific production by country showed that the United States concentrated the highest number of documents related to autonomy in children, with approximately 2170 publications indexed in Scopus during the period 2022-2026. In second place was the United Kingdom with around 890 documents, followed by Canada with approximately 570 publications. Subsequently, Australia, Spain, and China were recorded, with values close to 480, 440, and 430 documents, respectively. Finally, the Netherlands, Italy, Germany, and Brazil each showed a production of fewer than 400 publications. Overall, the results showed a concentration of production below 400 publications each. Overall, the results showed a concentration of scientific production in a small group of countries, led by the United States, which recorded the highest volume of research during the analyzed period.



Picture 3. Documents by type according to the Scopus database between 2019 and 2026.

Figure 3: The distribution of documents by type showed that scientific articles constituted the main avenue for disseminating research on children's autonomy, representing 79.6% of the total publications indexed in Scopus. In smaller proportions, review articles were identified with 7.6%, followed by book chapters with 6.7% and

conference papers with 2.5%. The other types of documents showed a reduced participation, including notes (1.1%), books (0.9%), editorials (0.7%), letters (0.5%), errata (0.2%), conference reviews (0.1%), and other documents (0.1%). These results reflected a clear predominance of scientific articles as the main publication format during the analyzed period.



Picture 4. Documents by area obtained from the Scopus database 2019 and 2026.

Figure 4: The distribution of publications by thematic area showed that medicine concentrated the largest proportion of research on autonomy, with children accounting for 28.8% of the total documents indexed in Scopus. In second place were the social sciences, with 24.1%, followed by psychology, with 15.5%. Likewise, a significant participation of arts and humanities was identified, with 6.4%, and of nursing, with 5.9%. On the other hand, Computer Science, Health Professionals, Neurosciences, Biochemistry, Genetics. and Molecular Biology, and Environmental Sciences presented percentages lower than 3%. Finally, 8.3% corresponded to other areas of knowledge, which evidenced that the scientific production on children's autonomy was distributed in a multidisciplinary manner, with a predominance of disciplines related to health and social sciences.

3.1. DISCUSSION

The discussion of this study allowed for the articulation of the findings obtained with previous evidence and how a specific axis determines meaningful learning in early childhood. The bibliometric analysis showed a sustained growth in scientific production in recent years, although with a marked concentration in certain countries and disciplines, which generated the need to contrast these results with local and regional experiences.

It was observed that the international literature indicated that parental involvement in early educational processes strengthened both the academic performance and socio-emotional competencies of children (Sujarwo and Herwin, 2023). The results of the present study confirmed this relationship, as the reviewed documents highlighted the importance of shared responsibility between family and school as a factor that transcended the classroom and extended into the child's social environment (Dardanou and Brito, 2024).

This convergence allowed us to assert that family involvement was not limited to occasional support, but constituted a positive predictor of holistic development. The triangulation with previous studies showed that, although in contexts such as the United States and the United Kingdom, scientific production was abundant and systematic, in Latin American countries, family participation presented diverse nuances, conditioned by cultural and structural factors. The findings of the bibliometric analysis reinforced this idea, showing that academic production on SAFPI in Ecuador was still limited and faced challenges in the practical implementation of family engagement strategies (Muñoz-Herrera et al., 2024). This situation suggested that the gap between the pedagogical proposal and its implementation at home continued to be an obstacle to consolidating meaningful learning.

The discussion also allowed for the identification that constant and trustworthy communication between parents and teachers was a recurring element in the literature and in the results obtained (Paizan et al., 2026). However, in the Ecuadorian case, it was evident that such communication was not always established systematically, which limited the construction of sustained collaborative work. This contrast highlighted the need to strengthen parental training mechanisms and pedagogical support that allow overcoming barriers of time, lack of knowledge, and appreciation of the family's educational role.

The bibliometric analysis also showed that the majority of publications were disseminated in the format of scientific articles, reflecting a predominance of theoretical and descriptive studies over applied empirical research. This trend coincided with what was stated by those who claimed that parents who set demanding requirements and actively participate in their children's education provide valuable support, although the literature still requires more longitudinal studies to measure the real impact of these practices (Linkiewicz et al., 2021). Triangulation allowed us to maintain that, although the field has advanced in quantitative terms, explanatory gaps regarding the effectiveness of family strategies in diverse contexts still persisted (Devjak et al., 2021).

The thematic distribution of the publications showed a predominance of areas such as medicine, social sciences, and psychology, which evidenced a multidisciplinary approach to the phenomenon (Gomes et al., 2024). This diversity coincided with research that highlighted the importance of integrating socio-emotional, communicative, and health dimensions in the analysis of family engagement (Barrable, 2020). However, the discussion allowed for the interpretation that this multidisciplinary did not always translate into a practical integration of approaches, as in many cases the studies remained fragmented by discipline. It was then suggested the need to promote intersectoral research that articulates health, education, and family within the same analytical framework (Michael-Luna and Gray, 2018).

The triangulation with previous studies also evidenced that family involvement was considered a critical determinant of academic performance and early childhood development. The results of the present study confirmed this assertion, showing that the most significant experiences for children were those activities supervised and guided by their parents. This coincidence allowed for the interpretation that active family participation not only strengthened language acquisition and autonomy but also generated a supportive learning environment that transcended school spaces (Goldstein et al., 2026). The discussion also addressed the limitations identified in the Ecuadorian context, where the lack of time and the parents' unfamiliarity with pedagogical strategies reduced the effectiveness of efectividad de las propuestas. This finding coincided with what Muñoz-Herrera et al. (2024) pointed out, highlighting that the level of relationship and collaboration between families and schools had a direct correlation with the success of the

educational process. Triangulation allowed us to maintain that, without effective communication and an adequate appreciation of the family's educational role, meaningful learning was compromised. Finally, the critical interpretation of the findings suggested that, although the scientific production on family participation in early childhood showed sustained growth, significant gaps in the literature still persisted. The bibliometric review revealed that a significant portion of the studies focused on trend descriptions and bibliometric analyzes, while more empirical research is needed to assess the real pedagogical impact and the implications in terms of equity and access (Bravo-Sanzana et al., 2025). This reflection allowed us to assert that the quantitative advancement of the field did not, by itself, guaranty explanatory maturity, which raises the need to delve into comparative and longitudinal designs that better understand the dynamics of family engagement in diverse contexts. In summary, the discussion integrated the obtained results with previous evidence and a reflective interpretation that positioned family participation as a determining factor of meaningful learning (Dong et al., 2026). Triangulation allowed for the recognition of similarities, contrasts, and gaps, providing a broader and more critical view of the phenomenon, highlighting the need to strengthen empirical research, communication between family and school, and multidisciplinary integration in the analysis of family engagement.

4. CONCLUSIONS

The bibliometric analysis revealed that the scientific production on children's autonomy and family involvement in meaningful learning maintained a sustained growth throughout the studied period, reflecting an increasing interest in understanding the family's influence on these early childhood educational processes. The information obtained confirmed that this topic has gained relevance within research. Internationally, it continued to consolidate as a field of study with significant contributions to early childhood education.

The literature review showed that scientific production was mainly concentrated in several countries with greater research development, while participation in Latin America remained limited. This reality allowed for the recognition of the need to strengthen research. Contextualized, responding to the characteristics and needs of Latin American educational systems, favoring the generation of evidence that contributes to the design of strategies in line with the social and family reality of the region.

The results also showed that family commitment fosters the development of autonomy and meaningful learning when there are ongoing processes of communication, support, and shared responsibility between the family and the teachers. The analyzed literature showed that active parental involvement strengthens children's learning opportunities. It fosters more meaningful experiences and contributes. To the development of skills that promote independence and holistic development.

The different publications and thematic areas allowed for the identification that the phenomenon was approached from a multidisciplinary perspective, with a predominance of research coming from social sciences, psychology, and medicine. From this, it was recognized that there is still a need to expand empirical studies that delve into the application of family participation strategies within educational contexts. Favoring the consolidation of practices based on scientific evidence and aimed at strengthening autonomy.

4.1. RECOMMENDATIONS

- Strengthen family participation in the SAFPI modality thru workshops, guidance, and practical materials that help caregivers support the development of children's autonomy at home.
- Design age-appropriate pedagogical activities aimed at promoting decision-making, problem-solving, and the independent completion of simple tasks.
- Establish constant communication between teachers and families to coordinate follow-up actions, identify specific needs, and reinforce the learning achieved at home and in the educational environment.
- Incorporate playful and contextualized strategies that promote meaningful learning, allowing children to relate content to their daily lives and actively participate in their formative process.
- Encourage empirical research in Latin America and in contexts linked to SAFPI, in order to expand the scientific evidence on the relationship between family involvement, child autonomy, and meaningful learning.
- Promote from educational institutions policies and actions that recognize the family as a fundamental actor in the educational process, facilitating their effective integration into teaching and support activities.

PLEASE TO THANK YOU

The authors express their sincere gratitude to all the people who provided their support during the development of this article. In particular, they thank their teachers for the guidance, shared knowledge, and valuable observations that strengthened this work. Likewise, they acknowledge the support of their families, who, with their understanding and constant motivation, made the completion of this academic process possible. Finally, they thank all the people who, in one way or another, contributed to the development of this research and the achievement of the stated objectives.

LIBRARY DOWNLOADS

- Abera, M., Wedi, S., & Asfaw, A. (2026). The role of parental involvement and emotional intelligence in students' academic achievement: A correlational study at Woldia Millennium Secondary School, Northeast Ethiopia. *Social Sciences & Humanities Open*, 13, 102626. <https://doi.org/10.1016/j.ssaho.2026.102626>
- Astuti, E, Sulistyono, J., Supartini, Y., Wildan, M., Tambunan, E., y Solikhah, F. (2025). The Synergistic Effects of Education, Experience, and Institutional Support on Nursing Lecturer Competency: A Novel Framework for Modern Education. *Seminars in Medical Writing and Education*, 4. <https://doi.org/10.56294/mw2025735>
- Bravo-Sanzana, M., Terán-Mendoza, O., Miranda, R., Oriol, X., Varela, J., y Mieres-Chacaltana, M. (2025). Design and Validation of the Multidimensional School Social Climate Inventory for Adolescents (MSSCI-A) in Chile. *Behavioral Sciences*, 15(11). <https://doi.org/10.3390/bs15111588>
- Cordoves Peinado, R., y Judiht López Rodríguez, D. (2025). Monte Carlo Analysis to Assess Research Competencies in Health Sciences. *Revista Cubana de Educacion Medica Superior*, 39. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-105024118534&partnerID=40&md5=32226e8c9566bb7846cbe825782ce90c>

- Dardanou, M., y Brito, R. (2024). Family Involvement in Early Childhood Education and Care: Insights from Portuguese and Norwegian Curriculum Frameworks. *Social Sciences*, 13(12), 694. <https://doi.org/10.3390/socsci13120694>
- Dong, S., Li, X. y Yan, Y. (2026). The formation of preschooler's creative personality: The promotion mechanism of positive family routines. *BMC Psychology*. <https://doi.org/10.1186/s40359-026-04506-5>
- Gonzales, M. A. S., Juacalla, M. P., & Juacalla, B. B. (2026). Graduate students' competence and readiness for research. *International Journal of Evaluation and Research in Education*, 15(1), 157–165. <https://doi.org/10.11591/ijere.v15i1.31938>
- Gomes, S., Antunes, R., Sales, I., Marques, R. y Oliveira, A. (2024). Enhancing autonomy in preschoolers: The role of motor games in development. *Education Sciences*, 14(5), 524. <https://doi.org/10.3390/educsci14050524>
- Goldstein, M. G., Santana, M., Claro, S., Ong, X. L. y Chen, P. (2026). Parental autonomy support predicts adolescents' strategic mindset, which relates to self-regulation and academic achievement in Chile. *Social Psychology of Education*. <https://doi.org/10.1007/s11218-026-10189-y>
- Hendrawan, D., Hayya, R. N., Syazwani, F., Fahira, K. A. A., Muhdiar, M. A., et al. (2026). The effectiveness of an autonomy-supportive parenting intervention for enhancing maternal parenting skills and executive functioning among preschool-aged children: Two preliminary studies. *Child Neuropsychology*. Advance online publication. <https://doi.org/10.1080/09297049.2025.2612025>
- Huda, W, Sartono, E., Saptono, B., Putri, F., Anay, Z. (2026). Construction and Psychometric Properties Structure and Measurement of Mathematical Reciprocity: Exploratory and Confirmatory Factor Analysis. *International Research Journal of Multidisciplinary Scope*, 7(1), 785–798. <https://doi.org/10.47857/irjms.2026.v07i01.07923>
- Jin, X. (2026). Predicting academic success: Machine learning analysis of student, parental, and school efforts. *Asia Pacific Education Review*, 27(1), 1–22. <https://doi.org/10.1007/s12564-023-09915-4>
- Kaya, Ü., Demircan, H., y Altun, D. (2026). Parental Engagement and Satisfaction in Early Childhood Education: The Mediating Role of Home Literacy Environment. *Early Childhood Education Journal*, 54(3), 1375–1393. <https://doi.org/10.1007/s10643-025-01935-6>
- Marín León, J. A., Castillo, E. R., Sigüeñas Fernández, R. L., Jara Alarcón, T. J., y Aguilar, D. D. (2026). Development of Research Competencies in University Students: A Systematic Review. *International Journal of Interdisciplinary Educational Studies*, 21(1), 1–21. <https://doi.org/10.18848/2327-011X/CGP/v21i01/1-21>
- Mero, K. M. M., Llaver, L. R. M., & Viteri, L. V. (2021). La educación de la autonomía en niños y niñas del subnivel inicial 2 de la escuela Gabriela Mistral. *Polo del conocimiento*, 6(8), 135-153.

- Muñoz-Herrera, E., Montero-Trillo, D. M., Aranda-Ruz, F., & Llorente-Cantarero, F. J. (2024). Perception Differences between Families and Teachers on the Integral Development of the Child and the Educational Process. *Education Sciences*, 14(8). Scopus. <https://doi.org/10.3390/educsci14080825>
- Otero-Mayer, A., González-Benito, A., Gutiérrez-de-Rozas, B., & Expósito-Casas, E. (2026). Family Involvement in Early Childhood Education: A Systematic Review of its Measurement. *Early Childhood Education Journal*, 54(4), 2495–2516. <https://doi.org/10.1007/s10643-025-02024-4>
- Paizan, M. A., Aumann, L., & Titzmann, P. F. (2026). Home-to-School Contact and Its Impact on Students' School Belonging: A Triadic, Mixed-Methods Approach. *Journal of Community Psychology*, 54(1). Scopus. <https://doi.org/10.1002/jcop.70066>
- Peng, R., Liu, X., Wang, G., & Zhou, L. (2026). Research of medical student competency evaluation: A scoping review. *Chinese Journal of Evidence-Based Medicine*, 26(1), 119–124. <https://doi.org/10.7507/1672-2531.202508095>
- Saracosti, M., Lara, L., Martella, D., Miranda, H., Miranda-Zapata, E. D., & Reininger, T. (2019). Influence of family involvement and children's socioemotional development on the learning outcomes of Chilean students. *Frontiers in Psychology*, 10(FEB). Scopus. <https://doi.org/10.3389/fpsyg.2019.00335>
- Sara Michael Luna, S. M., & Leslee J. Grey (2018). Navigating the policy directive of child autonomy in universal pre-kindergarten practice. *Journal of Early Childhood Research*, 20(3), 298–313. <https://doi.org/10.1177/1463949118768325>
- Sim, S. M., & Zhang, L.-F. (2026). Do PhD students' research styles predict their perceived competencies? *Higher Education*. <https://doi.org/10.1007/s10734-026-01629-x>
- Sujarwo, S., & Herwin, H. (2023). Parental Involvement and Student Achievement: A Meta-analysis of Publications in the Scopus Database. *International Journal of Instruction*, 16, 107–124. <https://doi.org/10.29333/iji.2023.1627a>
- Vélez, W. Z., & Chavarría, M. D. T. (2022). El rol de la familia en el aprendizaje de los niños de Educación Inicial. *Sapienza: International Journal of Interdisciplinary Studies*, 3(2), 17–26. <https://doi.org/10.51798/sijis.v3i2.260>
- Villalobos-Fontalvo, G. M., Badilla-Quintana, M. G., & Careaga-Butter, M. (2025). Psychometric Properties of Instruments Measuring Individual Knowledge Management Practices in Higher Education: A Systematic Review (2000–2024). *International Journal of Technology, Knowledge and Society*, 21(2), 73–103. <https://doi.org/10.18848/1832-3669/CGP/v21i02/73-103>
- Wang, L., Chen, J., & Talib, O. (2025). Core dimensions and measurement characteristics of multidimensional nursing competency assessment instruments: A systematic

review. *Journal of Professional Nursing*, 61, 96–104.
<https://doi.org/10.1016/j.profnurs.2025.09.013>

Wei, Z., Yang, T., Gu, X., Dong, J., & Hassan, N. C. (2025). Psychometric validation of Utrecht Work Engagement Scale-Student-9 in Chinese undergraduate students. *Frontiers in Psychology*, 16. <https://doi.org/10.3389/fpsyg.2025.1486363>

Yang, S. C., Liou, S.-J., Liu, Y. M., & Hung, S.-C. (2025). Exploring research literacy in graduate students: Key dimensions and influencing factors. *Studies in Higher Education*. <https://doi.org/10.1080/03075079.2025.2520417>

Linkiewich, D., Martinovich, V. V., Rinaldi, C. M., Howe, N., & Gokiart, R. (2021). Parental autonomy support in relation to preschool aged children's behavior: Examining positive guidance, negative control, and responsiveness. *Clinical Child Psychology and Psychiatry*, 26(3), 810–822.
<https://doi.org/10.1177/1359104521999762>