

Global Trends in Parent-Child Communication Research in the Digital Age: A Bibliometric Analysis of Scopus 2022–2026

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Abstract

Digital transformation has fundamentally changed the dynamics of parent–child communication, but scientific developments in this field have not been systematically mapped in the recent period. This study aims to reconstruct the global landscape of parent–child communication research in the digital era during the period 2022–2026 through a comprehensive bibliometric approach. Data were collected from the Scopus database in January 2026 using the PRISMA protocol. From the initial 5,875 documents, after applying the inclusion criteria (journal articles, English language, open access, period 2022–2026), 418 articles were analysed using Biblioshiny (R Studio) through performance analysis and science mapping. The results show that this field is experiencing dynamic growth with a high level of scientific collaboration (1,706 authors; an average of 4.26 authors per article), but knowledge production is still concentrated in Global North countries such as the United States, Australia, and Canada. The conceptual structure is dominated by demographic and relational themes such as human, child, female, and parents, while digital issues have not yet emerged as a dominant thematic cluster. Citation analysis shows strong integration with developmental psychology, interpersonal communication, and public health. These findings indicate that although the research context is in the digital age, the theoretical paradigm still relies on the classical family communication model. The contribution of this research lies in mapping the intellectual architecture and identifying methodological and conceptual gaps, which provides a basis for developing a digital ecology-based family communication model and enriches the global literature on parent-child communication dynamics in an era of technological transformation.

Keywords: *Bibliometric Analysis, Health Impact, Health Communication, Social Media.*

Introduction

Digital transformation over the past decade has fundamentally altered communication patterns within families. The increasingly massive global penetration of the internet, the use of *smartphones* from an early age, and the dominance of social media in the lives of adolescents have created new spaces for interaction that transcend the boundaries of the domestic sphere [1], [2]. Communication between parents and children no longer takes place solely in a face-to-face context, but is also mediated by digital platforms that present both opportunities and risks [3], [4], [5]. On the one hand, technology enables more intense connectivity, more adaptive supervision, and broad access to educational information. However, on the other hand, new challenges have emerged, such as *cyberbullying*, exposure to risky content, gadget addiction, health misinformation, and intergenerational conflicts due to the digital literacy gap. This phenomenon places parental communication as a key factor in shaping children's digital resilience, mental health, and social well-being in an era of unlimited connectivity [6], [7], [8], [9].

In this context, parental communication is no longer understood conventionally as a process of transferring values and supervising behaviour, but as a practice of negotiating meaning, digital regulation, and technology mediation within the family ecosystem [10], [11], [12], [13]. Various

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international studies show that *digital parenting* strategies, supportive communication patterns, and parental involvement in children's online activities correlate with a decrease in the risk of aggressive online behaviour, an increase in media literacy, and the strengthening of adolescents' psychological well-being. However, these dynamics are evolving rapidly alongside changes in platform algorithms, social media trends, and a global information landscape rife with disinformation. As a result, the production of scientific knowledge about parent-child communication in the digital age has experienced a significant surge, spread across various disciplines such as communication, psychology, education, public health, and media studies[14], [15], [16] . This situation requires systematic mapping to understand the direction of research development, patterns of scientific collaboration, dominant thematic clusters, and research gaps that remain open in the most recent period.

Studies show strong consolidation on the issues of *digital parenting*, adolescent mental health, and social inequality in family communication. The study "[17]" in *the Journal of Research on Adolescence* uses a multimethod design to test digital parenting strategies (supportive vs. restrictive mediation) on adolescent psychosocial adjustment as a dependent variable, emphasising the importance of dialogic communication over unilateral control. In parallel, the study[18], through a systematic review approach, mapped the contextual factors that influence the effectiveness of parenting in the digital social environment, showing that parental digital literacy serves as a key mediator of child well-being. In the domain of public health,[19] in *Social Science and Medicine* identified parental education disparities as a major predictor of attitudes towards childhood vaccination, expanding the dependent variable to the realm of health trust and information-based decision-making.

Meanwhile,[20] and[21] explore the dimensions of social communication and parental mentalisation through quantitative and experimental designs, with outcomes in the form of children's social competence and emotional regulation. Longitudinal studies such as[22] also show how family communication practices influence secondary school students' adaptation in the context of educational transition. Methodologically, recent publications are dominated by SEM-based quantitative surveys, systematic reviews, and digital intervention designs, with dependent variables including psychological well-being, social behaviour, health literacy, and academic adaptation. This trend marks a shift from a focus on media use control towards a collaborative communication model based on digital resilience, showing that contemporary research is increasingly multidisciplinary and integrated between family communication, public health, and adolescent development.

A number of significant *research gaps* can be observed when viewed specifically from a bibliometric methodological perspective. First, a methodological gap is evident in the dominance of empirical quantitative approaches based on surveys and SEM, while knowledge structure mapping through bibliometrics remains very limited. To date, no comprehensive study has been found that uses *performance analysis*, *science mapping*, *co-word analysis*, *co-citation networks*, or *bibliographic coupling* to map the conceptual evolution of parent-child communication in the digital age.

This study offers novelty by comprehensively reconstructing the intellectual architecture of parent-child communication research in the digital age through a multi-method bibliometric approach that has never been done in an integrated manner in the recent period of 2022–2026. Unlike previous studies that focused on empirically testing variable relationships (e.g., parental communication styles on adolescent well-being) using surveys and SEM, this study shifts the focus to the meta-scientific level by integrating *performance analysis* (to identify the productivity of authors, institutions, and countries), *science mapping* (to map conceptual evolution), *co-word analysis* (to detect thematic clusters and topic trends), *co-citation networks* (to reveal theoretical foundation-), and *bibliographic coupling* (to identify the direction of current research). This integrated approach allows not only the mapping of trends, but also the identification of paradigm shifts—from parental control models to collaborative communication based on digital resilience and media literacy, as well as the detection of fragmentation or integration across disciplines (communication, psychology, education, and public health).

This study aims to systematically reconstruct the global landscape of parent-child communication research in the digital era during the period 2022–2026 through a comprehensive bibliometric approach. Specifically, this study analyses publication growth trends, the distribution of author productivity, institutions, countries, and journals contributing to the field (*performance analysis*). In addition, this study maps conceptual structures and thematic clusters using *co-word analysis*, identifies intellectual foundations through *co-citation networks*, and reveals current research directions and emerging themes through *bibliographic coupling*. Departing from methodological gaps that indicate the absence of integrated multi-method mapping, this study argues that the field of parent-child communication is

undergoing a paradigm shift from traditional mediation and control models towards collaborative approaches based on digital resilience, media literacy, and adolescent psychosocial well-being.

Research Methodology

Research Design

This study uses a quantitative approach with bibliometric analysis to evaluate the conceptual structure, intellectual dynamics, and current direction of parent–child communication research in the digital age[23], [24]. Unlike historical longitudinal studies, this research specifically focuses its analysis on publications from the period 2022–2026 to capture the acceleration phase of research following digital transformation and the pandemic, which is marked by a significant increase in studies on *digital parenting*, adolescent mental health, media literacy, and family health communication. Bibliometric analysis was conducted through *performance analysis* and *science mapping* to identify scientific productivity, collaboration patterns, thematic clusters, and the intellectual foundations of this field in the current period. This approach was then enriched with limited content analysis to interpret the conceptual meaning of the clusters formed and identify emerging *themes*. The Scopus database was chosen as the main data source because it has a wider coverage of journals and citation networks than other databases such as Web of Science (WoS), thus enabling a more comprehensive mapping of multidisciplinary publications in the fields of communication, psychology, education, and health relevant to the focus of this study ().

Search Strategy, Criteria, and Data Collection

The *Preferred Reporting Items for Systematic Reviews and Meta-Analyses* (PRISMA) model was adapted in this study to ensure transparency, replication, and consistency in the document identification and selection process[25], [26]. The PRISMA flow diagram (Figure 1) details the stages of the search and data screening strategy. Data collection was conducted in January 2026 through the Scopus database using the search query: "communication" AND "parents", combined with relevant keywords such as *children*, *parents*, *communication*, and *parent-child relationships*. The initial search yielded a total of 5,875 documents. Next, a screening process was carried out by limiting the publication period to 2022–2026 to represent the latest phase of research development. *The inclusion criteria applied included document type: article, English language, open access, and sources indexed as scientific journals. Documents that did not meet these criteria—such as conference proceedings, book reviews, editorials, non-open access articles, and publications outside the specified year range—were excluded from the analysis. After applying all inclusion and exclusion criteria in accordance with the PRISMA protocol, 418 articles were found to be eligible for further analysis through performance analysis and science mapping, in order to map the conceptual structure, collaboration networks, and the latest developments in parent-child communication research in the digital era.*

Tools and Data Analysis

Data analysis in this study was conducted centrally using Biblioshiny, which is integrated into the R Studio application, as the main tool for comprehensive bibliometric analysis[27], [28]. Biblioshiny was used to perform *performance analysis* to identify publication growth trends for the period 2022–2026, as well as the productivity of authors, institutions, countries, and journals that contributed most to the field of parent–child communication. In addition, the *science mapping* feature is used to analyse conceptual structures through *co-word analysis* (co-occurrence of keywords), identify major thematic clusters, and map emerging themes (*thematic evolution* and *thematic map*). *Co-citation* analysis was used to reveal the intellectual foundations and main reference works that shape this field, while *bibliographic coupling* helped detect the direction of current research and the interconnections between the latest articles. Through an integrated approach of in Biblioshiny, this study was able to produce scientific network visualisations, conceptual maps, and citation impact indicators that provide a comprehensive overview of the structure, dynamics, and evolution of parent-child communication research in the digital era during the period 2022–2026.

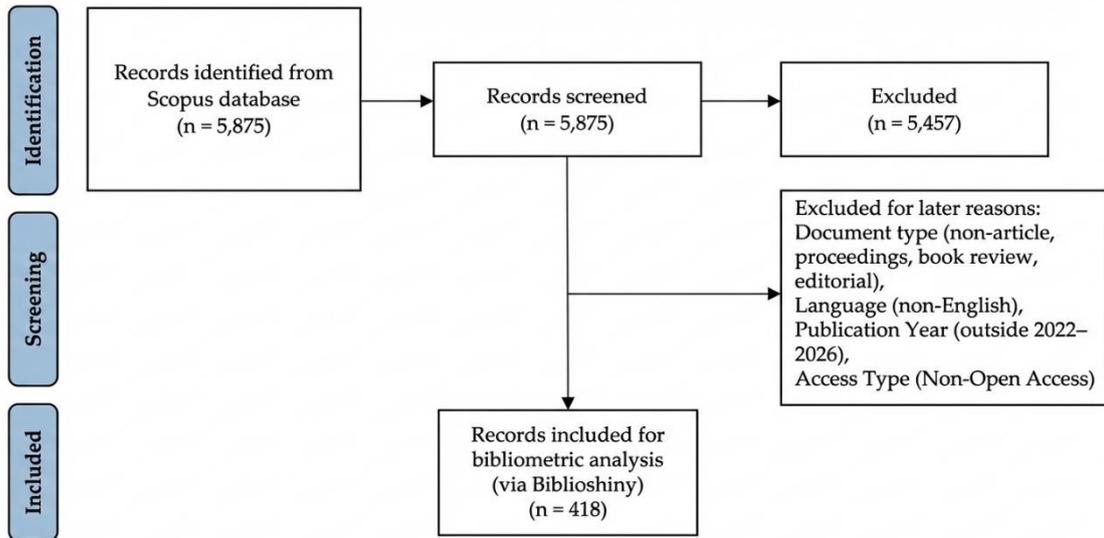


Figure 1. PRISMA Diagram

Research Findings and Discussion

Descriptive Analysis

Based on the results of *performance analysis* using Biblioshiny (R Studio), the landscape of parent-child communication research publications for the period 2023–2026 shows relatively intensive scientific dynamics but is still in the consolidation phase. During this period, 418 documents were identified, published in 187 journal sources, reflecting a fairly broad and multidisciplinary distribution of publications. The *annual growth rate* was recorded at -43.72%, indicating fluctuations in publication output over a relatively short period—possibly influenced by the post-pandemic publication cycle and journal indexing dynamics. Collaboratively, this field involved 1,706 authors, with only 28 articles written by a single author, indicating the dominance of scientific collaboration over individual production. The average number of authors per document was 4.26, while the level of international collaboration reached 21.05%, indicating the existence of cross-country networks, although they are not yet fully integrated globally.

In terms of conceptual structure, 1,437 author keywords were identified, reflecting the diversity of themes and conceptual fragmentation in this field. The average age of documents is 1.77 years, confirming that this dataset represents very recent literature. Meanwhile, the average citations per document of 3.294 indicates a developing level of academic visibility, which is common in fields of research undergoing thematic expansion and paradigm redefinition. Overall, these findings confirm that research on parent-child communication in the digital age is in a phase of dynamic growth with a high intensity of collaboration, but still requires conceptual consolidation and strengthening of citation impact to achieve more stable epistemic maturity.



Figure 2. Dataset

Figure 3 "Most Relevant Authors" below shows the distribution of productivity of the most active authors in parent-child communication research publications for the period 2023–2026. The visualisation shows that scientific productivity in this field is relatively distributed and not yet concentrated predominantly in one particular group of authors. Wang Y is listed as the most productive author with four documents, followed by Gerrits E with three documents. Meanwhile, a number of other authors—including Abd Majid MA, Ali AWM, Allen TE, Bernier A, Beyens I, Brown MT, Calderon G, and Cao X—each contributed 2 documents. This pattern shows that there is no *extreme productivity concentration*, but rather a relatively dispersed contribution structure among several key researchers.

From a scientific structure perspective, this distribution indicates that the field of parent-child communication in the digital age is still in its growth phase as an *emerging field*, where productivity is not yet fully centred on certain *core scholars*. The moderate dominance of several leading authors shows the beginnings of intellectual leadership, but has not yet formed a strong academic oligarchy as seen in epistemically mature fields. This pattern also reflects the high level of collaboration across research teams and the possibility of thematic fragmentation, where various subtopics—such as *digital parenting*, adolescent mental health, and media literacy—are developed by different research communities. Thus, the structure of author productivity in this period confirms that the research landscape is still dynamic, open to new contributions, and has the potential for intellectual consolidation in the coming years.

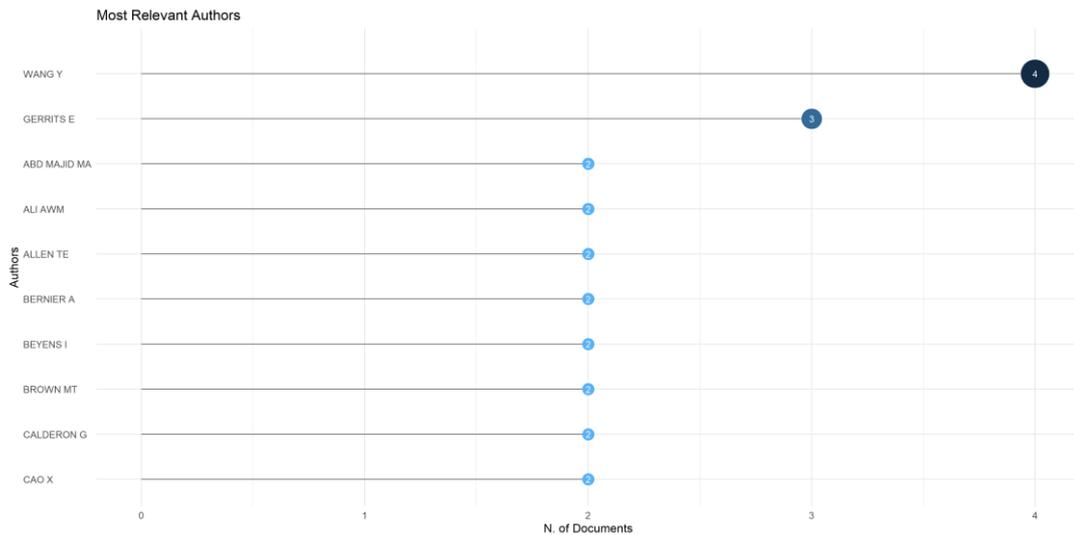


Figure 3. Most relevant Authors
Research Trend Analysis

Figure 4. *Thematic map* depicting the conceptual structure of parent-child communication research for the period 2023–2026 based on theme centrality and density. The upper right quadrant (motor themes) shows themes with high relevance and development, namely the "female–male–humans" and "human–child–article" clusters. The existence of these themes as *motor themes* indicates that research in the current period is still dominated by approaches based on demographic characteristics and human populations, with a strong focus on children as the main subject of study. High centrality indicates that these themes are the main axis in the conceptual network, while high density indicates the maturity and consistency of literature development in these clusters.

In the upper left quadrant (niche themes), there are no dominant clusters, indicating that specific themes with strong internal development but lacking broad connections have not yet been formed. Meanwhile, the lower left quadrant (emerging or declining themes) features keywords such as "questionnaire," "surveys and questionnaires," and "reliability," indicating that methodological issues tend to be peripheral—either as themes that are beginning to develop or experiencing a decline in conceptual relevance. In the lower right quadrant (basic themes), the cluster "preschool child–child, preschool–infant" emerges as a basic theme with relatively high centrality but low density, indicating that the focus on early childhood is an important foundation of this field, but still requires further conceptual deepening. Overall, this thematic map shows that the structure of parent–child communication research in the digital era is still centred on population characteristics and child development phases, while the integration of methodological issues and the differentiation of more specific sub-themes have not been fully consolidated, opening up opportunities for conceptual exploration and theoretical deepening in future studies.

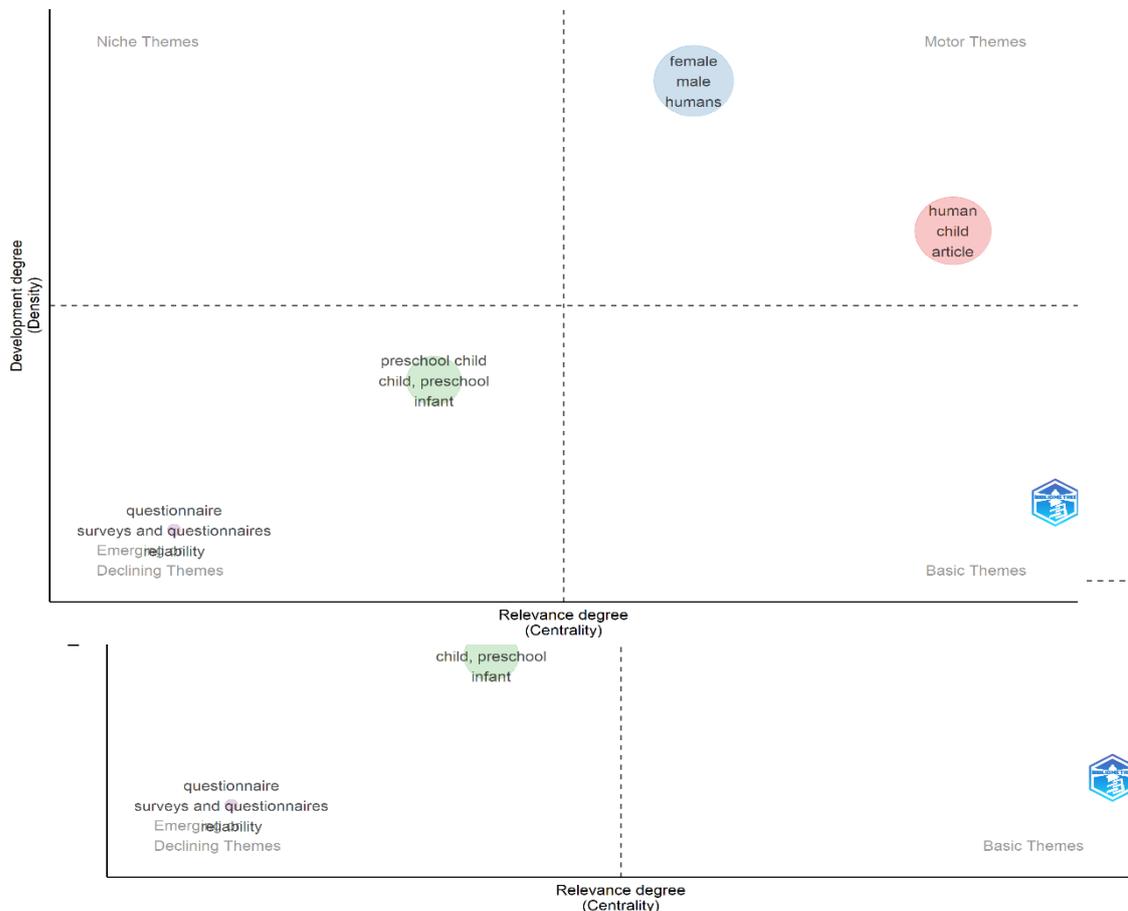


Figure 4. Thematic Map

The *word cloud* visualisation in the figure represents the frequency of occurrence of *the author's keywords* in parent-child communication publications from 2023 to 2026. Larger font sizes indicate higher frequencies of occurrence in the dataset. The keywords "human," "female," "child," "parents," "communication," and "interpersonal communication" emerged as the most dominant terms, indicating that the main focus of the literature still rests on interpersonal relationships in the context of the human population, with a strong emphasis on gender roles and child characteristics. The dominance of the terms "female" and "male" shows that gender differentiation remains an important variable in family communication analysis, while "child" and "parents" confirm dyadic relationships as the core of the study. The presence of terms such as "psychology," "adolescent," "adult," "preschool child," and "parent-child relations" shows the close relationship between family communication studies and developmental psychology and mental health perspectives.

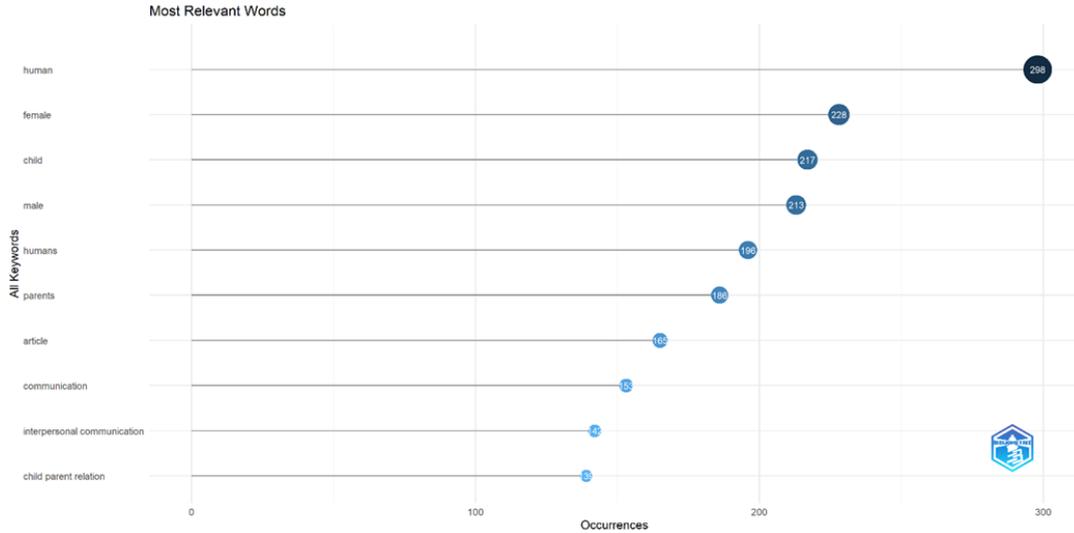


Figure 6. Most Relevant Words

Most influential countries, affiliates, and productive authors

Table 1 shows the distribution of publication productivity by country and year in the period 2023–2026. The data shows that Australia is the most dominant contributor to the landscape of parent–child communication research, with a very significant upward trend from 19 articles in 2023 to 92 articles in 2025, remaining stable at the same number in 2026. This pattern indicates a consistent acceleration in knowledge production and the possible existence of research centres or national policy agendas

that support studies on family communication and child development in the digital age

Canada shows a progressive and relatively stable growth trend, from 7 articles in 2023 to 60 articles in 2026. This gradual increase reflects the strengthening of research capacity and academic collaboration in this field. Meanwhile, China shows a more moderate contribution, with an increase from 8 articles in 2023 to 13 articles in 2024. Although the volume is lower than Australia and Canada, this positive trend indicates an increasing attention to family communication issues in a rapidly developing social and digital context.

This geographical distribution shows the dominance of Global North countries in the production of knowledge in the field of parent-child communication in the recent period. The disparity in contributions between countries indicates a *structural concentration of knowledge production*, which opens up opportunities for cross-regional comparative research and the need to expand the participation of Global South countries to achieve a more balanced epistemic representation in global family communication studies.

Table 1. Distribution of Articles by Country and Year (2023–2026)

Country	TP	%	Continent
United States	87	35.08	North America
China	39	15.73	Asia
United Kingdom	15	6.05%	Europe
Australia	14	5.65%	Oceania
Canada	12	4.84%	North America
Hong Kong	10	4.03	Asia
India	9	3.63%	Asia
Malaysia	9	3.63	Asia

The "Affiliations" over Time" dynamics of of the top in parent-

figure Production shows the productivity institutions child

Germany	8	3.23%	Europe
Indonesia	8	3.23	Asia

communication research publications during the period 2023–2026. In general, all affiliations show an upward trend in the number of articles from year to year, albeit at varying rates of growth. The University of South Carolina appears to be the institution with the most consistent and relatively high productivity since 2023, increasing gradually to peak in 2025 and stabilising in 2026. This pattern indicates the sustainability of a structured research agenda and established scientific production capacity in the field of family communication and child development.

Meanwhile, the University of North Carolina at Chapel Hill shows the most progressive growth, from no publications in 2023 to becoming one of the highest contributors in 2026. This significant surge indicates rapid research expansion or the possible formation of new research groups focusing on parent-child communication in the digital age. The University of Amsterdam, and the University of Michigan show moderate and relatively stable growth patterns, reflecting sustained contributions without drastic increases. On the other hand, the National University of Malaysia shows a fairly sharp increase, especially in 2025, which signals the strengthening of the contribution of institutions in the Asian region in a research landscape previously dominated by Global North institutions.

Structurally, this pattern indicates a concentration of knowledge production in a number of key institutions with high research capacity, while also revealing the emergence of new research centres that are beginning to play a significant role. The upward trend across institutions also reinforces previous findings regarding the expansion phase of this field in the recent period. However, the dominance of universities from North America and Western Europe remains evident, underscoring the importance of geographical diversification and strengthening international collaboration to promote more inclusive epistemic representation in the study of parent-child communication in the digital age.

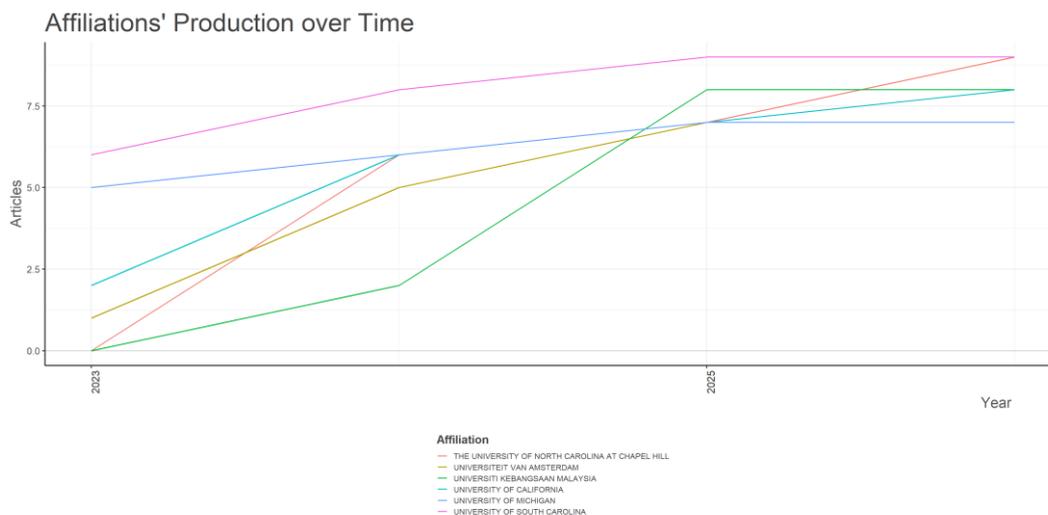


Figure 7. Production of the "Most Relevant Affiliations" over Time

The figure "Most Relevant Affiliations" displays the ten institutions with the highest publication contributions in the field of parent-child communication for the period 2023–2026. The two institutions at the top are the University of North Carolina at Chapel Hill and the University of South Carolina, each with nine articles, demonstrating consistency and strong scientific production capacity in this domain. The next positions are occupied by Universiti Kebangsaan Malaysia and the University of California, each with 8 articles, indicating that in addition to the dominance of the United States, there is significant contribution from the Southeast Asian region in the current research landscape.

The group of institutions with moderate contributions—the University of Amsterdam and the University of Michigan (7 articles each), as well as UNC School of Medicine, the University of Oslo, and Zhejiang University (6 articles each)—reflects a relatively diverse geographical spread across North America, Europe, and Asia. Bar-Ilan University, with 5 articles, completes the top ten list, demonstrating the involvement of Middle Eastern institutions in the global discourse on family communication.

Structurally, this distribution confirms the concentration of knowledge production in high-capacity research institutions, particularly in the United States, which remains the dominant centre in the development of parent-child communication literature. However, the emergence of institutions from Malaysia, China, Norway, and Israel indicates a more inclusive geographical expansion trend compared to the previous decade. This pattern indicates that although the structure of knowledge production is still centred on the Global North, this field is beginning to show diversification of institutional actors, which has the potential to enrich theoretical and contextual perspectives in family communication studies in the digital age.

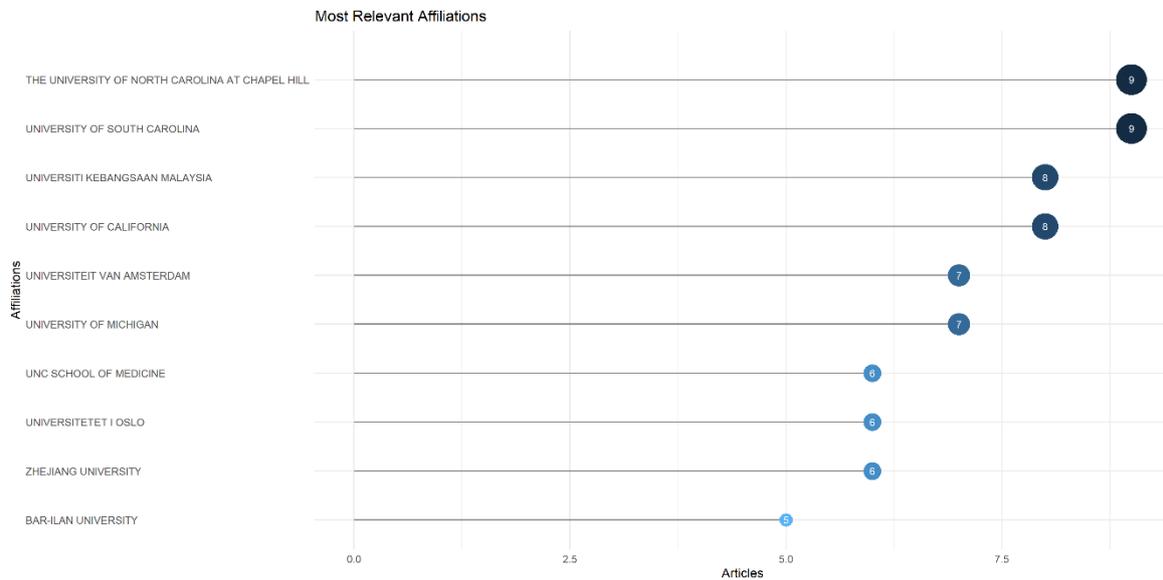


Figure 8. Most Relevant Affiliations

Citation Analysis

Table 2 displays the ten articles with the highest citations in the field of parent-child communication for the period 2023–2024, providing an overview of the intellectual foundations and academic influence in the current research landscape. The article by Al-Tarawneh (2024) in *Studies in Media and Communication* ranks first with 168 citations, a TC per Year value of 56.00, and a Normalised TC of 37.30, indicating a highly significant academic impact in a relatively short period of time. The high number of citations per year indicates that the article serves as a central reference in contemporary discourse, likely related to issues of media communication and family dynamics in the digital age.

Other influential publications come from reputable journals such as *the British Journal of Educational Psychology*, *Developmental Psychology*, *Cyberpsychology, Behaviour, and Social Networking*, and *Social Science & Medicine*. The dominance of developmental psychology and social health journals indicates that parent-child communication research is still highly integrated with psychological and public health approaches. Articles in *Cyberpsychology, Behaviour, and Social Networking* emphasise the increasing attention to digital dimensions and online interactions in family relationships.

The relatively high *normalised citation* values of several articles indicate that scientific impact is not solely influenced by publication age, but also by the relevance of the topic to the global research agenda. Overall, this citation pattern shows that the intellectual structure of the field of parent-child communication is multidisciplinary, with significant contributions from developmental psychology, media communication, sociology, and public health. These findings reinforce the argument that this field is developing through cross-disciplinary integration, but still requires conceptual consolidation to build a more cohesive family communication paradigm in the digital age.

Table 2. Ten Articles with the Highest Citations (2023–2024)

Paper	DOI	T C	T C /Y	Normali sed TC
Chou, 2009, Journal of Medical Internet Research	10.2196/jmir.1249	8 4 3	4 6. 8 3	2.78
Liu, 2020, Journal of Medical Internet Research	10.2196/19118	2 1 4	3 0. 5 7	5.35
Valente, 1998, Commun Res	10.1177/009365098 025001004	1 4 3	4. 9 3	1.55
Rus, 2016, Annals of Behavioural Medicine	10.1007/s12160- 016-9793-9	1 1 7	1 0. 6 4	3.5
Van De Belt, 2013, Journal of Medical Internet Research	10.2196/jmir.2607	1 0 7	7. 6 4	2.39
Huo, 2019, Cancer Control	10.1177/107327481 9841442	1 0 5	1 3. 1 3	4.04
Chan, 2018, Social Science & Medicine	10.1016/j.socscime d.2018.07.007	9 9	1 1. 0 0	1.92
Ngai, 2020, Journal of Medical Internet Research	10.2196/21360	9 1	1 3. 0 0	2.27
Niederdeppe, 2013, Journal of Communication	10.1111/jcom.1200 3	8 0	5. 7 1	1.78

Discussion

The results of the bibliometric analysis show that parent–child communication research in the 2022–2026 period is in a dynamic expansion phase but has not yet been fully consolidated conceptually. The pattern of fairly high publication growth, accompanied by the involvement of 1,706 authors and an average of 4.26 authors per article, confirms that this field is developing through intensive scientific collaboration. The dominance of Global North institutions and countries—particularly the United States, Australia, and Canada—indicates a concentration of knowledge production in research centres with established academic capacity. The meaning behind this pattern shows that the family communication research agenda is still heavily influenced by the social context and policies in developed countries, so that the Global South perspective is relatively underrepresented. Thus, the structure of knowledge production reflects an epistemic inequality that has the potential to influence the theoretical direction and issue priorities in this field.

From a conceptual structure perspective, thematic mapping and keyword analysis reveal the dominance of terms such as "human," "female," "child," "male," and "parents," indicating that the literature's primary focus remains on demographic characteristics and traditional interpersonal relationships. *Motor themes* centre on child populations and gender differentiation, while methodological issues such as "questionnaires" and "surveys" tend to be peripheral or emerging. The significance of this pattern shows that although research is conducted in the context of the digital age, the conceptual framework used is still heavily influenced by the paradigms of classical developmental psychology and interpersonal communication. In other words, digital transformation has not yet fully

reconstructed the theoretical foundations of this field, but rather functions more as an additional context than as the main analytical framework.

Interestingly, there is a significant conceptual anomaly: although this research focuses on the digital era, terms explicitly related to digital technology, social media, or digital literacy do not appear as the most dominant keywords. This indicates a gap between an increasingly digitised empirical context and a still conventional conceptual structure. Furthermore, the negative annual growth rate (-43.72%) in this short period indicates non-linear fluctuations in scientific production, possibly influenced by the dynamics of the publication cycle or changes in open access policies. Overall, these findings confirm that the field of parent-child communication is in a phase of epistemic transition—experiencing quantitative and collaborative expansion, but still requiring stronger conceptual integration to respond comprehensively to changes in the digital communication ecosystem.

Based on bibliometric findings—which show the dominance of the classical interpersonal communication paradigm, strong gender differentiation, a focus on parent-child relationships, and the lack of explicit digital terminology—the most relevant theories for contextualising the results of this study are Parental Mediation Theory, Family Communication Patterns Theory (FCPT), and, in the context of digital transformation, an extension through Ecological Systems Theory (Bronfenbrenner) adapted into a *digital ecology* framework. These three theories provide a foundation for understanding how family communication functions within a relational system influenced by social and technological environments.

The findings of this study generally verify the relevance of Parental Mediation Theory and Family Communication Patterns Theory, as the keyword structure and thematic clusters indicate that interpersonal communication, parent-child relationships, and demographic characteristics remain the conceptual centre of this field. The dominance of terms such as "parents," "child," and "interpersonal communication" indicates that dialogic communication patterns, control, and conversation orientation (conversation vs. conformity orientation) remain the main analytical frameworks in the current literature. However, these findings also reveal the limitations of classical theories in fully explaining the context of family communication in the digital age, given that terms explicitly referring to digital media or technological literacy have not yet become central themes. Thus, the results of this study do not challenge existing theories but indicate that they need to be expanded to accommodate the dynamics of communication mediated by digital platforms.

From the perspective of Ecological Systems Theory, findings regarding the dominance of the Global North and institutional concentration indicate that the production of knowledge about family communication is influenced by the macrosystem context (policy, academic culture, and research infrastructure). This broadens the understanding that parent-child communication does not only take place within the family microsystem, but is also shaped by broader social, cultural, and technological structures. Therefore, the theoretical contribution of this research lies in proposing an integration between Parental Mediation Theory and the digital ecology approach—that is, viewing family communication as a process that is not only interpersonal but also connected to platform systems, algorithms, and media literacy. , this theoretical integration encourages the development of policies and interventions that do not solely emphasise parental control, but also the improvement of family digital literacy and adaptation to the ever-changing digital communication ecosystem.

The bibliometric findings of this study indicate that research on parent-child communication in the 2022–2026 period is still dominated by classical developmental psychology and interpersonal communication approaches, with a focus on gender differentiation, dyadic relationships, and child welfare. This pattern is in line with the study "[17] ," which confirms that *digital parenting* strategies remain rooted in traditional supportive and mediating parental communication patterns, even though the context of interaction has shifted to the digital space. Similarly, these findings are consistent with "[29] " in *Developmental Psychology*, which shows that the quality of parent-child relationships remains the main predictor of children's psychological well-being, regardless of the medium of communication. Thus, the results of this study verify that the theoretical foundation of family communication still rests on the relational and child development paradigms.

However, this study also expands on previous findings by showing conceptual fragmentation and the lack of consolidation of digital issues as a dominant thematic cluster. This complements the findings of [11] in *Cyberpsychology, Behaviour, and Social Networking*, which highlights the importance of the digital context in family dynamics but does not yet show conceptual dominance at the bibliometric meta-analysis level. Furthermore, the concentration of knowledge production in Global North countries

identified in this study is consistent with the pattern reported by [19] in the context of family health communication, which shows that the global research agenda is still influenced by the institutional structures and policies of developed countries. Thus, the results of this study not only confirm global trends but also add empirical evidence regarding geographical inequalities in knowledge production.

Furthermore, compared to previous studies that generally focused on testing variable relationships through surveys and SEM, this study offers a meta-scientific perspective that shows how the intellectual structure of this field has developed collectively. In the context of post-pandemic global trends, increased international collaboration and a surge in publications in 2024–2025 reflect the acceleration of attention to family communication in an increasingly complex digital ecosystem. Thus, these findings expand the previous literature by showing that digital transformation has not completely reformulated the theoretical paradigm, but still operates within the framework of classical interpersonal communication. The main contribution of this study is to provide evidence that even though the social and technological contexts are changing rapidly, the conceptual structure of the field of parent–child communication is developing gradually and still requires more adaptive theoretical integration to global digital dynamics.

Theoretically, the findings of this study confirm that the conceptual structure of parent-child communication research in the digital age is still strongly rooted in the classical interpersonal communication and developmental psychology paradigms. However, the dominance of demographic terminology and the lack of a strong digital cluster indicate the need for a more comprehensive theoretical integration. Thus, this study enriches the literature by offering a reconstruction of the intellectual architecture of this field and encouraging the expansion of *Parental Mediation Theory* and *Family Communication Patterns Theory* into a digital ecology framework that is more adaptive to technological changes. The main contribution of this study is not merely to map publication trends, but to reveal the ongoing epistemic shift and the need for conceptual consolidation so that family communication theory can explain the dynamics of platforms, algorithms, and digital literacy more systematically.

Practically, these findings have important implications for policymakers, educators, family counsellors, and health communication practitioners. The dominance of child welfare issues and gender differentiation indicates that family communication interventions still focus on interpersonal relationships, while the dimensions of digital literacy and resilience to misinformation have not yet become mainstream. Therefore, field practices need to shift from a control-only approach to a collaborative communication model based on digital resilience. Educational institutions and government agencies can utilise these findings to design more integrated family digital literacy training programmes, while encouraging cross-country collaboration to reduce knowledge production inequalities that remain concentrated in the Global North.

This study has several limitations that need to be considered. First, the analysis only used the Scopus database and limited the documents to English-language open access articles from 2022–2026, so there may be relevant publications in other databases or in different languages that were not identified. Second, the bibliometric approach focused on quantitative patterns and the structure of scientific networks, so it did not fully explore the theoretical substance of each article. Nevertheless, these limitations open up opportunities for further research to conduct comparative analyses across databases, expand the geographical scope, and integrate bibliometrics with *systematic literature reviews* or meta-analyses to deepen the conceptual understanding of parent-child communication in the digital age.

Conclusion

This research stems from the need to understand how the scientific landscape of parent–child communication is developing in the context of an increasingly complex digital transformation. Through bibliometric analysis of 418 Scopus-indexed articles from 2022 to 2026, this study systematically mapped the structure of scientific productivity, collaboration networks, and thematic configurations in this field. The results show that parent-child communication research is in a phase of expansion with intensive collaboration, but knowledge production is still concentrated in Global North institutions and countries. Conceptually, the findings reveal that the literature structure is still dominated by the paradigms of interpersonal communication and classical developmental psychology, with a strong focus on gender differentiation and parent–child relationships. Although the research context is in the digital era, issues of technology and digital literacy have not yet fully become the centre of thematic clusters. This indicates a gap between digital social transformation and theoretical consolidation in the field of

family communication. The significance of this research lies in its contribution to reconstructing the intellectual architecture and identifying ongoing epistemic shifts. This study expands the literature by highlighting the need to integrate family communication theory with digital ecology perspectives and revealing geographical inequalities in global knowledge production. However, this study has limitations as it only uses the Scopus database and restricts documents to English-language open access articles. Furthermore, the bibliometric approach emphasises quantitative patterns and does not delve into the theoretical substance of each article. Future research should expand the scope of the database, conduct cross-cultural comparative analyses, and integrate bibliometrics with *systematic literature reviews* or meta-analyses to deepen the conceptual understanding of parent-child communication in the global digital ecosystem.

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References

- [1] A. A. Maryam and M. A. S. Khasawneh, "Using Social Media as a Platform of Communication Between School Administration and the Local Communities to Promote Inclusive Education for Children with Special Needs," *Stud. Media Commun.*, vol. 12, no. 2, pp. 79–87, 2024, doi: 10.11114/smc.v12i2.6560.
- [2] N. P. Rao, S. Padickaparambil, and S. Tiwari, "Speech-Language Pathologists' Experiences on Telepractice in Children With Autism Spectrum Disorder in India—A Qualitative Study," *Int. J. Lang. Communication Disorders*, vol. 60, no. 4, 2025, doi: 10.1111/1460-6984.70072.
- [3] R. Ward and E. Puig-Mayenco, "Attitudes Towards Bilingualism: Insights From Parents of Children With Down Syndrome," *Int. J. Lang. Commun. Disord.*, vol. 60, no. 6, 2025, doi: 10.1111/1460-6984.70153.
- [4] S. Nowell et al., "Adapting the Early Communication Indicator as a Social Communication Outcome Measure for Young Autistic Children: A Pilot Study," *American Journal of Speech-Language Pathology*, vol. 33, no. 5, pp. 2610–2617, 2024, doi: 10.1044/1413-1413. J. Speech-Language Pathol., vol. 33, no. 5, pp. 2610–2617, 2024, doi: 10.1044/2024_AJSLP-24-00004.
- [5] R. Oram, A. Young, and P. Cartney, "Standing at the crossroads: Child safeguarding and Deaf BSL parents (in England) - Issues and challenges in social work," *British Journal of Social Work*, vol. 55, no. 3, pp. 1436–1454, 2025, doi: 10.1093/bjsw/bcae202.
- [6] Y. Wang, Y. Zhao, J. Lu, and Y. Gao, "Young Children's Digital Literacy Practices with Caregivers in the Home Environment: Voices of Chinese Parents and Grandparents," *Sustain.*, vol. 16, no. 8, 2024, doi: 10.3390/su16083300.
- [7] N. A. Praptiningsih, H. Mulyono, and B. Setiawan, "Toxic relationship in youth communication through self-love intervention strategy," *Online Journal of Communication Media Technology*, vol. 14, no. 2, 2024, doi: 10.30935/ojcm/14292.
- [8] A. Fiskerstrand, M. S. Hannula, and A. K. Toppol, "Parental involvement and children's mathematical outcomes: How values and communication relate to achievement and attitudes," *LUMAT*, vol. 12, no. 3, 2024, doi: 10.31129/LUMAT.12.3.2146.
- [9] N. S. Buha and M. M. Jelić, "Children's developmental status and parental trust in educators in inclusive preschools," *Spec. Edukac. i Rehabil.*, vol. 24, no. 2, pp. 165–180, 2025, doi: 10.5937/specedreh24-54674.
- [10] N. L. Gómez-Victoria, K. Carvajal, S. Collazos, Y. Muñoz, and A. Quinchia, "Rethinking Communication in Interactions with a Child with Autism: Ela, Her Father, and the Jellyfish in the Pool," *Scand. J. Disabil. Res.*, vol. 27, no. 1, pp. 44–61, 2025, doi: 10.16993/sjdr.1140.
- [11] T. C. McFayden, S. Bristol, O. Putnam, and C. Harrop, "ChatGPT: Artificial Intelligence as a Potential Tool for Parents Seeking Information About Autism," *Cyberpsychology, Behaviour, and Social Networking*, vol. 27, no. 2, pp. 135–148, 2024, doi: 10.1089/cyber.2023.0202.
- [12] B. Gollopeni and M. Baruti-Sylejmani, "The Relationship Between Effective Parent-Teacher Communication and Student Motivation at Primary School," *Int. J. Divers. Educ.*, vol. 25, no. 1, pp. 189–210, 2025, doi: 10.18848/2327-0020/CGP/v25i01/189-210.
- [13] E. Ferrer, S. Marhan, L. Haller, and S. M. O'Connor, "Parent to Child Intergenerational Transmission of Direct and Indirect Weight and Shape Communication," *Journal of Child and Family Studies*, vol. 34, no.

- 8, pp. 2070–2080, 2025, doi: 10.1007/s10826-0025-0007-0. *Studies*, vol. 34, no. 8, pp. 2070–2080, 2025, doi: 10.1007/s10826-025-03078-z.
- [14] A. Suing, J.-P. Arrobo-Agila, X. Coronado-Otavalo, V. Galarza-Ligna, and A. Reascos-Trujillo, “Audiovisual Competences in Times of COVID-19: The Role of Educational Actors in Media and Digital Learning of Adolescents,” *Sustain.*, vol. 15, no. 7, 2023, doi: 10.3390/su15076323.
- [15] D. I. Acosta and C. A. Haden, “Supporting Latine Children’s Informal Engineering Learning Through Tinkering and Oral Storytelling,” *Developmental Psychology*, vol. 59, no. 12, pp. 2342–2355, 2023, doi: 10.1037/dev0001648.
- [16] A. Wilke, T. van Rhijn, K. Squires, and K. Barton, “Digital Bonds: Exploring the Impact of Computer-Mediated Communication on Parent–Educator Relationships in Early Childhood Education and Care,” *Educ. Sci.*, vol. 14, no. 2, 2024, doi: 10.3390/educsci14020123.
- [17] J. Nesi et al., “Multimethod assessment of parenting strategies for managing early adolescents’ social media use,” *Journal of Research on Adolescence*, vol. 36, no. 1, 2026, doi: 10.1111/jora.70127.
- [18] G. Zheng, Y. Fan, J. Huang, J. Lan, and Y. Wang, “Parenting in Context: A Systematic Review of Family Factors and Cyberbullying Perpetration Among Adolescents,” *Child Fam. Soc. Work*, vol. 31, no. 1, pp. 420–446, 2026, doi: 10.1111/cfs.13281.
- [19] V. T. Christensen, A. N. Polonijo, and R. M. Carpiano, “Parental education disparities in childhood vaccination in Denmark: A test of two explanations for the role of misinformation,” *Soc. Sci. Med.*, vol. 391, 2026, doi: 10.1016/j.socscimed.2025.118914.
- [20] R. Buivydaite, B. Page, J. Carter, D. Mann, and C. Vincent, “Parents’ Experience of a New Approach to Family Safeguarding in Oxfordshire Children’s Social Care Services,” *Child and Family Soc. Work*, vol. 30, no. 4, pp. 939–949, 2025, doi: 10.1111/cfs.13230.
- [21] L. Ketelaar, N. P. W. D. de Rue, E. de Boer, and E. Dirks, “Language as a Window to the Mind: Parental Mental State Language in Relation to Deaf and Hard-of-Hearing Children’s Social–Emotional Skills,” *Behavioural Science (Basel)*, vol. 15, no. 11, 2025, doi: 10.3390/bs15111558.
- [22] E. M. Meuleman, I. M. Koning, D. M. Heemskerk, V. Busch, and M. M. van Stralen, “Tracking Secondary School Students: A Qualitative Investigation of an Online Student Monitoring System With Parent Portal,” *Journal of School Health*, vol. 96, no. 1, 2026, doi: 10.1111/josh.70097.
- [23] D. M. Obreja, R. Rughiniş, and D. Rosner, “Mapping the conceptual structure of innovation in artificial intelligence research: A bibliometric analysis and systematic literature review,” *Journal of Innovation Knowl.*, vol. 9, no. 1, p. 100465, 2024, doi: <https://doi.org/10.1016/j.jik.2024.100465>.
- [24] A. Nasir, K. Shaukat, I. A. Hameed, S. Luo, T. M. Alam, and F. Iqbal, “A Bibliometric Analysis of the Coronavirus Pandemic in the Social Sciences: A Review of Influential Aspects and Conceptual Structure,” *IEEE Access*, vol. 8, pp. 133377–133402, 2020, doi: 10.1109/ACCESS.2020.3008733.
- [25] R. E. O’Dea et al., “Preferred reporting items for systematic reviews and meta-analyses in ecology and evolutionary biology: a PRISMA extension,” *Biol. Rev.*, vol. 96, no. 5, pp. 1695–1722, 2021, doi: <https://doi.org/10.1111/brv.12721>.
- [26] D. Moher, A. Liberati, J. Tetzlaff, and D. G. Altman, “Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement,” *Int. J. Surg.*, vol. 8, no. 5, pp. 336–341, 2010, doi: <https://doi.org/10.1016/j.ijsu.2010.02.007>.
- [27] P. Thangavel and B. Chandra, “Two Decades of M-Commerce Consumer Research: A Bibliometric Analysis Using R Biblioshiny,” 2023. doi: 10.3390/su151511835.
- [28] A. Kemeç and A. T. Altınay, “Sustainable Energy Research Trend: A Bibliometric Analysis Using VOSviewer, RStudio Bibliometrix, and CiteSpace Software Tools,” 2023. doi: 10.3390/su15043618.
- [29] S. Golombok, C. Jones, P. Hall, S. Foley, S. Imrie, and V. Jadva, “A Longitudinal Study of Families Formed Through Third-Party Assisted Reproduction: Mother–Child Relationships and Child Adjustment From Infancy to Adulthood,” *Dev. Psychol.*, vol. 59, no. 6, pp. 1059–1073, 2023, doi: 10.1037/dev0001526.