

Derleme Makalesi / Review Article

A bibliometric analysis of the research trends in ReCALL (2009-2024)

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ABSTRACT

The present bibliometric study provides a comprehensive review of the publication trends of ReCALL – one of the distinguished academic venues in CALL research. Two hundred seventy-four articles published between 2009 and 2024 were analysed to reveal the relevant authors, productive institutions, influential countries, impactful papers, and dominant research themes. Due to the discrepancies in the Web of Science (WoS) and the Biblioshiny tool, the analyses were performed via a spreadsheet, including the cross-checked metadata. Our study indicated that Melinda Dooly and Sangmin-Michelle Lee were the most prolific authors, and single authorship was the most common collaboration pattern. Adam Mickiewicz University was the most productive institution, while China produced the most articles. The thematic evolution moved from exploratory technological integration and pedagogical experimentation to learner-centred focus, digital integration, automation, and sustainability. The findings suggest the applicability and adaptability of CALL systems across various contexts and signal potential study gaps for prospective researchers. With these findings, the study contributes valuable insights into academic scholarship through potential knowledge exchanges between researchers, educators, and administrators..

KEYWORDS: Academic journals, academic discourse, bibliometric analysis, CALL, ReCALL

ReCALL'daki araştırma eğilimlerinin bibliyometrik analizi (2009-2024)

ÖZ

Bu bibliyometrik çalışma, bilgisayar destekli dil öğrenme (BDDÖ) araştırmalarında önde gelen akademik platformlardan biri olan ReCALL'ın yayın eğilimlerini kapsamlı bir şekilde incelemektedir. 2009 ile 2024 yılları arasında yayınlanan 274 makale analiz edilerek ilgili yazarlar, üretken kurumlar, etkili ülkeler, etkili makaleler ve baskın araştırma temaları ortaya çıkarılmıştır. Web of Science (WoS) ve Biblioshiny aracındaki tutarsızlıklar nedeniyle, analizler çapraz kontrol edilmiş meta veriler de dahil olmak üzere bir elektronik tablo aracılığıyla gerçekleştirilmiştir. Çalışmamız, Melinda Dooly ve Sangmin-Michelle Lee'nin en üretken yazarlar olduğunu ve tek yazarlı makalelerin en yaygın iş birliği modeli olduğunu göstermiştir. Adam Mickiewicz Üniversitesi en üretken kurum olurken, Çin en fazla makale üreten ülke olmuştur. Tematik evrim, keşifsel teknolojik entegrasyon ve pedagojik deneylerden öğrenen merkezli odaklanma, dijital entegrasyon, otomasyon ve sürdürülebilirliğe doğru ilerlemiştir. Bulgular, BDDÖ sistemlerinin çeşitli bağlamlarda uygulanabilirliğini ve uyarlanabilirliğini göstermekte ve gelecekteki araştırmacılar için potansiyel çalışma boşluklarına işaret etmektedir. Bu bulgularla çalışma, araştırmacılar, eğitimciler ve yöneticiler arasında potansiyel bilgi alışverişi yoluyla akademik burslara değerli içgörüler sağlamaktadır.

ANAHTAR KELİMELER: Akademik dergiler, akademik söylem, bibliyometrik analiz, BDDÖ, ReCALL

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Introduction

Academic journals play a significant role in disseminating knowledge and scholarship in a particular field. The difficulty of examining the bulks of knowledge as a whole has led to their partition, resulting in the specialisation of scientific disciplines, from language and culture to linguistics and second language acquisition (SLA). The division of the scientific fields has also brought about the emergence of manifold journals with diverse foci and scopes. In the field of second/foreign language education (S/FLE), academic journals have particularised in various fields, including language learning, teaching, and assessment. Technological advancements have further diversified the field, giving birth to journals specialised in technology-assisted language learning (TALL), such as Computer-Assisted Language Learning (CALL) and Language Learning & Technology (LLT).

One such journal is ReCALL – the journal of the European Association for Computer Assisted Language Learning (EUROCALL). Founded in 1989, ReCALL is published by the Cambridge University Press. Since its foundation, the journal has grown into one of the leading publication venues in the field of language and linguistics. Indexed in the Social Sciences Citation Index (SSCI) and Arts & Humanities Citation Index (A&HCI), along with its inclusion in the Quartile 1 (Q1), ReCALL publishes rigorous research articles, syntheses, and surveys triennially. The journal administration seeks meticulously written manuscripts meshing language/culture learning and teaching with CALL that will make substantial contributions to the relevant literature.

Given the distinctive position of journals in knowledge dissemination within the academic discourse (Mur-Dueñas, 2018), inquiries into their research and publication trends become worthwhile for many stakeholders, from academics and researchers to journal editors, administrators, and sponsors. The developing technology (e.g., statistical methods, data visualisation, and bibliometric tools) has streamlined analysing such trends. Grounded in such fields as scientometrics and informetrics, bibliometric analysis has become increasingly popular among researchers from diverse disciplines (Ellegaard, 2018; Gingras, 2016). Based on bibliometrics (Groos & Pritchard, 1969), bibliometric analysis is the examination of scientific/bibliometric data (e.g., authors, references, and citations) in a particular field and the application of statistical methods through bibliometric instruments (e.g., VOSviewer, CiteSpace, and Bibliometrix) for numerous purposes, such as revealing the emerging trends and collaboration patterns or assessing journal performance and knowledge structures (Donthu et al., 2021; Van Leeuwen, 2006).

Bibliometric analyses provide sundry merits for researchers, including determining knowledge gaps, gaining a unique overview, deriving novel areas of investigation, predicting prospective trends, and situating the expected contributions within a discipline (Donthu et al., 2021; Ellegaard, 2018). Considering these gains, previous researchers have addressed various issues using the bibliometric approach. For instance, scholars have focused on specific research fields and topics, such as MALL (Karakaya & Bozkurt, 2022) and e-learning (Djeki et al., 2022). Others have targeted certain issues in particular contexts, such as English language teaching research in Southeast Asia (Ngoc &

Barrot, 2023) and artificial intelligence (AI) in second language and applied linguistics (Kartal & Yeşilyurt, 2024).

Academic journals have not been exempted from bibliometric analyses. Various well-known language journals have been bibliometrically analysed, including CALL (Goksu et al., 2022), IRAL (Zhong & Liu, 2023), and TESOL Quarterly (Riazi et al., 2023). In ReCALL's case, the literature hosts several bibliometric studies. The earliest was conducted by Jung (2005) to discover how CALL developed between 1980 and 2004. The second study was performed by Li (2022) to examine the research trends of blended language learning in SSCI-indexed publications between 2000 and 2019. In another study, Dong et al. (2023) explored data-driven learning between 1994 and 2021 using 126 articles. In an additional study, Kartal and Yeşilyurt (2024) sketched out the trends of AI in applied linguistics and second language teaching between 1995 and 2022 using 185 SSCI-indexed studies. In a further study, Mohsen et al. (2024) conducted a scientometric analysis (sources and co-citation) of the CALL research between 1980 and 2021 and revealed emerging areas (e.g., mobile-assisted learning and data-driven approaches). A specific bibliometric study was carried out by Choubasaz et al. (2024), who examined the papers with the most citations in four CALL journals (including ReCALL) and noted an upward trend in the global reach of CALL research.

Despite the growing prominence of ReCALL within the Social Sciences Citation Index (SSCI) and the Arts & Humanities Citation Index (AHCI), no bibliometric study to date has focused exclusively on this journal. This gap is notable given ReCALL's increasing influence and relevance in the fields of language learning and technology. As Topal (2025) highlights, further bibliometric analyses of journals are needed to map their scholarly impact. Addressing this need, the present study offers the first comprehensive bibliometric analysis of ReCALL, examining key indicators such as leading authors, institutions, countries, influential papers, and research topics. By providing a thorough bibliometric mapping, this study aims to inform the journal's administration and prospective contributors about ReCALL's evolving profile and future directions. Against this backdrop, the study is guided by the following research questions:

1. Who were the key authors publishing in ReCALL between 2009 and 2024?
2. What was the nature of collaboration between the authors publishing in ReCALL between 2009 and 2024?
3. What institutions and countries were the most productive in ReCALL publications between 2009 and 2024?
4. What papers were the most influential in ReCALL between 2009 and 2024?
5. What research topics or themes were emergent in ReCALL publications between 2009 and 2024?

Answering these questions will allow us to understand how academic communication develops within a specialized and distinguishing field. Information science, fundamentally concerned with the organization, dissemination, and evaluation of knowledge, employs bibliometrics as a core methodological tool to quantitatively map scholarly activity and impact. Opting for a bibliometric approach, rather than a systematic review, is thus

methodologically justified: while systematic reviews synthesize findings from selected works, bibliometrics enables an objective, large-scale analysis of publication patterns, influential contributors, and networked relationships within a research field. Specifically, mapping the research trends of ReCALL through bibliometric methods provides comprehensive insights into the dynamics of knowledge production and dissemination in applied linguistics, highlighting how emerging academic subfields institutionalize and connect to broader scientific networks, which are key concerns within information science. This approach not only enriches disciplinary visibility for second language pronunciation research but also situates ReCALL as a case study within the evolving landscape of scholarly communication.

Method

The current research follows a bibliometric approach to analyse ReCALL's publication and research trends between 2009 and 2024. It seeks to reveal the key contributors, most productive institutions and countries, influential papers, and emerging research themes/topics. The bibliometric data were obtained from the Web of Science (WoS) Core Collection database and subjected to processing and scrutiny to explore the scholarly communication within the journal.

Data collection

The bibliometric data were collected from the Core Collection of the WoS, a commonly consulted database in bibliometric studies for its reliability and comprehensiveness (Garg et al., 2024; Pranckutė, 2021). Data collection followed a systematic, multi-step approach. First, an initial search using "ReCALL" in publication titles yielded 394 results. Next, the results were filtered by year of publication (2009–2024) and limited to the document type "research articles," reducing the dataset to 290 records. A further manual review excluded early access articles listed as 2024 but actually published in 2025, resulting in 274 records. Each filtering step and exclusion criterion is detailed to ensure transparency and replicability.

The inclusion/exclusion criteria were grounded on several justifications. The search in ReCALL was performed between 2009 and 2024, due to the journal's SSCI indexation since 2009 and the incompleteness of 2025. Only research articles were included, resulting in the exclusion of other document types (e.g., reviews, editorials, proceeding papers, book reviews, and software reviews). This focus on research articles is justified both methodologically and analytically: research articles undergo rigorous peer review and are the primary vehicles for original scholarly contributions, ensuring the scientific quality and comparability of the dataset. Including only research articles aligns with established practices in bibliometric research (e.g., Kartal & Yeşilkaya, 2024) and enables consistent analysis of publication and citation patterns, as other document types (such as editorials or reviews) often serve different communicative functions, follow distinct evaluation standards, and may introduce bias or heterogeneity into bibliometric indicators. Since all articles between 2009 and 2024 were indexed in SSCI, no additional criteria were set on indexation.

After applying these inclusion and exclusion criteria, the remaining records underwent meticulous manual screening, as conducted in previous studies (Kartal & Yeşilkaya, 2024; Marzi et al., 2025), to verify accuracy and relevance.

This included a thorough review of publication titles, abstracts, publication years, and document types. To enhance reliability, a third party reviewed 10% of the dataset for relevance. Additionally, author names were standardized to ensure consistency and replicability in subsequent analyses: variations referring to the same author (e.g., “Dooley, Melinda” and “Dooley, M.”) were merged by matching surname and given name/initials, cross-referenced with institutional affiliations and publication topics when necessary. This meticulous process yielded and corroborated our final dataset of 274 research articles published in ReCALL between 2009 and 2024 (see Supplementary Material Table A). Figure 1 visualizes the chronological distribution of ReCALL publications during this period.

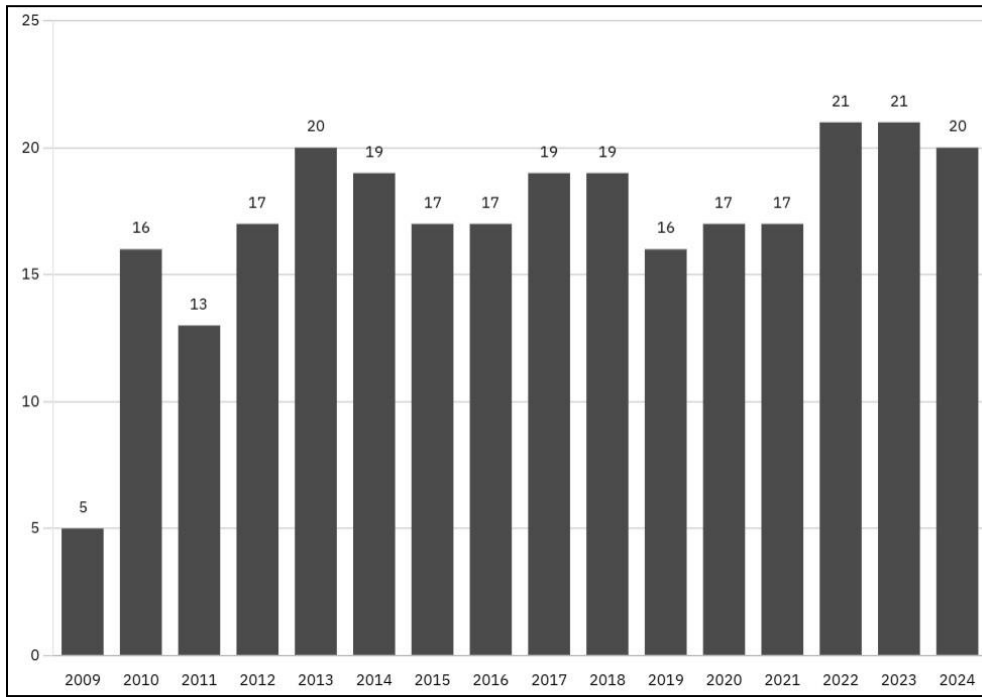


Figure 1. *Distribution of research papers published in ReCALL between 2009 and 2024*

Figure 1 shows that 274 articles (approximately 17 per year on average) were published in one source (i.e., ReCALL) between 2009 and 2024, highlighting the journal’s productivity and growth over the years.

In what follows, the 274 WoS records were exported to the BibTeX format for bibliometric analysis using Biblioshiny – RStudio’s web interface to the Bibliometrix instrument (Aria & Cuccurullo, 2017).

Data analysis

Due to discrepancies encountered between the Web of Science (WoS) analysis tool and the BibTeX file processed in RStudio’s Biblioshiny app, the researcher downloaded the bibliometric data from the WoS database in Excel format. To ensure data integrity during this manual process, a specific protocol was followed: publication titles, author names, affiliations, and publication years were cross-checked against the official records on the ReCALL journal’s website. Any inconsistencies were resolved by referencing the primary source, and duplicate or incomplete entries were rectified or removed. The researcher then conducted

a systematic data-cleaning process, including verifying field consistency, standardizing author and institution names, and harmonizing year formats to ensure accuracy and uniformity. After standardizing the bibliometric data, a keyword analysis was performed using the authors' keywords to reveal emerging or trending topics in the journal's publications (Lu et al., 2021). A full-counting method was used to identify institutional and regional productivity; authors from the same institutions or regions were counted as a single author in multiple-authored publications. In cases of multiple affiliations for the same author, the first institution was taken as the reference. The remaining analyses were conducted using the spreadsheet—a standard practice in previous bibliometric studies where data discrepancies arise from the database or bibliometric tools (e.g., Maisano et al., 2025). The analysis results obtained using the cleaned data were visualized via online data visualization tools. Furthermore, to address collaboration patterns more robustly, the study incorporated co-authorship networks and keyword co-occurrence maps generated with specialized software such as VOSviewer and CiteSpace. These visualisations provide deeper insights into collaborative structures and thematic developments within the journal, thus significantly strengthening the analysis beyond descriptive statistics alone.

Findings and Discussion

The study's findings are presented in accordance with the research questions, given under relevant headings: authorial influence, nature of collaboration, institutional and regional productivity, documentary impact, and thematic evolution.

The analysis reveals that ReCALL has grown 9.68% between the analysed years. A total of 274 articles were written by 513 authors, with 20.8 international co-authorship and 29.74 average citations per document.

Authorial influence

After standardising the authors' published names (e.g., Dooly, Melinda and Dooly, M.), our analysis revealed a total of 503 unique authors who published in ReCALL between 2009 and 2024 with single or multiple contributions. The author names were standardised by using the authorial data on the WoS and Google Scholar. To put it differently, the names were cross-checked on two platforms. Table 1 displays the 11 most productive authors, along with their h-indices, institutional and national backgrounds.

Table 1*Most Prolific Authors*

Author	Article count*	h-index**	Affiliation	Country
Melinda Dooly	5	17	Universitat Autònoma de Barcelona	Spain
Sangmin-Michelle Lee	5	14	Kyung Hee University	South Korea
Anna Dziemianko	4	8	Adam Mickiewicz University	Poland
H. Müge Satar	4	9	Newcastle University	UK
Randall Sadler	4	8	University of Illinois	USA
Ciara R. Wigham	3	8	Université Clermont II	France
Dongping Zheng	3	14	University of Hawaii	USA
Jack Burston	3	9	Cyprus University of Technology	Cyprus
Mark Peterson	3	11	Kyoto University	Japan
Nicolas Guichon	3	12	Université Lumière Lyon 2	France
S. Susan Marandi	3	10	Alzahra University	Iran

* The cut-off point for the most productive authors was determined by the article count (3 and above).

** h-indices were taken from the WoS Core Collection author metrics.

With five publications each, Melinda Dooly and Sangmin-Michelle Lee share the first place as the most productive authors, followed by four papers published by three authors –Anna Dziemianko, H. Müge Satar, and Randall Sadler. Six authors produced three articles between 2009 and 2024. The remaining authors excluded from the list contributed with a double ($n = 51$) or single ($n = 441$) publication in ReCALL. The eleven most prolific authors exhibit institutional and regional diversity, albeit with two French and U.S. contributors leading the list. The authors' publication counts do not match their h-indices (varying between 8 and 17) due to their publications in other venues and the total citations each article receives (Bornmann & Daniel, 2007).

The most productive authors' ReCALL publications encompassed a variety of topics. While Melinda Dooly published on online interaction tasks, ICT use among teacher trainees, flipped online exchange, telecollaboration, and teachers' professional development in virtual exchange, Sangmin-Michelle Lee's papers pertained to machine translation, microteaching, and game-enhanced learning environment. In the third place, Anna Dziemianko published research on online dictionaries. The remaining authors in Table 1 contributed to the journal with articles on MALL, telecollaboration, massively multiplayer online role-playing games (MMORPG), desktop videoconferencing, multiuser virtual environments (MUVE), web conferencing, online collaborations, critical digital literacy, and digital tool usage. The most productive researchers' broad topical interest aligns with the broad thematic development within CALL (Choubsaz et al., 2024; Mohsen et al., 2025).

Nature of collaboration

The collaboration patterns between authors were categorised into four for meaningful interpretation: single authorship (SA, no collaboration), only institutional (OI, authors from the same institution), only national (ON, authors from the same country), and international collaboration (IC). The general

statistics reveal that SA predominates ($n = 103$, 37.59%), followed by OI ($n = 60$, 21.90%), IC ($n = 57$, 20.80%), and ON ($n = 54$, 19.71%). These results coincide with those of Praus (2025), reporting that SA articles prevail in the social sciences and arts and humanities. However, the findings diverge from those of Sankaranarayanan et al. (2023), who found the prevalence of multiple authorship in their study of microlearning in diverse contexts, and Bond et al. (2019), who revisited the bibliometric trends of British Journal of Educational Technology.

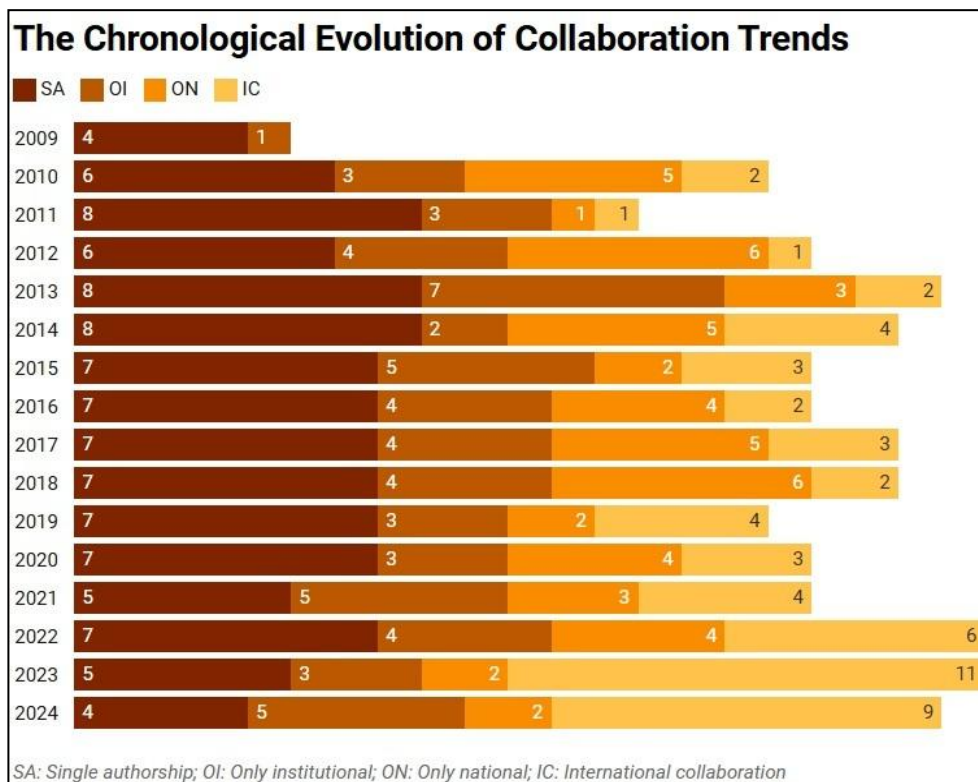


Figure 2. *The nature of collaboration among authors between 2009 and 2024*

When carefully examined, Figure 2 confirms the sustained prevalence of SA publications in ReCALL. On average, the mean article counts of SA papers ($= 6.43$) doubled those of others ($OI = 3.75$, $ON = 3.37$, and $IC = 3.56$) over 16 years. While the SA, OI, and ON publications followed a relatively regular trend over the years, the IC papers displayed an upward trend, especially in the last two years (11 and 9 respectively), suggesting more perspectives into the CALL research from around the world.

Institutional and regional productivity

The relevant publications were also analysed in terms of influential/most relevant affiliations and countries. The analysis yielded 283 unique affiliations, the ten most productive of which are shown in Table 2. When applied, the full-counting method revealed that a total of 416 papers were authored or co-authored by researchers from 283 affiliations. More than half of the institutions ($n = 213$) contributed with a single publication, followed by two papers ($n = 42$). Researchers from ten affiliations published three articles, while eight institutions aided the journal's productivity with four publications.

Table 2*Most Productive Institutions*

Affiliation	Publication count	Citation Count*	h-index**	Location
Adam Mickiewicz University	8	104	6	Poland
National Taiwan Normal University	7	176	6	China
National Central University	6	168	6	China
Universitat Autònoma de Barcelona	6	268	6	Spain
Alzahra University	5	90	5	Iran
Iowa State University	5	273	5	USA
Kyung Hee University	5	121	5	South Korea
The Open University	5	307	4	UK
University of California	5	178	5	USA
University of Illinois	5	308	5	USA

* The citation count indicates the times cited without self-citations (as of October 7, 2025)

**The h-index value is based on a list of publications ranked in descending order by the Times Cited count.

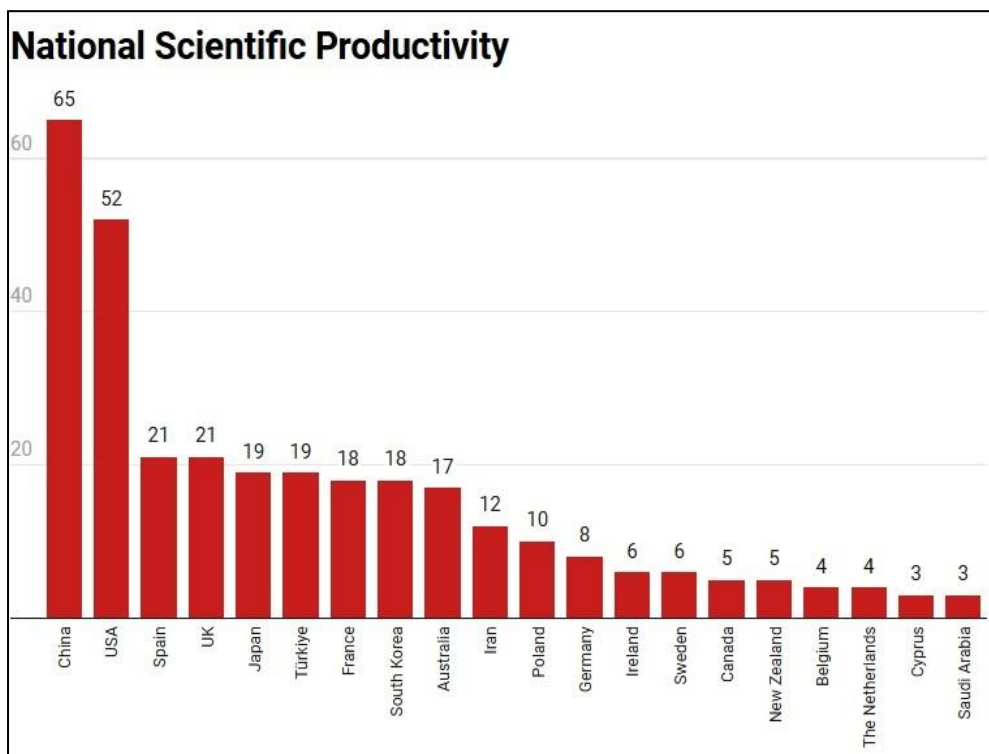
The remaining ten institutions are presented in Table 2, with Adam Mickiewicz University in the leading position ($n = 8$), followed closely by National Taiwan Normal University ($n = 7$). While National Central University and Universitat Autònoma de Barcelona contributed six publications, the other universities published five papers. Despite the geographic diversity, U.S. institutions predominate in institutional productivity, which Chinese universities pursue. In Goksu et al.'s (2022) bibliometric study of the CALL journal, Chinese institutions prevailed, diverging from our finding. Similarly, despite the similarities to Mohsen et al.'s (2025) findings of the most productive affiliations, our study differed from theirs regarding the most prolific institutions by order. This shows the contributions of similar universities across diverse publication venues – journals other than ReCALL.

The institutional influence was analysed through citation count (without self-citations) and h-indices retrieved from the citation analysis tool of the WoS. The results indicate that publication count does not necessarily mean higher citations, as voiced in previous research (Waltman et al., 2013). This also suggests that article topics outbalance article counts. In a collaborative meta-analysis study between the University of Illinois and Iowa State University researchers, for instance, Grgurović et al. (2013) examined 37 studies on computer technology-supported language learning and received 129 citations alone from the WoS. Similarly, the Open University researcher, Comas-Quinn (2011), surveyed blended learning and cited it 130 times on the WoS. These statistics reinforce the claim that the greater significance of research interests lies in appealing to broader audiences than in the number of publications in a specific journal.

The publications were also analysed in terms of the most prolific countries. Figure 3 shows the top 20 most productive countries in ReCALL publications by adopting a full-counting method. In general, a total of 35 unique countries contributed to the journal between the analysed years. While nine countries published a single article, six produced two documents. The remaining twenty is shown in Figure 3. With 65 papers, China leads the list, followed by the USA ($n = 52$), diverging from Mohsen et al.'s (2025) findings even when China, Taiwan, and Hong Kong are combined. It also disagreed with the findings of Akturk

(2022), who found that the UK was the most prolific in the Journal of Computer Assisted Learning publications. However, it concurred with Liu and Zhang's (2021) study, revealing China's predominance. It further agreed with the findings of Goksu et al. (2022), albeit with varying order (Taiwan, China, and the USA). While Spain and the UK share the third rank ($n = 21$ each), Japan and Türkiye are ranked fourth ($n = 19$). Similarly, two countries (France and South Korea) occupy the fifth place with 18 publications each. Australia follows them closely, with a minus paper.

Figure 3. *The number of publications by country*



The publication count of the remaining countries varies between three and 12. Overall, the distribution of the ReCALL publications by country shows national diversity, diverging from Mohsen et al. (2025), particularly with reference to the European countries.

On the other hand, regional statistics revealed the predominance of Europe ($n = 128$), followed by Asia ($n = 109$) and North America ($n = 57$). While Australia and the Middle East generated close publication volume (22 and 20 respectively), South America was represented with a single publication (by Chile), and no African countries were involved in the dataset. The results are congruent with the investments in technology for education (including language education) in Asia and Europe (Giagkou et al., 2023; Sood & Szyf, 2011).

Documentary impact

A total of 274 research articles published in ReCALL were cited 29.82 times on average and 8,171 times (7,806 without self-citations) in total by 5,265 articles (5,108 without self-citations). As Figure 4 illustrates, the overall citations the

whole publications received have followed an upward trend, peaking in 2024 ($n = 1,126$).

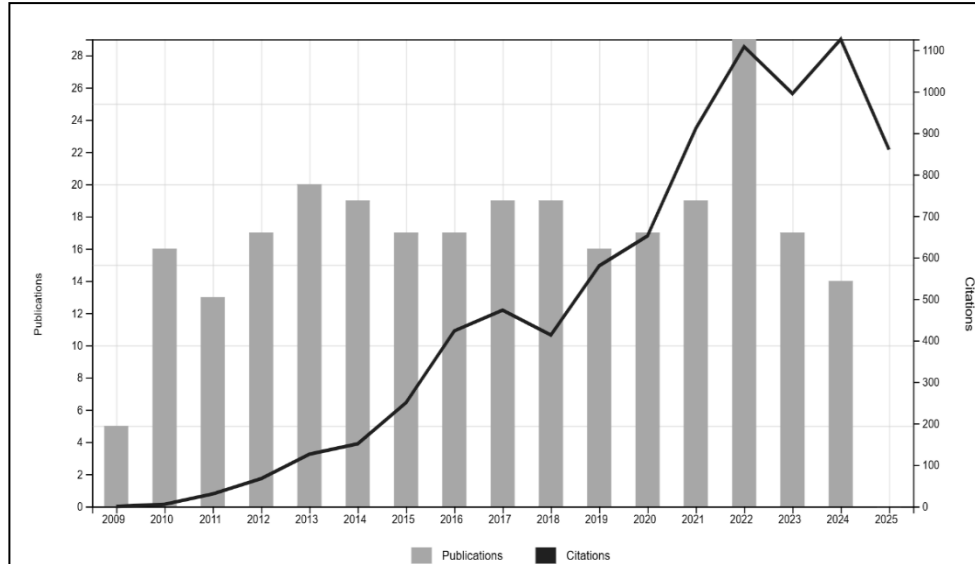


Figure 4. *Times cited and publications over time*

Following the overall publications and citations in Figure 4, Table 3 showcases the ten most influential works and authors in ReCALL between 2009 and 2024 as measured by citation frequency and annual impact. Overall, the ten highly influential papers were published between 2011 and 2019, addressing various topics, including MALL, gaming, extramural English, blended learning, CALL, and videoconferencing. The most influential paper in ReCALL was Burston's (2015) meta-analysis of learning outcomes in the last twenty years of MALL research. He found that MALL provides benefits for listening, reading, and speaking. Sylvén and Sundqvist (2012) as the authors of the second most influential paper, reported promising gains for second language acquisition through frequent exposure to digital games (e.g., MMORPGs). The third most cited paper (Loewen et al., 2019) noted positive, moderate learning gains for semester-long Duolingo use.

Table 3*The Most Cited 10 Articles*

Title	Authors	TC	APY
Twenty years of MALL project implementation: A meta-analysis of learning outcomes	Burston (2015)	219	19,91
Gaming as extramural English L2 learning and L2 proficiency among young learners	Sylvén and Sundqvist (2012)	207	14,79
Mobile-assisted language learning: A Duolingo case study	Loewen et al. (2019)	171	24,43
Research trends in mobile assisted language learning from 2000 to 2012	Duman et al. (2015)	152	13,82
Learning to teach online or learning to become an online teacher: an exploration of teachers' experiences in a blended learning course	Comas-Quinn (2011)	130	8,67
A meta-analysis of effectiveness studies on computer technology-supported language learning	Grgurović et al. (2013)	129	9,92
Affordances for second language learning in World of Warcraft	Rama et al. (2012)	121	8,64
The use of videoconferencing to support multimodal interaction in an online language classroom	Hampel and Stickler (2012)	121	8,64
Language-related computer use: Focus on young L2 English learners in Sweden	Sundqvist and Sylvén (2014)	118	9,83
Affect and willingness to communicate in digital game-based learning	Reinders and Wattana (2015)	116	10,55

TC: Total citations; APY: Average per year

Thematic evolution

ReCALL publishes original research within the broad CALL contexts, but in such specific areas as “Applied Linguistics, Corpus Linguistics, Digital Pedagogy, Digital Literacies, Computer-Mediated Communication, Learning Analytics, Second Language Acquisition, and Educational Science” (<https://www.cambridge.org/core/journals/recall>). We analysed how publications evolved thematically between 2009 and 2024. Using the author’s keywords as the field and setting the following parameters (250 number of words, minimum cluster frequency as 5 words, number of labels as 3 per cluster, and Walktrap as the clustering algorithm, we cut the analysed years into three time slices: 2013, 2017, and 2021).

In the first stage (2009-2013), the research revolved around six themes (Figure 5). This period somewhat characterises the foundational stage, where the focus was on integrating digital tools (multimedia, CMC, games, and MALL) (e.g., Rama et al., 2012; Sylvén & Sundqvist, 2012), training teachers to adapt technology in pedagogy (e.g., Dooly & Sadler, 2013; Hong, 2010; Whyte, 2011), and learner interactions in digital environments (e.g., Cornillie et al., 2012; Peterson, 2012).

The second temporal range (2014-2017) exhibited similarities and differences with the previous period, with a total of eight themes. Research in this period shifted towards examining how technology support language skills development (e.g., Levak & Son, 2017; Oskoz & Elola, 2016; Perez et al., 2014), a movement towards evidence-based CALL (e.g., Frankenberg-Garcia, 2014; Geluso & Yamaguchi, 2014; Tono et al., 2014), and a focus on affective factors (e.g., Hsu, 2015; Kissau & Algozzine, 2015; Reinders & Wattana, 2015).

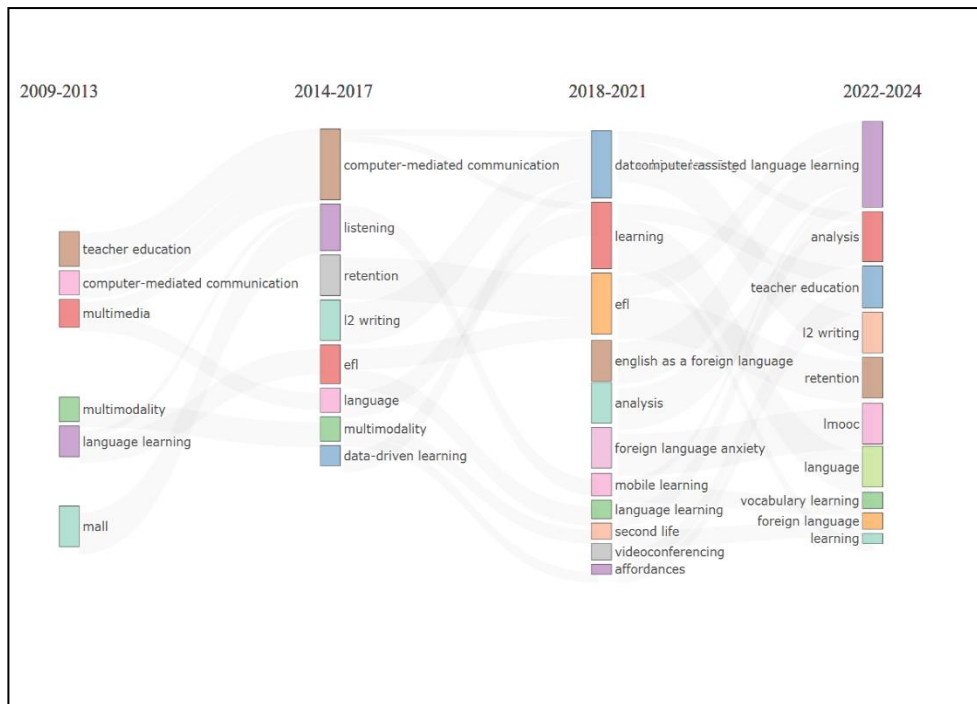


Figure 5. *The thematic evolution of ReCALL publications between 2009 and 2024*

In the third period (2018-2021), researchers delved into the cognitive and affective dimensions and deepened into learner-centred approach (e.g., Bárkányi, 2021; Lai & Zheng, 2018; York et al., 2021). Mobile and blended language learning (e.g., Çakmak & Erçetin, 2018; Loewen et al., 2019) remained as mainstream modes, while data-driven and analytical approaches became central (e.g., Crosthwaite et al., 2019; Dooly & Sadler, 2020; Liang, 2019).

The last period (2022-2024) of CALL research within the ReCALL publications centred around ten key themes. Recent years have highlighted AI- and data-enhanced CALL integration (e.g., Yang et al., 2022) and online learning ecosystems (e.g., Gruber et al., 2023). The renewed concentration on teacher digital literacy (e.g., Bilki et al., 2023; Ma et al., 2023), sustainable online pedagogy (e.g., Canals & Mor, 2023; Ekin & Balaman, 2024; Schmidt, 2023), and skills-specific improvement (e.g., Li & Hafner, 2022; Lo, 2024; Morgana, 2024) suggests adaptable and developed technological implementations.

Overall, the emerging themes in ReCALL publications between 2009 and 2024 reflect the field's maturation and align technological affordances with learning theories, data science, and sustainable pedagogy. The thematic evolution highlights both the progress made and the areas requiring further exploration. For instance, although ethical considerations in AI-based language education have emerged as a concern, they remain underexplored within the dominant themes, indicating a need for prospective research that addresses these ethical gaps in relation to evolving pedagogical and technological frameworks. Similarly, the evolution of assessment practices in the literature has primarily centered on limited skill sets and traditional approaches. This signals the importance of developing multimodal assessment strategies that are better aligned with the

integrated, cross-platform, and data-informed directions identified in recent themes. Additionally, with the identified research interests between the analysed dates, future researchers may conduct longitudinal studies on how CALL systems impact learning, and examine sustainable affective support in long-term virtual or hybrid contexts. In sum, by explicitly linking these gaps to the thematic evolution, future research can more effectively address the field's ongoing challenges and opportunities.

Conclusion

The current study bibliometrically analysed ReCALL's publications between 2009 and 2024. ReCALL is one of the most influential journals (with a JFI of 3.77 in 2023 and 3.81 in 2024), supported by the total citations it received between the analysed dates (8,171 times by 5,65 articles). It should be acknowledged that newer articles (2022–2024) have had less time to accumulate citations compared to older publications, which may influence citation-based analyses. Therefore, analysing its publication trends through a bibliometric analysis will inform journal administration, prospective researchers, and educators about influential authors, institutions, and countries to collaborate with and potential research areas to study in future research.

The authorial, institutional, and national diversity in the analysed publications indicates a great potential for future collaborations among authors, institutions, and countries. This is supported by the relatively low international collaboration (20.80%), compared to SA, OI, and ON collaboration patterns. The emergence of China and the USA as influential countries underscores the significance of national language policies, particularly regarding investments in language technologies. The common themes (e.g., games, MALL, extramural English, blended learning, and pedagogical effectiveness) in the most influential papers published in the journal reveal the adaptability and popularity of research topics across diverse contexts. Correspondingly, the research gaps identified after visualising the thematic evolution of ReCALL publications may guide prospective researchers on potential study areas and journal administrators on diversifying research themes.

Notwithstanding the valuable insights the study offers, it recognises certain limitations. First, it focused on general bibliometric trends (e.g., influential authors, countries, papers, institutions, and research themes). Future research may therefore address specific metrics (e.g., co-citation, co-word, and co-authorship analyses) using bibliometric tools (e.g., CiteSpace and VOSviewer). Second, the current study particularly handled ReCALL as the unit of analysis. Further investigations may be performed on specific research topics (e.g., meta-analysis of experimental studies or a systematic review of research on videoconferencing) by combining other similar journals (e.g., *Language Learning & Technology* and *Computer-Assisted Language Learning*). In conclusion, the study advanced academic scholarship by analysing ReCALL's research trends bibliometrically, illuminating its contributing authors, institutions, countries, influential papers, and emergent themes.

Ethical Approval

The research does not require ethical approval since it does not involve any human or animal subjects. However, the researcher follows the guidelines of the Helsinki Declaration.

Contribution Rate Statement

The only research is responsible for all phases of the manuscript writing.

Conflict of Interest

The researcher declares that there is no conflict of interest.

AI Use Disclaimer Statement

The researcher employed Grammarly for language check and editing. However, the author acknowledges full responsibility for conducting and analysing the study.

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