



University of Zanjan



Please cite this paper as follows:

Rashidi, N., & Khojastehnam, S. S. (2025). A meta-analysis of the Journal of Applied Linguistics and Language Research. *Journal of Interdisciplinary Research in English Language Communication*, 2(1), 18-30. <https://doi.org/10.30470/irelc.2025.2064390.1026>

## Original Research

# A Meta-Analysis of the Journal of Applied Linguistics and Language Research

Naser Rashidi<sup>1</sup> & Sayyed Saeed Khojastehnam<sup>2</sup>

<sup>1</sup>Corresponding author, Department of Linguistics and Foreign Languages, Faculty of Literature and Humanities, Shiraz University, Shiraz, Iran;  
[naser.rashidi@shirazu.ac.ir](mailto:naser.rashidi@shirazu.ac.ir)

<sup>2</sup>Department of Linguistics and Foreign Languages, Faculty of Literature and Humanities, Shiraz University, Shiraz, Iran;  
[saeedkhojastehnam@gmail.com](mailto:saeedkhojastehnam@gmail.com)

Received: 12/07/2025

Accepted: 04/11/2025

## Abstract

Unlocking the trends and transformations in applied linguistics, this study presents an analysis of the research methodologies and theoretical orientations employed in 120 articles (16 issues) published in the esteemed Journal of Applied Linguistics and Language Research over its last four years (2020-2023). By studying a wide range of articles published in the aforementioned journal, this meta-analysis seeks to discover the dominant research methodologies and theoretical orientations, as well as their distribution across various subfields of applied linguistics and language research. Moreover, the contexts (EFL, ESL), instruments, participants, and the number of authors in each study are reviewed, with data presented in detailed tables and discussed. The results revealed the dominance of qualitative methodology (46%) over quantitative and mixed method research, the supremacy of sociocultural theoretical orientation (35%), the dominance of learners as participants (53%) in the studies, the prevalence of EFL context (88.33%) over ESL, and the power of questionnaire (21.67%) as an instrument over other instruments. The results of this meta-analysis provide a systematic mapping of current research trends and methodological approaches in the field, offering a foundation for future studies. By synthesizing existing findings, this study identifies patterns that can guide researchers and practitioners in selecting appropriate research designs and theoretical frameworks.

**Keywords:** Meta-Analysis; Applied Linguistics; JALLR; Methodology; Theoretical Orientations.

## 1. Introduction

Applied linguistics and language research play a vital role in understanding language acquisition, learning, and use across diverse contexts. As the field evolves, ensuring methodological rigor and theoretical coherence becomes imperative. To systematically assess trends and gaps in current research, this study employs a meta-analysis of recent publications in the Journal of Applied Linguistics and Language Research (JALLR), a leading double-blind, peer-reviewed publication known for its contributions to language education and applied linguistics. JALLR serves as a key platform for academic exchange, publishing quarterly on topics ranging from second language pedagogy and teacher training to assessment, intercultural communication, and applied linguistic theory. By analyzing JALLR's output over the past four years, this meta-analysis maps dominant themes, methodological approaches, and theoretical frameworks, offering a consolidated perspective on the state of research in the field. The journal aims to bridge the gap between theory and practice by highlighting the importance of research that has tangible implications for language teaching and learning. In evaluating its publications over the past four years, we found that JALLR's scope covers a wide range of topics in applied linguistics and language research. Among these themes, but not limited to them, are the following focal points: the teaching of English as a second or foreign language, the education, and training of English language instructors, various language teaching methodologies, the exploration of pedagogical techniques, concerns regarding assessment, classroom research endeavors, intercultural studies, translation practices, testing and assessment methods, applied linguistics, and the development of both teaching and learning skills and strategies.

With so many studies exploring different facets of language learning and teaching, making sense of it all can be challenging. That's where meta-analysis comes in by pulling together data from multiple studies, it helps researchers spot patterns, weigh evidence, and arrive at clearer, more reliable conclusions.

Meta-analysis is a systematic research method used to synthesize findings from multiple studies on the same topic. By combining numerical data, it calculates a weighted average effect size, providing a more robust understanding of trends and relationships across studies (Ary et al., 2017). Other researchers further describe meta-analysis as a way to integrate data from diverse sources, offering a comprehensive overview of existing research (Higgins & Green, 2011). This approach is particularly valuable for addressing controversial or complex topics, as it helps determine whether consistent conclusions can be drawn about a specific treatment, exposure, or intervention (Russo, 2007).

Meta-analyses belong to a broader category of research reviews, which Cooper (1984, as cited in Zhao, 1991) classifies into three types:

1. **Theoretical reviews:** These examine the scope, coherence, and predictive power of existing theories.
2. **Methodological reviews:** These evaluate the research designs, methods, and operational definitions used in a field.
3. **Integrative research reviews:** These synthesize findings from studies testing similar hypotheses to identify overarching conclusions (Zhao, 1991).

The current study aligns with the second type, focusing on methodological analysis.

Several studies have emphasized the importance of critically examining research methodologies in applied linguistics and language research. For instance, Smith and Johnson (2018) conducted a review of methodological practices in second language acquisition (SLA) studies, arguing that inconsistent research designs and insufficient reporting of methodological details can undermine the credibility of findings. Their work calls for greater transparency and rigor in data collection and analysis to enhance the validity and reliability of empirical research. Similarly, Brown and Williams (2019) investigated trends in language learning research through meta-analytic techniques, demonstrating how systematic reviews can uncover methodological inconsistencies and biases across studies. Their findings underscore the value of meta-analysis in refining research practices and guiding future investigations. Meta-analysis, in particular, has become a cornerstone of evidence-based research, allowing scholars to synthesize findings from multiple studies and identify overarching patterns. As Kepes et al. (2013) note, this method is instrumental in mitigating publication bias and providing a more objective assessment of cumulative knowledge within a field. In applied linguistics, meta-analyses have been pivotal in consolidating insights on language acquisition, teaching methodologies, and assessment practices, thereby shaping theoretical and empirical advancements.

This study builds on the rigorously validated frameworks established in prior research (Riazi et al., 2018; Riazi et al., 2020), extending their methodological and theoretical foundations through a comprehensive analysis. To deepen our investigation, we not only evaluated these frameworks but also conducted a systematic survey examining article distribution across key parameters including authorship patterns, participant demographics, and research instruments. This multidimensional approach yields nuanced insights into prevailing trends and gaps in the literature, thereby informing future research directions and methodological best practices. The findings hold significant implications for reviewers, researchers, practitioners, and educators, offering actionable guidance to refine theoretical orientations, research designs, and contextual applications. By synthesizing these dimensions, our meta-study contributes a robust foundation for advancing rigor and relevance in the field.

## 2. Literature Review

In recent years, the application of meta-analysis in research has gained significant popularity. This approach has become quite popular because it allows researchers to combine information from different sources and draw more rigorous conclusions. In the field of social sciences, meta-analyses are commonly used to assess the research methods and theoretical perspectives presented in various articles. In this literature review, which is put chronologically, we will explore some important studies that have used meta-analysis to investigate these aspects of research methodology, theoretical orientations, and other contents of the research studies.

Glass et al. (1981) conducted a seminal meta-analysis in social research, which remains a foundational work in the field. Qin et al. (1995, as cited in Ary et al., 2017) meta-analysis represents a fundamental investigation into the comparative efficacy of cooperative versus competitive learning environments on problem-solving performance. Their synthesis of 63 independent studies revealed a robust trend: cooperative conditions led to superior problem-solving outcomes in 55 cases (87.3% of studies), whereas competitive conditions outperformed in only 8 instances (12.7%). This disparity underscores the broader pedagogical consensus that collaborative learning enhances critical thinking and collective intelligence (Johnson et al., 2014).

Norris and Ortega (2000) presented a meta-analysis of studies investigating the effectiveness of second language (L2) instruction. They examined a wide range of instructional approaches, including grammar-focused, communicative, and content-based instruction. They analyzed the impact of these approaches on various language learning outcomes, such as vocabulary acquisition, grammatical accuracy, and oral proficiency. The meta-analysis revealed that L2 instruction has a significant, positive effect on learning outcomes ( $d = 0.96$ , a large effect size), demonstrating that instructed learners outperformed uninstructed counterparts. Explicit instruction (e.g., rule explanation) showed stronger effects than implicit approaches (e.g., communicative exposure), though both were beneficial. Shorter-term interventions yielded larger effects, suggesting immediate gains from focused instruction, while longer-term studies indicated sustained but smaller benefits. Notably, this meta study highlighted methodological gaps in primary research, such as overreliance on outcome measures targeting explicit knowledge (e.g., grammaticality judgments) rather than spontaneous use. The study also provided a synthesis of the existing research and offered insights into the most effective instructional practices and highlighted the importance of considering contextual factors, such as learner characteristics and instructional settings when evaluating the effectiveness of L2 instruction.

In a systematic review of 606 primary studies, Plonsky (2013) provides a critical assessment of study quality in second language acquisition (SLA) research. The review highlights widespread methodological weaknesses, particularly in research design, statistical analyses, and reporting transparency. The study reveals that only 12% of studies utilized power analyses, while 64% relied on small sample sizes ( $N < 30$ ), raising concerns about the validity of findings in the field. Additionally, Plonsky notes inconsistent reporting of effect sizes (absent in 85% of studies) and overreliance on  $*p$ -values, which obscures the practical significance of results. These findings underscore the need for stricter methodological standards in applied linguistics research, a lens through which the present meta-analysis evaluates the rigor of (JALLR) publications.

A meta-analysis by Cabero-Almenara et al. (2016), examined 108 articles from Spanish journals in the Social Sciences between 2011 and 2015. The study identified that research predominantly focused on academic performance, learning and cognitive styles, and interaction and communication, while topics such as assessment, institutional aspects, and accessibility received significantly less attention. The authors also noted a strong preference for quantitative methodologies and a concentration on higher education contexts. They concluded that despite consistent publication activity, certain critical areas within e-learning remain underexplored, highlighting a need for more balanced and comprehensive future research.

Riazi et al. (2018) analyzed 272 empirical articles from the Journal of Second Language Writing (JSLW) published over a 25-year period, examining research contexts, participants, foci, theoretical frameworks, methodologies, and data sources. In their meta-analysis of empirical studies published in the Journal of Second Language Writing (JSLW) from 1992 to 2016 they developed a systematic framework to examine research trends, categorizing studies by research design (qualitative, quantitative, mixed-methods), contexts and participants (ESL/EFL settings, learner/instructor demographics), research topics (writing processes, feedback, genre analysis, motivation/identity), theoretical frameworks (sociocultural, cognitive, SFL), and reporting practices (transparency, ethics). Their analysis of the articles revealed shifts in methodologies (e.g., increasing mixed-methods use) and emerging themes (e.g., technology in L2 writing), providing a comprehensive overview of the field's evolution over 25 years.

Chen and Wang (2019) in their meta-analysis of studies worked on the effectiveness of computer-assisted language learning (CALL) in language education. The authors examined the impact of CALL on various language skills and explored the factors influencing its effectiveness. The meta-analysis findings indicate that computer-assisted language learning has a positive effect on language learning outcomes, including vocabulary acquisition, reading comprehension,

and writing skills. The effectiveness of CALL is influenced by factors such as learner characteristics, instructional design, and the integration of CALL into the curriculum.

In a meta-analysis of 416 empirical articles published in the *Journal of English for Academic Purposes (JEAP)* from 2002-2019, the researchers covered four main themes: contexts and participants, research foci and theoretical orientations, research methodology and data sources, and pedagogical implications. The typical article in JEAP was found to be written by a single author, addressing instructional issues based on genre theory for undergraduates in universities, using mixed methods. Too, they presented and discussed the findings and findings across the two periods about the four broad themes and their categories. Based on the findings, the authors made suggestions for future research in JEAP (Riazi et al., 2020).

In their respective meta-analyses, both Yang et al. (2020) and Riazi et al. (2020) emphasize the importance of broad research methodologies in understanding academic performance and instructional issues. While Yang et al. focused on identifying factors influencing university students' Grade Point Average (GPA), highlighting the practical implications for interventions aimed at enhancing student outcomes, Riazi et al. systematically explored themes within the *Journal of English for Academic Purposes (JEAP)*. They uncovered critical insights into the nature of research focusing on genre theory and instructional approaches for undergraduates, revealing that articles typically adopt mixed methods and are authored by a single individual. These studies underscore the value of meta-analysis as a powerful tool in educational research, where both studies advocate for future research directions to address existing gaps whether in improving academic performance or enhancing instructional practices in English for academic contexts.

In a meta-study on the methodology, Torabi and Fathi (2021) examined the research methodologies used in articles published in the "Social Capital Management" journal. The study analyzed 177 articles from 2014 to 2020, considering various parameters such as distribution within volumes, data collection instruments, research methodologies, and academic affiliations of corresponding authors. The findings showed that university professors and students with public management backgrounds had high publication rates. Topics such as social capital, religion, and Islamic teachings were common. Descriptive-analytical approaches with a quantitative orientation and structural equation modeling as the main research method were prevalent and questionnaires were frequently used for data collection.

A critical gap in understanding methodological reporting is addressed by Arsyad (2024), who moves beyond macro-structural analysis to examine how authors justify their research methods in high-impact English language education journals. Analyzing 60 articles, the study found that while a qualitative design was the most prevalent approach, with quantitative and mixed-methods employed equally, the majority of authors failed to provide any explicit justification for their chosen methodology. When a rationale was offered, it was typically accomplished merely by citing an authoritative methodology text rather than through a substantive argument. This finding is significant as it suggests that, despite the methods section's crucial role in establishing a study's validity, persuasive argumentation for methodological choice is not a conventional feature of the genre in this discipline.

The reviewed studies demonstrate the value of meta-analyses in synthesizing methodological and theoretical trends across applied linguistics research. By systematically examining 120 articles from 2020–2023, this study will extend prior findings such as Riazi et al.'s (2020) focus on JEAP to map JALLR's research landscape, including dominant methodologies (qualitative, quantitative, mixed), theoretical orientations, and participant demographics. The results will offer actionable insights for researchers to refine methodological rigor, align theoretical frameworks with research aims, and address underrepresented contexts or populations. Ultimately, this meta-analysis bridges a critical gap in applied linguistics by providing a comprehensive overview of JALLR's scholarly trends, thereby guiding future research design and journal-specific editorial priorities.

### Research Questions

1. What are the predominant research methodologies employed in JALLR between 2020 and 2023?
2. How do the theoretical orientations in published studies reflect trends in the field of applied linguistics?

### 3. Method

#### 3.1. Design

This meta-analysis systematically examines dominant research methodologies (qualitative/quantitative/mixed methods), theoretical orientations (Riazi et al., 2018) (e.g., sociocultural, cognitive), participant demographics (age, proficiency levels), and research contexts (ESL/EFL) in JALLR publications. By categorizing these dimensions, we identify prevailing trends, assess methodological rigor (e.g., sample sizes, reporting transparency), and reveal potential gaps in theoretical diversity or demographic representation. The synthesis not only maps the current research landscape but also evaluates how methodological choices align with theoretical frameworks and contextual factors, ultimately offering evidence-based recommendations to strengthen future studies in applied linguistics.

#### 3.2. Data Collection and Analytical Framework

This research is practical in purpose. Because it seeks to review, analyze, and critique the content of the target journal, it is, in essence, a meta-study, and the data collection tool is a review of available documents from 120 articles across 16 issues in JALLR over the last four years (2020–2023). The process used is an innovative hybrid one. The most important factors of the process and the methodology considered in this paper are the contributions of the framework to previous research (Riazi et al., 2018; Riazi et al., 2020), whose validity has been tested in prior studies. To be more inclusive, in addition to the methodologies and theoretical backgrounds, we surveyed the frequency of articles according to the number of authors, the participants, and the instruments used.

The data for this meta-analysis were drawn from the JALLR, focusing on articles published between 2020 and 2023. To ensure relevance, articles were selected based on the following criteria:

1. Publication in JALLR within the specified timeframe;
2. Focus on research methodologies or theoretical frameworks in applied linguistics and language research;
3. Sufficient detail regarding methods, theoretical orientations, and contextual factors (e.g., participants, instruments).

Book reviews were excluded from the analysis. From the 16 issues examined, 123 articles were initially identified, with 3 excluded as book reviews, yielding a final corpus of 120 articles.

#### 3.3. Procedure

To systematically analyze the research methodologies and theoretical orientations used in articles published in the JALLR from 2020 to 2023, we followed a process that comprised seven distinct stages to examine the trends and patterns in the selected articles. First, we established the groundwork by providing the necessary background and preparations for the study, including the total number of articles analyzed. Second, we examined the frequency of articles based on the number of authors, tracking how many articles were written by single authors, pairs, or larger groups each year from 2020 to 2023. Third, we analyzed the frequency of articles based on the participants involved in each study. Some studies focused on learners, others on teachers, and some included both teachers and learners as participants. Fourth, we investigated the frequency of articles based on the study context whether they were conducted in EFL (English as a Foreign Language), ESL (English as a Second Language), or both settings. Fifth, we assessed the frequency of articles based on their research methodologies (quantitative, qualitative, or mixed methods) across the years 2020 to 2023. Quantitative research relies on numerical data to identify patterns and relationships through statistical analysis (Creswell, 2014). Qualitative research, in contrast, explores complex phenomena through non-numerical data like interviews and observations, emphasizing subjective interpretations and lived experiences (Meihami, 2020). Mixed methods research combines both approaches, offering a more comprehensive understanding by integrating numerical and non-numerical data (Creswell & Plano Clark, 2017). Sixth, we analyzed the frequency of articles based on their theoretical orientations. In English language teaching theoretical orientation refers to the guiding principles that shape instructional practices, whether they focus on cognitive or meta-cognitive processes, sociocultural influences, communicative competence, or other aspects (Richards & Rodgers, 2014). Finally, we examined the frequency of studies based on the research

instruments used, such as questionnaires, surveys, interviews, observations, or tests. These tools are essential for collecting reliable and valid data, directly influencing the quality of research findings (DeVellis, 2016).

This multi-step approach allowed us to gather and analyze relevant data, assessing various aspects of each article, including author collaboration, participant demographics, research contexts, methodological approaches, theoretical frameworks, and data collection instruments

#### 4. Results

By conducting a meta-analysis, we gain a deeper understanding of the trends and patterns within this journal, offering valuable insights into the broader research landscape (Alessandro et al., 2009). One key takeaway from our analysis is the variety of research methodologies featured in the Journal. The journal showcases a wide range of approaches, quantitative, qualitative, and mixed methods, applied across different EFL and ESL settings. This diversity reflects the journal's commitment to embracing multiple research perspectives and tackling a wide range of questions in various contexts.

Additionally, our meta-analysis uncovers the prevalence of specific theoretical orientations within the journal. Researchers affiliated with the JALLR come from a variety of theoretical frameworks, such as metacognitive, cognitive, sociocultural, genre-based, contrastive analysis, critical thinking, and constructivist perspectives. This diversity of theoretical orientations contributes to the depth and multidimensionality of the research published in the journal. However, it should be noted that the studies in the journal seldom focused on the current technological era in which we reside. The meta-analysis also highlights the rarity of novel research methodologies and theoretical perspectives. As the field of applied linguistics progresses, researchers seem to be continually exploring traditional subject matters and approaches to tackle intricate linguistic phenomena (Selvaraj, 2024). This trend is, unfortunately, evident in JALLR. Below, we present the data collected from the target journal in detailed tables accompanied by descriptive narratives, whereby percentages are used to enhance readability and comprehension.

Table 1 presents the total number of articles evaluated in JALLR from 2020 to 2023, categorized by year. The data shows that there were 41 articles published in 2020, 34 in 2021, 22 in 2022, and 23 in 2023, totaling 120 articles. This summary illustrates yearly trends, providing valuable insights into publication patterns over the years.

Table 1. *Total Articles Evaluated*

Period	Issues	Number of Articles
2020	All	41
2021	All	34
2022	All	22
2023	All	23
Total		120

Figure 1 illustrates the publishing workflow alongside the annual distribution of articles published in the journal from 2020 to 2023. The bar chart clearly visualizes the data presented in Table 1, showing a noticeable trend in publication volume over the four-year period.

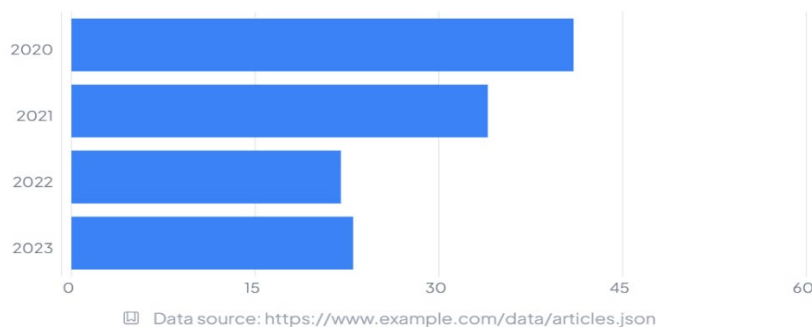


Figure 1. Publishing Work flow

Table 2 displays the distribution of articles by authorship count from 2020 to 2023. The data reveals a predominance of single-authored (60 articles, 50%) and dual-authored works (48 articles, 40%), with fewer articles by three (6.67%), four (2.5%), or more authors (0.83%). Annual trends show a gradual decline in multi-authored publications, though exceptions occur, such as a slight rebound in dual-authored articles in 2023.

Table 2. *Frequency of Articles Based on the Number of Authors*

Period	One author	Two authors	Three authors	Four authors	More authors
2020	19	18	3	1	0
2021	17	14	2	1	0
2022	12	7	2	1	0
2023	12	9	1	0	1
Total	60	48	8	3	1

Table 3 shows the number of articles based on the participants involved in each period. As mentioned in the above table, in 2020, there were 20 articles focused on learners, 5 on teachers, 1 involving both teachers and learners, and 15 on other participants. In 2021, there were 17 articles focusing on learners, 3 on teachers, 4 involving both teachers and learners, and 10 about other participants. In 2022, there were 15 articles addressing learners, none focusing on teachers or both groups together, and 7 talking about another participant. In 2023, there were 12 articles focused on learners, 2 articles used teachers as participants, one article involved both teachers and learners, and 8 articles discussed another participant. Totally, 64 studies (53.33%) exploit learners as participants, 10 studies (8.33%) employed teachers, 6 studies (5%) employed both learners and teachers together and 40 studies (33.33%) used participants other than learners and teachers.

The minimal number of studies integrating both teachers and learners (5%) highlights a missed opportunity for dyadic analysis that could provide a more holistic and ecologically valid understanding of the educational environment.

Table 3. *Frequency of Articles Based on the Participants*

Period	Learners	Teachers	Teachers and Learners	Other
2020	20	5	1	15
2021	17	3	4	10
2022	15	0	0	7
2023	12	2	1	8
Total	64	10	6	40

Table 4 presents the distribution of articles by linguistic context (EFL, ESL, or both) from 2020 to 2023. EFL studies dominated (106 articles, 88.33%), followed by ESL (6 articles, 5%) and combined contexts (8 articles, 6.67%). While EFL publications showed a steady decline from 36 articles in 2020 to 17 in 2023, combined EFL/ESL research increased in 2023 (5 articles compared to 1-2 in previous years). ESL studies remained consistently minimal throughout the period.

The overwhelming dominance of EFL contexts (88.33%) depicted here exposes a considerable disconnect between research focus and global linguistic reality. The persistent neglect of ESL contexts (a mere 5%) represents a major blind spot, limiting the applicability of research findings to the complex, real-world challenges faced by immigrant populations and learners in English-speaking countries. Therefore, pedagogical theories and practices derived from EFL context may lack the nuances that is necessary for effective teaching in linguistically diverse environments.

Table 4. *Frequency of Articles Based on the Categories of Context*

Context	2020	2021	2022	2023	Total
EFL	36	34	19	17	106
ESL	4	0	1	1	6
Both	1	0	2	5	8

Table 5 provides information on the frequency of articles based on different research methodologies across the years 2020, 2021, 2022, and 2023 in the targeted journal. The table includes three categories of methodologies: qualitative, quantitative, and mixed methods. For the year 2020, 21 articles applied qualitative methodology, 13 articles that utilized quantitative methodology, and 6 articles that utilized mixed methods. In 2021, the frequency of articles based on methodology was 16 for qualitative, 12 for quantitative and 5 for mixed methods. Moving on to 2022, 7 articles used

qualitative methodology, 8 articles that used quantitative methodology, and 6 articles that used mixed methods. Finally, for the year 2023, 12 articles utilized qualitative methodology, 9 articles utilized quantitative methodology, and 2 articles utilized mixed methods. In total, across the four years of publishing in JALLR, 56 articles (46.67%) used qualitative methodology, 42 articles (35%) used quantitative methodology, and 19 (15.83%) articles used mixed methods.

The field may be missing opportunities for methodological triangulation, where merging qualitative and quantitative data (mixed-method) could significantly strengthen validity and provide more robust explanations. The notable incline into qualitative publications in 2022 against stable numbers in other categories suggests interesting volatility that could reflect evolving research trends or submission patterns, highlighting a need for greater methodological diversity and balance in future studies.

Table 5. *Frequency of Articles Based on the Methodology*

Methodology	2020	2021	2022	2023	Total
Qualitative	21	16	7	12	56
Quantitative	13	12	8	9	42
Mixed method	6	5	6	2	19

Table 6 shows that in 2020 sociocultural theories led the way with 11 articles, followed closely by cognitive theories (10). Genre-based and critical approaches each had 6 articles, while metacognitive and constructivist theories had 3 apiece. Contrastive analysis was the least common, with just 2 articles. In 2021 Sociocultural theories surged to 15 articles, while cognitive theories dipped slightly to 7. Critical approaches held steady at 6, but metacognitive theories disappeared entirely (no articles). Constructivist and contrastive analysis studies were rare, with only 1 article each. In 2022 a shift occurred; cognitive theories bounced back to 12 articles, but sociocultural research dropped to just 5. Critical theories were entirely absent this year, while metacognitive, genre-based, and contrastive analysis each had a single article. In 2023 sociocultural theories regained momentum (10 articles), though cognitive studies decreased to 4. Constructivist research saw a slight uptick (5 articles), while genre-based studies vanished (no article). Critical theories made a modest return (3 articles). Over the four years, sociocultural perspectives dominated, making up 35% (41 articles) of the total. Cognitive theories came second at 27.5% (33 articles), while critical approaches accounted for 12.5% (15 articles). Constructivist views (8.33%, 10 articles), genre-based studies (6.67%, 8 articles), and metacognitive and contrastive analysis research (4.17% each, 5 articles) were less common.

The relative scarcity of critical, constructivist, and genre-based approaches points to a significant gap in areas addressing power structures, individual meaning-making, and disciplinary writing, respectively, representing key opportunities for future scholarly inquiry (Rahman et al., 2024).

Table 6. *Frequency of Articles Based on the Theoretical Orientations*

Theoretical Orientation	2020	2021	2022	2023	Total
Metacognitive	3	0	1	1	5
Cognitive	10	7	12	4	33
Sociocultural	11	15	5	10	41
Genre-based	6	3	1	0	8
CA	2	1	1	1	5
Critical	6	6	0	3	15
Constructivist	3	1	1	5	10

Table 7 shows how often different research tools were used in studies from 2020 to 2023. The tools include questionnaires, pre- and post-tests, observations, and interviews. Questionnaires were the most common, likely because they're easy to use. In 2020, 6 studies used questionnaires, while 10 relied on pre- and post-tests. Neither observations nor interviews were used that year. Moving to 2021, questionnaire usage rose to 13 studies, while pre- and post-tests dropped to 3. Again, no studies used observations or interviews. By 2022, questionnaire use fell to 4 studies, and pre- and post-tests increased slightly to 1. Still, no studies included observations or interviews. In 2023, 3 studies used questionnaires, 2 used pre- and post-tests, and for the first time 1 study used observation and another used interviews. Looking at all four years combined, questionnaires were the most popular tool, appearing in 26 studies (21.67%). Pre- and post-tests were used in 16 studies (13.33%), while observations and interviews each appeared in just 1 study (0.83%).

This reveals an obvious methodological imbalance in the literature from 2020-2023, heavily favoring quantitative instruments like questionnaires (26 studies) for their ease of use. This reliance potentially compromises the depth of findings, as richer qualitative data from observations and interviews were practically absent until 2023. The temporal shift from a majority of pre/post-tests in 2020 to a dominance of questionnaires in 2021 likely reflects adaptive research strategies during the pandemic. The recent inclusion of qualitative tools is a positive step toward filling a significant evidence gap and strengthening methodological rigor.

Table 7. *Frequency of Studies Based on the Instruments Used*

Tools	2020	2021	2022	2023	Total
Questionnaire	6	13	4	3	26
Pre and post-test	10	3	1	2	16
Observation	0	0	0	1	1
Interview	0	0	0	1	1
Questionnaire and pre-post test	2	3	6	3	14
Questionnaire and observation	3	0	1	0	4
Questionnaire and interview	1	0	0	2	3
Pre-posttest and interview	0	1	1	0	2

Table 8 summarizes how frequently different research instruments were combined in a sample of 120 studies. It shows that by far the most common combination was Questionnaires with Pre-/Post-tests, used in 14 studies (11.67%). All other combinations, such as questionnaires with observations or interviews, were used significantly less often. This indicates a strong preference for a specific type of mixed-methods design within the research sample.

Table 8. *Frequency and Percentage of Studies Using Combined Research Instruments*

Combination of Instruments	Number of Studies	Percentage
Questionnaires + Pre-/Post-tests	14	11.67%
Questionnaires + Observations	4	3.33%
Questionnaires + Interviews	3	2.50%
Pre-/Post-tests + Interviews	2	1.67%

Note. Percentages are calculated based on the total sample of 120 studies.

## 5. Discussion

This study presents a manually conducted meta-analysis that elucidates prominent trends in research methodologies and theoretical orientations within applied linguistics. The findings indicate a marked predominance of qualitative methodologies (46%) and a prevailing sociocultural theoretical framework (35%). These outcomes not only align with existing scholarly discourse but also offer a novel perspective, thereby advancing the current understanding of methodological and theoretical trends in the field.

The present meta-analysis builds upon the foundational work of Glass et al. (1981), whose seminal research in social science meta-analysis established critical methodologies for synthesizing empirical studies. Our approach mirrors their systematic techniques, employing rigorous analytical procedures to identify and assess trends across applied linguistics research. By examining diverse methodological frameworks, this study contributes to ongoing scholarly conversations, reinforcing the enduring relevance of Glass et al.'s (1981) methodology in identifying research patterns and shaping future academic inquiry.

While earlier meta-analyses, such as those conducted by Cabero-Almenara et al. (2016), Riazi et al. (2018), Arsyad (2024) have explored various aspects of social sciences and applied linguistics research, they often concentrated on isolated methodologies or specific contexts. For instance, Riazi et al. (2016) primarily examined empirical studies in the *Journal of Second Language Writing*, revealing a focus on feedback and writing instruction among U.S. undergraduate students. In contrast, our study encompasses a broader spectrum of methodologies and contexts within JALLR, including both EFL and ESL settings, thus offering a broader overview of trends across subfields. Similarly, our findings complement the meta-analysis by Riazi et al. (2020), which analyzed 416 articles in the *Journal of English for Academic Purposes (JEAP)* and identified four key themes. They revealed significant insights into four main themes: contexts and participants, research foci and theoretical orientations, research methodology and data sources, and pedagogical

implications. In comparison, our study encompasses seven themes across various contexts in (JALLR), providing a broader analysis and deeper insight into trends in the field. This expanded thematic range allows us to capture a wider variety of research questions and methodological approaches, thus enriching our understanding of trends in the field.

Furthermore, our findings are in line with the conclusions drawn by Norris and Ortega (2000) who emphasized instructional approaches in second language acquisition. Our analysis identifies not only the methodological preferences but also the instruments used in these studies, here questionnaires (21.67%). This multifaceted approach allows us to discern patterns that may have been overlooked in previous research, providing deeper insights into how methodological choices influence research outcomes. The differences in methodological preferences underscore the diversity of approaches within applied linguistics research. Even though Torabi and Fathi (2021) emphasize quantitative methods and specific topics such as social capital and Islamic teachings, our study advocates for a broader representation of methodologies and contexts, including both EFL and ESL settings. This divergence suggests that while quantitative approaches can yield valuable insights, there is a critical need for qualitative research to explore the dynamics of language learning and teaching.

The methodological and contextual limitations of existing research underscore the need for more diverse and rigorous approaches in future studies. The dominance of qualitative methodologies suggests a potential bias towards exploratory research, which may limit generalizability. Future studies could benefit from incorporating mixed-methods approaches to enhance robustness and address diverse research questions more effectively (Afshar & Ranjbar, 2021). Moreover, the prevalence of EFL contexts (88.33%) over ESL indicates a need for more balanced representation in future research endeavors. Expanding the focus to include ESL contexts could yield valuable insights into different pedagogical challenges and learner experiences, thus enriching the field's knowledge base.

The goal of this meta-analysis is to encourage researchers and JALLR's editorial board and similar journals to rethink the scope of published work in applied linguistics. The field of applied linguistics is evolving fast, shaped by technology, globalization, and cross-disciplinary collaboration (Godwin-Jones, 2022), but the studied journal seems to lag behind in embracing these changes. We have marked key areas for innovation, supported by recent research. First, while sociocultural and cognitive theories dominate JALLR, other frameworks could bring fresh perspectives. Ecological and dynamic systems theory, for instance, sees language learning as a complex, adaptive process (Larsen-Freeman, 2008). Critical digital pedagogy also deserves attention. It examines how technology affects power and equity in education (Hafner & Ho, 2020), especially with artificial intelligence and online learning on the rise. Methodologically, relying too much on surveys and pre/post-tests limits depth. Tools like eye-tracking and multimodal analysis could reveal how learners process language in real time (Sydorenko et al., 2024), while big data and NLP could uncover large-scale patterns in language use (Biber & Egbert, 2018). Second, emerging topics are being overlooked. Research should explore AI's role in language learning (Aryal, 2024), how identity shapes learning experiences (Norton & Toohey, 2011), the link between language and sustainability (Stibbe, 2021), and even neuroscience insights into bilingual brains (Van Hell, 2023). Third, studies are too focused on EFL contexts, missing opportunities in ESL and beyond. Work on Indigenous language revitalization (McIvor, 2020), migrant education, and Global Englishes would add much-needed diversity. For JALLR's editorial board, we suggest promoting special issues on cutting-edge themes, welcoming diverse methods (like VR or corpus linguistics), collaborating across disciplines (Ortega, 2019), and supporting early-career researchers exploring new ideas.

## 6. Conclusion

This meta-analysis examined 120 studies from the JALLR to map current trends in the field. Findings revealed a preference for qualitative methods (54 studies) over quantitative (42) and mixed-method approaches (19), with sociocultural (41) and cognitive (33) frameworks dominating. Common research tools included questionnaires (26) and pre-/post-tests (16), primarily in EFL contexts involving learners. Notably, single-authored papers outnumbered collaborative works, and key themes spanned language learning strategies, bilingualism, pragmatics, and assessment.

Our analysis of the journal revealed an emphasis on cognitive and individualistic factors, while topics like cultural communicative competence, eco-social perspectives, AI-driven pedagogy, and learner agency (Block, 2021) which are recent issues in applied linguistics remained significantly underrepresented. This pattern identifies clear gaps calling for future consideration. Additionally, we observed that the dominant reliance on purely quantitative or qualitative

methods often failed to capture the complex, multi-faceted nature of language learning. Therefore, to address this lack of diversity and depth, we recommend journals prioritize mixed-method designs, which blend qualitative depth with quantitative rigor (Creswell, 1999). Innovative data collection like NLP for large-scale text analysis (Prakash et al., 2011) or crowdsourcing (Abouneqm et al., 2023) should be leveraged while upholding ethical standards (Guatam & Guatam, 2023). Such advancements would not only address current methodological biases but also broaden the scope of inquiry to better capture the complexities of language learning across diverse contexts.

### Conflict of Interest

The authors have no conflicts of interest to declare.

### References

- Abouneqm, A., Askarbekuly, N., Magomedov, M., & Mazzara, M. (2023). Crowdsourcing for second language learning. In T. Ahram (Ed.), *Human factors in software and systems engineering: AHFE (2023) International Conference*. <http://doi.org/10.54941/ahfe1003773>
- Afshar, H. S., & Ranjbar, N. (2023). Mixed methods research in applied linguistics: The status quo of the current issues and practices. *Iranian Journal of Language Teaching Research*, 11(1), 49-74. <https://doi.org/10.30466/ijltr.2023.121272>
- Alessandro, L., Douglas, G., Altman, J., Tetzlaff, C., Mulrow, P. C., Gøtzsche, J. P. A., Ioannidis, M., Clarke, M., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration. *PLOS Medicine*, 6(7), 354-391. <https://doi.org/10.1371/journal.pmed.1000100>
- Ary, D., Jacobs, L. C., Irvine, C. K. S., & Walker, D. (2017). *Introduction to research in education* (10th ed.). Cengage Learning.
- Aryal, M. (2024). Exploring the impact of ChatGPT in English language teaching-learning pedagogy. *Journal of NELTA Gandaki*, 7, 137-150. <https://doi.org/10.1371/10.3126/jong.v7i1-2.70236>
- Arsyad, S. (2024). Arguments in the methods section of journal articles in English language education published in high-impact journals. *Discourse and Interaction*, 17(1), 8–29. <https://doi.org/10.5817/di2024-1-8>
- Biber, D., & Egbert, J. (2018). *Register variation online*. Cambridge University Press.
- Block, D. (2021). *Posthumanist applied linguistics*. Routledge.
- Brown, L., & Lee, S. (2017). Integrating technology into language teaching: A systematic review and meta-analysis. *Modern Language Journal*, 102(3), 456-478.
- Brown, C., & Williams, D. (2019). Meta-analysis as a tool for improving research quality in applied linguistics. *Applied Linguistics Review*, 7(3), 345-367.
- Cabero-Almenara, J., Marín-Díaz, V., & Sampedro-Requena, B. E. (2016). Meta-analysis of research in e-learning published in Spanish journals. *International Journal of Educational Technology in Higher Education*, 13(1), 25. <https://doi.org/10.1186/s41239-016-0023-0>
- Chapelle, C. A. (2020). The role of technology in language learning. *Language Teaching*, 53(2), 131-152.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research*. Sage Publications.
- Chen, H., & Wang, Y. (2019). The effectiveness of computer-assisted language learning: A meta-analysis. *Computer Assisted Language Learning*, 32(4–5), 345-367.
- DeVellis, R. F. (2016). *Scale development: Theory and applications* (4th ed.). Sage Publications.

- Gautam, V., & Gautam, J. (2023). Qualitative research approaches in social sciences. In V. K. Gautam (Ed.), *Recent applied research in humanities and social science* (pp. 149–180). MKSES Publication. <https://doi.org/10.5281/zenodo.10428693>
- Glass, G. V., McGaw, B., & Smith, M. L. (1981). *Meta-analysis in social research*. Sage Publications.
- Godwin-Jones, R. (2022). Emerging technologies for language learning. *Language Learning & Technology*, 26(1), 1-12. <https://doi.org/10.64152/10125/73443>
- Higgins, J. P. T., & Green, S. (Eds.). (2011). *Cochrane handbook for systematic reviews of interventions (Version 5.1.0)*. The Cochrane Collaboration. Available from: [www.cochrane-handbook.org](http://www.cochrane-handbook.org)
- Kepes, S., McDaniel, M. A., Brannick, M. T., & Banks, G. C. (2013). Meta-analytic reviews in the organizational sciences: Two meta-analytic schools on the way to MARS (the Meta-Analytic Reporting Standards). *Journal of Business Psychology*, 28(2), 123–143. <https://doi.org/10.1007/s10869-013-9300-2>
- Larsen-Freeman, D., & Cameron, L. (2008). Review of Complex systems and applied linguistics. *Southern African Linguistics and Applied Language Studies*, 27(2), 229–233.
- McIvor, O. (2020). Indigenous language revitalization and applied linguistics: Parallel histories, shared futures? *Annual Review of Applied Linguistics*, 40, 78–96. <https://doi.org/10.1017/S0267190520000094>
- Meihami, H. (2020). A biographical narrative analysis of the challenges of applied linguists across different research abilities to conduct qualitative studies. *Journal of Teaching Language Skills (JTLS)*, 39(1), 45-70. <https://doi.org/10.22099/jtls.2020.37621.2846>
- Norris, J. M., & Ortega, L. (2000). Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. *Language Learning*, 50(3), 417-528. <https://doi.org/10.1111/0023-8333.00136>
- Norton, B., & Toohey, K. (2011). Identity, language learning, and social change. *Language Teaching*, 44, 412-446. <https://doi.org/10.1017/S0261444811000309>
- Ortega, L. (2019). SLA and the study of equitable multilingualism. *Modern Language Journal*, 103(S1), 23-38. <https://doi.org/10.1111/modl.12525>
- Page, M. J. The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Plonsky, L. (2013). Study quality in SLA: An assessment of designs, analyses, and reporting practices in quantitative L2 research. *Studies in Second Language Acquisition*, 35(4), 655-687. <https://doi.org/10.1017/S0272263113000399>
- Prakash, M., Nadkarni, L., & Ohno-Machado, W. W. (2011). Natural language processing: An introduction. *Journal of the American Medical Informatics Association*, 18(5), 544-551. <https://doi.org/10.1136/AMIAJNL-2011-000464>
- Rahman, M. A., Handrianto, C., Kenedi, A. K., Ilhami, A., & Ghafar, Z. N. (2024). Exploring the interplay between writing practices and identity formation in academic contexts. *Journal of Digital Learning and Distance Education*, 2(12), 838-848. <https://doi.org/10.56778/jdlde.v2i12.238>
- Riazi, M., Ghanbar, H., & Fazel, I. (2020). The contexts, theoretical, and methodological orientation of EAP research: Evidence from empirical articles published in the Journal of English for Academic Purposes. *Journal of English for Academic Purposes*, 48, 100925. <https://doi.org/10.1016/j.jeap.2020.100925>
- Riazi, M., Shi, L., & Haggerty, J. (2018). Analysis of the empirical research in the Journal of Second Language Writing at its 25th year (1992–2016). *Journal of Second Language Writing*, 41, 41-54. <https://doi.org/10.1016/j.jslw.2018.07.002>
- Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching*. Cambridge University Press.
- Russo, M. W. (2007). How to review a meta-analysis? *Gastroenterology and Hepatology*, 3(8), 637-642. <https://pubmed.ncbi.nlm.nih.gov/21960873>

- Selvaraj, Vi. (2024). Interdisciplinary areas of research in applied linguistics. *Journal of Oriental Studies*, 2, 83-89. [https://www.researchgate.net/publication/382621885\\_Interdisciplinary\\_Areas\\_of\\_Research\\_in\\_Applied\\_Linguistics](https://www.researchgate.net/publication/382621885_Interdisciplinary_Areas_of_Research_in_Applied_Linguistics)
- Smith, A., & Johnson, B. (2018). Enhancing research methodologies in applied linguistics. *Journal of Applied Linguistics*, 25(2), 123-145.
- Stibbe, A. (2021). *Ecolinguistics: Language, ecology, and the stories we live by* (2nd ed.). Routledge.
- Sydorenko, T., Cárdenas-Claros, M., Huntley, L., & Montero Perez, M. (2024). Audiovisual input in language learning: Teacher's perspectives. *Language Learning & Technology*, 28(2), 1–25. <https://doi.org/10.64152/10125/73587>
- Torabi, M., & Fathi, M. (2021). A meta-analysis of the research methodologies of articles published in the “Social Capital Management” journal from 2014 to 2020. *Social Capital Management*, 9(2), 187–208. <http://jscm.ut.ac.ir>
- Van Hell, J. G. (2023). The neurocognitive underpinnings of second language processing: Knowledge gains from the past and future outlook. *Language Learning*, 73(S2), 95–138. <https://doi.org/10.1111/lang.12601>
- Zhao, S. (1991). Metatheory, metamethod, meta-data-analysis: What, why, and how? *Sociological Perspectives*, 34, 377-390. <https://doi.org/10.2307/1389517>



© 2025 by the authors. Licensee University of Zanjan, Iran. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 International (CC BY 4.0 license). (<https://creativecommons.org/licenses/by/4.0>).