Classroom Factors and Language Learning Anxiety: 2019-2024 Bibliometric Review

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ABSTRACT

Language learning anxiety has long been recognized as a significant challenge to students' language acquisition, with classroom dynamics playing a critical role. This study examined how such factors influenced language learning anxiety between 2019 and 2024, with particular attention to the impact of the COVID-19 pandemic. Using bibliometric analysis, the study reviewed over 150 publications to identify key research trends, influential works, and major contributors in the field of language education. The analysis revealed a 40% increase in studies focusing on classroom-related anxiety during the review period and highlighted a growing interest in how technology shapes students' emotional experiences. Findings indicated that supportive classroom environments, characterized by positive teacher-student interactions and strong peer support, were associated with reduced anxiety. The shift to online and hybrid learning introduced both benefits and challenges: while technology facilitated communication for some students, it increased anxiety for others. Despite growing research attention, studies remained fragmented, often examining classroom factors in isolation rather than as interconnected elements. This review offers valuable insights for educators and policymakers, highlighting the need for holistic strategies that promote inclusive and emotionally supportive learning environments. The findings also lay a foundation for future research aimed at reducing language learning anxiety and improving student outcomes across diverse educational contexts.

Keywords: *language learning anxiety; classroom dynamics; bibliometric analysis*

INTRODUCTION

Language learning anxiety is a significant challenge that impacts students' ability to acquire a new language. This phenomenon, known as Foreign Language Anxiety (FLA), encompasses three primary components: communication apprehension (fear of speaking), test anxiety (fear of being

evaluated), and fear of negative judgment from peers or instructors. In educational settings, these anxieties can hinder student participation, diminish confidence, and obstruct academic success. FLA is described as a distinct structure of self-perceptions, beliefs, attitudes, and behaviors linked to classroom language acquisition (Song, 2024), and its impact extends beyond performance, affecting cognitive processing and memory recall (Chen, 2023). As educational institutions increasingly promote multilingualism, understanding and managing FLA becomes crucial. Strategies such as fostering a supportive classroom environment, incorporating communicative activities, and applying mindfulness techniques have been suggested to help reduce anxiety levels and improve language learning outcomes (Chen, 2023; Song, 2024).

Recent research has highlighted how classroom environments influence language learning anxiety, particularly in the context of changes brought about by the COVID-19 pandemic. The transition to online learning and the subsequent return to in-person classes have introduced new challenges for educators and learners alike. Teachers must navigate the complexities of fostering supportive and calm learning environments while students grapple with heightened stress levels. Investigating how classroom dynamics—such as teacher behavior, peer interactions, and instructional methods—can exacerbate or alleviate anxiety is essential.

This study focuses on research spanning from 2019 to 2024, examining both pre-pandemic and post-pandemic trends to gain a deeper understanding of current issues in FLA. The 2019-2024 period is uniquely significant as it encapsulates the rapid transformation of educational environments due to technological advancements and the global shift toward hybrid and online learning formats. The COVID-19 pandemic has reshaped classroom dynamics, making this a pivotal period for understanding how the integration of technology and the changing role of in-person interaction impact students' emotional well-being in language learning contexts.

Research by Russell (2020) emphasizes the significance of a nurturing classroom atmosphere in mitigating anxiety, points out that students who receive encouragement from teachers and peers are more inclined to engage actively in the learning process. Similarly, White (2018) argues that teachers play a pivotal role in managing students' emotions; neglecting to address anxiety can impede language acquisition.

The existing literature predominantly emphasizes isolated factors contributing to language learning anxiety. Research by Hao (2024) investigates anxiety among International Baccalaureate (IB) students concerning program difficulty, while Lin et al. (2015) developed an Affective Tutoring System aimed at alleviating anxiety but noted the necessity for further testing and broader applications. However, much of the literature has focused on individual aspects such as teacher behavior or peer interactions without considering the broader interplay of multiple classroom dynamics. This study seeks to bridge this gap by examining how various factors—teacher behavior, peer interactions, instructional methods, and the role of technology—interact to influence anxiety. By analyzing trends from 2019 to

2024, this study provides a more integrated framework for understanding the complexities of FLA in modern classrooms.

To further investigate this critical area, this study will address two research questions: 1. What are the major trends and keywords in research on classroom factors influencing language learning anxiety between 2019 and 2024? 2. Which authors, journals, and countries contribute most to the field of classroom-related language learning anxiety research?

LITERATURE REVIEW

The existing literature on language learning anxiety primarily focuses on isolated factors contributing to the phenomenon, such as test anxiety or communication apprehension. Hao (2024) explores anxiety among International Baccalaureate (IB) students, particularly concerning the program's difficulty, while Lin et al. (2015) developed an Affective Tutoring System aimed at alleviating anxiety but noted the necessity for further testing and broader applications. Despite these valuable contributions, much of the research continues to examine these variables independently, often overlooking how multiple factors interact within the broader classroom context (Horwitz et al., 1986). As a result, this fragmented approach limits a holistic understanding of how classroom dynamics such as teacher behavior, peer interactions, and instructional strategies that can work together to influence anxiety.

While these studies are informative, the existing literature often reiterates well-established themes without considering recent advancements or deeper critiques of how these factors have evolved. For example, much of the research conducted on anxiety in traditional classroom settings has not adapted to the unique challenges posed by post-pandemic education. The shift to online and hybrid learning environments introduces complexities that traditional studies may fail to capture. As such, there is a pressing need to analyze how these changing classroom dynamics—coupled with the increasing reliance on technology—have reshaped students' experiences of anxiety.

In addition, there has been insufficient attention to cross-cultural or non-Western contexts in the existing literature. While many studies acknowledge the importance of understanding how culture influences anxiety, the majority of research focuses on Western educational settings. This oversight leaves critical gaps in our understanding of how language learning anxiety manifests in diverse cultural environments and how it might differ across global contexts. To address this, future research should consider the socio-cultural factors that may influence anxiety in non-Western classrooms, where educational practices and student-teacher relationships can vary significantly.

The need for an integrated approach to studying classroom-related language learning anxiety is further compounded by the lack of a systematic, comprehensive review. Despite the success of bibliometric methods in other educational fields, their application to FLA research remains underexplored. Traditional reviews tend to focus on individual studies or theoretical perspectives without providing a broader map of how the field has developed

over time. A bibliometric review, by contrast, can offer a unique contribution by systematically analyzing trends in authorship, methodologies, key themes, and influential frameworks. This method allows for the identification of emerging research trends, such as the role of technology in mitigating anxiety, and can reveal important gaps that remain under-researched.

Conducting a bibliometric study is particularly timely given the rapid increase in research regarding language learning anxiety. This analysis will not only identify key authorship patterns, publishing venues, and dominant methodologies but will also pinpoint significant contributions to the field and the evolution of theories addressing classroom-related anxiety. By mapping the research trends between 2019 and 2024, this study aims to provide educators, researchers, and policymakers with a clearer understanding of how to effectively manage anxiety in modern language learning environments, encompassing both traditional and virtual contexts.

In conclusion, this literature review emphasizes the need for an integrated, cross-cultural approach to understanding classroom-related language learning anxiety. By critically evaluating recent advancements and using bibliometric analysis, this study will contribute valuable insights into the complexities of anxiety in diverse learning environments. It will offer actionable recommendations for educators and policymakers to create more inclusive and supportive classrooms while identifying gaps that future research must address.

METHOD

This study employed a bibliometric approach to examine publishing trends and identify emerging research areas related to classroom factors influencing language learning anxiety over the past decade. Bibliometric analysis is a valuable method for tracing the development of a research field, recognizing key contributors, and identifying gaps in the literature. It enables the analysis of citation patterns, publication trends, and central themes within the field, providing actionable insights for researchers, educators, and policymakers.

To address Research Question 1 (RQ1), the study analyzed trends in publication growth over time. Articles were sourced from the Scopus database, and publication years were extracted for trend analysis. The Biblioshiny tool was then used to visualize these trends from 2019 to 2024, identifying key peaks and shifts in research activity. Biblioshiny also facilitated an in-depth analysis of source publications, helping to emphasizes active journals within the field. Biblioshiny was chosen for its ability to generate detailed bibliometric visualizations, such as co-occurrence networks, thematic maps, and citation trend graphs. Additionally, its automated reporting functions streamline the analysis process, allowing researchers to efficiently identify influential studies and emerging themes within large datasets. Compared to other bibliometric tools, Biblioshiny provides an intuitive user interface and integrates seamlessly with R-based bibliometric analysis, enhancing the depth and flexibility of data interpretation.

For Research Question 2, the study performed a comprehensive co-authorship and citation analysis using Biblioshiny. This analysis identified influential authors based on their productivity and citation counts. It also revealed the journals most active in publishing research on language learning anxiety, as well as the countries contributing significantly to the field, based on author affiliations. These analyses facilitated the identification of core contributors and primary sources that shape the current landscape of research.

The data collection process was planned to ensure the inclusion of relevant studies. An initial search of the Scopus database was performed using the keywords "classroom," "language," "learning," and "anxiety," which yielded 827 articles. To refine the focus, the results were filtered to the Arts and Humanities subject area, reducing the dataset to 392 articles. Further refinement excluded non-journal articles, such as conference papers and book chapters, narrowing the dataset to 272 records. While conference papers and book chapters can offer valuable insights, they were excluded for two primary reasons. First, peer-reviewed journal articles undergo rigorous review processes, ensuring a higher level of academic reliability. Second, journal articles typically provide more comprehensive theoretical discussions and methodological details than conference papers, which are often preliminary findings. The exclusion of book chapters was also necessary due to indexing inconsistencies across databases, which could affect the uniformity of the dataset.

Ultimately, 200 articles were selected for export to ensure a focused and representative dataset. This selection process ensured that the final dataset was both relevant to the research questions and of sufficient quality for analysis. Scopus was chosen as the primary database for this study due to its comprehensive coverage of peer-reviewed journals and its strong analytical capabilities. Compared to other databases like Web of Science and Google Scholar, Scopus provides broader coverage in the Arts and Humanities domain and offers more advanced tools for citation analysis. Additionally, Scopus allows for seamless data integration with Biblioshiny, making it easier to process and analyze large datasets. Google Scholar, by contrast, does not provide structured export functions compatible with Biblioshiny, making bibliometric analysis more cumbersome. Web of Science was not used simply because Scopus already provided a substantial dataset that met the study's objectives. While the exclusive use of Scopus may limit the inclusion of certain non-indexed but relevant studies, its high-quality indexing, structured citation tracking, and ease of integration with bibliometric tools ensured a systematic and replicable research process.

This study specifically focused on the period from 2019 to 2024 to capture recent trends in language learning anxiety research, particularly those influenced by the shift toward remote and hybrid learning environments. This timeframe was selected to examine the impact of the COVID-19 pandemic on educational practices and to explore how teaching methods and classroom dynamics have evolved during this period.

FINDINGS AND DISCUSSIONS

Major Trends and Key-words in Research

Focused analysis of the evolving landscape of research on classroom-related language learning anxiety over the past five years. The research trends demonstrate a shift towards understanding the complex factors that contribute to anxiety in educational settings, including the impact of digital learning environments in the post-pandemic era. By examining these trends, this analysis aims to offer a comprehensive view of the major themes, influential contributors, and emerging patterns that have shaped the field of language learning anxiety research.
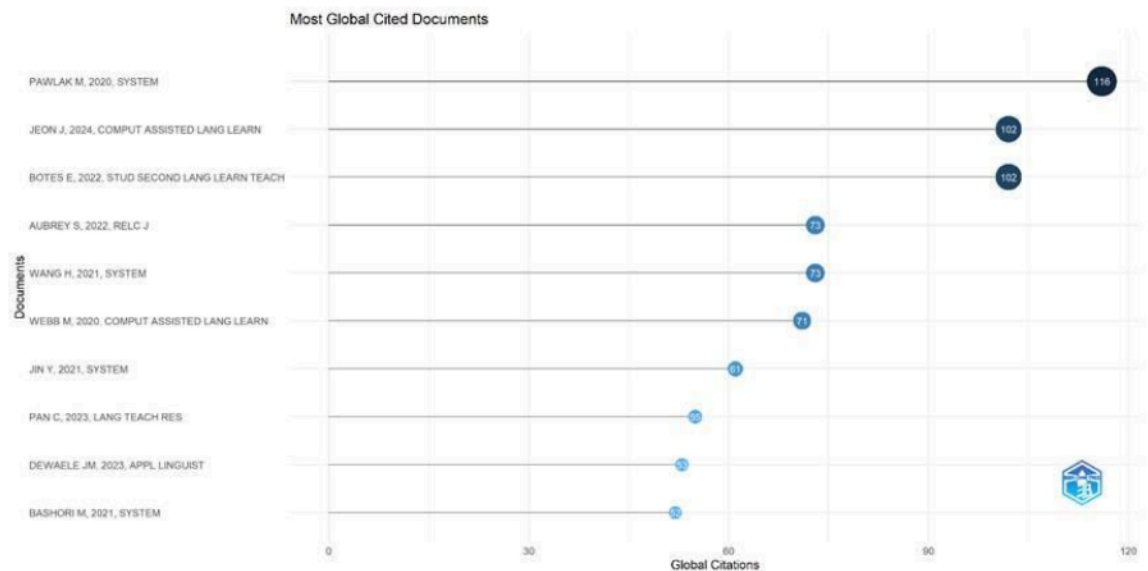
Figure 1 Most Global Cited Documents

Figure 1, The citation trends indicate that the most frequently cited studies in recent years have significantly shaped the discourse on language learning anxiety. Notably, works such as Pawlak (2020), with 116 citations, alongside Jeon (2024) and Botes (2022), each with over 100 citations, reflect a growing academic focus on how digital interventions impact anxiety in language learning. These studies suggest a shift in research priorities, emphasizing online learning platforms' influence on students' emotional well-being.

However, while digital learning has become a dominant theme, this emphasis may overshadow critical traditional classroom strategies, such as teacher-student interactions and task-based learning, which remain fundamental in managing anxiety. Future research should strive for a more balanced approach, integrating both technological and non-digital pedagogical strategies to mitigate anxiety effectively.

The citation analysis exposes a geographical imbalance in research contributions. The dominance of publications from China, the United States, and the United Kingdom underscores the need for more cross-cultural perspectives. The scarcity of studies from non-Western contexts show a research gap that future studies should address by exploring how language learning anxiety manifests in diverse educational and cultural environments. Furthermore, a notable limitation is the absence of longitudinal studies investigating the long-term effectiveness of anxiety-reducing interventions. Addressing these gaps will provide deeper insights into the sustainability of anxiety management strategies over time.

Emerging Research Themes

Figure 2 Wordcloud

Figure 2, the wordcloud analysis demonstrates the main topics in language learning anxiety research from 2019 to 2024. Important terms such as "classroom environment," "student anxiety," "teacher behavior," "peer interactions," and "language learning" show that researchers continue to focus on how social relationships in the classroom affect anxiety. This supports earlier studies by Horwitz et al. (1986), which emphasized the role of social connections in shaping language learning anxiety.

Recently, researchers have been paying more attention to how teacher support and peer interactions can either help reduce or increase anxiety. Terms like "online learning," "distance education," "digital tools," and "hybrid classrooms" show a clear shift toward studying the impact of technology in learning. This shift, which was accelerated by the COVID-19 pandemic, also raises concerns about whether all students have equal access to digital education.

Even though research has focused more on the social and emotional aspects of learning, there are still gaps. For example, not much research explores anxiety related to exams or how anxiety changes over time. Also, there is little research on how cultural and language differences affect anxiety, which is important for understanding diverse classrooms.

Keyword Frequency Over Time
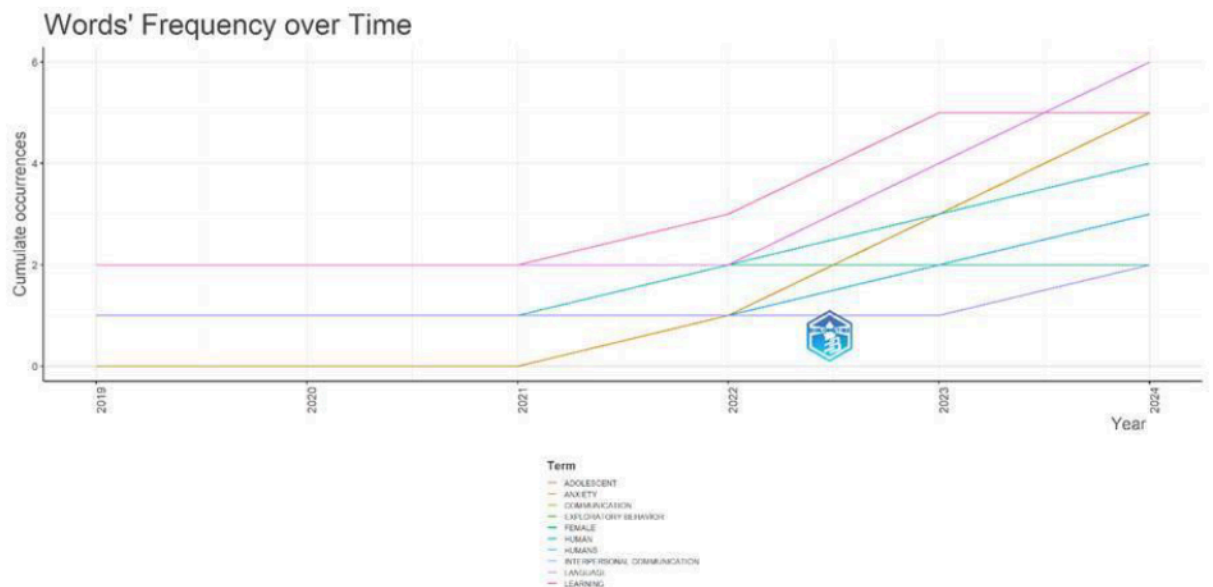

Figure 3 Words' Frequency over Time

This line chart in Figure 3 analysis demonstrates that words like "anxiety," "learning," "human," and "communication" have been appearing more often in studies, especially after 2021. This shows that researchers are paying more attention to the emotional and social aspects of language learning.

Over the past five years, studies have focused more on how the classroom environment, teaching methods, and peer interactions contribute to anxiety. The increasing citations of studies by Botes (2022) and Jeon (2024) suggest that this topic is gaining importance. More studies are also looking at the role of technology

in reducing anxiety, as seen in journals such as System and Computer-Assisted Language Learning.

A major trend is the emphasis on teacher-student relationships and social support as ways to lower anxiety. This builds on earlier findings by Horwitz (2001) and indicates how student-centered teaching methods—such as task-based learning and collaborative learning—can help students feel less anxious. However, future studies should look at how well these methods work in different educational settings and whether their benefits last over time.

Authors, Journals, and Countries Contribute
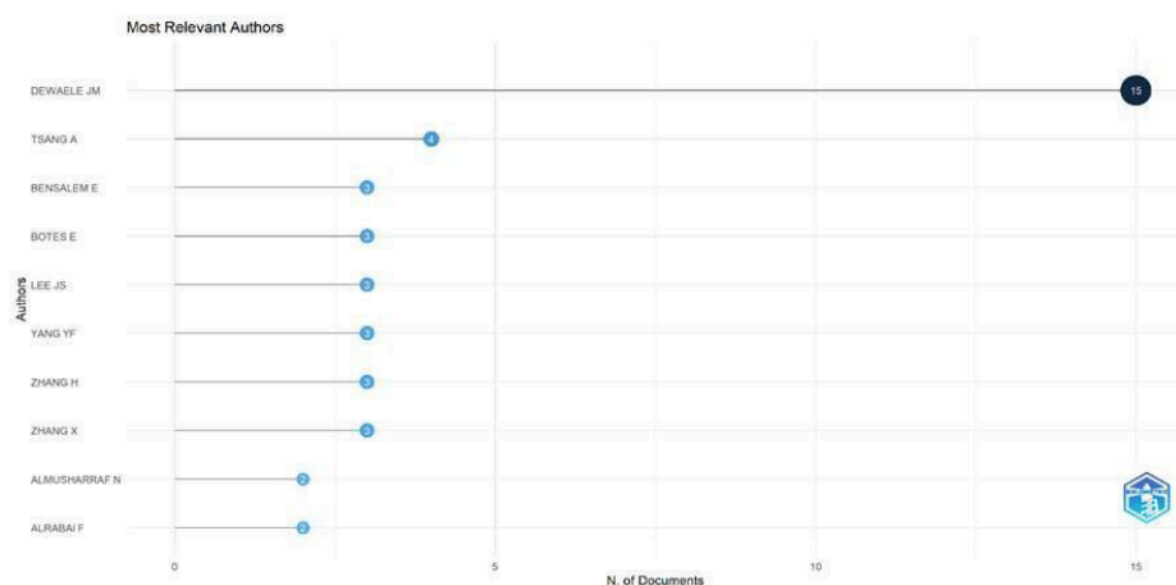
Figure 4 Most Relevant Authors

The data demonstrates that Dewaeile J.M. is the most active researcher in classroom-related language learning anxiety, with 15 publications. This shows Dewaeile's major role in shaping theories and practical approaches in this field. Other key researchers include Tsang A., Bensalem E., Botes E., Lee J.S., Yang Y.F., Zhang H., and Zhang X., each with three publications. Their collective work provides different perspectives that help broaden the understanding of language learning anxiety. However, most of the studies in this field come from a small group of researchers. More contributions from diverse backgrounds and regions could bring new perspectives and make the research more complete.
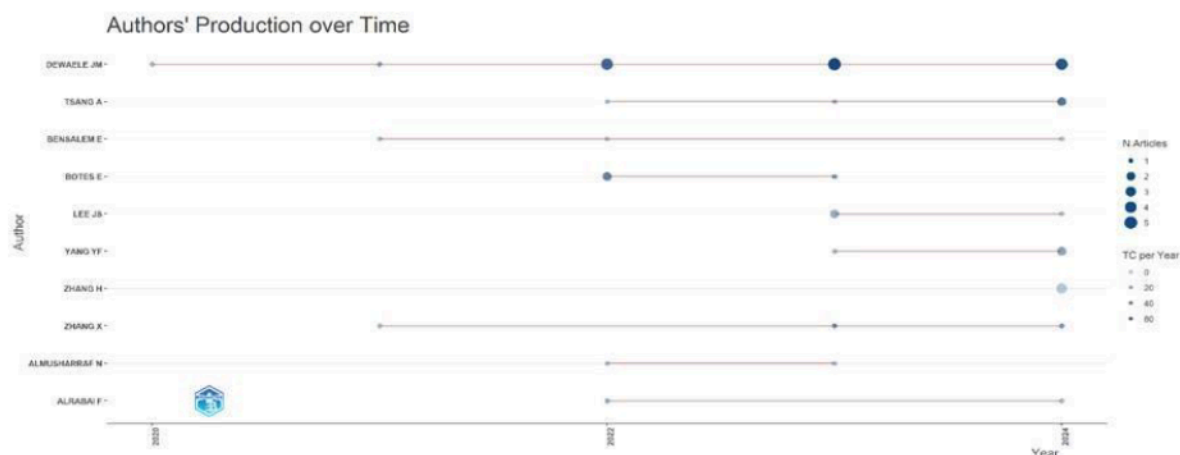
Figure 5 Authors' Production Over Time

In the analysis of journal contributions to classroom-related language learning anxiety research, the significance of specific articles is revealed, particularly the impactful work by Dewaeale J.M. titled "The Relationships Between Young FL Learners' Classroom Emotions (Anxiety, Boredom, & Enjoyment), Engagement, and FL Proficiency," published in Applied Linguistics Review. This article exemplifies the intertwining of emotional factors and language learning outcomes, emphasizing not only the role of anxiety but also the importance of engagement and overall emotional well-being in the learning environment.

Dewaeale's research is vital, as it provides insight into how various classroom emotions affect students' engagement and foreign language proficiency, thereby broadening the understanding of language learning anxiety within a more comprehensive emotional context. The publication in a respected journal like Applied Linguistics Review further asserts its relevance, ensuring that the findings are accessible to a wide audience, including researchers, educators, and policymakers.

This contribution fits within a dynamic landscape of scholarly output where key journals serve to disseminate influential research. The dataset illustrates that journals featuring a high number of published articles, particularly those that address topics like language learning anxiety, continue to attract significant citations. This trend points to their authority in the field and their essential role in fostering dialogue among researchers and educators.

As more international authors engage with these topics, the discourse surrounding language learning anxiety becomes more nuanced, benefiting from varied perspectives and cultural contexts. The increasing publication frequency over the past few years signifies a growing academic recognition of the importance of addressing emotional factors in language education. Ultimately, the contributions from key journals, exemplified by Dewaeale's article, are crucial for advancing

knowledge and developing effective strategies to support learners in classroom settings worldwide.
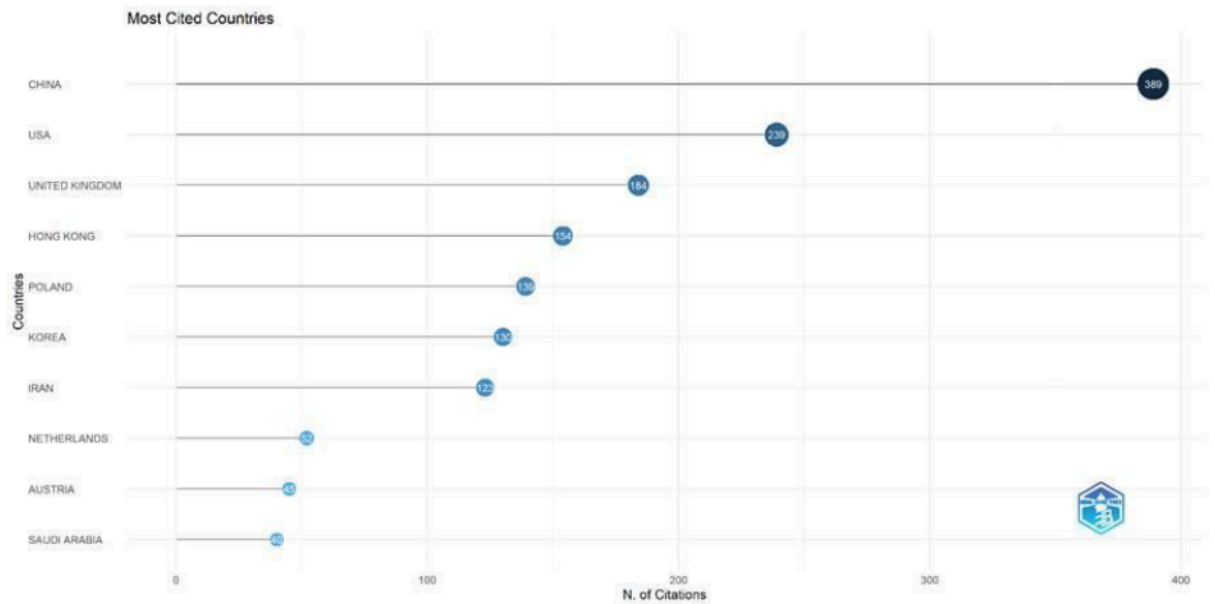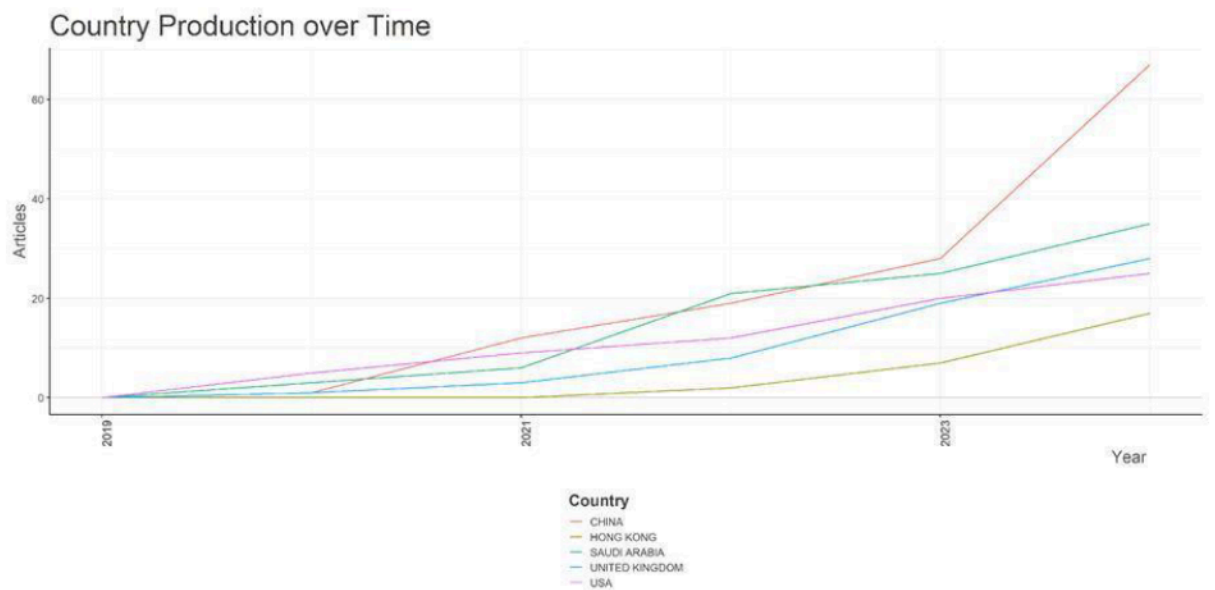

Figure 6 Most Cited Countries

Figure 7 Country Production Over Time

The data on country contributions to classroom-related language learning anxiety research reveals significant trends in scholarly output and influence over recent years. The first graph illustrates the increasing publication rates from various countries, with China emerging as the dominant contributor. From 2019 to 2023, China consistently produced the highest number of articles, indicating a proactive research environment focused on this critical area. Following China, the United

States and the United Kingdom also show notable contributions, although at a slower rate, reflecting their established academic frameworks in language education.

Hong Kong, while contributing fewer articles than the aforementioned countries, demonstrates a steady increase, reflecting a growing interest in addressing language learning anxiety contextually. Meanwhile, Saudi Arabia stands out as another key player, showcasing a significant rise in research output, suggesting that the issue is receiving heightened attention within educational contexts there. However, research from non-Western and developing countries is still limited. More studies from different regions could help provide a more complete understanding of language learning anxiety in diverse educational settings.

The second graph, revealing most cited countries, complements the first by showing not only production but also impact. China leads with the highest citation count, with 389 citations, indicating that its research is widely referenced and influential in the field of language anxiety research. The United States and the United Kingdom follow closely, emphasizing their contributions' relevance to global discourse. Collectively, these patterns illustrate that while several countries are actively contributing to the field, China's prolific output and the citation metrics signal its pivotal role in shaping contemporary understandings of classroom-related language learning anxiety. This emphasizes the importance of these countries in addressing educational challenges and contributing valuable insights to improve language learning environments globally.

The analysis also reveals China's dominance in this area, with the highest number of publications and citations. This reflects China's growing interest in language learning anxiety, which aligns with global trends recognizing the importance of emotional factors in education. it is important to see whether its findings apply to other education systems. More collaborations between researchers from different countries could help create anxiety-reducing strategies that work in various learning environments.

CONCLUSIONS

This study highlights the increasing academic focus on language learning anxiety and identifies key contributors shaping the field. By analyzing research trends from 2019 to 2024, it underscores the role of Dewaele J.M. in advancing the understanding of how anxiety interacts with student engagement and foreign language proficiency. The findings emphasize the crucial role of social support, particularly teacher-student relationships and peer interactions, in mitigating anxiety. Furthermore, the study reveals the global scope of research on classroom-

related anxiety, with China emerging as a leading contributor in terms of publication output and citation counts. This reflects the growing international recognition of the importance of emotional factors in language education.

A key contribution of this study is its identification of the impact of digital learning environments and teaching methods on language learning anxiety. The findings suggest that fostering supportive classroom environments and integrating social-emotional learning strategies can play a significant role in reducing anxiety. However, while these insights are valuable, this study has several limitations. The reliance on publication and citation data, while providing a broad overview, does not fully capture the practical effectiveness of specific teaching interventions. Additionally, the focus on country-level contributions may overlook smaller but meaningful research efforts from regions with emerging scholarship, which could offer unique cultural perspectives on language learning anxiety.

To address these limitations, future research should expand the dataset by incorporating multiple databases beyond Scopus, including Web of Science and regional repositories, to ensure a more diverse and inclusive representation of studies. Additionally, qualitative research methods, such as classroom observations and student interviews, could provide deeper insights into how anxiety manifests in real-world educational settings.

From a practical standpoint, educators and policymakers can take several actionable steps to reduce language learning anxiety. Teacher training programs should include strategies for creating anxiety-reducing environments, such as encouraging positive reinforcement, fostering peer collaboration, and utilizing adaptive learning technologies. Policymakers should prioritize the development of national frameworks for social-emotional learning in language education, ensuring that language learning policies address both cognitive and emotional challenges. Furthermore, institutions should consider curriculum modifications that emphasize communicative and task-based learning, which have been shown to reduce anxiety by increasing student engagement and confidence.

Finally, future research should explore the long-term effects of digital and hybrid learning environments on language learning anxiety, examining whether technology-driven solutions can be optimized to provide ongoing support for anxious learners. Additionally, more studies should investigate cross-cultural variations in anxiety, particularly in non-Western contexts, to develop culturally responsive interventions that accommodate diverse student populations.

By offering a comprehensive analysis of research trends and practical recommendations, this study contributes to both academic literature and educational practice, laying the foundation for future research and interventions aimed at reducing anxiety in language learning contexts.

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