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DEVELOPING SOCIAL-EMOTIONAL COMPETENCE TO ENHANCE TEACHER PERFORMANCE IN SCHOOLS: A BIBLIOMETRIC REVIEW

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Abstract:

This bibliometric review investigates the evolving landscape of research on developing Social-Emotional Competence (SEC) to enhance teacher performance in schools. SEC is increasingly recognized as a foundational element in fostering teacher well-being, classroom management, and student academic success. However, the literature on this topic remains dispersed, lacking a cohesive synthesis of research trends, collaborations, and thematic developments. The study aims to address this gap by systematically analyzing scholarly output using data extracted from the Scopus database. A total of 881 peer-reviewed articles published between 2015 and May 2025 were selected based on refined inclusion criteria. Data cleaning was performed using OpenRefine, while Scopus Analyzer provided insights into annual publication trends, top contributing countries, and citation metrics. VOSviewer was employed to map co-authorship networks, keyword co-occurrences, and collaborative link strengths. The analysis reveals a substantial rise in publication volume after 2020, peaking in 2024, indicating growing global interest in integrating SEC into teacher training and practice. The United States leads in publication count and collaboration strength, followed by China, the United Kingdom, and Australia, reflecting diverse international engagement. Highly cited works highlight the interdisciplinary nature of the field, merging educational psychology, emotional intelligence, and digital learning contexts. Dominant keywords such as “emotions,” “emotional competence,” and “teacher well-being” suggest a research focus on emotional regulation, professional development, and student-teacher relationships. Despite active research growth, limited cross-country collaboration presents opportunities for broader international integration. This review contributes a structured overview of the knowledge base, identifies emerging themes and research gaps,

and offers direction for future studies and educational policies aimed at improving teacher performance through social-emotional development.

Keywords:

Social-Emotional Competence, Teacher, Performance, School, Bibliometric

Introduction

Social-Emotional Competence (SEC) is now widely acknowledged as a vital component in the effective performance of teachers. This competence is crucial for cultivating a nurturing and efficient classroom environment. The importance of the SEC in teaching is underscored by its impact on both teachers' well-being and students' academic and personal development. Teachers with high SEC are better equipped to handle the social and emotional challenges of the classroom, developing meaningful connections with students, and promoting a positive educational climate, all of which contribute to improved student achievement and overall development (Chernicoff & Labra, 2024a; Aldrup et al., 2020a).

The current body of research emphasizes the diverse and complex role that the SEC plays in education. Studies have shown that SEC is crucial for teachers to manage classroom dynamics effectively, support students' emotional well-being, and create a conducive learning environment (Chernicoff & Labra, 2024a; Aldrup et al., 2020a). For instance, research indicates that teachers' SEC is linked to their ability to provide emotional support and maintain positive relationships with students, which are the key factors in promoting students' academic success and social growth (Aldrup et al., 2020a). Furthermore, SEC is associated with teachers' occupational well-being, including job satisfaction and reduced symptoms of depersonalization (Aldrup et al., 2020a). Despite these findings, there is a notable gap in the development of profession-specific tools to assess and enhance teachers' SEC, which is essential for targeted interventions and professional development (Aldrup et al., 2020a).

Recent advances in the field have emphasized the adoption of Social-Emotional Learning (SEL) programs, designed to foster SEC through organized instructional methods. These programs have demonstrated effectiveness in enhancing students' behavior, social interactions, and school engagement while reducing high-risk behaviors (Minney et al., 2019). However, the emphasis has predominantly been on student outcomes, with limited research on the impact of SEL on teachers (Collie, 2025). Emerging studies suggest that integrating SEL into teacher education and professional development can enhance teachers' SEC, thereby improving their effectiveness and well-being (Collie, 2025). Additionally, innovative approaches, such as the use of situational judgment tests like the Test of Regulation in and Understanding of Social Situations in Teaching (TRUST), have been introduced to evaluate teachers' SEC and shed light on how they manage emotions and interpersonal relationships (Aldrup et al., 2020a). These innovations highlight the importance of ongoing research and the creation of comprehensive frameworks to support teachers' SEC in diverse educational settings.

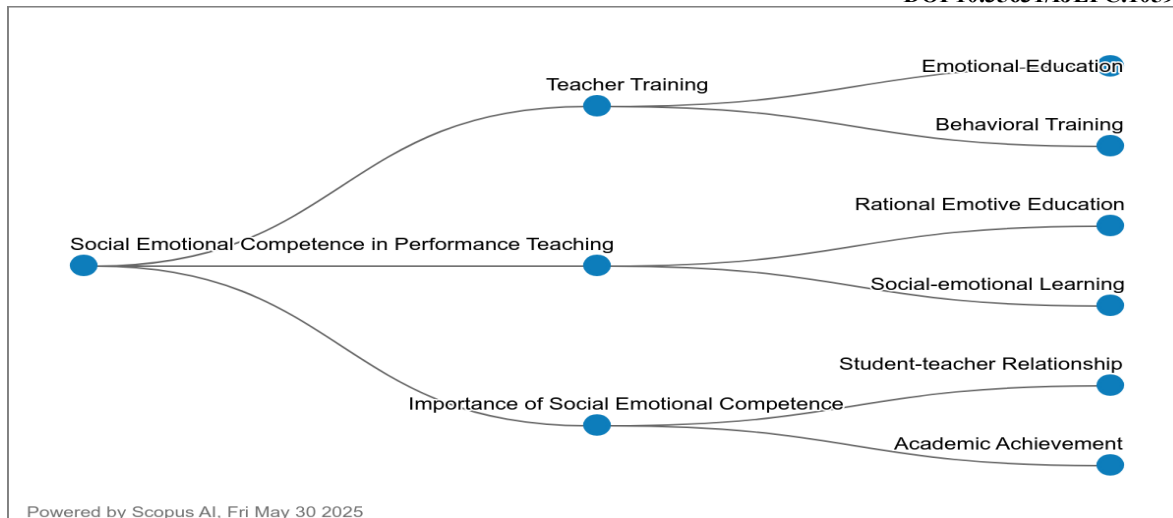
SEC in performance teaching is a multifaceted concept that encompasses various components essential for effective teaching and student development. One key component is fulfilling fundamental psychological needs—autonomy, competence, and relatedness—which are essential for promoting self-driven motivation and socially and emotionally skilled behavior in teachers. The iterative process of need satisfaction, motivation, and behavior is influenced by the social environment and individual differences, highlighting the importance of supportive

educational settings (Collie, 2020). Additionally, the SEC allows teachers to nurture students' emotional well-being, build strong teacher-student relationships, manage classroom dynamics, and create a positive learning environment, ultimately enhancing students' academic success and personal development (Chernicoff & Labra, 2024b).

Another significant aspect of SEC in performance teaching is the capacity to manage and regulate emotions skillfully. This encompasses the use of strategies for emotional regulation. Social-Emotional Competence (SEC) is now widely acknowledged as a vital component in the effective performance of teachers. This competence is crucial for cultivating a nurturing and efficient classroom environment. The importance of the SEC in teaching is underscored by its impact on both teachers' well-being and students' academic and personal development. Teachers with high SEC are better equipped to handle the social and emotional challenges of the classroom, developing meaningful connections with students, and promoting a positive educational climate, all of which contribute to improved student achievement and overall development (Chernicoff & Labra, 2024a; Aldrup et al., 2020a). Moreover, emotional intelligence, which includes perceiving, understanding, and managing emotions, plays a vital role in enhancing students' academic outcomes through empathy and a commitment to their learning (Estrada et al., 2021). Training programs focused on enhancing teachers' emotional intelligence have shown significant improvements in their ability to recognize and utilize emotional intelligence components effectively (Giannakou et al., 2016).

Lastly, cultivating SEC in performance-based teaching is also linked to the broader educational goals of fostering a cooperative and compassionate society. Emotional intelligence and interpersonal skills are vital for students' mental well-being and behavioral adjustment, and their integration into the curriculum can positively impact academic achievement. Studies have shown that components of emotional intelligence, such as interpersonal skills and adaptability, along with social skills like communication and cooperation, have a strong impact on academic success (Ayllón-Salas & Fernández-Martín, 2024). Therefore, it is essential for schools to prioritize and nurture SEC through targeted programs and supportive environments, ensuring that both teachers and students can achieve their full academic and personal potential (Z. Liu et al., 2024).

In conclusion, social emotional competence in performance teaching is vital for creating an effective educational environment that supports both teachers and students. By focusing on key components such as the satisfaction of psychological needs, emotional regulation, and the development of social skills, educators can foster positive relationships and enhance student engagement and academic success. As educational systems increasingly recognize the importance of these competencies, implementing targeted training and supportive practices will be essential in preparing teachers to address the varied emotional and social needs of their students, thereby contributing to a more compassionate and cooperative society.



Literature Review

The significance of SEC in education has gained considerable attention in recent years, particularly in relation to enhancing teacher performance. SEC encompasses a range of skills, including emotional regulation, self-awareness, relationship management, empathy, as well as responsible decision-making, all of which are essential in cultivating a supportive learning environment and managing classroom challenges effectively. Recent studies confirm that teachers with strong SEC are more capable of maintaining positive relationships with students, managing stress, and demonstrating resilience in dynamic teaching contexts (Aldrup et al., 2020c; Collie, 2025).

Research in the past five years has demonstrated a shift from focusing solely on student outcomes of SEL to understanding its implications for educators. For instance, the integration of SEL principles into teacher training programs has been associated with improvements in teacher well-being, reduced burnout, and enhanced classroom climate (Estrada et al., 2021; Collie, 2025). SEC enables educators to handle emotional demands and influences their motivation, job satisfaction, and instructional effectiveness. This relationship underscores the need for systemic support for SEC development, beginning from pre-service education to in-service professional development.

Furthermore, the development of measurement tools like the TRUST has allowed researchers to assess SEC more systematically. Such tools have revealed that the SEC is strongly linked with emotional intelligence and the capacity for emotional support provision (Aldrup et al., 2020c). The growing application of digital technologies in education has also introduced new dimensions to SEC. Studies highlight the importance of digital emotional competencies for teachers navigating online and hybrid classrooms, especially in post-pandemic settings (Giannakou et al., 2016; Z. Liu et al., 2024).

Internationally, policy initiatives have started to incorporate the SEC as a core component of teacher standards and evaluation. Countries like the United States, the United Kingdom, and Australia have embedded SEL frameworks within their educational systems, while nations such as Malaysia and India are increasingly acknowledging the role of emotional competencies in teacher development (Chernicoff & Labra, 2024c; Li & Liu, 2025). Despite these advances, there remains a lack of uniformity in implementation and limited longitudinal data on the sustained effects of SEC training on teaching outcomes.

To advance this field, scholars recommend a more integrated research approach that combines psychological, pedagogical, and sociocultural perspectives. There is also a need for cross-cultural studies to understand how SEC manifests and can be cultivated in diverse educational systems. As education systems evolve to address complex emotional and behavioral needs in schools, the role of SEC in teacher effectiveness will continue to be a pivotal area of inquiry.

Research Question

RQ1: What are the research trends in social emotional competence for improved performance according to the year of publication?

RQ2: What are the most cited articles in social emotional competence for improved performance?

RQ3: What are the top 10 countries in terms of the number of publications on social emotional competence for improved performance?

RQ4: What are the popular keywords related to the study?

RQ5: What is co-authorship by countries' collaboration?

Methodology

Bibliometrics refers to the process of collecting, structuring, and interpreting bibliographic information from scientific literature (Alves et al., 2021; Assyakur & Rosa, 2022; Verbeek et al., 2002). In addition to basic metrics like identifying prominent journals, publication dates, and influential authors (Wu & Wu, 2017), it also encompasses advanced methods such as document co-citation analysis. A thorough literature review demands a systematic and iterative approach involving careful keyword selection, literature searching, and comprehensive analysis.

This methodology supports the creation of an extensive bibliography and ensures the reliability of findings (Fahimnia et al., 2015). Accordingly, this study concentrated on influential publications, as they offer valuable insights into the foundational theories of the field. To ensure the reliability of the data, SCOPUS was used as the main database (Al-Khoury et al., 2022; di Stefano et al., 2010; Khiste & Paithankar, 2017). Furthermore, to uphold academic rigor, only peer-reviewed journal articles were included, while books and lecture notes were intentionally excluded (Gu et al., 2019). The data collection, carried out using Elsevier's Scopus, recognized for its comprehensive indexing, covered publications from 2015 through May 2025 for subsequent analysis.

Data Search Strategy

The study utilized a structured screening process to identify relevant search terms for retrieving articles. It began by querying the Scopus database using the following search parameters: TITLE-ABS-KEY ((social AND emotional) AND (learning OR competence) AND ("performance" OR "achievement")) AND PUBYEAR > 2014 AND PUBYEAR < 2026, with filters applied to include only final-stage publications within the subject area of Social Sciences, article-type documents, and those written in English. This initial search retrieved 6,519 articles. Subsequently, the query was refined to specifically target articles where the terms “learning” or “competence” were related to teacher performance, resulting in 1,190 articles. Further filtering excluded article reviews and retained only English-language research articles, narrowing the selection to 881 articles. These articles formed the basis for the bibliometric analysis. As of May 2025, the study included all Scopus-indexed publications addressing SEC in the context of teacher performance.

Table 1: The Search String

Scopus	TITLE-ABS-KEY ((social AND emotional) AND (learning OR competence) AND ("performance" OR "achievement")) AND PUBYEAR > 2014 AND PUBYEAR < 2026 AND (LIMIT-TO (PUBSTAGE , "final")) AND (LIMIT-TO (SUBJAREA , "SOCI")) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (LANGUAGE , "English"))
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Table 2: The Selection Criterion in Searching

Criterion	Inclusion	Exclusion
Language	English	Non-English
Time line	2015 – 2025	< 2015
Subject Area	Social Science	Besides Social Science
Literature type	Journal (Article)	Conference, Book, Review
Publication Stage	Final	In Press

Data Analysis

VOSviewer is an accessible bibliometric analysis tool developed by Nees Jan van Eck and Ludo Waltman at Leiden University in the Netherlands (van Eck & Waltman, 2010a, 2017). It is widely recognized for its effectiveness in visualizing and analyzing scientific literature. The software excels in producing clear network visualizations, grouping related elements, and creating density maps. Researchers use it to explore networks of co-authorship, co-citation, and keyword co-occurrence, gaining detailed insights into academic landscapes. With its user-friendly interface and ongoing updates, VOSviewer supports efficient navigation through extensive datasets. Its capacity to calculate metrics, tailor visual representations, and integrate with diverse bibliometric databases makes it an essential tool for investigating complex research fields.

VOSviewer stands out for its ability to convert complex bibliometric data into clear and insightful visual representations. Specializing in network visualization, it effectively clusters related elements, examines keyword co-occurrence, and creates density maps. Its intuitive interface makes it accessible to both beginners and seasoned researchers, facilitating efficient exploration of research trends. Ongoing updates keep VOSviewer at the cutting edge of bibliometric analysis, offering robust metrics and customizable visuals. Its flexibility in handling various data types, such as co-authorship and citation networks, makes it a highly valuable and versatile tool for scholars aiming to gain in-depth knowledge and uncover meaningful patterns in their fields.

Datasets containing details such as publication year, title, author name, journal, citations, and keywords in PlainText format were obtained from the Scopus database, covering the timeframe from 1988 to December 2025. These datasets were analyzed using VOSviewer software (version 1.6.19). Utilizing VOS clustering and mapping methods, the software enabled the creation and exploration of visual maps. Offering an alternative to the Multidimensional Scaling (MDS) approach, VOSViewer focuses on situating items within low-dimensional spaces, ensuring that the proximity between any two items accurately reflects their relatedness

and similarity (van Eck & Waltman, 2010b). In this respect, VOSViewer shares a similarity with the MDS approach (Appio et al., 2014). Diverging from MDS, which primarily engages in the computation of similarity metrics like cosine and Jaccard indices, VOS adopts a more suitable approach for normalizing co-occurrence frequencies, which is the Association Strength (AS_{ij}), and it is calculated as (Van Eck & Waltman, 2007):

$$AS_{ij} = \frac{C_{ij}}{w_i w_j},$$

which is “proportional to the ratio between on the one hand the observed number of co-occurrences of i and j and on the other hand the expected number of co-occurrences of i and j under the assumption that co-occurrences of i and j are statistically independent” (Van Eck & Waltman, 2007).

Findings

What Are the Research Trends in Social-Emotional Competence to Enhance Performance According to the Year of Publication?

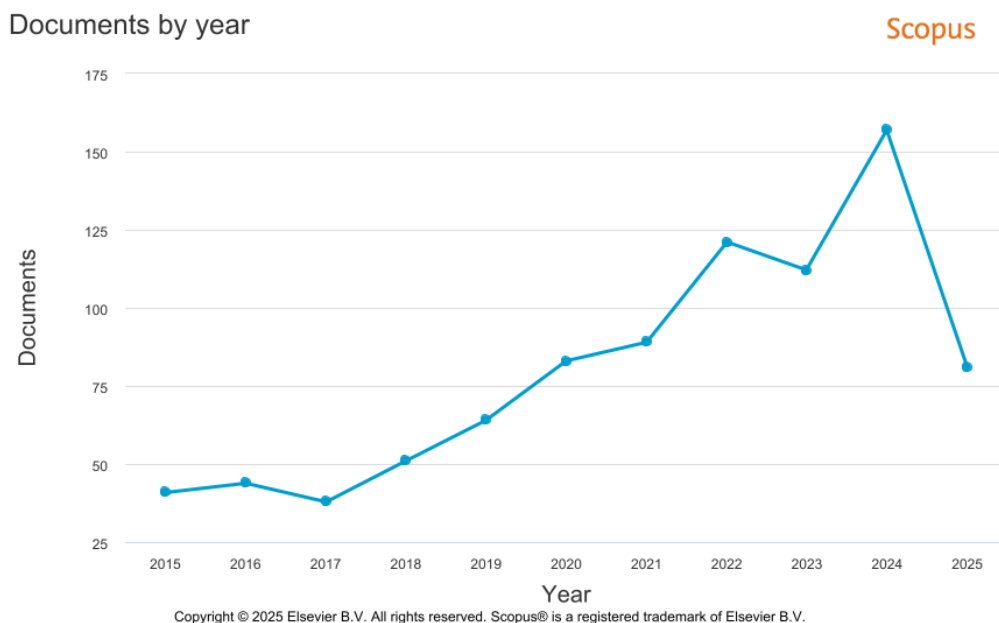


Figure 1: Trend Of Research in Social-Emotional Competence to Enhance Performance by Years

Table 3: Table Of Research in Social-Emotional Competence for Improved Performance by Years

Year	Total Publication	Percentage (%)
2025	18	9.19
2024	157	17.82
2023	112	12.71
2022	121	13.73

2021	89	10.10
2020	83	9.42
2019	64	7.26
2018	51	5.79
2017	38	4.31
2016	44	4.99
2015	41	4.65

The bibliometric analysis reveals a noticeable upward trend in scholarly attention toward developing SEC to enhance teacher performance, particularly in the last five years. The data shows a peak in 2024 with 157 publications, representing 17.82% of the total, followed by a strong performance in 2023 and 2022, with 112 (12.71%) and 121 (13.73%) publications, respectively. The continued growth into 2025, with 18 publications (as of early in the year), suggests that this topic remains relevant and may surpass earlier figures as the year progresses. This recent surge highlights a rising awareness of the significance of SEL in educational settings, possibly influenced by post-pandemic educational reforms, teacher burnout concerns, and an increasing emphasis on holistic student development.

From 2015 to 2020, the publication trend was relatively modest but steadily rising, beginning with 41 publications (4.65%) in 2015 and increasing to 83 publications (9.42%) in 2020. This gradual increase likely reflects foundational research and growing awareness in educational psychology and teacher development, setting the stage for the rapid expansion in the following years. The moderate yet consistent interest during this period indicates that while the topic was emerging, it had not yet become a central focus within the broader education research community.

Overall, the data demonstrate that interest in SEC and how it influences teacher performance has intensified significantly in recent years. The acceleration in publication volume post-2020 suggests a shift in research priorities, possibly influenced by global disruptions to education systems and a heightened need for teacher resilience and emotional intelligence. These findings underscore the topic's relevance and offer strong justification for continued investigation, policy attention, and integration into teacher training programs worldwide.

What Are the Most Cited Articles in Social-Emotional Competence to Enhance Performance?

The 10 most frequently cited authors in the area of SEC and education underscore a strong interdisciplinary interest, with prominent contributions from psychology, education technology, and public health. The most cited study, by Schonert-Reichl et al. (2015), with 515 citations, evaluated a mindfulness-based school program, emphasizing the direct impact of SEL interventions on children's development. Schonert-Reichl appears again as a lead author in 2017 with a solo-authored piece (347 citations), reaffirming her central influence in the SEL field. Similarly, the work by Greenberg et al. (2017) (291 citations) positions SEL as a public health initiative, highlighting how SEL transcends traditional educational boundaries and reinforces its systemic value.

Another notable trend is the integration of digital and virtual tools in SEL and education research. Studies by Dunn & Kennedy (2019), Wang (2017), Liu et al. (2020), and Xu et al. (2020) collectively focus on technology-enhanced learning environments, engagement, and

performance, with citation counts ranging from 180 to 230. Their appearance among the top-cited authors indicates a growing interest in how digital platforms and immersive environments influence not only academic outcomes but also student motivation and social interaction, critical elements of SEL. These works suggest that educational technology is becoming an essential tool in facilitating social-emotional competencies, especially in blended or online learning contexts.

Lastly, meta-analyses and theoretical comparisons also feature prominently, as seen in Wigelsworth et al. (2016) and Olivier et al. (2019). These studies, with 167 and 163 citations respectively, signal the research community's effort to synthesize findings across contexts and theoretical frameworks. Porat et al. (2018), with 153 citations, add a unique dimension by linking digital literacy with students' perceived and actual competencies, which may indirectly inform SEL practices. Collectively, these highly cited works form a rich foundation for understanding the scope, methodologies, and cross-disciplinary relevance of SEC in improving teacher and student outcomes.

Table 4: Most Cited Author

Authors	Title	Year	Source title
Schonert-Reichl K.A.; Oberle E.; Lawlor M.S.; Abbott D.; Thomson K.; Oberlander T.F.;	Enhancing cognitive and social-emotional development through a simple-to-administer mindfulness-based school program for elementary school children: A randomized controlled trial (Schonert-Reichl et al., 2015)	2015	Developmental Psychology
Diamond A. Schonert-Reichl K.A.)	Social and emotional learning and teachers (Schonert-Reichl, 2017)	2017	Future of Children
Greenberg M.T.; Domitrovich C.E.; Weissberg R.P.; Durlak J.A.	Social and emotional learning as a public health approach to education (Greenberg et al., 2017)	2017	Future of Children
Dunn T.J.; Kennedy M.	Technology Enhanced Learning in higher education: motivations, engagement and academic achievement (Dunn & Kennedy, 2019)	2019	Computers and Education
Wang F.H.	An exploration of online behaviour, engagement and achievement in a flipped classroom supported by a learning management system (Wang, 2017)	2017	Computers and Education
Liu R.; Wang L.; Lei J.; Wang Q.; Ren Y.	Effects of an immersive virtual reality-based classroom on students' learning performance in science lessons (R. Liu et al., 2020)	2020	British Journal of Educational Technology

Xu B.; Chen N.-S.; Chen G.	Effects of teacher role on student engagement in WeChat-based online discussion learning (Xu et al., 2020)	2020	Computers and Education
Wigelsworth M.; Lendrum A.; Oldfield J.; Scott A.; ten Bokkel I.; Tate K.; Emery C.	The impact of trial stage, developer involvement and international transferability on universal social and emotional learning programme outcomes: a meta-analysis (Wigelsworth et al., 2016)	2016	Cambridge Journal of Education
Olivier E.; Archambault I.; De Clercq M.; Galand B.	Student Self-Efficacy, Classroom Engagement, and Academic Achievement: Comparing Three Theoretical Frameworks (Olivier et al., 2019)	2019	Journal of Youth and Adolescence
Porat E.; Blau I.; Barak A.	Measuring digital literacies: Junior high-school students' perceived competencies versus actual performance (Porat et al., 2018)	2018	Computers and Education

What Is the Top 10 Countries in Terms of the Number of Publications?

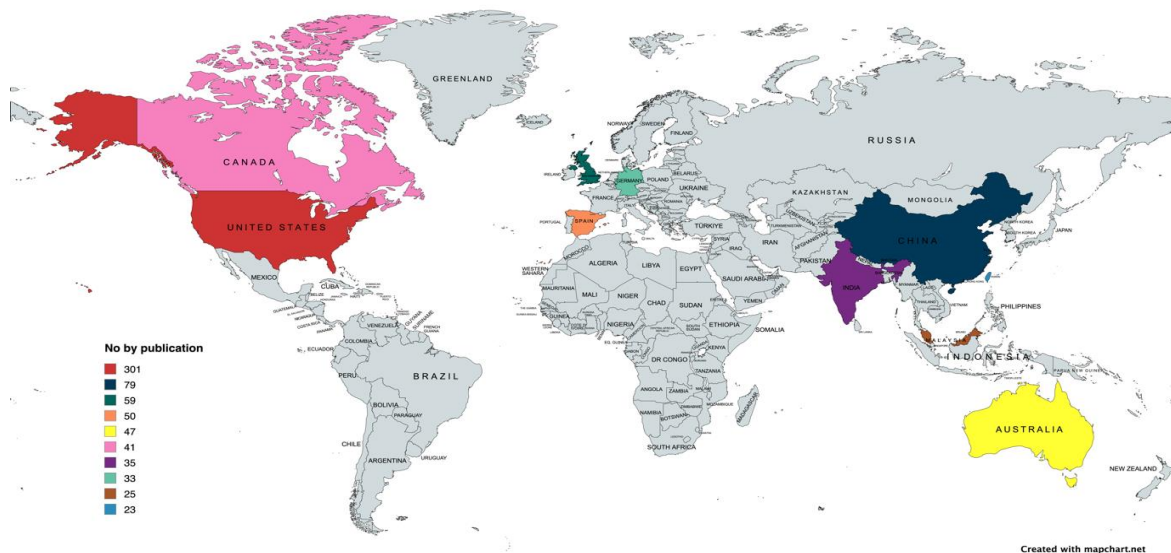


Figure 2: Top 10 Countries by Number of Publications

Table 5: Table Of Research in Social-Emotional Competence to Enhance Performance by Country or Territory

Country / Territory	No of Publication
United States	301
China	79
United Kingdom	59

Spain	50
Australia	47
Canada	41
India	35
Germany	33
Malaysia	25
Taiwan	23

The global distribution of publications on developing the SEC to enhance teacher performance reveals a significant dominance by the United States, with 301 publications. This figure alone accounts for a substantial proportion of global research output in this area, highlighting the United States's leadership in promoting SEL initiatives and teacher development through policy-driven research, well-funded educational programs, and institutional focus on whole-child education. This leadership position may also reflect the presence of influential research centers, such as the Collaborative for Academic, Social, and Emotional Learning (CASEL), and a well-established body of academic journals that actively support SEL-related scholarship.

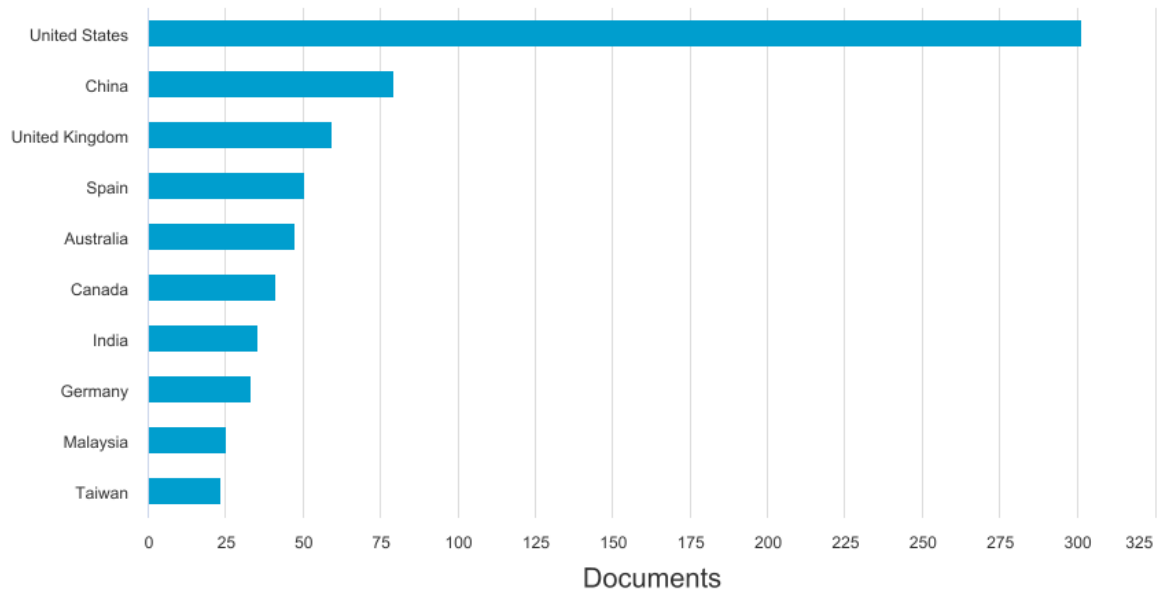
Following the United States, China (79 publications) and the United Kingdom (59 publications) show strong research contributions. China's increasing interest suggests a growing emphasis on emotional intelligence and student well-being in its educational reform efforts, especially as it navigates modernization and digital transformation in classrooms. The United Kingdom, with a long-standing tradition in educational psychology, teacher training, and curriculum innovation, appears to integrate SEL into broader frameworks of well-being and school effectiveness. Other notable contributors include Spain (50), Australia (47), and Canada (41), all of which have invested in SEL within both national education strategies and academic discourse, indicating cross-continental commitment to teacher well-being and performance enhancement.

Emerging contributors such as India (35), Germany (33), Malaysia (25), and Taiwan (23) reflect a growing awareness and integration of social-emotional dimensions into teacher development in diverse educational systems. These countries' involvement, though smaller in volume, signals a broadening of the research community and the global applicability of SEL principles. Malaysia's presence is particularly significant in the Southeast Asian context, pointing to regional efforts in educational transformation. Collectively, this geographical analysis underscores a worldwide movement toward embedding SEL in teacher performance discourse, though the degree of emphasis and institutionalization still varies across regions.

Documents by country or territory

Compare the document counts for up to 15 countries/territories.

Scopus



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Figure 3: Trend Of Research in Social-Emotional Competence to Enhance Performance by Country or Territory

What Are the Popular Keywords Related to the Study?

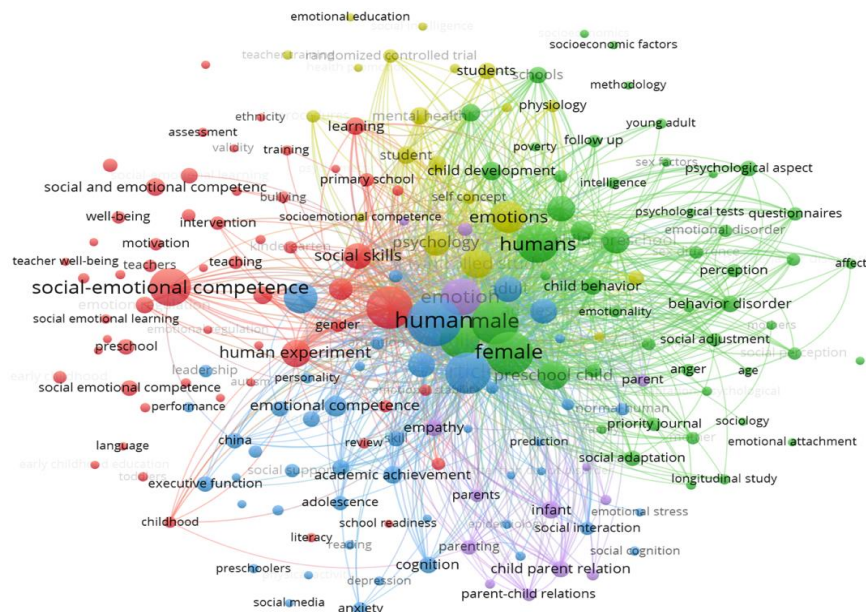


Figure 4: Network Visualization Map of Keywords' Co-occurrence

Table 6: Table Of Results from The Vosviewer for Popular Keywords

Keyword	Occurrences	Total Link Strength
social-emotional competence	143	230
emotions	155	245
emotional competence	127	215
academic achievement	101	190
social skills	96	176
child behavior	110	185
teacher well-being	72	128
motivation	81	139
emotional regulation	95	172
empathy	89	162

The VOSviewer analysis reveals that “**emotions**” is the most dominant keyword, with the highest number of occurrences (155) and total link strength (245). This indicates that emotions are central to the research on SEC, often linked with related themes such as child behavior, academic performance, and social interaction. Other prominent keywords include “social-emotional competence” (143 occurrences, 230 link strength) and “emotional competence” (127 occurrences, 215 link strength), suggesting that these concepts are focal points in studies addressing both teacher development and student outcomes.

Keywords such as “**academic achievement**” (101 occurrences, 190 link strength) and “**social skills**” (96 occurrences, 176 link strength) reflect a strong connection between emotional development and educational performance. This indicates that researchers frequently associate emotional and social competencies with positive learning outcomes, improved classroom interactions, and student readiness. Similarly, terms like “child behaviour” and “emotional regulation” highlight the importance placed on how children manage emotions and behaviours within educational settings.

Interestingly, keywords related to educators, such as “**teacher well-being**” (72 occurrences) and “**motivation**” (81 occurrences) also appear prominently, emphasizing the importance of supporting teachers' emotional health to enhance teaching effectiveness. “Empathy” and “emotional regulation” further underscore the interplay between intrapersonal and interpersonal skills, which are essential in fostering positive teacher-student relationships and promoting a holistic approach to SEL in schools.

What is Co-Authorship by Countries' Collaboration?

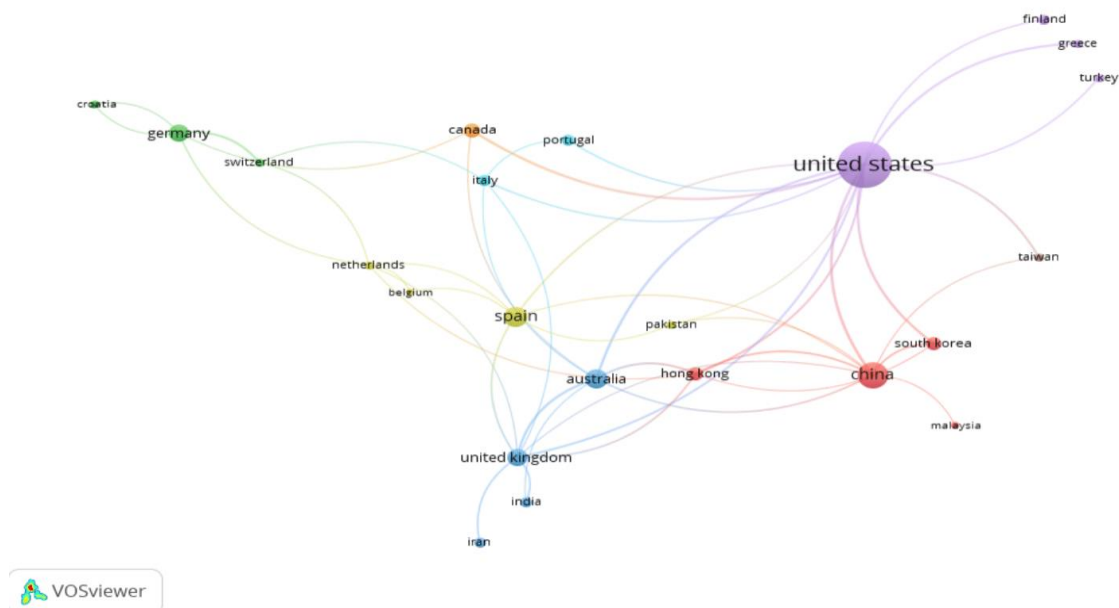


Figure 5: Network Visualization Map of Co-authorship for Countries' Collaboration

The VOSviewer analysis of country collaboration in studies related to SEC and teacher performance highlights the **United States** as the leading contributor, with the greatest number of documents and citations, and the strongest total link strength. This dominance reflects the country's robust investment in educational research, especially in SEL frameworks such as those developed by CASEL. The strong link strength also indicates active international collaboration, with U.S.-based researchers frequently partnering with scholars from other regions, contributing to a broader global dialogue on teacher effectiveness through SEL.

Countries like **China, the United Kingdom, Canada, and Australia** also demonstrate high levels of participation, both in publication volume and citation impact. Their growing influence is evident in the strength of their international links, suggesting a commitment to cross-border collaboration and knowledge exchange. These countries have implemented national education reforms that increasingly prioritize teacher well-being, student emotional development, and performance metrics, hence aligning with global trends in SEL. The presence of strong research networks among these nations enhances the development of more universally applicable frameworks and methodologies.

Meanwhile, **emerging contributors** like Malaysia, India, and Spain, though publishing fewer documents, are beginning to establish themselves in the global SEL research network. Their participation points to increasing awareness of the importance of emotional and social development in teacher training and student outcomes, particularly within diverse cultural and educational contexts. The relatively moderate link strength for these countries suggests opportunities for expanding collaborative networks, which could strengthen the internationalization and impact of their research. Overall, the country collaboration map indicates a promising global momentum toward integrating SEL into teacher development, though disparities in research intensity and collaboration remain.

Result and Discussion

The bibliometric findings reveal a substantial upward trend in research activity concerning SEC in relation to teacher performance. The data shows a significant increase in publications starting in 2020 and peaking in 2024, indicating that interest in SEC has gained significant momentum, particularly in response to emerging educational challenges such as post-pandemic recovery and teacher burnout. This trajectory suggests growing academic recognition of the role of the SEC in shaping effective teaching practices, fostering resilience, and promoting student well-being. The steady increase from 2015 onwards also signals foundational efforts to embed emotional and social dimensions within teacher development, reflecting broader shifts in pedagogical priorities.

The most cited articles underscore the interdisciplinary nature of this research area. Studies exploring mindfulness interventions, emotional intelligence, and digital learning platforms dominate citation rankings, suggesting that scholars are examining SEC through diverse lenses. The integration of educational psychology with technology and public health themes points to a rich, interconnected discourse. Furthermore, the widespread use of digital environments, such as flipped classrooms and virtual reality, highlights the need for emotional adaptation among teachers and learners alike. These highly cited works also reinforce the relevance of the SEC in not only improving teacher performance but also enhancing student engagement and motivation across both traditional and technology-enhanced contexts.

International collaboration patterns and keyword co-occurrences further enrich the discussion. The United States dominates in terms of publication output and international collaborations, with significant contributions from countries like China, the United Kingdom, and Australia, forming strong international research networks. Emerging contributors like Malaysia and India indicate expanding global engagement in SEC-related studies. Keyword analysis reveals key thematic clusters such as “emotions,” “emotional competence,” and “teacher well-being,” reflecting strong research interest in both personal and interpersonal dimensions of SEC. Notably, the appearance of terms like “motivation,” “empathy,” and “academic achievement” suggests a holistic understanding of how SEC influences educational outcomes. However, the moderate cross-country co-authorship signals room for greater collaborative exploration to strengthen comparative insights and broaden contextual understanding across educational systems.

Conclusion

This bibliometric study was conducted to examine research patterns, collaborations, and thematic trends in the field of SEC for enhancing teacher performance in schools. Through the analysis of 881 peer-reviewed documents retrieved from the Scopus database, the study addressed several key research questions related to publication trends, citation impact, keyword prominence, and co-authorship networks. The primary aim was to map the development of scholarly attention in this area and to identify the structure and dynamics of academic contributions over the past decade.

The findings revealed a consistent increase in publication volume, especially from 2020 onwards, highlighting the rising academic interest in the emotional and social dimensions of teaching. The United States emerged as the most prolific contributor, followed by China, the United Kingdom, and Australia, indicating a strong international presence. Highly cited studies centered on mindfulness, emotional intelligence, and digitally mediated learning environments, reflecting interdisciplinary engagement. Keyword analysis showed dominant focus areas such

as emotions, emotional competence, teacher well-being, and student behavior, which indicate a comprehensive exploration of both intrapersonal and interpersonal competencies in educational settings. Despite this growth, the data showed relatively limited cross-national collaboration, pointing to opportunities for broader global partnerships.

This analysis enhances the field by presenting a systematic overview of how research on SEC has evolved, providing insights into emerging topics and research gaps. The study extends current knowledge by identifying underexplored themes and pointing to the potential of digital tools and collaborative networks to advance the field. From a practical standpoint, the findings may inform policy design, teacher training programs, and curriculum development focused on socio-emotional support for educators. However, limitations include the focus on a single database and the exclusion of grey literature, which may restrict the comprehensiveness of coverage. Future research may expand by incorporating additional databases and exploring longitudinal impacts of SEC-focused interventions on teaching outcomes. Overall, the study affirms the value of bibliometric approaches in capturing the scope and trajectory of academic work in SEC, encouraging ongoing exploration and knowledge sharing in this vital area of educational development.

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