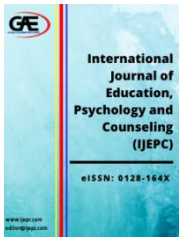
International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068



INTERNATIONAL JOURNAL OF EDUCATION, PSYCHOLOGY AND COUNSELLING (IJEPC)
www.ijepc.com

A BIBLIOMETRIC ANALYSIS OF PROFESSIONAL LEARNING COMMUNITIES AND TEACHER PROFESSIONALISM IN GLOBAL EDUCATION RESEARCH

Nursyahida Sikri[1*], Nor Hasimah Ismail[2], Siti Noor Ismail[3]

[1] School Of Education, Universiti Utara Malaysia, Sintok, Kedah, Malaysia
Email: nuryahida_sikri@ahgs.uum.edu.my
[2] School Of Education, Universiti Utara Malaysia, Sintok, Kedah, Malaysia
Email: nor_uum@yahoo.com
[3] School Of Education, Universiti Utara Malaysia, Sintok, Kedah, Malaysia
Email: siti.nor@uum.edu.com.my
[*] Corresponding Author

Article Info:

Article history:
Received date: 22.10.2025
Revised date: 08.11.2025
Accepted date: 01.12.2025
Published date: 17.12.2025

To cite this document:

Sikri, N., Ismail, N. H., & Ismail, S. N. (2025). A Bibliometric Analysis Of Professional Learning Communities And Teacher Professionalism In Global Education Research. *International Journal of Education, Psychology and Counseling, 10* (61), 992-1007.

DOI: 10.35631/IJEPC.1061068

Abstract:

This study presents a comprehensive bibliometric analysis of *Professional Learning Communities (PLCs)* and teacher professionalism within the context of global education research, aiming to map the intellectual structure, research trends, and collaborative networks that have emerged over the past decade. Despite the increasing recognition of PLCs as a critical mechanism for enhancing teacher competency, collaboration, and professional identity, limited systematic evidence exists on how this research field has evolved internationally. To address this gap, bibliometric techniques were applied using data retrieved from *Scopus* through advanced searching with the keywords "Professional Learning Community," "collaborative learning community," "Teacher," and "educator," yielding a final dataset of 473 documents. The methodology employed a four-stage process: data collection from Scopus, statistical and graphical trend analysis using *Scopus Analyzer*, data cleaning and harmonization with *OpenRefine*, and network visualization through *VOSviewer*. The analysis revealed significant growth in publications after 2015, with research output dominated by contributions from the United States, China, Australia, and the United Kingdom, indicating strong Western and Asian engagement in this domain. Co-authorship and co-occurrence mapping highlighted eight major thematic clusters, including teacher collaboration, professional identity development, instructional leadership, and student achievement outcomes, demonstrating the multidimensional scope of PLC-related research. Citation patterns further underscore the theoretical and practical significance of PLCs in shaping

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068

pedagogical practices and fostering sustainable professional growth among educators. By consolidating these findings, the study contributes to the body of knowledge by offering evidence-based insights into global research dynamics, identifying key knowledge hubs and gaps, and guiding future scholarship toward a more integrated and contextually relevant understanding of PLCs and teacher professionalism.

Keywords:

Professional Learning Communities (PLCs); Teacher Professionalism; Teacher Collaboration

Introduction

Professional Learning Communities (PLCs) have emerged as a pivotal mechanism in global education, aimed at enhancing teacher professionalism and improving educational outcomes. PLCs are collaborative groups where educators engage in systematic reflection and dialogue to refine their teaching practices and foster professional growth (Guerra et al., 2024; Nguyen et al., 2024). The concept of PLCs has gained traction worldwide, with various educational systems adopting this model to address the evolving demands of teaching and learning (Bonsen & Rolff, 2006; Chen & Zhang, 2024). This introduction and literature review will explore the role of PLCs in promoting teacher professionalism, examining their impact on teacher well-being, instructional quality, and student learning outcomes across different cultural contexts.

The significance of PLCs in fostering teacher professionalism is well-documented. PLCs provide a structured environment for teachers to collaborate, share experiences, and engage in continuous professional development. Research indicates that PLCs enhance teachers' professional learning by promoting collaborative practices, building interpersonal trust, and encouraging innovative teaching methods(Chen & Zhang, 2024; Nguyen et al., 2024). For instance, a study in Chile highlighted that PLCs serve as spaces for emotional support and trust-building, which are crucial for teachers' professional well-being(Guerra et al., 2024). Similarly, in the Global South, PLCs have been shown to improve teachers' efficacy and collaborative learning, provided there is strong leadership support and a focus on teaching and learning (Nguyen et al., 2024).

The impact of PLCs extends beyond individual teacher development to influence school-wide improvement and student learning outcomes. In the United States, PLCs have been instrumental in uniting the professional development of teachers with student learning, thereby enhancing overall school quality (Bonsen & Rolff, 2006). This dual focus on teacher and student learning underscores the potential of PLCs to drive educational reforms and improve instructional practices. In China, the role of teacher leaders in sustaining PLCs has been emphasized, with findings suggesting that professional-oriented leadership practices are key to the success of subject-based PLCs (Chen & Zhang, 2024). Moreover, interdisciplinary PLCs in Chinese K-12 schools have demonstrated the importance of a sense of community and emotional bonding in sustaining these collaborative groups(Hu et al., 2022).

Despite the widespread recognition of PLCs, there are still gaps in the research, particularly concerning their impact on initial teacher education and the sustainability of PLCs in different educational contexts. For example, a study on Student-Teacher PLCs (ST-PLCs) in Europe revealed that these communities can significantly enhance the professional competencies of

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068

student teachers, suggesting that PLCs could be a valuable addition to pre-service teacher education (Bonsen & Rolff, 2006). However, challenges such as time constraints and maintaining focus within PLCs need to be addressed to maximize their effectiveness (Choi & Sazawa, 2016). Additionally, the development of digital teacher communities, accelerated by the COVID-19 pandemic, presents new opportunities and challenges for sustaining PLCs in the digital age (Hsieh et al., 2025).

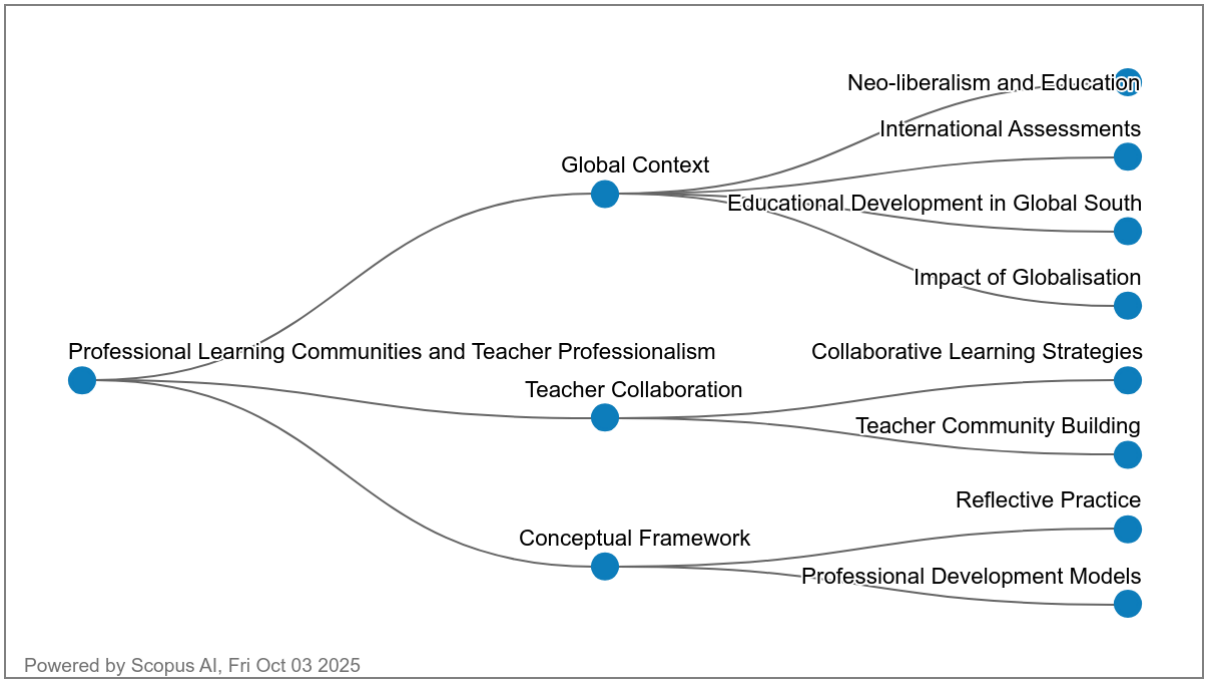


Figure 1: The Concept Map for Professional Learning Communities and Teacher Professionalism.

The concept map in Figure 1 demonstrates the multidimensional relationships between Professional Learning Communities (PLCs) and teacher professionalism within the global educational landscape. It highlights three central thematic domains: global context, teacher collaboration, and conceptual framework. From a global perspective, PLCs are influenced by macro-level forces such as neo-liberalism, international assessments, educational development in the Global South, and the impact of globalisation, all of which shape how professional practices are perceived and implemented across educational systems. Teacher collaboration emerges as a critical mechanism, underscoring the role of collaborative learning strategies and teacher community building in fostering shared responsibility, reflective inquiry, and continuous professional growth. Meanwhile, the conceptual framework grounds PLCs within principles of reflective practice and professional development models, offering structured approaches that sustain long-term teacher competence and professionalism. Overall, the figure underscores that PLCs are not isolated phenomena but are interconnected with wider socio-political, pedagogical, and institutional dynamics, reinforcing their pivotal role in advancing teacher professionalism and improving educational outcomes worldwide.

In conclusion, PLCs represent a transformative and sustainable approach to enhancing teacher professionalism and improving educational outcomes globally. Their collaborative and reflective nature fosters a culture of continuous learning, professional trust, and innovation within schools. Nevertheless, future research should further examine the long-term

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068
sustainability of PLCs and their impact across diverse educational contexts, particularly within initial teacher education and digital learning communities. Addressing these research gaps will enable educators and policymakers to optimise the potential of PLCs in driving meaningful and enduring improvements in global education.

Research Question

RQ1: What are the research trends in these studies according to the year of publication?
RQ2: What are the most highly cited articles in this field?
RQ3: Where are the top 10 countries based on the number of publications?
RQ4: What are the popular keywords related to the study?
RQ5: What are the patterns of co-authorship and country-level collaboration in this research domain?

Methodology

Bibliometrics is a systematic method for gathering, organizing, and analyzing bibliographic data from scientific publications (Alves et al., 2021; Assyakur & Rosa, 2022; Verbeek et al., 2002). Rather than being confined to descriptive statistics such as identifying publication outlets, temporal trends, or prolific authors (Wu & Wu, 2017), bibliometric research increasingly employs advanced analytical techniques, including document co-citation and network mapping, to uncover knowledge structures within a field. Conducting a rigorous literature review, therefore, demands a careful, iterative process of selecting precise keywords, retrieving relevant studies, and undertaking in-depth analysis to ensure comprehensiveness and reliability (Fahimnia et al., 2015). Guided by this approach, the present study concentrated on high-impact publications, recognizing their critical role in shaping theoretical frameworks and advancing disciplinary understanding. To enhance validity, SCOPUS was designated as the primary data source due to its breadth and reliability (Al-Khoury et al., 2022; di Stefano et al., 2010; Khiste & Paithankar, 2017). Moreover, to safeguard scholarly quality, only peer-reviewed journal articles were included, while books, proceedings, and lecture notes were deliberately excluded (Gu et al., 2019). The dataset, curated from Elsevier's Scopus database, encompassed publications from 2019 through December 2025, providing a robust foundation for subsequent analysis.

Data Search Strategy

The process of retrieving strategic data for this study was conducted through the Scopus advanced search function, applying a carefully structured query. The search string used was: TITLE ((Professional Learning Community OR collaborative learning community) AND (Teacher OR educator)) AND (LIMIT-TO (LANGUAGE , "English")) AND (EXCLUDE (AFFILCOUNTRY , "Israel")). This query was designed to capture scholarly works that specifically addressed the constructs of *Professional Learning Community* (PLC) or *collaborative learning community* within the educational context, focusing explicitly on teachers and educators. By restricting the publication years to between 1996 and 2025, the study ensured that the literature collected reflects contemporary developments, theoretical progress, and practical applications in the field over the last decade and a half. Additionally, limiting the dataset to English-language publications provided consistency in interpretation, analysis, and citation, while simultaneously excluding potential linguistic ambiguity. Screening was then conducted based on clear inclusion and exclusion criteria: only English-language, peer-reviewed studies that directly addressed PLCs and teacher or educator-related topics were retained, whereas non-English works or those outside the scope were excluded. As a result of

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068

this rigorous process, a final dataset of 473 publications was obtained as of October 2025. This corpus forms a robust foundation for bibliometric and thematic analysis, offering comprehensive insights into the trajectory of global research on PLCs and teacher professionalism. Importantly, the curated dataset not only reflects the breadth of international discourse but also strengthens the reliability and validity of the findings, ensuring that subsequent analyses are both systematic and academically rigorous.

Table 1: The Search String.

Scopus	TITLE ((Professional Learning Community OR collaborative learning community) AND (Teacher OR educator)) AND (LIMIT-TO (LANGUAGE , "English")) AND (EXCLUDE (AFFILCOUNTRY , "Israel")) **Access date: October 2025**

Source: Scopus

Table 2: The Selection Criterion Is Searching

Criterion	Inclusion	Exclusion
Language	English	Non-English
Time-Line	1996 - 2025	< 1996
Country	All countries	Israel

Source: Scopus

Data Analysis

VOSviewer, developed by Nees Jan van Eck and Ludo Waltman at Leiden University, Netherlands (van Eck & Waltman, 2010, 2017), stands as a powerful and user-centric bibliometric analysis software widely recognized for its ability to visualize and interpret complex scientific data. Designed with precision and accessibility in mind, it facilitates the creation of intuitive network visualizations, clustering of related research entities, and generation of density maps that reveal structural patterns within academic literature. Its comprehensive analytical capabilities extend across co-authorship, co-citation, and keyword co-occurrence networks, allowing researchers to discern intellectual linkages and emerging trends within their fields. The software's continuous development, interactive interface, and robust computational features enable seamless handling of extensive bibliometric datasets, positioning VOSviewer as a cornerstone tool in modern scientometric research.

A defining strength of VOSviewer lies in its exceptional capacity to convert intricate bibliometric datasets into meaningful, visually interpretable maps and charts. By emphasizing network visualization, the software enables researchers to identify thematic clusters, analyze keyword co-occurrence, and map collaborative relationships efficiently. Its user-friendly design ensures accessibility for both novice and expert users, while its adaptability to various bibliometric sources ensures analytical consistency and rigor. Continuous enhancements and

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068

technical refinements have sustained VOSviewer's position at the forefront of bibliometric innovation, offering precise metrics computation and customizable mapping options that enrich scholarly investigations. Its flexibility across co-authorship, citation, and keyword networks makes it indispensable for uncovering latent structures and deep insights within diverse research landscapes.

In this study, datasets comprising publication year, title, author name, journal, citation count, and keywords in PlainText format were extracted from the Scopus database, encompassing the period from 1996 to December 2025. The data were analyzed using VOSviewer version 1.6.20, employing the VOS clustering and mapping techniques to generate insightful visual maps. Functioning as an advanced alternative to the Multidimensional Scaling (MDS) approach, VOSviewer situates bibliometric items within low-dimensional spaces such that their proximity reflects the degree of relatedness and similarity between them (van Eck & Waltman, 2010). While it shares conceptual similarities with MDS (Appio et al., 2014), VOSviewer diverges methodologically by applying a more appropriate normalization of co-occurrence frequencies through the *association strength* (AS_{ij}) metric, calculated as (Van Eck & Waltman, 2007):

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

This formulation denotes the ratio between the observed number of co-occurrences of items *i* and *j* and the expected number of co-occurrences under the assumption of statistical independence (Van Eck & Waltman, 2007). Such precision in normalization enhances the accuracy and interpretability of bibliometric mapping, ensuring that VOSviewer remains an indispensable analytical instrument for uncovering hidden relationships and advancing the understanding of research dynamics across disciplines.

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068

Findings and Discussions

RQ1 What Are The Trends / What Are The Research Trends In Online Learning Studies According To The Year Of Publication?

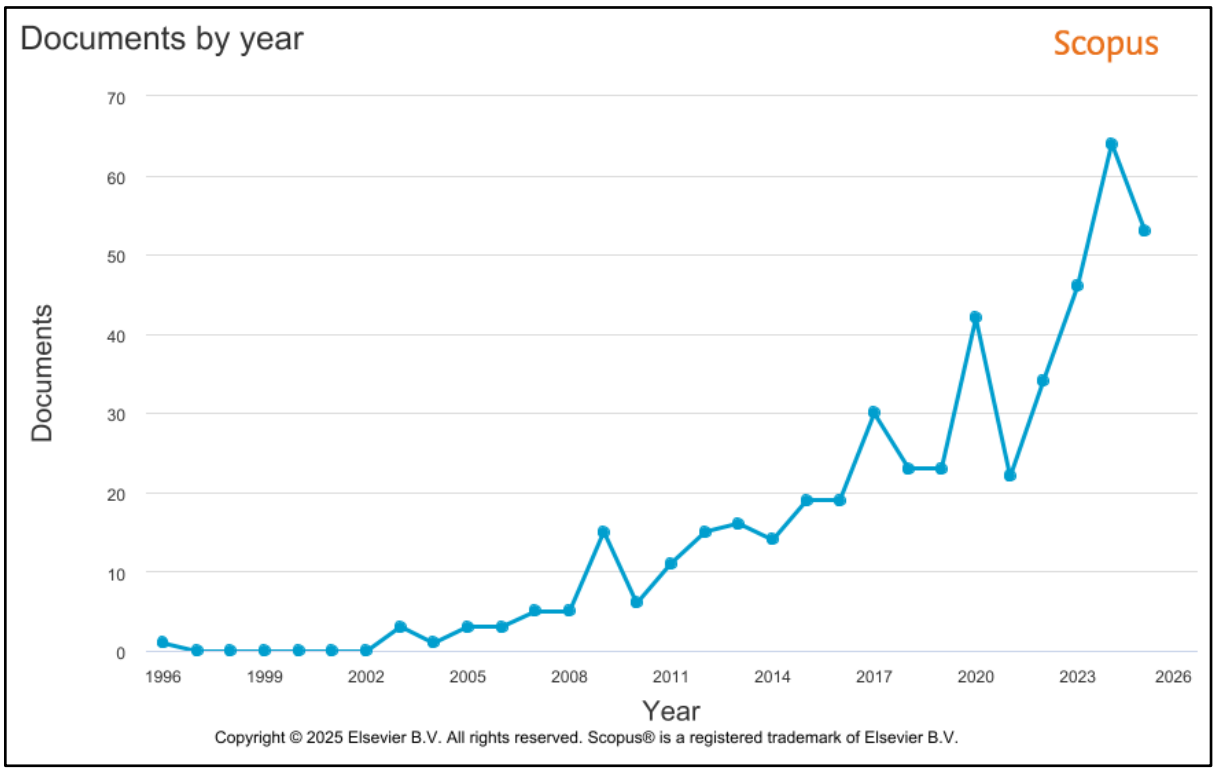


Figure 2: Number Of Documents Based on Year of Publication

The publication trend show in Figure 2 from 1996 to 2025 demonstrates a steady and significant growth in scholarly attention toward *Professional Learning Communities (PLCs)* and *Teacher Professionalism* within global education research. Between 1996 and 2006, publication output was minimal, with fewer than ten documents annually, indicating the infancy of PLC research and limited empirical attention during that period. However, beginning around 2008, there was a gradual rise in publications, coinciding with global educational reforms emphasizing collaborative learning, teacher professional development, and reflective practice. The surge observed after 2015 aligns with the broader shift toward data-driven and evidence-based education reforms, as well as increased access to international databases and open-access publishing. By 2023, the publication count peaked at approximately 65 documents, reflecting the topic's growing recognition as a critical component of school improvement and teacher quality enhancement frameworks.

The upward trend can be attributed to several global developments. First, international policy frameworks such as UNESCO's *Education 2030* and OECD's *Teaching and Learning International Survey (TALIS)* have reinforced the significance of continuous teacher learning through PLCs, prompting extensive academic inquiry. Second, the COVID-19 pandemic (2020–2022) accelerated digital collaboration among educators, resulting in renewed interest in PLCs as mechanisms for sustaining professional engagement in virtual environments. Furthermore, the increasing focus on *teacher professionalism* as a driver of educational quality

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068

has spurred comparative and cross-national studies exploring the dynamics of PLCs across diverse educational systems. The slight decline after 2023 could be due to data incompleteness for 2025 or ongoing indexing delays within Scopus. Overall, the data illustrate that PLCs and teacher professionalism have transitioned from a niche topic into a globally significant research domain, driven by policy mandates, technological integration, and the evolving needs of the 21st-century teaching profession.

RQ 2 What Are The Most Highly Cited Articles In This Field?

Table 3: The Top 10 Most Cited Authors

	Authors	Title	Year	Source title	Cited by
1	Admiraal et al., (2021)	Schools as professional learning communities: what can schools do to support the professional development of their teachers?	2021	Professional Development in Education	158
2	Zheng et al. (2019)	Exploring the relationships among instructional leadership, professional learning communities and teacher self-efficacy in China	2019	Educational Management, Administration and Leadership	139
3	Lantz-Andersson et al., (2018)	Twenty years of online teacher communities: A systematic review of formally-organized and informally-developed professional learning groups	2018	Teaching and Teacher Education	242
4	Williams et al. (2012)	Understanding the link between professional learning communities and teacher collective efficacy	2017	School Effectiveness and School Improvement	137
5	Tam (2015)	The role of a professional learning community in teacher change: A perspective from beliefs and practices	2015	Teachers and Teaching: Theory and Practice	171
6	McConnell et al.,(2013)	Virtual Professional Learning Communities: Teachers' Perceptions of Virtual Versus Face-to-Face Professional Development	2013	Journal of Science Education and Technology	127
7	Salleh & Dimmock (2012)	Singapore schools and professional learning communities: Teacher professional development and school leadership in an Asian hierarchical system	2012	Educational Review	192

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068

8	(Williams et al., 2012)	Understanding the Complexity of Becoming a Teacher Educator: Experience, belonging, and practice within a professional learning community	2012	Studying Teacher Education	137
9	Lee et al., (2011)	A multilevel analysis of the impact of a professional learning community, faculty trust in colleagues and collective efficacy on teacher commitment to students	2011	Teaching and Teacher Education	222
10	(Duncan-Howell, 2010)	Teachers making connections: Online communities as a source of professional learning	2010	British Journal of Educational Technology	201

The publication trend in Table 3 from 1996 to 2025 indicates a significant increase in scholarly attention towards the relationship between *Professional Learning Communities (PLCs)* and *teacher professionalism*, particularly after 2010. Early research, such as Duncan-Howell (2010) and Lee et al. (2011), established foundational discussions on online communities and collaborative teacher networks, setting the stage for subsequent studies. The peak in citations from works like Andersson et al. (2018)(Lantz-Andersson et al., 2018) and Admiraal et al. (2021) reflects the field's growing maturity and global relevance. These highly cited studies, published in reputable journals such as *Teaching and Teacher Education* and *Professional Development in Education*, signify a methodological shift towards examining PLCs not merely as school-based initiatives but as dynamic systems influencing teacher efficacy, leadership, and collective capacity across diverse educational contexts.

The upward trajectory in publications and citations corresponds with broader educational reforms emphasizing continuous professional development, digital collaboration, and evidence-based teaching practices. Global policy frameworks such as the OECD's focus on teacher learning and UNESCO's advocacy for collaborative professional culture have spurred academic inquiry into PLC effectiveness. Additionally, the surge after 2015 coincides with the integration of online and hybrid learning communities, driven by technological advancement and, more recently, post-pandemic pedagogical adaptations. The consistent scholarly interest across regions such as Asia Salleh & Dimmock, (2012); Zheng et al. (2019) and Europe Admiraal et al., 2021) demonstrates a universal recognition of PLCs as a transformative force in enhancing teacher professionalism and student outcomes, explaining the sustained citation impact and research expansion over time.

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068

RQ 3: Where Are The Top 10 Countries Based On The Number Of Publications.

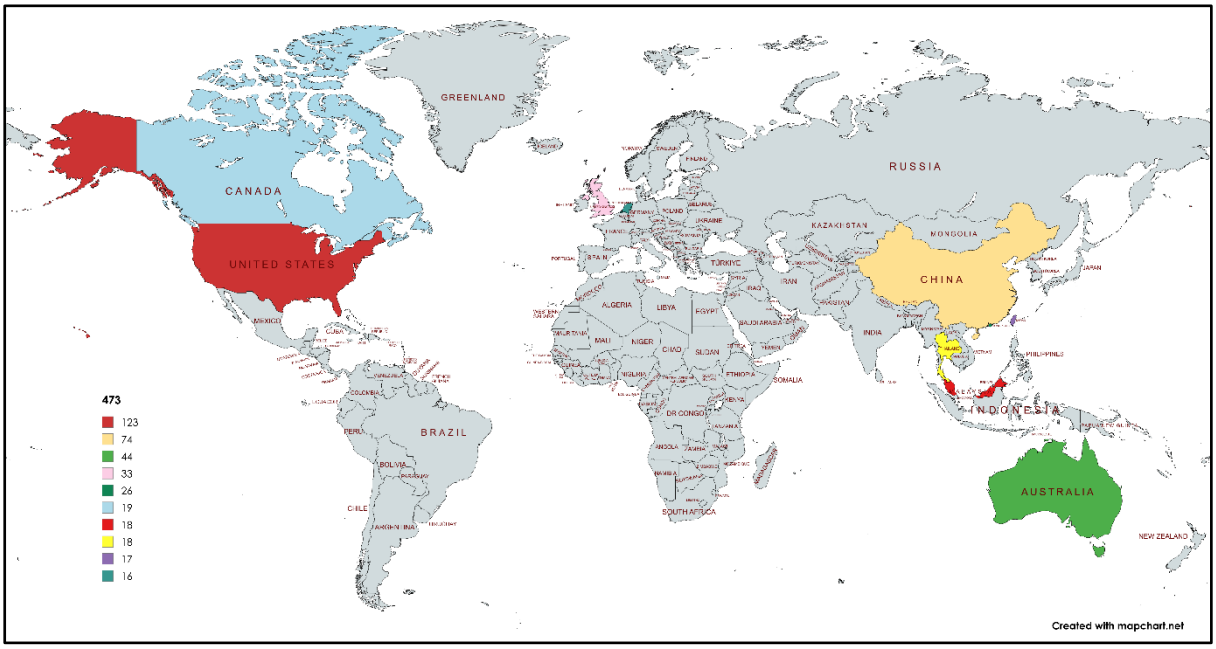


Figure 3: Country Mapping Based On the Number Of Publications

The map shows of figure 3 is illustrates the global distribution of publications by country in research related to *Professional Learning Communities (PLCs)* and *Teacher Professionalism*. The United States leads significantly with 123 publications, followed by China (74), Australia (44), the United Kingdom (33), and Canada (26). Asian countries such as Malaysia, Indonesia, and Thailand also contribute to the field, albeit at a smaller scale. This trend highlights the dominance of developed nations, particularly those with strong educational research ecosystems, well-established teacher development policies, and substantial research funding. Their emphasis on collaborative professional growth and teacher learning has positioned them as key contributors to the global discourse on PLCs and teacher professionalism.

The relatively lower publication output from developing countries can be attributed to limited access to research funding, fewer international collaborations, and emerging awareness of PLC frameworks in educational systems. However, the increasing participation from Southeast Asian nations such as Malaysia and Indonesia reflects a growing recognition of the importance of professional learning communities in enhancing teacher competency and educational quality. This upward trend suggests a gradual diffusion of PLC concepts from Western to Asian contexts, aligning with global educational reforms that prioritize teacher collaboration, reflective practice, and continuous professional growth.

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068

RQ 4: What Are The Popular Keywords Related To The Study?

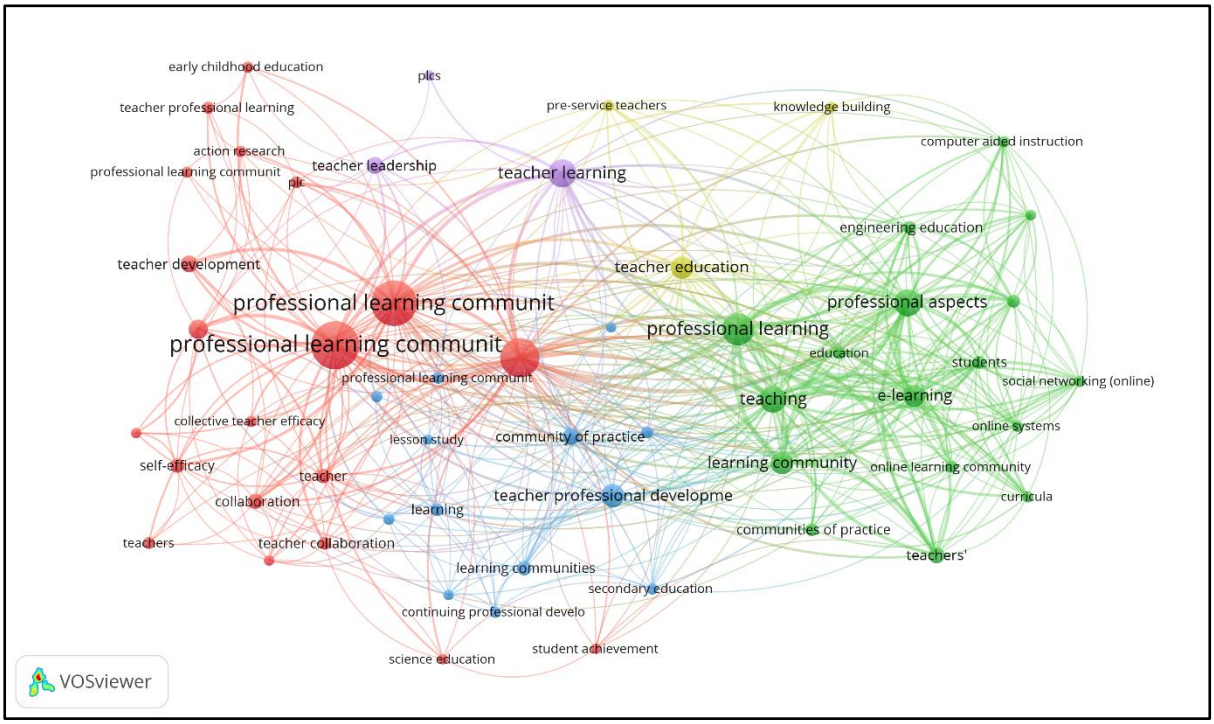


Figure 4: Network Visualization Map Of The Authors' Keywords' Co-Occurrence

As shown in Figure 4, the co-occurrence analysis of author keywords using VOSviewer aims to visualize the relationships between key research terms that frequently appear together in scholarly publications. Each node in the map represents a keyword, and the connections (links) between nodes indicate how often these keywords co-occur within the same set of articles. The strength of these links reflects the closeness or thematic relationship between the concepts, enabling researchers to identify core themes, subfields, and emerging research areas within the domain. For this visualization, the full counting method was used, meaning that each occurrence of a keyword was given equal weight regardless of its source. The analysis included 1,134 total keywords, but only 56 met the minimum occurrence threshold of five, ensuring that only significant and recurrent terms were analyzed. By setting the minimum cluster size to five, VOSviewer generated five clusters, each representing a different thematic group within the body of research, visualized through distinct colours on the map.

The resulting visualization contributes valuable insights into the intellectual structure and evolution of research in the field. Larger nodes such as "professional learning community," "teacher education," "teacher learning," and "e-learning" indicate central themes with strong interconnections, reflecting major areas of scholarly focus. The five clusters demonstrate how the field integrates concepts of teacher development, collaboration, technology in education, and professional growth. For example, the red cluster emphasizes collaboration, self-efficacy, and teacher development, while the green and yellow clusters highlight digital learning environments and pedagogical innovation. These findings enhance the body of knowledge by mapping the conceptual landscape of the field, identifying research priorities, and revealing cross-disciplinary linkages that can guide future studies toward underexplored or emerging topics.

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068

RQ 5 What Are The Patterns Of Co-Authorship And Country-Level Collaboration In This Research Domain?

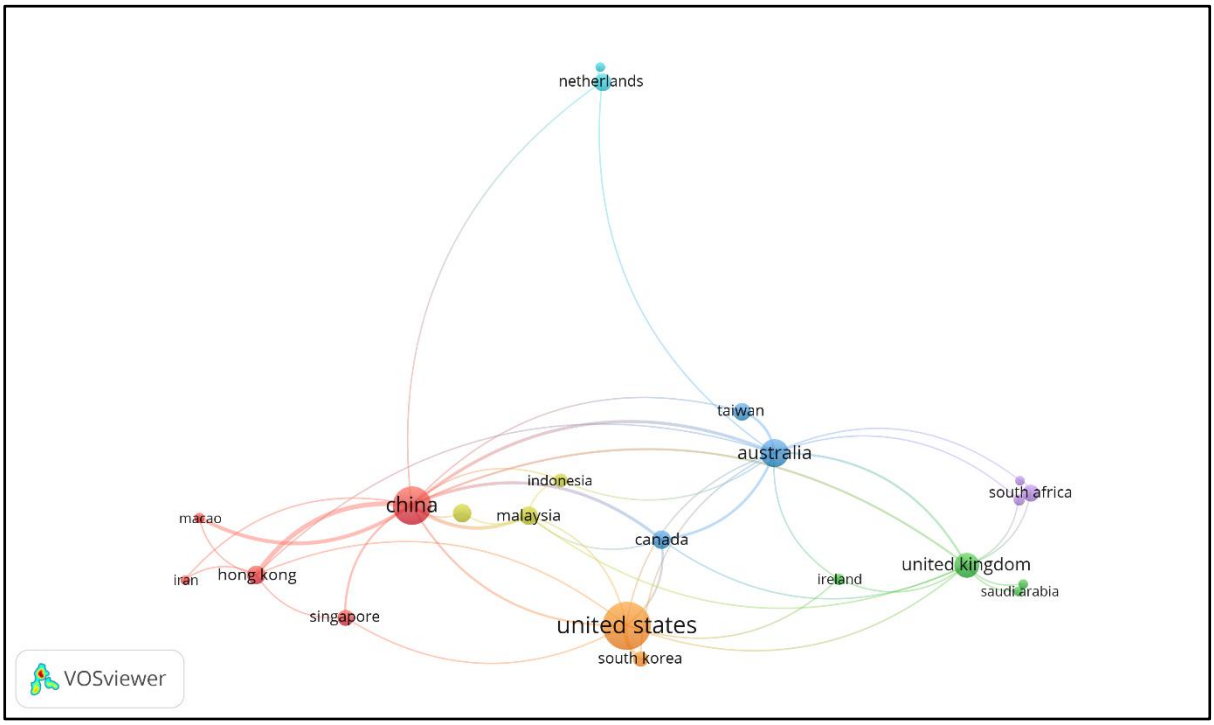


Figure 5: Network Visualization Map Of Author Collaboration Countries

Figure 5 shows the co-authorship by countries' collaboration analysis in VOSviewer visualizes international research connections based on shared authorship affiliations. Each node represents a country, and the links between nodes illustrate collaborative publications between researchers from those countries. The size of each node corresponds to the volume of publications produced, while the thickness of connecting lines reflects the strength of collaboration, measured by the frequency of co-authored works. In this analysis, the full counting method was employed, which gives equal weight to each co-authored paper regardless of the number of authors or institutions involved. A minimum threshold of five documents was set, meaning that only countries with at least five publications were included in the visualization. Out of 58 countries identified in the dataset, 24 met this threshold. With a minimum cluster size of five, VOSviewer generated seven distinct clusters, each representing a regional or thematic research network based on shared scholarly contributions.

The visualization reveals significant insights into global collaboration patterns in this research domain. Major contributors such as China, the United States, Australia, and the United Kingdom emerged as central nodes, indicating their strong presence and leadership in international research partnerships. The clusters show dense interconnections among Asian countries (China, Malaysia, Singapore, Hong Kong, and Indonesia), as well as strong transcontinental collaborations linking Western nations (the United States, United Kingdom, Netherlands, and Australia) with Asian partners. This pattern highlights the growing globalization of research on professional learning and education, where knowledge exchange and cross-country cooperation enhance the diversity and impact of findings. These results contribute to the body of knowledge by mapping the international collaboration landscape,

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068
demonstrating how research productivity and innovation are amplified through global partnerships, and emphasizing the importance of cross-border academic networks in shaping educational research worldwide.

Conclusion

This bibliometric analysis set out to examine the intellectual structure, research trends, and collaborative networks in the global study of Professional Learning Communities (PLCs) and teacher professionalism. The findings demonstrated a substantial increase in scholarly attention from 1996 to 2025, reflecting the growing recognition of PLCs as a central mechanism for enhancing teacher competency, collaboration, and professional identity in diverse educational contexts. The analysis revealed dominant contributions from countries such as the United States, China, Australia, and the United Kingdom, supported by emerging participation from Southeast Asian regions, highlighting a gradual diffusion of the PLC framework across global education systems. Co-authorship and keyword co-occurrence mapping identified major thematic clusters that centered on teacher collaboration, instructional leadership, digital learning environments, and professional identity, signifying the multidimensional nature of PLC research.

The study contributes to the academic field by systematically mapping the evolution of PLC-related research, providing evidence of its theoretical maturation and practical relevance to modern educational reform. The patterns uncovered underscore the crucial role of PLCs in promoting collective teacher efficacy and improving pedagogical quality, thereby informing policy and practice on professional development. In practical terms, the findings offer insights into how collaborative professional cultures can be nurtured across varying educational systems, particularly through international cooperation and the integration of digital learning platforms.

Despite its comprehensive scope, the study is constrained by its reliance on the Scopus database and the exclusion of non-English publications, which may limit representation from non-Western or multilingual scholarship. Future research should broaden database inclusion, integrate qualitative mapping, and explore longitudinal shifts in PLC implementation within digital and hybrid learning ecosystems. Overall, this analysis underscores the significance of bibliometric research in understanding global trends and collaborative patterns within the PLC and teacher professionalism domain, offering a foundation for future scholars and policymakers to build upon in advancing the field toward more contextually inclusive and evidence-driven educational practices.

Acknowledgments

The author gratefully acknowledges Ts. Dr. Wan Azani bin Wan Mustafa for his guidance, valuable feedback, and continuous support during the conduct of this study. His expertise and encouragement were crucial to the completion of this research.

References

Admiraal, W., Schenke, W., de Jong, L., Emmelot, Y., & Sligte, H. (2021). Schools as professional learning communities: what can schools do to support professional development of their teachers? *Professional Development in Education*, *47*(4), 684–698. https://doi.org/10.1080/19415257.2019.1665573

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068

Al-Khoury, A., Hussein, S. A., Abdulwhab, M., Aljuboori, Z. M., Haddad, H., Ali, M. A., Abed, I. A., & Flayyih, H. H. (2022). Intellectual Capital History and Trends: A Bibliometric Analysis Using Scopus Database. *Sustainability (Switzerland)*, *14*(18). https://doi.org/10.3390/su141811615

Alves, J. L., Borges, I. B., & De Nadae, J. (2021). Sustainability in complex projects of civil construction: Bibliometric and bibliographic review. *Gestao e Producao*, *28*(4). https://doi.org/10.1590/1806-9649-2020v28e5389

Appio, F. P., Cesaroni, F., & Di Minin, A. (2014). Visualizing the structure and bridges of the intellectual property management and strategy literature: a document co-citation analysis. *Scientometrics*, *101*(1), 623–661. https://doi.org/10.1007/s11192-014-1329-0

Assyakur, D. S., & Rosa, E. M. (2022). Spiritual Leadership in Healthcare: A Bibliometric Analysis. *Jurnal Aisyah : Jurnal Ilmu Kesehatan*, *7*(2). https://doi.org/10.30604/jika.v7i2.914

Bonsen, M., & Rolff, H.-G. (2006). Professional learning communities of teachers. *Zeitschrift fur Padagogik*, *52*(2), 167–184. https://www.scopus.com/inward/record.uri?eid=2-s2.0-33645140551&partnerID=40&md5=2a7be468a701e66eede283d5dda74022

Chen, L., & Zhang, J. (2024). Exploring the role and practice of teacher leaders in professional learning communities in China: A case study of a Shanghai secondary school. *Educational Studies*, *50*(5), 1034–1052. https://doi.org/10.1080/03055698.2022.2026297

Choi, J., & Sazawa, C. (2016). World language teachers exploring cultural teaching through professional learning community. *Electronic Journal of Foreign Language Teaching*, *13*(1), 68–81. https://www.scopus.com/inward/record.uri?eid=2-s2.0-84975755393&partnerID=40&md5=66a3d5b9e8b370573b3487cab830092d

di Stefano, G., Peteraf, M., & Veronay, G. (2010). Dynamic capabilities deconstructed: A bibliographic investigation into the origins, development, and future directions of the research domain. *Industrial and Corporate Change*, *19*(4), 1187–1204. https://doi.org/10.1093/icc/dtq027

Duncan-Howell, J. (2010). Teachers making connections: Online communities as a source of professional learning. *British Journal of Educational Technology*, *41*(2), 324–340. https://doi.org/10.1111/j.1467-8535.2009.00953.x

Fahimnia, B., Sarkis, J., & Davarzani, H. (2015). Green supply chain management: A review and bibliometric analysis. In *International Journal of Production Economics* (Vol. 162, pp. 101–114). https://doi.org/10.1016/j.ijpe.2015.01.003

Gu, D., Li, T., Wang, X., Yang, X., & Yu, Z. (2019). Visualizing the intellectual structure and evolution of electronic health and telemedicine research. *International Journal of Medical Informatics*, *130*. https://doi.org/10.1016/j.ijmedinf.2019.08.007

Guerra, P., Cuadros, O., & Calderón, M. (2024). Professional well-being in professional learning communities of early childhood teachers. *European Early Childhood Education Research Journal*. https://doi.org/10.1080/1350293X.2024.2443648

Hsieh, C.-C., Song, Y., Shen, Y., Chiang, W.-L., & Ku, Y.-R. (2025). Analysis of Trends in Global Teacher Community Research. *Journal of Research in Education Sciences*, *70*(2), 43–82. https://doi.org/10.6209/JORIES.202506_70(2).0002

Hu, Y., Jing, X., & Yang, Y. (2022). Factors Impacting the Sustainable Development of Professional Learning Communities in Interdisciplinary Subjects in Chinese K-12 Schools: A Case Study. *Sustainability (Switzerland)*, *14*(21). https://doi.org/10.3390/su142113847

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068
Khiste, G. P., & Paithankar, R. R. (2017). Analysis of Bibliometric term in Scopus. *International Research Journal*, *01*(32), 78–83.

Lantz-Andersson, A., Lundin, M., & Selwyn, N. (2018). Twenty years of online teacher communities: A systematic review of formally-organized and informally-developed professional learning groups. *Teaching and Teacher Education*, *75*, 302–315. https://doi.org/10.1016/j.tate.2018.07.008

Lee, J. C.-K., Zhang, Z., & Yin, H. (2011). A multilevel analysis of the impact of a professional learning community, faculty trust in colleagues and collective efficacy on teacher commitment to students. *Teaching and Teacher Education*, *27*(5), 820–830. https://doi.org/10.1016/j.tate.2011.01.006

McConnell, T. J., Parker, J. M., Eberhardt, J., Koehler, M. J., & Lundeberg, M. A. (2013). Virtual Professional Learning Communities: Teachers' Perceptions of Virtual Versus Face-to-Face Professional Development. *Journal of Science Education and Technology*, *22*(3), 267–277. https://doi.org/10.1007/s10956-012-9391-y

Nguyen, D., Boeren, E., Maitra, S., & Cabus, S. (2024). A review of the empirical research literature on PLCs for teachers in the Global South: evidence, implications, and directions. *Professional Development in Education*, *50*(1), 91–107. https://doi.org/10.1080/19415257.2023.2238728

Salleh, S., & Dimmock, C. (2012). Singapore schools and professional learning communities: Teacher professional development and school leadership in an Asian hierarchical system. *Educational Review*, *64*(4), 405–424. https://doi.org/10.1080/00131911.2011.625111

Tam, A. C. F. (2015). The role of a professional learning community in teacher change: A perspective from beliefs and practices. *Teachers and Teaching: Theory and Practice*, *21*(1), 22–43. https://doi.org/10.1080/13540602.2014.928122

van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, *84*(2), 523–538. https://doi.org/10.1007/s11192-009-0146-3

van Eck, N. J., & Waltman, L. (2017). Citation-based clustering of publications using CitNetExplorer and VOSviewer. *Scientometrics*, *111*(2), 1053–1070. https://doi.org/10.1007/s11192-017-2300-7

Van Eck, N. J., & Waltman, L. (2007). Bibliometric mapping of the computational intelligence field. *International Journal of Uncertainty, Fuzziness and Knowldege-Based Systems*, *15*(5), 625–645. https://doi.org/10.1142/S0218488507004911

Verbeek, A., Debackere, K., Luwel, M., & Zimmermann, E. (2002). Measuring progress and evolution in science and technology - I: The multiple uses of bibliometric indicators. *International Journal of Management Reviews*, *4*(2), 179–211. https://doi.org/10.1111/1468-2370.00083

Williams, J., Ritter, J., & Bullock, S. M. (2012). Understanding the Complexity of Becoming a Teacher Educator: Experience, belonging, and practice within a professional learning community. *Studying Teacher Education*, *8*(3), 245–260. https://doi.org/10.1080/17425964.2012.719130

Wu, Y. C. J., & Wu, T. (2017). A decade of entrepreneurship education in the Asia Pacific for future directions in theory and practice. In *Management Decision* (Vol. 55, Issue 7, pp. 1333–1350). https://doi.org/10.1108/MD-05-2017-0518

Zheng, X., Yin, H., & Li, Z. (2019). Exploring the relationships among instructional leadership, professional learning communities and teacher self-efficacy in China. *Educational*

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 10 Issue 61 (December 2025) PP. 992-1007
DOI 10.35631/IJEPC.1061068

Management Administration and Leadership, *47*(6), 843–859. https://doi.org/10.1177/1741143218764176