



Problems with Competence and Leadership Skills of Principals at the Junior High School Level: A Systematic Literature Reviewwords

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ABSTRACT

This study aims to map the development of research and scientific publications on the competencies and leadership skills of school principals at the junior high school (SMP) level. This study uses a Systematic Literature Review (SLR) approach to analyze 103 scientific articles identified through the PRISMA procedure. The articles analyzed were sourced from the Scopus database and published between 2013 and 2024. Data analysis was performed using VOSviewer to identify topic trends, thematic clusters, and scientific contributions in this field. The results of the study revealed four main thematic clusters in the study of principal leadership in junior high schools, namely instructional leadership practices, community involvement and cultural values, knowledge and policy interventions, and assessment and evaluation. The leadership practices cluster was the most dominant theme, reflecting the importance of the principal's role in improving the quality of learning and institutional management. This research contributes to the development of evidence-based and multidisciplinary educational leadership studies and provides a conceptual basis for formulating more contextual and adaptive school principal development policies in response to global challenges. A limitation of this study is the use of data from a single database, Scopus, which does not fully reflect the entire available literature landscape. Therefore, further research is recommended to utilize additional references from reputable databases such as Web of Science and EBSCO.



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Studies on school leadership have become increasingly complex in line with the demands of professionalism in the world of education (A & Sindhu, 2021; Kaminskienė et al., 2021; Seng, 2025). In the context of Junior High Schools (SMP), school principals are not only expected to perform administrative

functions but must also demonstrate effective instructional, emotional, and transformational leadership competencies. Curriculum changes, professional pressures, and social dynamics in the school environment according to principals adopt an adaptive role that focuses on improving the quality of learning. (Kaminskienė et al., 2021; Mestry & Govindasamy, 2021). The complexity of the role of junior high school principals is increasing due to multidimensional demands that include curriculum changes, professional pressures, and social dynamics. This requires principals to develop adaptive skills that not only focus on administrative aspects, but also on improving the quality of learning holistically.

Contemporary research reveals a paradigm shift in understanding principals' leadership competencies, moving from traditional administrative functions to a more complex and multidimensional framework. The literature shows convergence on three critical dimensions of effective school leadership: collaborative capacity building, contextual adaptability and authentic leadership development. Recent studies show that successful principals have the ability to foster a collaborative culture that transcends hierarchical boundaries, enabling teachers and management teams to engage in mutual support, knowledge sharing and collective problem-solving processes. This collaborative dimension proves particularly important during periods of curriculum transformation, where distributed leadership approaches produce more sustainable outcomes than top-down mandates. (Mestry & Govindasamy, 2021; Ralebese et al., 2022).

In addition to the collaborative aspect, research emphasizes that leadership competencies are inherently contextual and culturally embedded, requiring principals to develop authentic approaches that resonate with their specific school environment while maintaining universal principles of affective leadership. The integration of active engagement strategies and experiential learning has emerged as a significant factor in leadership development, with evidence suggesting that contextualized experiences can enhance leadership self-perception and effectiveness across diverse cultural and demographic contexts. This synthesis suggests that contemporary school leadership requires a holistic competency framework that balances technical management skills with relational, cultural and adaptive capabilities. (Chu et al., 2024; Kouhsari et al., 2022; Lubguban, 2020).

Based on the identified research gaps, this study aims to answer the research question of how research on contextual competencies of principals at the junior high school level has developed and evolved over the last two decades. Contextual competencies are identified as leadership abilities that are adaptive and responsive to the specific conditions of the school environment, encompassing a deep understanding of the socio-cultural dynamics, school community characteristics, and local challenges that influence leadership effectiveness. To answer this question, this study uses a Systematic Literature Review (SLR) approach with qualitative content analysis that enables a

comprehensive synthesis of various conceptualizations and applications of contextual competencies in the context of junior secondary school leadership.

The SLR approach was chosen for its ability to identify the conceptual evolution of contextual competencies, integrate findings from different geographical and cultural contexts, and build a systematic theoretical understanding of how these contextual competencies evolve and are established in school leadership practices. The significant contribution of this research lies in presenting a systematic scientific mapping of the dynamics of contextual competencies in middle school leadership, which not only identifies research trends and gaps but also provides a conceptual foundation for the development of a more adaptive contextual competencies framework that can be applied in various global educational contexts (Chu et al., 2024; Kaminskienė et al., 2021; Leksy et al., 2023; Mahfouz & Karami, 2023; Mestry & Govindasamy, 2021).

LITERATURE REVIEW

In the context of junior high school education, school leadership is not only understood as an administrative function, but also as a strategic capacity in managing the vision, culture, and quality of the teaching and learning process at school (Strand & Emstad, 2020). The challenges faced by school principals are becoming increasingly complex, in line with changes in education policy, social dynamics in society, and demands for equitable educational quality. Research indicates that principals who fail to align their competencies with contextual needs tend to be ineffective in implementing policies, mentoring teachers, or creating a conducive learning environment (Kaminskienė et al., 2021; Mahfouz & Karami, 2023; Mestry & Govindasamy, 2021). In some studies, an imbalance in leadership skills between managerial and instructional dimensions has been identified as a source of innovation stagnation in schools, particularly in resource-constrained areas (Chu et al., 2024; Leksy et al., 2023).

School leadership at the junior high school level is also closely related to the ability to adapt to the pressures of globalization and digitalization in education. School principals are expected to act as change agents capable of orchestrating the roles of teachers, students, and the school community toward a unified direction of development. However, various studies highlight that many principals still struggle to mobilize the school's internal potential due to limitations in competencies related to building collaboration, cross-actor communication, and data-driven decision-making (Kaminskienė et al., 2021; Leksy et al., 2023). Several studies also emphasize that structural constraints, administrative burdens, and resistance to change exacerbate leadership competency issues in both public and private schools (Chu et al., 2024; Mahfouz & Karami, 2023). Therefore, it is important to rethink the direction of principal training through a more transformative, contextual, and research-based approach.

Recent studies show that the leadership competencies of school principals are one of the determining factors in improving the quality of

education at the junior high school level. For example, Mahfouz and Karami (2023) highlighted that the success of school principals in managing interpersonal relationships, making strategic decisions, and directly supporting teacher development directly influences the school climate. In another study, Kaminskienė et al. (2021) emphasize the importance of a distributive leadership approach that allows teachers and staff to participate in decision-making, but this is still rarely applied effectively due to a lack of training and a strong collaborative culture.

A study by Mestry and Govindasamy (2021) found that in many developing countries, school principals are still burdened by heavy administrative tasks, limiting their time and energy for instructional leadership. As a result, many principals struggle to develop a clear educational vision and lead learning innovations relevant to the needs of the times. Another study by Leksy et al. (2023) states that the challenges of school leadership do not only originate from internal school aspects but also from external pressures such as government bureaucracy, policy instability, and a lack of school community support.

Research conducted by Chu et al. (2024) used a bibliometric approach to map the direction of research on educational leadership over the past two decades. Their findings show that although there has been an increase in the number of publications on principal leadership, topics focusing on contextual competencies and adaptive skills of principals at the junior high school level are still relatively limited. This indicates that most research is more focused on general issues such as school management and teacher evaluation, without elaborating further on specific and contextual leadership skills in primary and secondary education units.

In addition, Mahfouz and Karami (2023) also show that the emotional and social competencies of school principals are becoming increasingly crucial, especially in facing post-pandemic challenges, digital transformation, and increasing social inequality in the school environment. However, training and coaching on these aspects are still not a major focus in many leadership development programs. Therefore, a more comprehensive and systematic review is needed to ensure that research and educational policy directions truly address the real needs on the ground.

This study was specifically conducted to map scientific publications that directly address the issues of leadership competencies and skills of school principals at the junior high school level using a Systematic Literature Review (SLR) approach. This mapping includes trends in the number of publications, the distribution of documents by region, year, and author, as well as the mapping of dominant topics and subtopics in school leadership studies. This study also aims to identify research gaps and future topic opportunities.

The essence of this research is to contribute to the development of a conceptual framework in educational leadership studies, particularly at the junior high school level, which has not yet been fully explored in the global

literature. This study will utilize reputable sources from the Scopus database and bibliometric data analysis with the assistance of VOSviewer software, as recommended in previous SLR studies (Mahfouz & Karami, 2023; Mestry & Govindasamy, 2021). Thus, the main contribution of this study is not only to provide a systematic literature map but also to serve as a conceptual basis for the development of educational policies and principal training programs that are more contextual and adaptive to the challenges of the times.

METHODS

This study uses a qualitative content analysis method with a Systematic Literature Review (SLR) approach to answer the main question (Khan et al., 2022), namely how the development of studies on the competencies and leadership skills of school principals at the junior high school (SMP) level based on scientific publications indexed in Scopus. The purpose of this approach is to systematically identify, evaluate, and synthesize relevant literature, conduct a comprehensive search using relevant keywords to gain a deep understanding of research trends (Mancin et al., 2024; Marcos-Pablos & García-Peñalvo, 2018), scope, and gaps in educational leadership studies (Sadeghi & Treglia, 2017; Turk, 2021). The questions addressed include: (1) how publication trends on the topic have evolved from 2013 to 2024, (2) how authors and institutions are distributed and collaborate in these studies, and (3) what thematic patterns and dominant topic clusters emerge in the publications.

The research stages were conducted in accordance with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol (Turk, 2021; Yaphe et al., 2021), which includes the processes of identification, screening, eligibility assessment, and inclusion of relevant articles from the Scopus database (Rethlefsen et al., 2021). In the identification stage, the researchers accessed the Scopus database through the institution's official account to obtain scientific articles relevant to the topic of school principal leadership at the junior high school (SMP) level, using keywords such as "School principal competency" OR, "Leadership skills of school principals", OR "headmaster", OR "Effective school leadership". From the initial search results, 970 articles were obtained. However, 378 articles were removed because they were not available in full paper format or could not be accessed in full.

Next, a screening process was conducted on the remaining 282 articles. At this stage, non-English articles (37 articles) were removed from the list. A total of 225 reports were submitted for further review, but one of them could not be downloaded or accessed. Of the 224 articles assessed for eligibility, 74 were excluded for not meeting the inclusion criteria, including: irrelevance to the keyword "educational leadership in junior high schools," publication period outside the range of 2013–2024 ($n = 29$), and document type other than articles ($n = 18$). The final stage was inclusion, where 103 articles that met the criteria were selected for further analysis. This rigorous screening process aimed to

ensure that only articles that were truly relevant and of high quality were used as the basis for this systematic review.

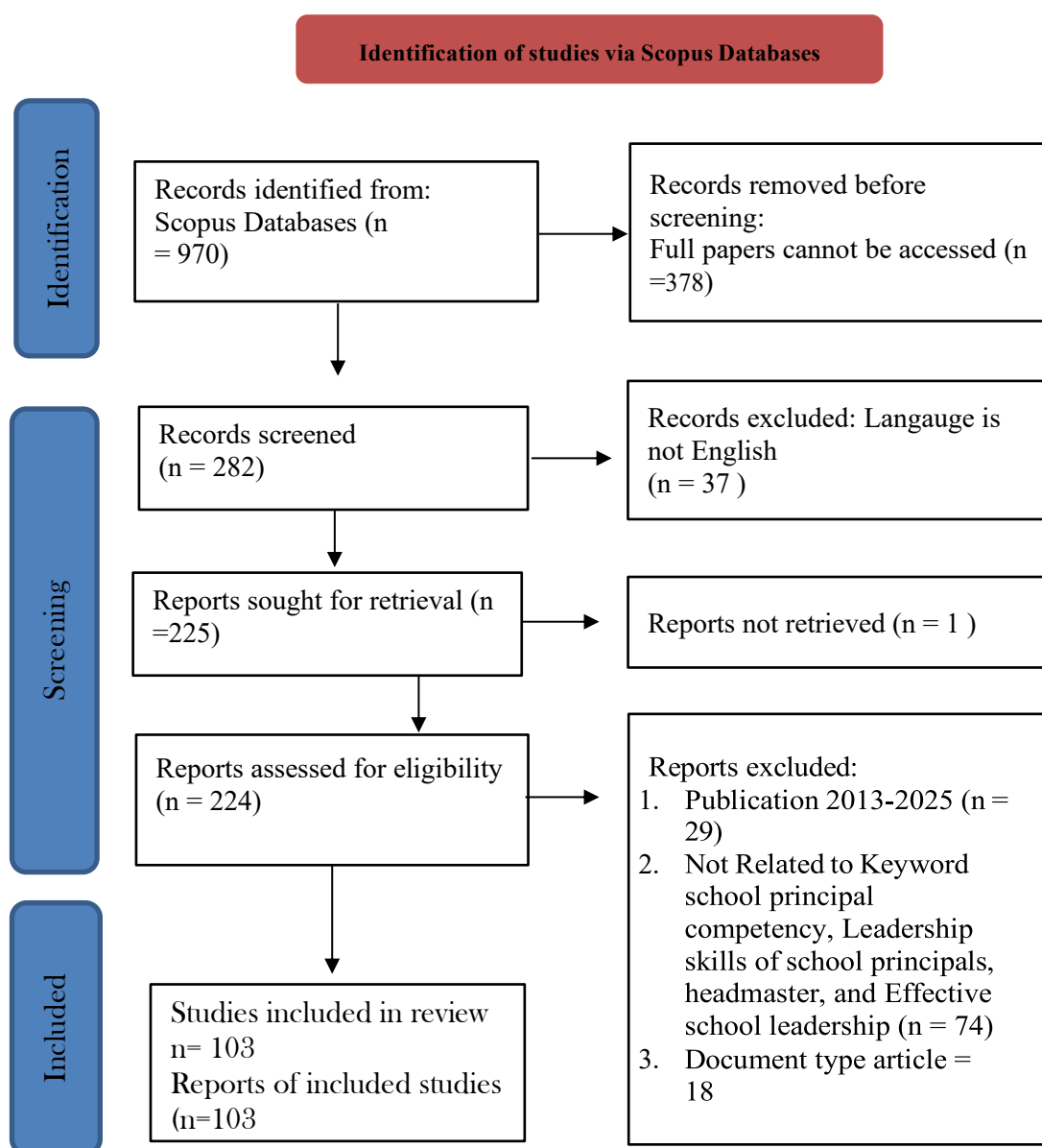


Diagram 1. Stages of article retrieval

RESULTS

The types of scientific publications discussing school leadership show a dominance of journal articles (85.7%), followed by conference papers (12.5%), and a small portion of reviews (1.8%). This composition reflects that the issue of school leadership is more frequently studied through empirical and conceptual research

approaches, both quantitative and qualitative, published in reputable scientific journals. The high percentage of articles indicates that this topic is a primary focus in formal academic discourse, typically undergoing rigorous peer-review processes. This underscores the importance of scientific research in formulating and evaluating leadership strategies at the educational unit level, particularly in the context of curriculum changes, school management, and teacher professional development.

Meanwhile, the presence of conference papers indicates the dynamics of discussion and exchange of current ideas in scientific forums, which often serve as the initial testing ground for new ideas before they are published in journal articles. On the other hand, the low number of publications in the form of reviews indicates that systematic studies or meta-analyses on school leadership are still limited, which are actually very much needed to synthesize previous findings and identify research gaps. Overall, this data confirms that research on school leadership has developed strongly within the evidence-based scientific domain, yet it still leaves room for enriching research approaches through other types of publications such as reviews or comprehensive theoretical analyses.

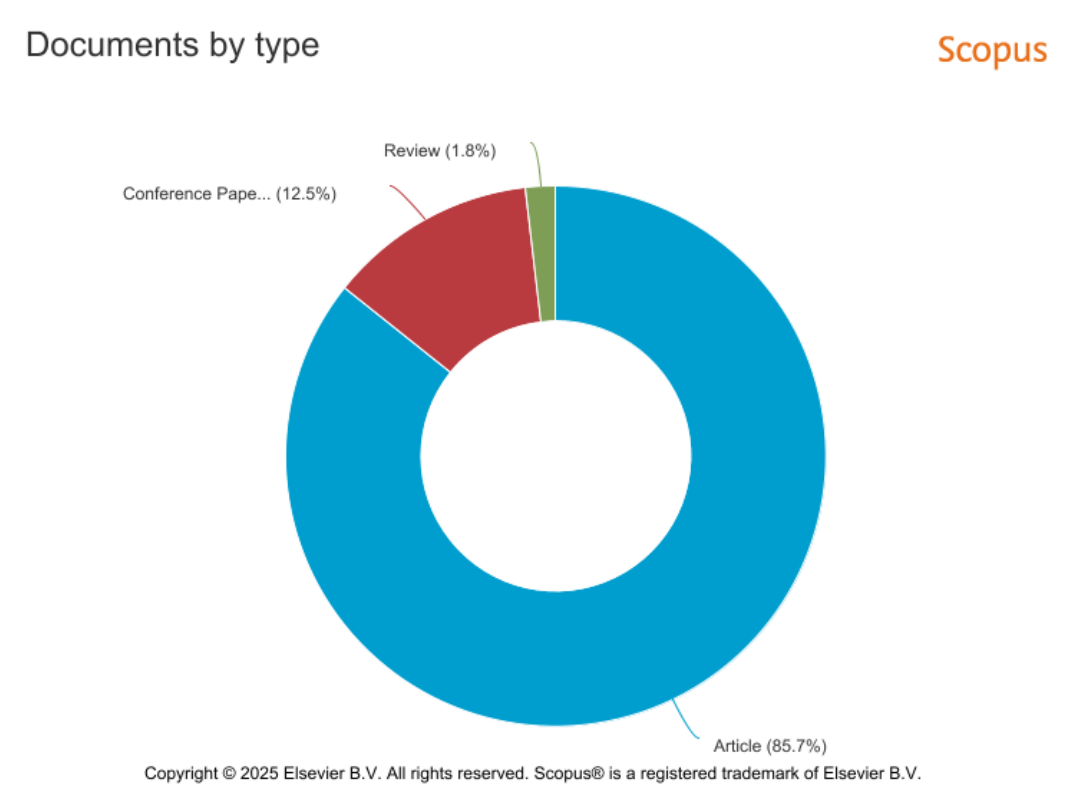


Figure 1. Documents based on publication type

It appears that the majority of publications related to school leadership at the

junior high school level are in the form of journal articles, accounting for 85.7%. Meanwhile, conference papers account for only 12.5%, and reviews only 1.8%. This significant gap indicates that research on school leadership has not yet received equal attention among academics in the context of developing diverse references, both theoretically, conceptually, and practically. Another finding that can be concluded from this data is that conference papers have not yet become a strong tradition among researchers and academics in this field. This indicates that the dissemination of research findings through scientific forums such as conferences remains limited, meaning that the latest findings on school leadership have not been widely disseminated and accessed by researchers, academics, and practitioners in the field of education management and policy.

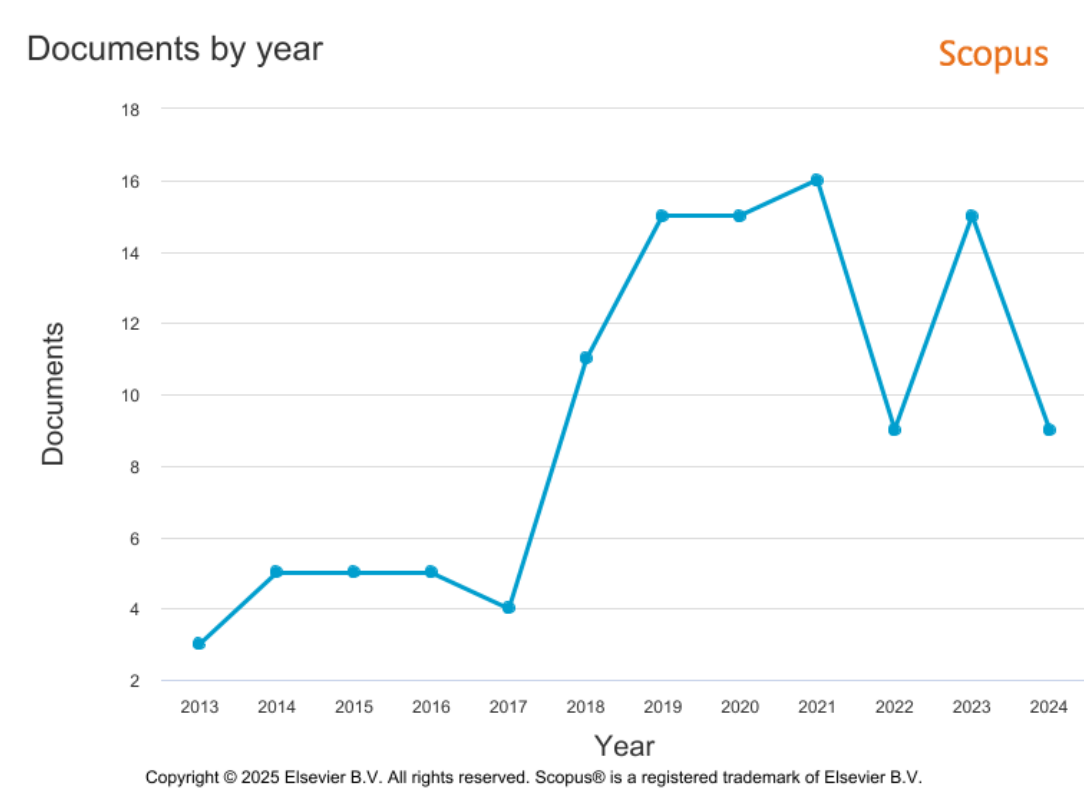


Figure 2. Trend in publications on school leadership

Although there have been fluctuations in the number of publications from year to year, overall the trend in publishing documents related to school leadership has shown a significant increase, especially since 2018. During the initial period, from 2013 to 2017, the number of documents was relatively low and stable, ranging from 3 to 5 documents per year. However, there was a sharp increase in 2018, with 11 documents, which then rose further in 2019 and 2020 to 15 documents each. The year 2021 showed the highest peak in publications with a total of 16 documents.

After that, there was a drastic decline in 2022 with only 9 documents, although it increased again to 15 documents in 2023. In 2024, the number of documents decreased again to 9 documents. This fluctuation indicates that while there has been an increase in attention to the topic of school leadership over the past decade, consistency in scientific production remains unstable. This suggests the need for stronger strategies to promote sustained research, as well as the development of conceptual studies and leadership practices in the secondary education environment.

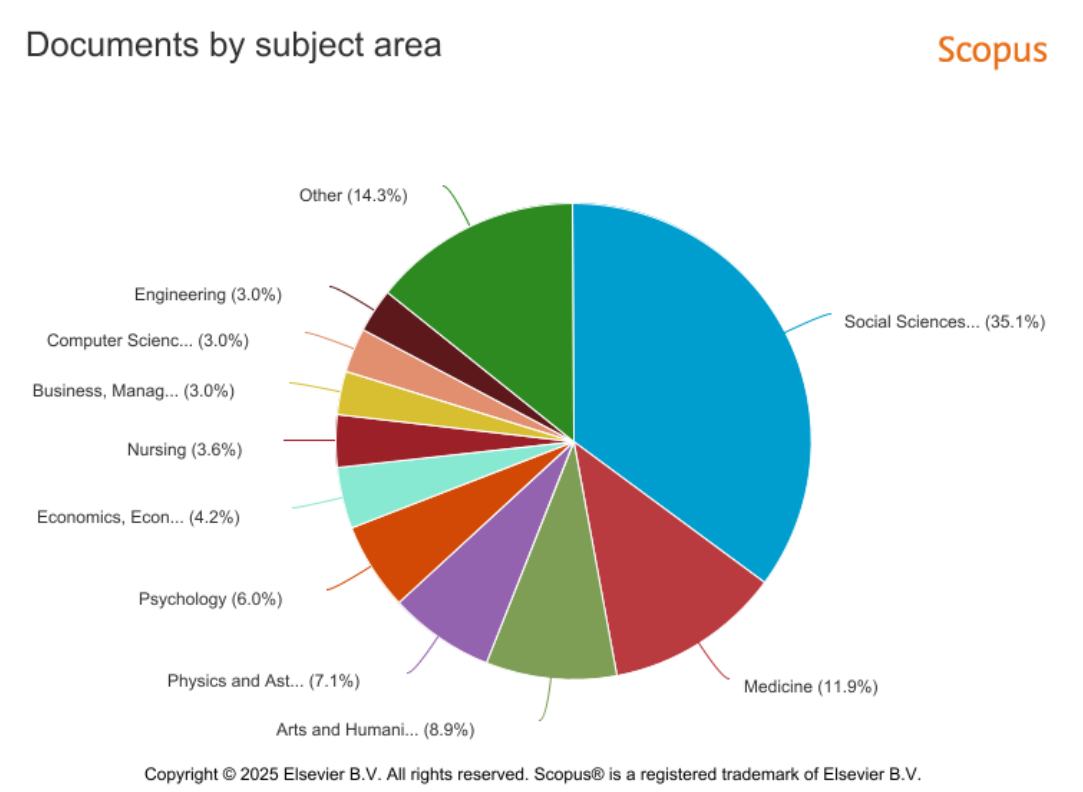


Figure 3. Publications by subject area

Based on Scopus data, scientific documents discussing various related issues are spread across various fields of science, but the Social Sciences dominate with a share of 35.1%. This shows that the topic of school leadership, as part of the study of education, organizational management, and social dynamics in the school environment, is widely analyzed through a social science approach. This topic is often examined within the framework of educational policy, change management, leadership capacity building, and the role of school principals as agents of social transformation. The fields of Medicine (11.9%) and Nursing (3.6%), which also appear in the graph, can be linked to the context of school principal leadership in maintaining the mental well-being and health of the school community, including during crises such as pandemics. School principals play a strategic role in creating an environment that supports the health and well-being of students and teachers.

The contribution of Psychology (6.0%) is highly relevant because psychological aspects, such as leadership style, emotional intelligence, and interpersonal communication skills, are key components of the effectiveness of school principal leadership. Meanwhile, Economics and Management (4.2% and 3.0%) may reflect studies on leadership in school resource management, decision-making efficiency, and educational governance aspects. The fields of Humanities and Arts (8.9%) and Computer Science and Engineering also contribute, particularly in qualitative approaches to school culture, leadership values, and the use of educational technology led by visionary school principals. With contributions from various disciplines, it can be concluded that studies on school leadership are interdisciplinary and reflect the complexity of the principal's role in supporting adaptive, inclusive, and sustainable educational development.

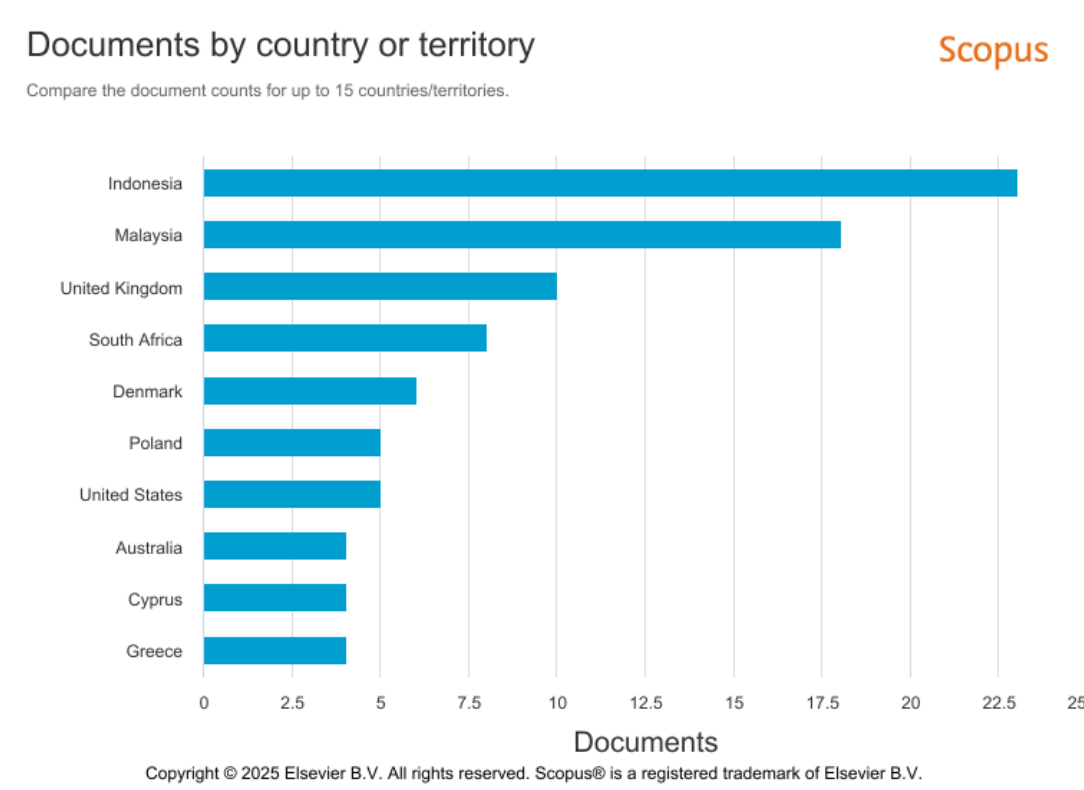


Figure 4. Distribution of Publications on School Leadership by Country

The country most active in publishing scientific papers on the topic of school leadership is Indonesia, with a total of more than 23 documents recorded in the Scopus database. This indicates the high level of academic interest in Indonesia in educational leadership issues, particularly at the junior high school level. Next is Malaysia with around 18 documents, followed by the United Kingdom with around 10 documents. These three countries are the main centers for the development of school leadership studies, which are likely influenced by the complexity of the education system, policy reform initiatives, and attention to school managerial

quality. Other countries contributing moderately include South Africa, Denmark, Poland, and the United States, each with approximately 5–8 documents. At a lower level, there are Australia, Cyprus, and Greece, each contributing around 3–4 documents. From this data, it can be concluded that school leadership studies are not only a concern for developed countries such as the United Kingdom, Denmark, and the United States, but also an important issue in developing countries in Asia and Africa. This indicates that school leadership is a global issue that transcends geographical boundaries and levels of national development.

Based on the content analysis visualization generated through VOSviewer, the heat map reveals the dominant concepts and thematic groups in research on principal leadership competencies. The visualization shows that “leadership” emerges as the most prominent concept (indicated by the brightest yellow area), serving as the main focus of the literature and forming strong connections with “school principal,” “instructional leadership,” and “school leader.” This core cluster highlights the primary emphasis of the research domain on leadership quality and practices within an educational context. The second most prominent concept, “school principal,” reinforces that school administrators are the primary subjects of this study, with their leadership roles being extensively examined. “Community” emerges as another important concept, indicating the significance of community engagement and relationship-building in effective school leadership research. The term “children” indicates a focus on student-centered leadership approaches, linking leadership practices to concepts such as ‘intervention’ and “policy,” while “knowledge” bridges the concepts of leadership and intervention strategies, underscoring the importance of professional expertise and knowledge management. The presence of “interviews” as a methodological term indicates the prevalence of qualitative research approaches in this field. Further visualization reveals thematic clusters encompassing leadership practices (instructional leadership, influence, impact), stakeholder perceptions (capabilities, relationships, motivation), intervention and policy implementation (evidence, health), community engagement (participation, cultural values), and assessment approaches (evaluation, authentic assessment). Collectively, this analysis shows that research on core school leadership competencies is multidimensional, integrating teaching practices, community relations, policy implementation, and student-centered approaches, with an emphasis on practical application and stakeholder experience rather than purely theoretical constructs.

Based on the results of content analysis of 103 studies using VOSviewer, the dominant concepts and key issues in this study, comprising leadership, principals, instructional leadership, community, knowledge, perception, motivation, ability, evaluation, intervention, policy, relationships, influence, impact, participation, cultural values, authentic assessment, and professional development, are shown in Figure 1. A number of these dominant concepts and issues have taken center stage in previous studies, illustrating the research objectives relating to the governance of junior secondary school leadership. Furthermore, it involves multiple actors

that are in favor of improving the quality of education. The formulation of dominant concepts and issues in the principal's leadership competency policy is organized into three clusters: school leadership and governance, educational communities and systems, and stakeholder relations and educational outcomes.

Table 1. Clustering of Concepts in Principal Leadership Studies

Cluster	Concepts	Total
Leadership Practice	Leadership, instructional leadership, instructional leadership practice, school principal, school leader, principal, influence, impact, motivation, chatgpt, perception, ability, term, significant difference, relation, change, person	17
Community and Stakeholder Engagement	Community, cultural value, participation, adoption, association, pupil, patient, pe teacher, physical activity, stigma, stage	11
Knowledge and Intervention	Knowledge, intervention, evidence, policy, child, health, activity, self, lung cancer, pa break	10
Assessment and Evaluation	Interview, evaluation, authentic assessment, mathematics, addition	5
Cluster Concepts Total		43

Visualization of dominant concepts in research on school principal leadership competencies reveals distinct thematic clusters that illustrate the diverse nature of educational leadership in contemporary school contexts. These concepts demonstrate how school leadership research integrates elements from educational administration, organizational psychology, public policy, and community development into a comprehensive framework. The Leadership Practices cluster, which contains 17 concepts including "leadership," "instructional leadership," and "principal," emphasizes the technical and strategic dimensions of principal effectiveness, focusing on how leadership approaches directly impact educational outcomes and institutional management. The Community and Stakeholder Engagement Cluster, comprising 11 concepts such as "community," "cultural values," and "participation," highlights the relational aspects of school leadership, acknowledging that effective school leadership transcends administrative boundaries to foster meaningful relationships with diverse stakeholders. The Knowledge and Intervention cluster, with 10 concepts including "knowledge," "policy," and "health," reflects a growing emphasis on evidence-based leadership practices and the role of principals in implementing targeted interventions to address student development holistically. Finally, the Assessment and Evaluation cluster, though smaller with 5 concepts, underscores the importance of measuring leadership effectiveness through traditional and authentic assessment methods. The grouping into four distinct yet interconnected clusters (Table 1) demonstrates that

research on principal leadership competencies has evolved from viewing principals solely as administrators to seeing them as transformative agents who must balance instructional excellence, community engagement, policy implementation, and continuous evaluation to create effective learning environments.

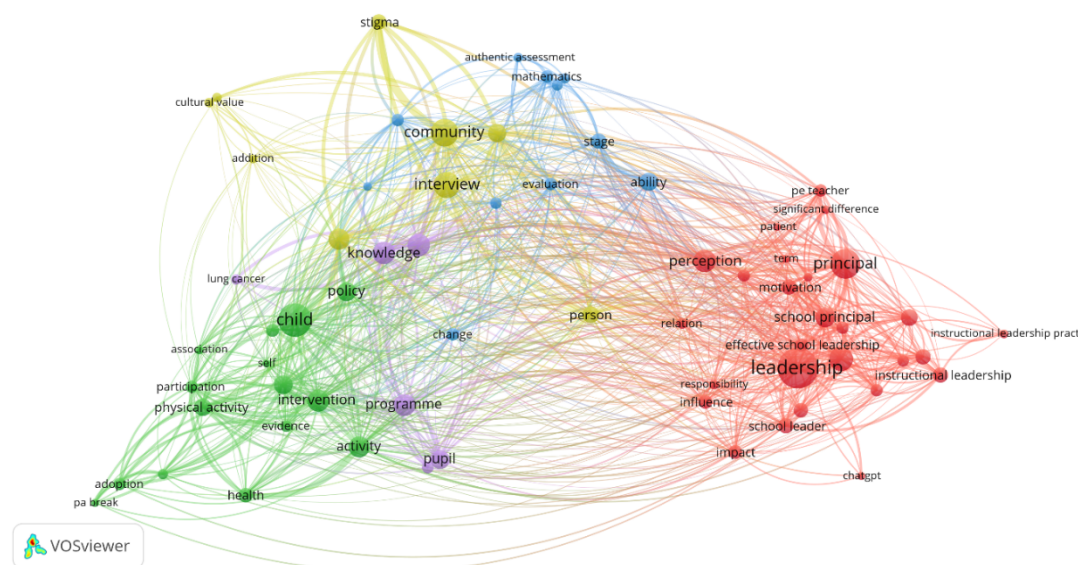


Figure 6. Networking Visualisasi in the study of School Principal Leadership

The visualization results using VOSviewer show the structure of collaboration among authors in research on the competencies and leadership skills of school principals at the junior high school level. There are two main clusters formed within the author network: the red cluster and the green cluster. The red cluster is dominated by authors such as Pryde, Liz; Jay, Emily; and Marsden, Rachael, who demonstrate high collaboration intensity on topics that tend to focus on psychosocial aspects, daily leadership practices, and managerial dynamics within the school environment. Conversely, the green cluster consists of authors such as Judge, Simon; Baxter, Susan; and Langley, Joe, who tend to focus on systemic approaches, educational policies, and data-driven interventions related to school leadership.

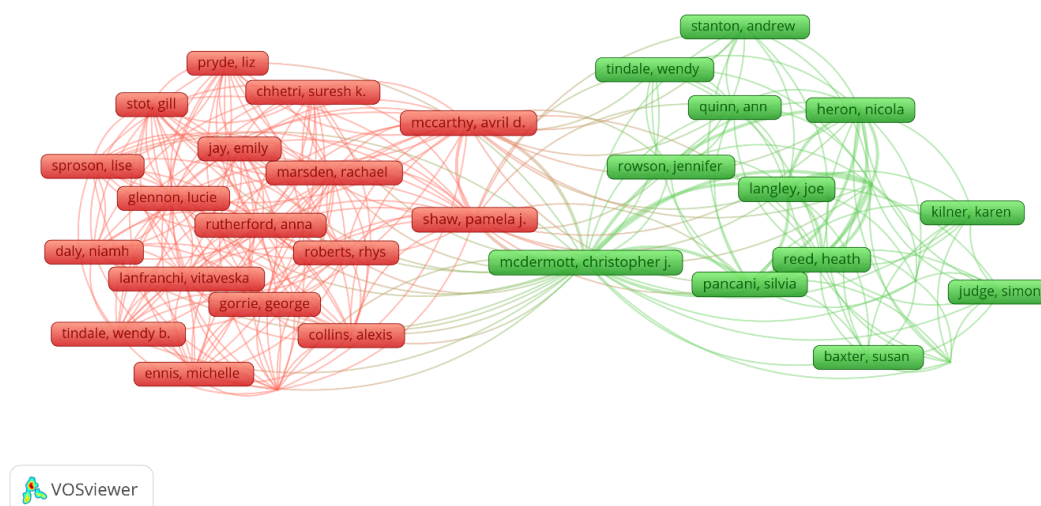


Figure 7. Author' Co-citation Map of School Principal Leadership

Interestingly, there are authors such as McDermott, Christopher J. and Shaw, Pamela J. who serve as a bridge between the two clusters, indicating an integration of perspectives between field practice and conceptual approaches in school leadership studies. This structure reflects that the study of school leadership is still divided into two major schools of thought but is beginning to show potential for integration through bridge authors. This collaborative pattern is important to understand in order to identify dominant literature trends and research gaps that can be further explored, particularly in integrating micro (practice) and macro (policy) approaches in strengthening school leadership competencies.

DISCUSSION

The results of this study strengthen the argument that school leadership at the junior secondary level is multidimensional and reinforces the ability to fulfill the roles of instructional leader, change agent, and school community facilitator. This finding is in line with Mestry and Govindasamy's (2021) study which emphasizes that effective principals are those who are able to build collaborative in the face of curriculum change. In the visualization of concept clusters presented through VOSviewer, the dimensions of "instructional leadership" and "principal influence" emerged as the most prominent topics, suggesting that the international literature strongly emphasizes the technical and strategic aspects of principals' leadership practices. To translate instructional leadership into practice, principal preparation programs should shift from traditional administrative training to a competency-

based model that integrates pedagogical leadership with organizational management. Specifically, this can be operationalized through the development of training modules that combine classroom observation techniques with data analysis skills, enabling principals to provide meaningful feedback to teachers while making evidence-based decisions about curriculum implementation.

Community engagement and holistic competency development also found that the concepts of “community” and “cultural values” emerged as important concepts in the community engagement cluster underscoring the importance of a rational perspective in educational leadership studies. This is in line with the participatory and context-based approach advocated by Kouhsari et al. (2022), where the role of the principal is not only seen as a manager of internal structures but as a social leader who is able to build meaningful relationships with teachers, students and the community.

In this context, the ability of principals to lead authentically, as researched by Chu et al. (2024), is particularly important because contextualized experiences and authentic assessment approaches enhance leadership self-perceptions, including transcending cultural and gender boundaries. The inclusion of the concepts of “knowledge,” intervention,“ and ”health” in the knowledge and intervention cluster suggests that the role of principals now extends to more complex domains, such as data-driven decision-making, evidence-based education policy, and the promotion of well-being in schools, in line with Leksy et al's (2023) study that emphasized the important role of principals in promoting the overall health and well-being of school communities.

Emerging evidence from digital-pedagogy research suggests that principals who purposefully champion technology-enhanced instruction can amplify each of the leadership dimensions identified above. A large-scale Indonesian study of 150 under-graduates found that behavioral and cognitive engagement with AI chatbots significantly predicted gains in English-language proficiency, underscoring the value of data-rich, learner-centered innovation (Hastomo et al., 2025). Complementary work with EFL teachers showed that strategically embedding chat-bots through personalized feedback, gamified tasks and interactive writing assignments raised affective, behavioral and cognitive engagement to “high” levels across all indicators (Hastomo et al., 2025). These findings reinforce the need for principal-led professional learning communities that normalize instructional experimentation, provide coaching in AI-supported formative assessment, and create safe conditions for iterative change.

Beyond AI, principals also influence media-rich pedagogies that extend learning beyond classroom walls. School-based training on video-authoring with KineMaster empowered teachers to design interactive learning media and reported

a 76 % satisfaction rate among participants, signaling the motivational dividend of low-cost digital tools (Sari et al., 2022). At the student level, reciprocal-questioning (ReQuest) protocols improved reading-comprehension scores by 12.7 points when the strategy was scaffolded with digital resources (Sari, Lipta, & Marlinda, 2024). These studies collectively highlight how principals who act as technology brokers—securing access, modelling use, and aligning digital initiatives with curricular goals—can strengthen instructional leadership, catalyze teacher collaboration, and deepen community trust in the school’s innovation agenda.

However, there is a gap in the literature review and Strategic recommendations and can be seen in the low proposition of publications in the form of reviews (1.8%) indicating a gap in theoretical and conceptual synthesis; which is wider in the school leadership literature, as indicated by Mahfouz and Karami (2023) that systematic reviews are essential to understand the complexity of the role of principals amid the dynamics of globalization of education. To address this gap, future researchers should focus on specific areas such as; (1) the effectiveness of different models of principal preparation in various contexts, (2) the relationship between principal leadership styles and student outcomes in various cultural settings, (3) the strategic impact of community engagement on school improvement, and (4) the role of technology in supporting distributed leadership models.

Based on these findings, it is recommended that principal preparation programs adopt a competency-based approach that integrates four core modules: instructional leadership with data analysis training, evidence-based intervention design and implementation, and authentic assessment and evaluation techniques. The main contribution of this study, using the Systematic Literature Review approach, is significant because it succeeded in building a comprehensive conceptual and thematic map while identifying research gaps that can serve as references for further studies and the formulation of more contextualized and sustainable school leadership development policies.

CONCLUSION

This systematic literature review of 103 Scopus-indexed articles reveals that secondary school principal leadership has evolved into a fundamentally interdisciplinary field, transcending traditional administrative boundaries and encompassing perspectives from psychology, social science, public health, and management. The analysis identified four distinct thematic clusters that collectively demonstrate the expansion of the principal’s role from administrative manager to multidimensional leader who must simultaneously excel in instructional leadership, community engagement, evidence-based interventions, and authentic assessment practices. Significantly, dominant clusters such as “leadership practices” underscore a paradigm shift towards

adaptive and contextual competencies, which position principals as transformational agents capable of addressing contemporary challenges including globalization, digitalization of education, and post-pandemic social inequalities through collaborative and data-driven approaches.

The main contribution of this study lies in providing a comprehensive thematic framework that can directly inform the redesign of principal preparation programs. Specifically, the researcher recommends implementing competency-based training modules that identify; (1) instructional leadership with real-time data analysis capabilities, (2) community engagement strategies tailored to diverse cultural contexts, (3) design and implementation of evidence-based interventions, and (4) authentic assessment methodologies for continuous improvement. However, there are shortcomings in this research because the data sources are only sourced from Scopus, thus requiring the expansion of databases from Web of Science and EBSCO, future researchers should prioritize three critical gaps: developing valid instruments to measure contextual leadership competencies, conducting longitudinal on the effectiveness of training programs, and exploring technology-enabled distributed leadership models. This direction will enable empirical validation of our thematic framework and support evidence-based policy development for sustainable educational leadership in junior secondary schools globally.

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REFERENCES

- A, S., & Sindhu, D. (2021). Knowledge Management Skills For 21st Century Library Professionals In India: A Study. *Library Philosophy and Practice*, 2021.
- Chu, T., Pham, T. T. T., Nguyen, T. V. H., Nguyen, C. T., Vu, T. H. N., Nguyen, T. B., & Nguyen, T. M. H. (2024). Authentic assessment designs and students' self-perception of leadership in business education in Vietnam. *Journal of Applied Research in Higher Education*. <https://doi.org/10.1108/JARHE-02-2024-0060>
- Hastomo, T., Sari, A. S., Widiati, U., Ivone, F. M., Zen, E. L., & Kholid, M. F. N. (2025). Does student engagement with chatbots enhance English proficiency? *ELOPE – English Language Overseas Perspectives and Enquiries*, 22(1), 93-109. <https://doi.org/10.4312/elope.22.1.93-109>
- Hastomo, T., Sari, A. S., Widiati, U., Ivone, F. M., Zen, E. L., & Andianto. (2025). Exploring EFL teachers' strategies in employing AI chatbots in writing instruction to enhance student engagement. *World Journal of English Language*, 15(6), 93-110. <https://doi.org/10.5430/wjel.v15n6p93>
- Kaminskienė, L., Žydžiūnaitė, V., & Juozaitienė, R. (2021). RELATIONSHIP

- BETWEEN FACTORS OF TEACHERS' LEADERSHIP: POSITIVE ATTITUDES, PROFESSIONAL ACTIVENESS, AND STRESS AT SCHOOL. *Management (Croatia)*, 26(2), 197–210. <https://doi.org/10.30924/mjcmi.26.2.11>
- Khan, K. S., Bueno Cavanillas, A., & Zamora, J. (2022). Systematic reviews in five steps: I. Framing questions to obtain valid answers. *Semergen*, 48(5), 356–361. <https://doi.org/10.1016/j.semERG.2021.12.005>
- Kouhsari, M., Navehebrahim, A., Zeinabadi, H., & Abbasian, H. (2022). Exploring positive school leadership practices in Iranian primary schools. *International Journal of Leadership in Education*. <https://doi.org/10.1080/13603124.2022.2052759>
- Leksy, K., Gawron, G., Rosário, R., Sormunen, M., Velasco, V., Sandmeier, A., Simovska, V., Wojtasik, T., & Dadaczynski, K. (2023). The importance of school leaders in school health promotion. A European call for systematic integration of health in professional development. *Frontiers in Public Health*, 11. <https://doi.org/10.3389/fpubh.2023.1297970>
- Lubguban, M. G. B. (2020). Leadership proficiency and emotional competence of women school administrators. *Journal of Critical Reviews*, 7(11), 293–296. <https://doi.org/10.31838/jcr.07.11.47>
- Mahfouz, J., & Karami, R. (2023). Principalship in Lebanon: The unsung heroes. In *Demystifying Educational Leadership and Administration in the Middle East and North Africa: Challenges and Prospects* (pp. 140–153). Taylor and Francis. <https://doi.org/10.4324/9781003334835-8>
- Mancin, S., Sguanci, M., Andreoli, D., Soekeland, F., Anastasi, G., Piredda, M., & De Marinis, M. G. (2024). Systematic review of clinical practice guidelines and systematic reviews: A method for conducting comprehensive analysis. *MethodsX*, 12. <https://doi.org/10.1016/j.mex.2023.102532>
- Marcos-Pablos, S., & García-Peñalvo, F. J. (2018). Decision support tools for SLR search string construction. In G.-P. F.J. & R. I. for E. S. (IUCE) University of Salamanca Department of Computer Science and Automatics, Plaza de los Caídos s/n, Salamanca (Eds.), *ACM International Conference Proceeding Series* (pp. 660–667). Association for Computing Machinery. <https://doi.org/10.1145/3284179.3284292>
- Mestry, R., & Govindasamy, V. (2021). The Perceptions of School Management Teams and Teachers of the Principal's Instructional Leadership Role in Managing Curriculum Changes. *Interchange*, 52(4), 545–560. <https://doi.org/10.1007/s10780-021-09425-5>
- Ralebese, M. D., Jita, L. C., & Chimbi, G. T. (2022). "Underprepared" Principals Leading Curriculum Reform in Lesotho. *Research in Educational Administration and Leadership*, 7(4), 861–897. <https://doi.org/10.30828/real.1104537>
- Rethlefsen, M. L., Kirtley, S., Waffenschmidt, S., Ayala, A. P., Moher, D., Page, M. J., Koffel, J. B., Blunt, H., Brigham, T., Chang, S., Clark, J., Conway, A., Couban, R., de Kock, S., Farrah, K., Fehrmann, P., Foster, M., Fowler, S. A., Glanville, J., ... Young, S. (2021). PRISMA-S: an extension to the PRISMA Statement for

- Reporting Literature Searches in Systematic Reviews. *Systematic Reviews*, 10(1), 1–19. <https://doi.org/10.1186/s13643-020-01542-z>
- Sadeghi, R., & Treglia, G. (2017). Systematic reviews and meta-analyses of diagnostic studies: a practical guideline. *Clinical and Translational Imaging*, 5(2), 83–87. <https://doi.org/10.1007/s40336-016-0219-2>
- Sari, A. S., Lipta, & Marlinda, S. (2024). Enhancing students' reading comprehension through reciprocal questioning. *LinguaEducare: Journal of English and Linguistic Studies*, 2(1), 107-116.
- Sari, A. S., Fadilaturrahmah, F., Kalsum, U., Yuliana, Y., Juliansa, P. R., Putra, Y. S., & Tansilo, H. (2022). Pelatihan pembuatan video sebagai media pembelajaran menggunakan Kinemaster. *Media Abdimas*, 1(3), 41-45. <https://doi.org/10.37817/mediaabdimas.v1i3>
- Seng, S. (2025). Review of the Professional Standards for School Principals in Cambodia: Functions and Content Analysis. *Research in Educational Administration and Leadership*, 10(1), 1–40. <https://doi.org/10.30828/real.1578811>
- Strand, M. K., & Emstad, A. B. (2020). Developing leadership by participating in principal professional learning communities (PPLCS) and the added value of transnational collaboration. *Research in Educational Administration and Leadership*, 5(2), 485–513. <https://doi.org/10.30828/real/2020.2.6>
- Turk, N. (2021). Methodology of systematic reviews. *Zdravniski Vestnik*, 90(7–8), 432–442. <https://doi.org/10.6016/ZdravVestn.3138>
- Yaphe, H., Wallace, D., Rank, M. A., & Lang, E. (2021). Systematic Review and Meta-Analysis: Pearls for Interpretation, Appraisal, and Application in Clinical Practice. *Journal of Allergy and Clinical Immunology: In Practice*, 9(12), 4209–4220. <https://doi.org/10.1016/j.jaip.2021.08.009>