



# Mapping Research Trends in Educational Administration Management: A Literature Review with Voyant Tools Visualization

Isaac John Ibanga<sup>1</sup>, Ibrahim O. Salawu<sup>2</sup>

<sup>1</sup>Modibbo Adama University, Yola

<sup>2</sup>Kwara State University, Malate

\*email Correspondence: [isacjohn@mau.edu.ng](mailto:isacjohn@mau.edu.ng)

---

## Abstracts

*Educational administration management has emerged as a strategic field of study in response to growing demands for effective governance, transparency, accountability, and innovation within educational institutions. The rapid expansion of scholarly work in this area has generated a wide range of themes, perspectives, and methodological approaches, which often makes it challenging to gain a holistic understanding of prevailing research directions and emerging trends. Consequently, systematic mapping of research trends is necessary to capture the overall landscape and evolution of studies in educational administration management. This study aims to map research trends in educational administration management through a literature review supported by text analysis and visualization using Voyant Tools. A qualitative literature review approach was employed by collecting relevant academic publications from reputable databases. The selected articles were compiled into a text-based corpus and analyzed to identify dominant keywords, term correlations, and thematic networks through various visualization features of Voyant Tools. The findings show that research in educational administration management is largely dominated by themes related to education, management, and administration, reflecting a strong focus on governance and institutional leadership. Term correlation analysis indicates close conceptual relationships among administration, management, and leadership, underscoring their integrative role in educational governance. Additionally, thematic mapping reveals increasingly interconnected research themes and a growing emphasis on literature-based studies supported by technology-driven text analysis, offering valuable insights for future research development.*

**Keywords:** Educational; Administration; Management; Research Trends

---



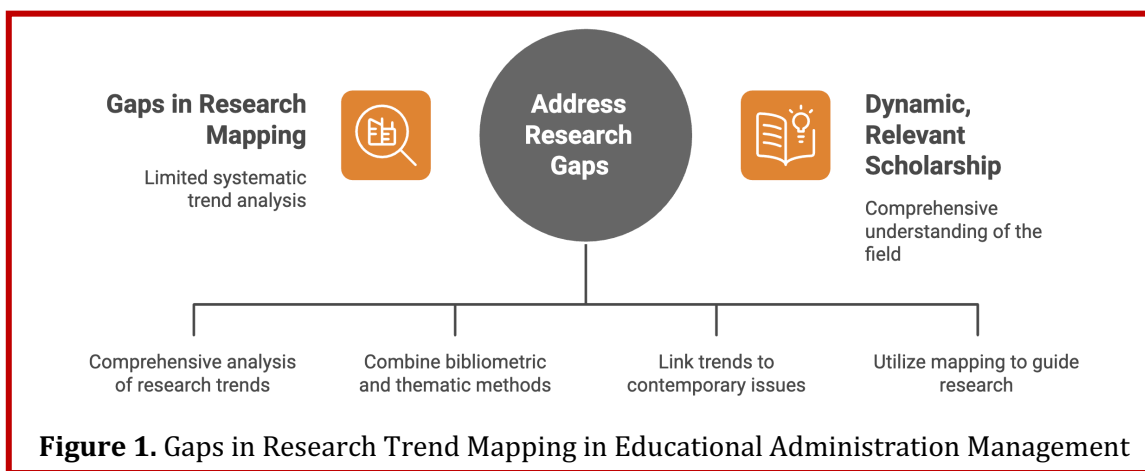
Copyright ©2026 Taksonomi: Jurnal Penelitian Pendidikan Dasar

## 1. Introduction

Educational administration management is a strategic field within the education system that plays a crucial role in ensuring the effective governance of educational institutions. Educational administration is not limited to technical and clerical functions, but also encompasses comprehensive processes of planning, organizing, implementing, and evaluating educational policies (Hammad et al., 2020). In the context of social change, technological advancement, and increasing demands for educational quality, educational administration management is required to continuously adapt in order to effectively support the achievement of educational goals (McGinity et al., 2021). Along with the growing emphasis on effective educational governance, research in the field of educational administration management has developed rapidly.

Numerous studies have explored themes such as educational leadership, school management, educational policy, the quality of administrative services, and technology-based management innovation (Zhang, 2025). However, the diversity of topics, approaches, and research foci is often dispersed across a wide range of scholarly publications, making it difficult to obtain a comprehensive understanding of the overall direction and emerging trends of research in this field.

These conditions highlight the importance of mapping research trends as a strategic effort to identify patterns of scholarly development, dominant themes, research gaps, and the dynamics of changing research foci in the field of educational administration management over time (Alsharija & Watters, 2020). Through research trend mapping, scholars can obtain a comprehensive overview of the direction of disciplinary development, the most frequently investigated topics, and emerging shifts in issues that arise in response to policy changes, institutional needs, and advances in educational technology (Nirit & Dorit, 2024). Furthermore, research trend mapping enables the identification of areas that have received relatively limited scholarly attention, thereby opening opportunities for the development of more innovative and contextually grounded studies. Such information provides a strong foundation for researchers in formulating research agendas that are relevant, sustainable, and aligned with real needs in educational practice (Qader & Benoliel, 2025). Thus, research trend mapping functions not only as a reflective tool for understanding the evolution of scholarship, but also as a strategic basis for strengthening the contribution of research to improving the quality of educational administration management.



**Figure 1.** Gaps in Research Trend Mapping in Educational Administration Management

This framework emphasizes that the limitations of existing, non-systematic trend analyses necessitate a more structured and comprehensive approach to research mapping. Research trend mapping is positioned as a strategic effort to identify patterns of scholarly development, dominant themes, and shifts in research focus, thereby enabling a more thorough understanding of existing knowledge gaps (Carrasco & Montoya, 2024). Furthermore, the framework illustrates that addressing these research gaps requires comprehensive trend analysis, the integration of bibliometric and thematic approaches, and the alignment of mapping results with contemporary issues (Da’as et al., 2025). This integrated approach allows research mapping to serve as a foundation for formulating future research directions and agendas. Consequently, research trend mapping not only provides an overview of disciplinary development but also fosters more dynamic, relevant, and impactful studies that contribute to

strengthening the understanding of educational administration management (Bush, 2021).

Previous studies on educational administration management have largely focused on empirical investigations and context-specific case studies, emphasizing issues such as school leadership, organizational effectiveness, and administrative performance (Francis et al., 2025). Several scholars have also highlighted the importance of management functions and governance structures in improving educational quality (Culha et al., 2025). However, these studies tend to examine isolated themes without systematically mapping the overall development of research trends. As a result, longitudinal patterns, thematic dominance, and shifts in research focus within educational administration management remain insufficiently explored, limiting a comprehensive understanding of how the field has evolved over time. In addition, prior research has predominantly employed narrative literature reviews and conceptual discussions to synthesize existing knowledge (Berkovich & Eyal, 2025). Although such approaches provide valuable theoretical insights, they often lack analytical rigor in identifying structural relationships among research themes. Recent methodological studies suggest that bibliometric analysis and thematic mapping can offer more objective and visual representations of research dynamics, collaboration patterns, and emerging topics (O'Doherty et al., 2025). Nevertheless, the application of these methods in educational administration research remains limited, and few studies have linked mapped research trends to contemporary challenges such as digital transformation and evidence-based governance. This gap underscores the need for integrative and forward-looking trend-mapping studies to guide future research agendas in educational administration management.

Although research on educational administration management has developed significantly, a gap remains in efforts to map research trends in a systematic and data-driven manner. Most previous studies tend to emphasize thematic analysis or conceptual discussions of specific topics, without providing a comprehensive overview of research development patterns, issue dominance, and shifts in research focus over time (Bush, 2024). This limitation results in an incomplete understanding of the scholarly dynamics of educational administration management, making the overall direction of research development and the positioning of individual studies within the broader research landscape less clear (O'Connor & Stacey, 2025). Consequently, a major challenge in research trend mapping lies in the limited use of analytical tools and text visualization techniques capable of processing literature data in a systematic and informative way (O'Doherty et al., 2025).

The minimal application of visualization-based approaches, such as Voyant Tools, often causes literature reviews to remain descriptive and insufficiently exploratory in revealing conceptual relationships, thematic intensity, and dominant discursive tendencies. Another challenge concerns linking mapping results to contemporary issues in educational administration management, including digital transformation and evidence-based governance (Hilal & Gardner-McTaggart, 2025). Therefore, there is a need for research that integrates literature review methods with text data visualization to produce more objective, in-depth, and relevant research trend mappings that can serve as a foundation for developing future research agendas.

The solution proposed in this study is to conduct a mapping of research trends in educational administration management through a *systematic literature review*

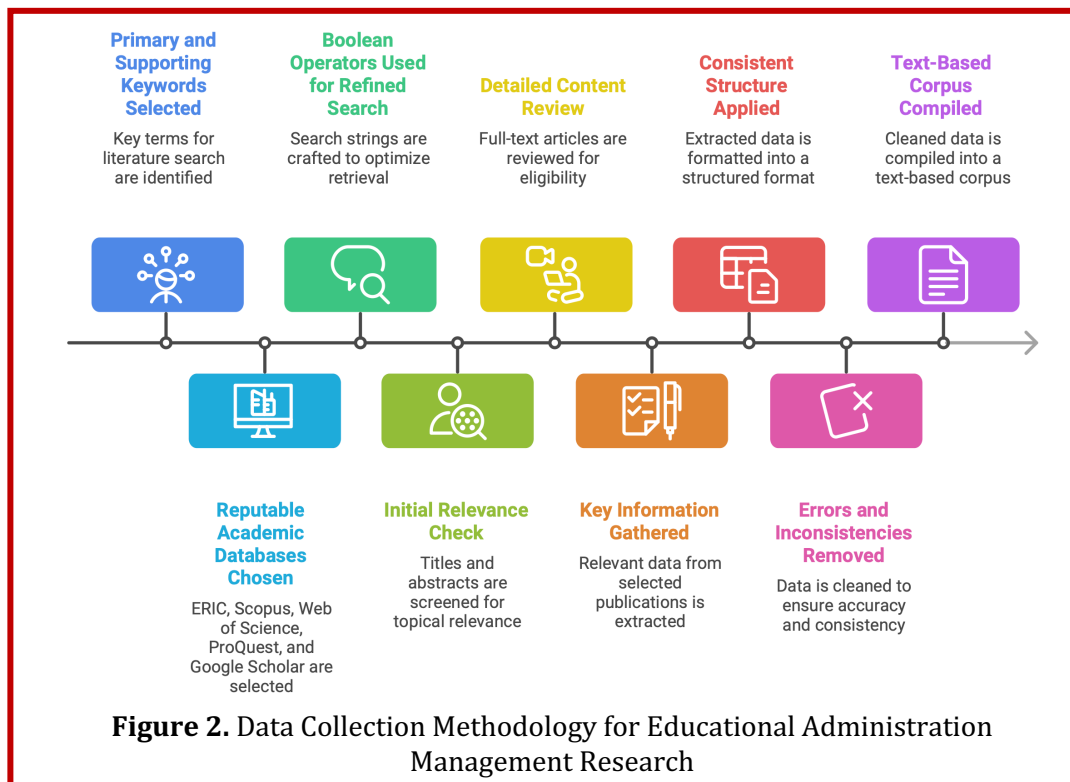
approach integrated with text analysis and visualization using Voyant Tools. This approach enables a more objective and systematic processing of literature data by identifying keyword frequencies, interconceptual relationships, and dominant discourse patterns within scholarly publications (Welle & Gunnulfsen, 2025). By utilizing text data visualization, this study is expected to overcome the limitations of conventional literature reviews that tend to be predominantly descriptive, and to provide a more comprehensive and evidence-based overview of developments in educational administration management research (Hughes & Davis, 2025). This study aims to systematically map research trends in educational administration management based on scholarly literature. Specifically, it seeks to identify the main themes and dominant keywords that characterize research in this field, analyze shifts and changes in research focus over time, and illustrate research discourse patterns through text visualization using Voyant Tools. In addition, the study aims to uncover existing research gaps that can serve as a foundation for formulating future research agendas that are both relevant and contextually grounded.

This study is of particular interest because it offers an innovative approach to research on educational administration management by integrating literature review methods with text analysis visualization. The use of Voyant Tools adds value by providing more exploratory and accessible data representations, enabling a clearer illustration of the dynamics of research development in this field. Beyond its methodological contribution, this study also holds academic and practical significance, as the mapping results can serve as a valuable reference for researchers, academics, and educational policymakers in understanding the direction of scholarly development and in designing policies and research initiatives that are more responsive to the challenges of educational administration management in an era of global change.

## 2. Research methods

This study employs a qualitative research design using a *literature review* approach integrated with visualization-based text analysis (NIKOLAOS, 2025). This approach aims to systematically map research trends in educational administration management based on relevant scholarly publications (Hammad et al., 2025). The research procedure begins with the identification of primary keywords related to educational administration management, followed by a systematic search and collection of academic articles from reputable academic databases. Subsequently, a screening process is conducted using predefined inclusion and exclusion criteria to ensure the relevance and quality of the analyzed sources.

The data sources in this study consist of scholarly journal articles, conference proceedings, and other academic publications that address educational administration management (Hallinger, Liu, & Niu, 2025). The selected literature is subsequently analyzed using Voyant Tools to identify keyword frequencies, patterns of term occurrence, and interconceptual relationships within the text corpus. The analysis results are visualized in the form of graphs and word maps to comprehensively illustrate research trends and tendencies (Weddle, 2022). The final stage of the study focuses on interpreting the visualization outputs to draw conclusions regarding dominant themes, the dynamics of scholarly development, and potential opportunities for future research in the field of educational administration management.



**Figure 2.** Data Collection Methodology for Educational Administration Management Research

Illustrates a systematic data collection methodology employed in educational administration management research (Bellibaş et al., 2025). The process begins with an initial relevance check through the identification of primary and supporting keywords, followed by the formulation of search strings using Boolean operators to optimize literature retrieval. Reputable academic databases such as ERIC, Scopus, Web of Science, ProQuest, and Google Scholar are selected to ensure the credibility and quality of the sources. Titles and abstracts are then screened for topical relevance, allowing only studies that align with the research focus to proceed to the next stage of analysis. Furthermore, the figure demonstrates that eligible full-text articles undergo a detailed content review to extract relevant data (Lipscombe et al., 2025). This extracted information is subsequently cleaned to remove errors and inconsistencies, ensuring data accuracy and reliability. The cleaned data are formatted into a consistent structure and compiled into a text-based corpus, which serves as the foundation for further analysis. Overall, the methodology depicted emphasizes rigor, transparency, and systematic procedures, ensuring that the resulting corpus is both representative and suitable for mapping research trends in educational administration management.

Data analysis was conducted using a text analysis approach supported by Voyant Tools to systematically map research trends in educational administration management (Rong & Chen, 2025). At this stage, the compiled text corpus was uploaded into the software and analyzed based on word frequency, term distribution, and the emergence of key themes. This analysis enabled the identification of dominant keywords and discourse patterns that reflect prevailing research foci in the field of educational administration management. The subsequent stage involved interpreting the visualizations generated by Voyant Tools, such as word clouds, term frequency lists, and collocation networks (Chen, 2025). The results were not only used to describe topical tendencies, but also to examine relationships among concepts and the dynamics of research development. The findings were then synthesized narratively to reveal

dominant themes, identify research gaps, and highlight opportunities for future research, thereby ensuring that the data analysis directly contributed to the achievement of the study's objectives.

### **3. Results and Discussion**

#### **3.1 Results**

The findings of this study on Mapping Research Trends in Educational Administration Management through a Literature Review with Voyant Tools Visualization indicate that research trend analysis can be comprehensively understood through three main approaches. First, the Word Cloud of Research Trends in Educational Administration Management provides an initial overview of the dominant terms and themes most frequently appearing in the literature corpus. This visualization reveals that the primary focus of research centers on the concepts of education, management, and administration, while also emphasizing the role of literature-based studies and research activities as the foundation for scholarly development in this field.

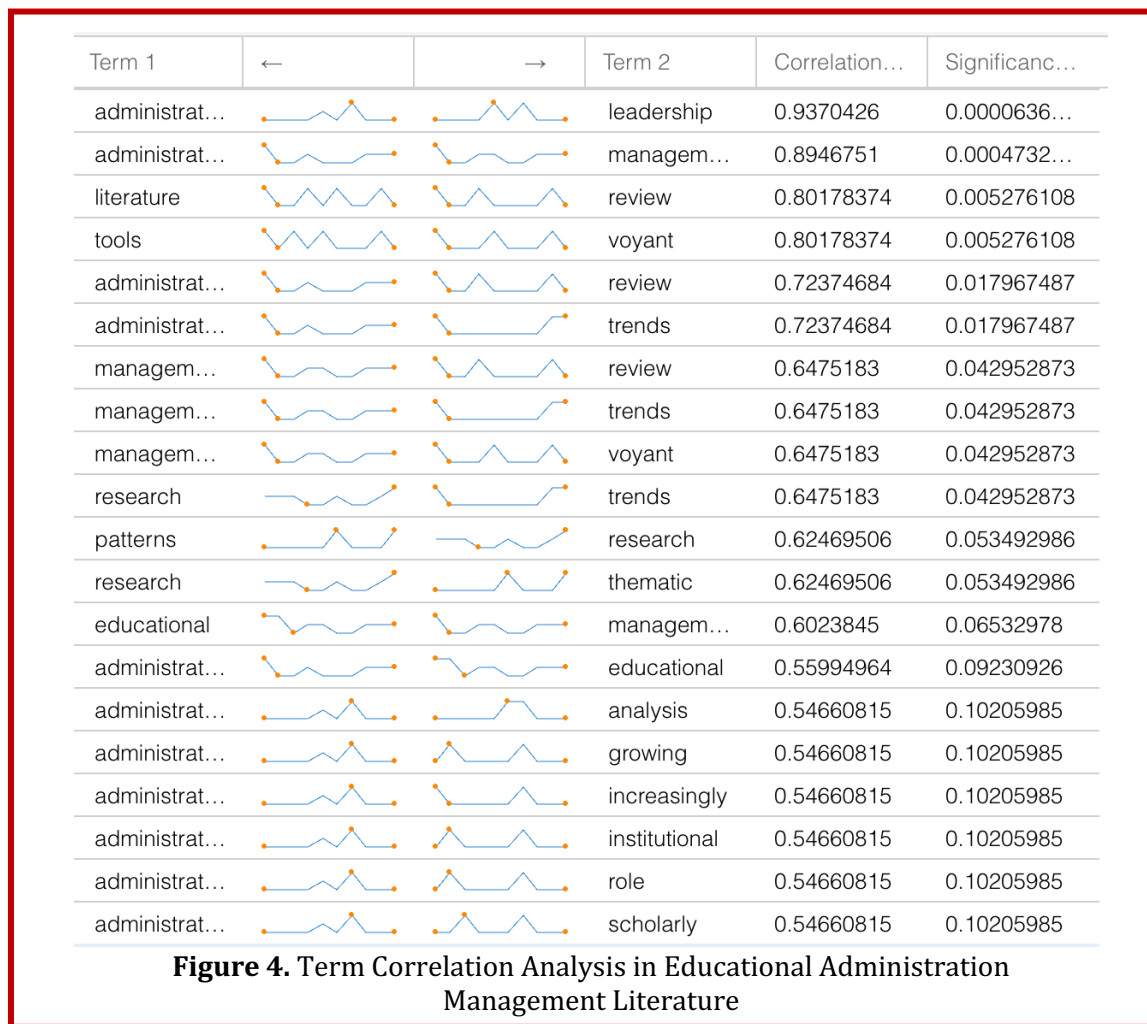
This approach functions as an exploratory analysis to identify the general direction and intensity of research discourse. Second and third, Term Correlation Analysis and Keyword Network and Thematic Mapping offer a deeper understanding of the structural and conceptual relationships among key terms. Term correlation analysis reveals the degree of association and strength of relationships among concepts that frequently co-occur in the literature, while keyword network and thematic mapping illustrate thematic clusters and the proximity of concepts within the research landscape. The integration of these analyses demonstrates that research in educational administration management is developing dynamically, not only in terms of substantive themes but also through methodological innovations based on text analysis and data visualization. Collectively, these three approaches produce a systematic, integrated, and relevant mapping of research trends that serves as a solid foundation for the formulation of future research agendas.

#### **Word Cloud of Research Trends in Educational Administration Management**

The *word cloud* visualization is used as an initial approach to understand trends in dominant themes and key terms within studies of educational administration management. Through this visual representation, frequently occurring words in the literature corpus are displayed proportionally according to their frequency, thereby providing a general overview of the research focus and orientation developing in this field. This approach enables researchers to gain an exploratory understanding of the research landscape before conducting more in-depth analyses. In addition, the *word cloud* functions as a supportive tool for identifying major discourse patterns within the scholarly literature. By visually presenting key terms, researchers can quickly recognize the central concepts that shape the research landscape of educational administration management. Therefore, this visualization represents an important initial step in the process of mapping research trends through text-based analysis.



essential stage in mapping research trends through text-based analysis. In addition, the presentation of term correlations is complemented by correlation coefficient values and statistical significance levels to indicate the strength and reliability of relationships among keywords. High correlation values signify strong associations among terms within the research context, while significance values reflect the level of confidence in these relationships. This approach provides a stronger empirical basis for interpreting thematic patterns and research tendencies in educational administration management.



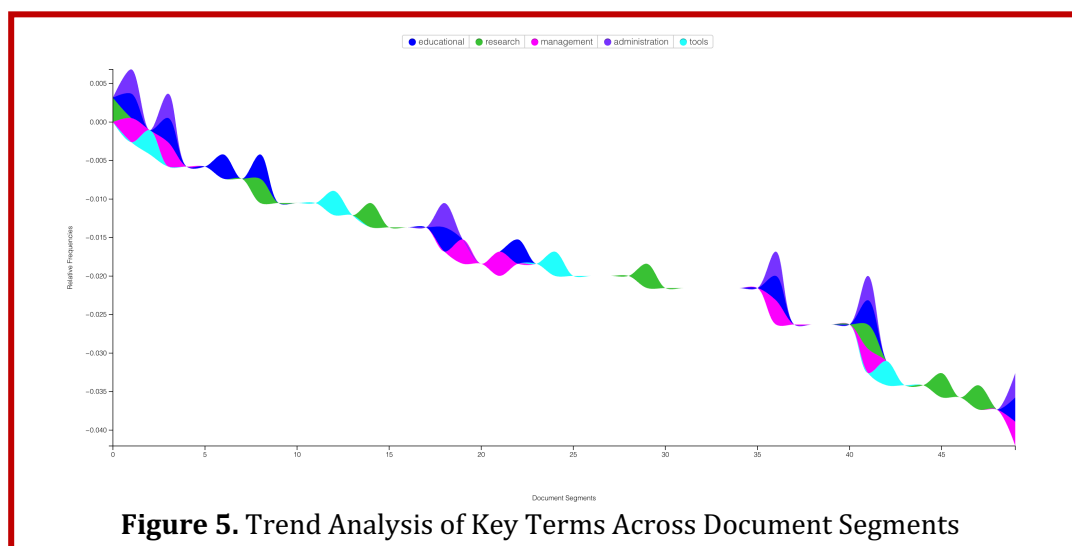
The presence of a very strong correlation between the terms *administration* and *leadership* indicates that leadership is an inseparable theme in studies of educational administration management. This relationship reflects a research focus that positions leadership as a key element in institutional management and decision-making processes within educational settings. In addition, the high correlation between *administration* and *management* confirms that these two concepts are frequently discussed together in the literature. This finding suggests that studies of educational administration commonly integrate administrative and managerial perspectives to achieve a comprehensive understanding of effective educational governance.

The significant relationships between the terms *literature* and *review*, as well as between *tools* and *Voyant*, indicate the strong use of literature-based approaches supported by text analysis tools in recent research. These findings reflect the increasing utilization of digital tools to facilitate more systematic and data-driven literature

analysis. Furthermore, the correlation between *administration* and the terms *review* and *trends* suggests that studies in educational administration are increasingly oriented toward research trend mapping and knowledge synthesis. This pattern indicates a shift in research focus from isolated descriptive studies toward more comprehensive and reflective analyses of scholarly development.

The association between the term *management* and *review*, *trends*, and *Voyant* further reinforces the indication that literature-based methodological approaches and text visualization are becoming integral components of research in educational administration management. This approach enables a more objective identification of thematic patterns and research dynamics. Overall, the pattern of term correlations presented in the figure reflects an integration between the substantive foundations of educational administration scholarship and text-based analytical methodologies. These findings confirm that research in educational administration management is evolving not only at the level of concepts and practices, but also through methodological innovation, particularly in the systematic and technology-based mapping of research trends.

The visualization of term occurrence trends within the literature corpus is used to illustrate the dynamic distribution of major themes in educational administration management research. This graph presents relative changes in the frequency of several key terms across document segments, allowing researchers to observe how the focus of discussion develops and shifts throughout the entire text corpus. Such an approach provides a temporal understanding of research discourse trends, rather than a merely static representation of word occurrences. In addition, this visualization serves as a comparative analytical tool to examine the relationships and simultaneous movements among major terms such as *educational*, *research*, *management*, *administration*, and *tools*. By mapping these terms concurrently, the graph helps reveal patterns of thematic co-existence and their relative intensity across different sections of the documents, thereby enriching text-based research trend analysis.

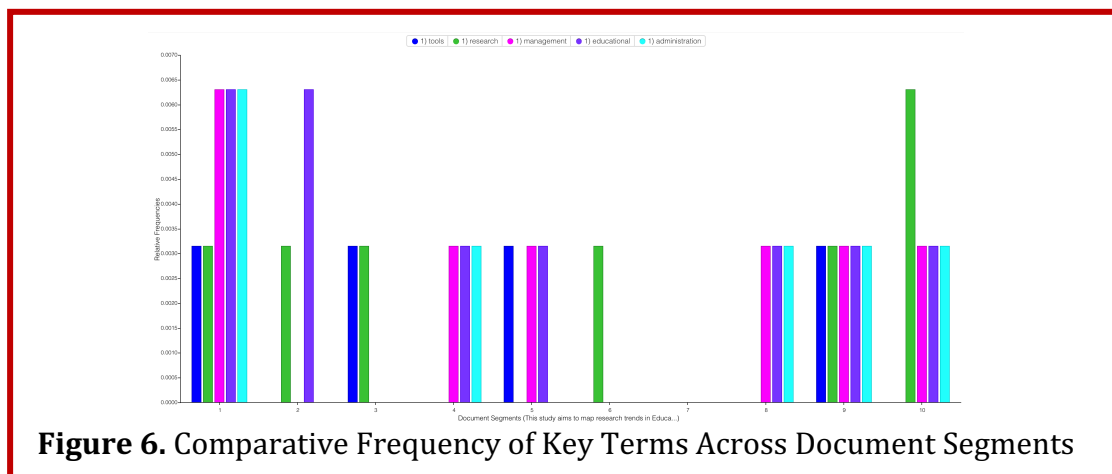


The key terms exhibit varying fluctuations in frequency across document segments, reflecting the dynamic focus of studies within the educational administration management literature. The observed upward and downward patterns indicate that research attention is not homogeneous, but rather shifts in accordance with the context and topics addressed in different sections of the documents. The terms *administration*

and *management* display relatively consistent occurrence patterns and frequently overlap, indicating that these two concepts constitute the core of research discourse. The interrelated patterns of these terms further reinforce the finding that studies in educational administration commonly integrate managerial and administrative perspectives when examining the governance of educational institutions.

The term *educational* shows a relatively strong intensity of occurrence in several specific segments, indicating that the educational context remains the primary foundation in discussions of management and administration. This suggests that although managerial approaches are applied, educational orientation continues to be the substantive focus of the research. The term *research* exhibits fluctuations that reflect sections of the documents that place particular emphasis on methodological aspects and the development of scholarly inquiry. Its occurrence indicates that the literature addresses not only practices and concepts, but also critical reflections on research directions and methods in the field of educational administration management. Overall, this visualization of term trends illustrates the dynamic interaction among major themes in educational administration management literature. The observed fluctuations and co-existence of terms indicate that research development is multidimensional, characterized by close interconnections among educational context, managerial approaches, administrative practices, and methodological innovations based on text analysis tools.

The comparative bar chart provides a clearer depiction of differences in term occurrence levels across document segments, thereby facilitating comparative analysis among topics. Through this visualization, researchers can assess whether a particular term appears consistently or is dominant only in specific segments, which can subsequently be used to interpret the dynamics of research focus within the educational administration management literature.



**Figure 6.** Comparative Frequency of Key Terms Across Document Segments

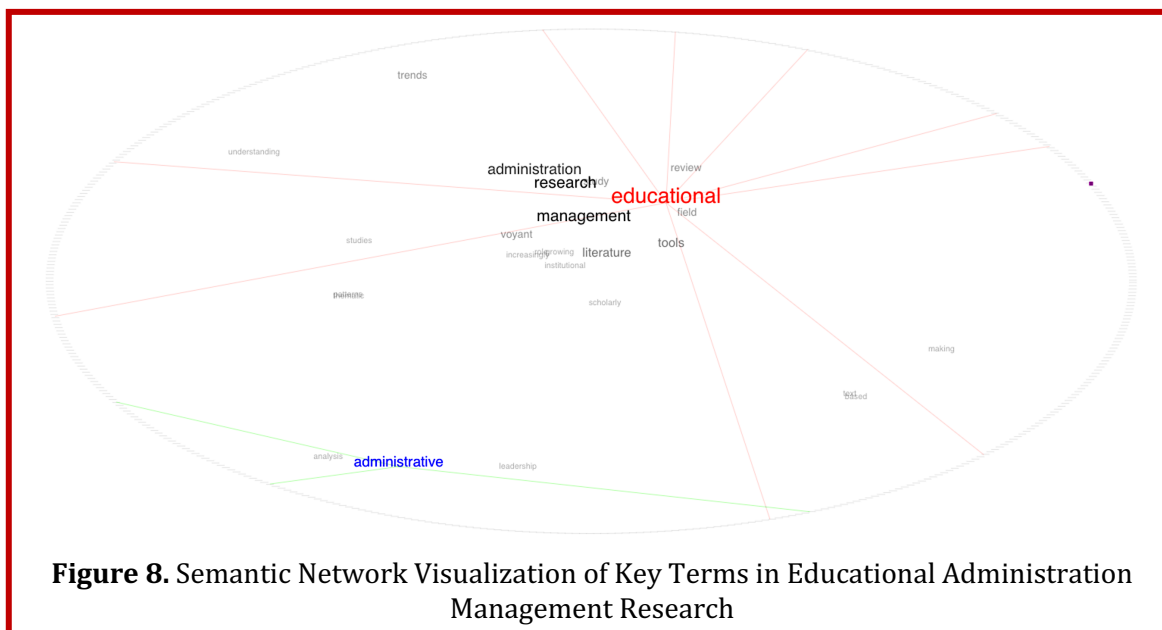
The key terms display varying patterns of occurrence across document segments. Some terms appear consistently across multiple segments, while others show higher intensity in specific sections. This variation reflects differences in thematic focus among sections of the analyzed literature corpus. The terms *educational* and *administration* exhibit relatively high frequencies in several early segments, indicating that educational context and administrative aspects constitute the foundational focus of the literature. This finding suggests that research on educational administration management remains firmly rooted in institutional and educational system issues. The term *research*



The keywords *educational*, *management*, and *administration* have the largest node sizes, indicating high frequencies of occurrence and their central roles in the literature. The close spatial positioning of these three terms reflects a strong conceptual linkage, confirming that management and administration constitute the main pillars of educational studies. The keyword *research* also appears prominently with a large node size, indicating that research orientation and scholarly development are important focal points in the literature. Its relatively separate yet connected position suggests its role as a cross-cutting concept that links various studies within the field. Beyond these core themes, several keywords such as *review*, *literature*, *trends*, and *thematic* form a cluster representing literature-based approaches and research trend mapping. This cluster indicates a growing scholarly emphasis on knowledge synthesis and the analysis of research development as integral components of educational administration management studies.

The presence of terms such as *tools*, *Voyant*, *visualization*, and *text* indicates the integration of technology-based methods and text analysis in research. This cluster reflects a methodological shift toward the use of digital tools to support more systematic, objective, and data-driven literature analysis. Keywords such as *leadership*, *institutional*, and *administrative* form subthemes related to institutional practices and roles in educational management. The positioning of these terms demonstrates their connection to the core themes, while also confirming that leadership and institutional dimensions remain substantive focal points in the literature. Overall, this keyword mapping reveals a complex and interconnected thematic structure within educational administration management research. The visualization not only confirms the dominance of core themes, but also uncovers the dynamics of methodological and thematic development, thereby providing a strong foundation for identifying research gaps and formulating relevant and innovative future research agendas.

Semantic network visualization is utilized to depict the conceptual relationships among key terms identified within the literature corpus of educational administration management. By mapping terms according to their semantic proximity and patterns of co-occurrence, this method reveals how concepts are interconnected within the broader research discourse. Each term is positioned within a relational structure that reflects its association with other concepts, thereby offering a systematic representation of the intellectual landscape of the field. Through this approach, researchers can more clearly observe how dominant themes emerge and how various concepts collectively construct the scholarly framework of educational leadership studies. Moreover, semantic network visualization helps distinguish between central and supporting concepts within the literature. Terms that appear in central positions and demonstrate numerous connections typically indicate a significant role in shaping research discussions, while those located on the periphery tend to represent more specific, contextual, or derivative themes. This differentiation allows researchers to identify core research priorities as well as emerging or specialized areas of inquiry. Consequently, semantic network visualization functions as an essential analytical tool for mapping research trends and understanding the structural dynamics of knowledge development in text-based studies.



**Figure 8.** Semantic Network Visualization of Key Terms in Educational Administration Management Research

The term *educational* occupies the most central position and demonstrates extensive connections with a wide range of other terms. This indicates that the educational context constitutes the primary axis of research in educational administration management, serving as a convergence point for diverse approaches, themes, and research foci. The terms *management* and *administration* also appear close to the center of the network, signifying strong conceptual associations with the educational context. This proximity suggests that the literature consistently integrates managerial and administrative perspectives in discussions of educational institution management, encompassing policy, practice, and governance.

The presence of the terms *research*, *review*, and *literature* around the center of the network reflects the important role of literature-based inquiry and research activities in scholarly development. This indicates that educational administration management is addressed not only as a field of practice, but also as an academic discipline that is continuously examined, reviewed, and systematically developed. Furthermore, terms such as *tools* and *Voyant* indicate the integration of technology-based methodological approaches in research. The connection of these terms with core concepts underscores that the use of text analysis tools and data visualization has become an increasingly important component of literature studies and research trend mapping.

The terms *administrative* and *leadership*, positioned along specific connection pathways, indicate the presence of subthemes related to leadership roles and administrative practices within an institutional context. The placement of these terms suggests that, although they do not always occupy the central position in the discourse, leadership and administrative aspects continue to make significant contributions to shaping research narratives. Overall, this semantic network visualization reveals an interconnected and layered scholarly structure in educational administration management research. The mapping not only confirms the dominance of core concepts, but also uncovers the dynamics of relationships among themes and methodological developments, thereby providing a strong foundation for understanding the direction of research development and identifying opportunities for future studies.

### 3.2 Discussion

The results of the *word cloud* visualization indicate that research on educational administration management is dominated by the terms *educational*, *management*, *administration*, and *research*, confirming that the primary focus of the literature lies in the governance and management of education as its core concern. The dominance of these terms reflects a strong research orientation toward managerial and administrative aspects within educational institutions. In addition, the frequent occurrence of terms such as *literature*, *review*, *study*, and *analysis* indicates the growing use of literature-based approaches to synthesize knowledge, map scholarly development, and identify research gaps. The presence of terms such as *trends*, *thematic*, *patterns*, and *growing* further suggests increasing attention to analyzing the dynamics and direction of research development from a longitudinal perspective. Meanwhile, the appearance of terms such as *tools* and *Voyant* highlights the integration of text analysis technologies in research, which enhances the objectivity and systematic nature of research trend mapping in educational administration management.

These findings are consistent with previous research emphasizing that text visualizations, including *word clouds*, are effective as an initial step for identifying dominant themes and discourse tendencies within extensive literature reviews (Hallinger, Liu, Aung, et al., 2025). That study demonstrated that keyword visualizations assist researchers in understanding the overall structure of discourse prior to conducting more in-depth and complex analyses. Accordingly, the results of this study reinforce the evidence that *word clouds* function not only as visual representations of word frequency, but also as relevant preliminary analytical instruments for mapping research trends, particularly in the field of educational administration management, which encompasses a broad and multidimensional body of scholarship.

The results of the *Term Correlation Analysis* indicate that relationships among terms in the educational administration management literature are not random, but instead form integrated conceptual patterns. The very strong correlation between the terms *administration* and *leadership* confirms that leadership is a central element in studies of educational administration, particularly in the context of institutional management and decision-making. In addition, the high correlation between *administration* and *management* demonstrates that administrative and managerial perspectives are almost always discussed together to explain the effectiveness of educational governance. Significant relationships between the terms *literature-review* and *tools-Voyant* also indicate a methodological shift toward literature-based approaches supported by text analysis and data visualization. These findings confirm that research trend mapping reveals not only substantive scholarly themes, but also the evolution of research methods toward more systematic and technology-based approaches.

These findings are consistent with the study by (Kılınç & Gümüş, 2020), which emphasizes that correlation and co-occurrence analyses of terms in bibliometric studies can uncover the conceptual structure of a field more deeply than frequency analysis alone. Donthu et al. demonstrated that keyword correlations can reflect core themes, subthemes, and the direction of research development within a discipline. Accordingly, the results of the *Term Correlation Analysis* in this study strengthen the view that correlation-based text analysis is a valid and relevant method for

understanding thematic dynamics and integration in educational administration management research.

The results of the *Keyword Network and Thematic Mapping* indicate that the thematic structure of educational administration management research is complex and highly interconnected. The keywords *educational*, *management*, and *administration* occupy the most central positions with high frequencies of occurrence, confirming that educational management and administration constitute the core of research discourse. The presence of *research* as a cross-cutting concept suggests that studies in this field are not only oriented toward institutional practice, but also toward scholarly development and academic reflection. In addition, the formation of clusters consisting of *review*, *literature*, *trends*, and *thematic* indicates a growing emphasis on research trend mapping and knowledge synthesis. The methodological cluster that includes *tools*, *Voyant*, *visualization*, and *text* reflects a shift in research approaches toward the use of text analysis technologies. Overall, the mapping of keyword networks and semantic networks demonstrates an integration of substantive themes, institutional practices, and methodological innovations that dynamically shape the research landscape of educational administration management.

These findings are consistent with the study by (Hannan et al., 2025), which emphasizes that keyword network mapping and thematic analysis based on co-occurrence can effectively reveal the conceptual structure and major thematic clusters within a field of scholarship. They demonstrate that network visualizations not only identify dominant themes, but also illustrate relationships among concepts and methodological developments within the scientific literature. Accordingly, the results of this study reinforce previous findings that keyword networks and thematic mapping are effective and valid approaches for understanding thematic dynamics, interconnections, and the direction of research development in the field of educational administration management.

#### 4. Conclusion

Based on the findings, it can be concluded that mapping research trends in educational administration management through a literature review supported by Voyant Tools visualization provides a comprehensive overview of the direction and characteristics of scholarly development in this field. The *word cloud* analysis reveals the dominance of the term *educational*, *management*, and *administration*, confirming that the primary focus of research lies in educational governance and management as the core of academic discourse. Meanwhile, *term correlation analysis* uncovers strong conceptual relationships among key terms, particularly administration, management, and leadership reflecting the integration of substantive themes in discussions of institutional management effectiveness. Furthermore, the results of *keyword network and thematic mapping* demonstrate an interconnected thematic structure encompassing core themes, institutional subthemes, and technology-based methodological approaches. These findings indicate that research in educational administration management has evolved not only in terms of concepts and practices, but also through a methodological shift toward the use of text analysis and data visualization in literature studies. Collectively, the three results underscore that visualization-based research trend mapping makes a significant contribution to understanding scholarly dynamics, identifying research gaps, and formulating more

relevant and innovative future research agendas in the field of educational administration management.

## References

- Alsharija, M., & Watters, J. J. (2020). Secondary school principals as change agents in Kuwait: Principals' perspectives. In *Educational Management Administration & Leadership* (Vol. 49, Issue 6, pp. 883–903). SAGE Publications. <https://doi.org/10.1177/1741143220925090>
- Bellibaş, M. Ş., Karaferye, F., & Walker, A. (2025). How cultural context shapes school leadership and its effectiveness: A systematic review. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251396683>
- Berkovich, I., & Eyal, O. (2025). Support for generative artificial intelligence as a predictor of middle leaders' generative artificial intelligence self-efficacy, valuing, and integration in school leadership work. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251361251>
- Bush, T. (2021). Gender and school leadership: Are women still under-represented as school principals? In *Educational Management Administration & Leadership* (Vol. 49, Issue 6, pp. 861–862). SAGE Publications. <https://doi.org/10.1177/17411432211050965>
- Bush, T. (2024). Leadership and culture in Singapore: What makes a successful education system? In *Educational Management Administration & Leadership* (Vol. 52, Issue 2, pp. 277–279). SAGE Publications. <https://doi.org/10.1177/17411432231219332>
- Carrasco, A., & Montoya, C. (2024). Caring leadership practices in Chilean educational communities: Perceptions of school principals and teachers. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432241293563>
- Chen, J. (2025). Principal resilience research from its birth in 2005 to 2024: A narrative review and a conceptual framework. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432241294170>
- Culha, A., Bellibaş, M. Ş., & Özkul, R. (2025). Educational leadership in the shadow of crises: Effective school leadership practices for post-earthquake recovery in southeast Türkiye. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251339712>
- Da'as, R., Qadach, M., & Schechter, C. (2025). Crisis leadership: Developing and validating a scale for school principals' crisis management in Israel. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251387306>
- Francis, S. S., Margolis, J., & King, F. (2025). Spanners and enhancers: The role of teacher leaders in school evolution. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432241307788>

- Hallinger, P., Liu, S., Aung, P. N., & Yan, M. (2025). A systematic review of instructional leadership research conducted with the Principal Instructional Management Rating Scale (PIMRS), 1983–2024. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251358575>
- Hallinger, P., Liu, S., & Niu, X. (2025). Cultural context, principal instructional leadership, and teacher efficacy: A meta-analytic review, 1989–2024. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251349810>
- Hammad, W., Hilal, Y. Y., & Hallinger, P. (2025). Science mapping the knowledge base on educational leadership and management in the Arab region: A bibliometric review. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251407035>
- Hammad, W., Samier, E. A., & Mohammed, A. (2020). Mapping the field of educational leadership and management in the Arabian Gulf region: A systematic review of Arabic research literature. In *Educational Management Administration & Leadership* (Vol. 50, Issue 1, pp. 6–25). SAGE Publications. <https://doi.org/10.1177/1741143220937308>
- Hannan, R., Lafferty, N., & Mannix-McNamara, P. (2025). Exploring diversity in principal promotions: A systematic review of global trends and challenges. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251380163>
- Hilal, Y. Y., & Gardner-McTaggart, A. (2025). School leadership at times of crises: Surveillance as support. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251393782>
- Hughes, J., & Davis, K. (2025). Enhancing primary school leadership through cultural intelligence and talent management: A case study approach. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251404429>
- Kılınc, A. Ç., & Gümüş, S. (2020). What do we know about novice school principals? A systematic review of existing international literature. In *Educational Management Administration & Leadership* (Vol. 49, Issue 1, pp. 54–75). SAGE Publications. <https://doi.org/10.1177/1741143219898483>
- Lipscombe, K., Harris, J., Ford, S. T., & Groth, S. (2025). School middle leadership: A systematic review revisited 2020–2024. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251362970>
- McGinity, R., McKay, A., & Courtney, S. J. (2021). Mapping trends in educational-leadership research: A longitudinal examination of knowledge production, approaches and locations. In *Educational Management Administration & Leadership* (Vol. 50, Issue 2, pp. 217–232). SAGE Publications. <https://doi.org/10.1177/17411432211030758>
- NIKOLAOS, S. (2025). Educational Robotics through Research : A Systematic Literature Review. In *INTERNATIONAL JOURNAL OF EDUCATIONAL INNOVATION* (Vol. 5,

- Issue 1). Epistimoniki Enosi Gia Tin Proothisi Tis Ekpaideutikis Kainotomias. <https://doi.org/10.69685/jmri9483>
- Nirit, P., & Dorit, T. (2024). Signature pedagogies and professionalism: An exploratory study on novice principal mentoring. In *Educational Management Administration & Leadership* (Vol. 54, Issue 1, pp. 112–129). SAGE Publications. <https://doi.org/10.1177/17411432241247295>
- O'Connor, E., & Stacey, M. (2025). Middle leaders as policy actors: The 'hyper-enactment' of school-level assessment policy. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251384197>
- O'Doherty, M., McNamara, G., Gardezi, S., & Brown, M. (2025). Does school inspection lead to school improvement? A case study. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251355386>
- Qader, Y. A. El, & Benoliel, P. (2025). Teacher professional commitment in the Israeli Arab education system: Principal leadership and school outcomes. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251324095>
- Rong, J., & Chen, S. (2025). Principal social justice leadership: A systematic review of 20 years of research, 2005–2024. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251376131>
- Weddle, H. (2022). Approaches to studying teacher collaboration for instructional improvement: A review of literature. In *Educational Research Review* (Vol. 35, p. 100415). Elsevier BV. <https://doi.org/10.1016/j.edurev.2021.100415>
- Welle, K. B. R., & Gunnulfsen, A. E. (2025). School leadership: Dilemmas in dealing with crises. In *Educational Management Administration & Leadership*. SAGE Publications. <https://doi.org/10.1177/17411432251325099>
- Yusnan, M., & Jannah, N. (2024). The Role of Teachers in Implementing Environmentally Based Learning Media through Animated Videos in Elementary Schools. *TAKSONOMI: Jurnal Penelitian Pendidikan Dasar*, 4(2), 285-299.
- Zhang, Y. (2025). Research on Educational Leadership and Management in China since 2000s: A Systematic Literature Review. In *Research in Educational Administration and Leadership* (Vol. 10, Issue 2, pp. 333–371). Egitim Yoneticileri ve Egitim Deneticileri Dernegi. <https://doi.org/10.30828/real.1594373>