

A Bibliometric Analysis of Artificial Intelligence Research in Guidance and Psychological Counseling

Burhan ŞAHİN, MSc.

Bursa Uludag University Institute of Educational Sciences

Bursa, Türkiye

ORCID ID:0009-0004-2532-9467

Nagihan OĞUZ DURAN, Prof.Dr.

Bursa Uludağ University, Faculty of Education

Bursa, Türkiye

ORCID ID: 0000-0002-8049-1510

Abstract

This study aimed to examine the research landscape and structure of scientific publications on artificial intelligence in the field of school psychological counseling and guidance through bibliometric analysis. To this end, a search was conducted in the Web of Science (WoS) database on May 19, 2025, using specified keywords, and 21 publications were included in the analysis based on the inclusion criteria. The publications were evaluated in terms of year, type, country, language, journal, number of citations, author, institution, and keywords; the data were analyzed and visualized using VOSviewer software. The findings indicate that the field is relatively emerging and that publication output has increased markedly, particularly since 2024. It was determined that the majority of the publications originated from the United States, all were published in English, and publication output is concentrated among a limited number of researchers. The keyword network revealed that the field is shaped by areas such as assessment and reporting processes, mental health services, ethics and professional responsibilities, educational practices, and career counseling. It was observed that the literature has developed primarily from the perspective of school psychology. At the same time, practices specific to psychological counseling and guidance services are represented to a relatively limited extent. Overall, the findings highlight a gap between the broader school psychology literature and research specifically addressing psychological counseling and guidance services. The findings indicate a need for greater diversity in international contributions to the field's development and for more research focusing specifically on psychological counseling and guidance contexts. Research into school counselors' experiences with artificial intelligence, their technology adoption processes, professional evaluations, and ethical approaches could contribute to a more

comprehensive understanding of the field's current state. Furthermore, it is recommended that professional and ethical requirements, such as student privacy, confidentiality, data security, ethical principles, and human/expert oversight, be upheld, and that AI-related knowledge, skills, and ethical competencies be supported through in-service training.

Keywords: Artificial Intelligence, Bibliometric Analysis, Psychological Counseling and Guidance.

Introduction

The term “artificial intelligence” was first used at the Dartmouth Conference in 1956 and defined as “the ability of machines to perform tasks that require human intelligence” (McCarthy et al., 1956); throughout its development to the present day, artificial intelligence has focused on the ability to mimic human cognitive processes (Natale & Ballatore, 2017). Artificial intelligence, which is based on the development of systems capable of performing tasks such as learning, reasoning, and decision-making—traditionally associated with human cognitive abilities (Lockwood, Shergill, Choi, Kim, Farmer & Sansosti, 2026)—creates a connection with the field of psychology through its focus on mimicking human cognitive processes. While psychology facilitates the development of artificial intelligence algorithms through its theoretical knowledge aimed at explaining human behavior (Subramanian et al., 2021), advancements in artificial intelligence, in turn, can contribute across a broad spectrum—from psychological diagnostic processes to treatment methods (Poudel, 2025).

ELIZA, developed by Weizenbaum and one of the earliest examples demonstrating the mutual influence between artificial intelligence and psychology, was able to generate conversational dialogues at a fairly basic level and engage in realistic conversations with humans (Russell & Norvig, 2021). In today's society, artificial intelligence has increasingly taken on a central role, creating transformative impacts in various fields, particularly in education and research (Zawacki-Richter, Garin et al., 2019); and with the widespread adoption of generative artificial intelligence (Chan & Colloton, 2024), it has become possible to establish emotionally aware interactions (Li et al., 2023; Vistorte, 2024). Artificial intelligence, whose use is becoming increasingly widespread in the healthcare sector (World Health Organization, 2024), is showing a similar trend of expansion in the workplace. This trend is supported by the fact that the rate of AI usage among employees rose from approximately 55% to 80% between 2023 and 2024 (Lin & Parker, 2025; Singla et al., 2025). This rapid progress in technological advancements and the increasing accessibility of big data are driving rapid transformations in work and life practices (Ricoy, Varela-Garcia & Delgado-Parada, 2025). This process of transformation and widespread adoption may bring about significant professional and practical changes for experts working in the fields of education and school psychology (Prendeville & Kinsella, 2025).

It has been noted that the labor shortage in the field of school counseling—which plays a significant role in students' psychological and academic development (Su et al., 2024)—has led many professionals to serve a number of students exceeding the levels recommended by professional standards (Goforth et al., 2021). Despite the increasing demand for student support services, the limited human resources in the field of mental health present a significant service delivery challenge for school counseling (U.S. Department of Education, 2021). The inability to fully meet the growing need for student support with current professional capacity has underscored the importance of artificial intelligence (AI) applications, which have the potential to enhance the effectiveness and efficiency of service delivery (Lockwood, Shergill & Choi, 2025). The ability of AI-based tools to provide real-time feedback, increase access to services, and offer alternatives to traditional practices is steadily increasing the importance of these technologies in the field of education (Boucher et al., 2021; Galvão et al., 2018; Miner et al., 2016).

Studies conducted in recent years have revealed findings regarding school psychologists' and school counselors' practices, perceptions, and modes of interaction with AI technologies (Farmer, Lockwood, Floyd & Sisco, 2025; Lockwood, Dillon, Farmer & Kubick, 2025). The first comprehensive study was conducted by Farmer et al. (2025) and involved 199 school psychologists across the United States. The findings indicate that approximately half of the participants had used AI for professional purposes within the past six months. However, regular use is low; fewer than 20% of participants use AI on a weekly or daily basis. A more recent study conducted in 2025 with 129 school psychologists in Ohio, however, indicates an increase in AI usage. According to this study, 79.1% of participants had used AI at work within the past six months, and 43.4% reported weekly or daily use. These results are consistent with the findings reported by Lockwood et al. (2025), which revealed a significant increase in AI usage within just one year. As usage becomes more widespread, there remains a need to build a body of knowledge regarding the purposes and boundaries within which AI will be used in professional practice in the fields of school psychology and psychological counseling.

Psychological counseling and guidance services, situated at the intersection of education and mental health, are influenced by developments in artificial intelligence, just like other professional groups in the mental health field. However, each professional group must address its stance on artificial intelligence within the framework of its own theoretical foundations, professional roles, and contextual application (Impram, 2026). Furthermore, it is emphasized that artificial intelligence should be positioned as a tool that supports decisions made by a human expert rather than as the ultimate decision-maker (Kalman et al., 2023). In this regard, it is emphasized that, in line with the professional context of psychological counseling and guidance, the use of AI must evolve toward a concept of “augmented intelligence,” which requires that AI-generated work be supervised by a qualified human expert (Blease & Torous, 2023; Chan, 2025).

While the widespread accessibility of artificial intelligence offers educators significant professional advantages, it has also intensified debates regarding the role of these technologies in educational applications, how they are used, and their ethical implications (Miao & Holmes, 2023). It appears that there are still only a limited number of studies addressing the use of artificial intelligence in school settings, which holds significant strategic potential for both psychological counseling and guidance practices (Bilquise, 2022; Inkster et al., 2018; Impram, 2026; Waidyam et al., 2019). Furthermore, the literature indicates that experiences and applications related to artificial intelligence are evaluated within the professional framework of school psychologists, thereby increasing the need for systematic and field-specific research on the role of artificial intelligence (Farmer, Lockwood, Floyd & Sisco, 2025). Therefore, in addition to current studies focused on school psychology, there is a need for research that examines how artificial intelligence is positioned within the context of psychological counseling and guidance services.

In recent years, there has been an increase in the number of studies on the use of artificial intelligence in the fields of school psychology and school counseling. However, existing research largely focuses on professionals' experiences with, perceptions of, and ethical evaluations of artificial intelligence (Chan, 2025; Farmer et al., 2025; Lockwood et al., 2025). These studies help us understand how professionals experience AI. However, they do not reveal the field's overall scientific structure. In other words, it is not yet known in which countries and institutions research is concentrated, which researchers are shaping the field, or which topics are prominent and which are under-researched. Yet, mapping this structure is crucial for conducting field-specific and systematic research (Farmer et al., 2025). Indeed, in the literature review conducted as part of this study, no studies were found that examined artificial intelligence in the field of school psychological counseling and guidance from a bibliometric perspective. Determining these structural characteristics of the field is important both for evaluating current research trends and for identifying topics that have not been sufficiently addressed. Accordingly, this study conducted a bibliometric analysis of relevant publications in the Web of Science (WoS) database to identify the field's development trends, the countries and institutions where scientific output is concentrated, the journals involved, and prominent research themes. The aim is to elucidate the current state of the field and provide a framework that can guide future research.

This study employs bibliometric analysis to answer the following research questions:

1. What is the global distribution of scientific publications related to school psychological counseling and guidance activities in terms of year, type, country, language, journal, and number of citations?
2. What is the distribution of authors in terms of citation analysis?
3. What is the distribution of publications by institution?
4. What is the distribution of publications by keywords?

Method

In this study, bibliometric analysis—defined as the use of mathematical and statistical methods to identify and evaluate the current state of scientific publications (Lundberg, 2006)—was employed. The bibliometric analysis method, which aims to reveal trends, developments, and research structures in a specific research field by examining scientific publications using quantitative methods (Donthu et al., 2021) is also an important scientific method for identifying potential knowledge gaps and is regarded as an effective tool that contributes to managerial processes and decision-making mechanisms in the fields of science and technology (Romanelli et al., 2018). Furthermore, bibliometric analysis—which enables the visualization of the indicators obtained through network structures—contributes to understanding the general framework of a discipline by examining the structural characteristics and content dimensions of a scientific field (Fahimnia, Sarkis, and Davarzani, 2015). Bibliometric analysis is an approach that enables the development of analytical methods and bibliographic indicators based on statistical criteria; it is used as an effective tool for the systematic tracking and management of scientific outputs such as publications, citations, patent documents, and reports (Goncalves et al., 2019). It can also provide additional statistical information regarding data such as authors, institutions, and keywords (Xinhan et al., 2018). The VOSviewer software is used to analyze and visualize the bibliographic data of publications. This software organizes the data into clusters and reveals their relationships (Van Eck and Waltman, 2017).

Data Collection Process

The Web of Science (WoS) database was used as the data source in this study. WoS is one of the most frequently preferred databases in bibliometric research due to its reliable data and coverage of high-quality academic journals (Ellegaard, 2018). Furthermore, its provision of standardized institutional information and capabilities for citation analysis contributes to WoS being considered a suitable data source for bibliometric studies (Mongeon & Paul-Hus, 2016). This study was conducted on May 19, 2025, in the WoS database using the keywords in the search string provided in Figure 1. A total of 71 publications were identified in the database using the relevant search string for the years 2020–2026. After including only research articles among the publications in the resulting dataset, 58 publications remained; bibliometric analyses were then continued using 21 of these publications that aligned with the research focus.

Figure 1*Data Collection Process*

The search in the WoS database used the following query: TS=((("school counselor*" OR "school counsellor*" OR "school counseling" OR "school counselling" OR "school guidance" OR "guidance counsel*" OR "guidance and counsel*" OR "school psycholog*" OR "school-wide" OR "school-based intervention") AND ("artificial intelligence" OR AI OR "generative artificial intelligence" OR "large language model*" OR "LLM" OR chatbot* OR ChatGPT OR "GPT-*" OR "machine learning" OR "deep learning" OR "natural language processing"))) using the "topic" filter.



The search string yielded a total of 71 publications from 2020 to 2026. The study continued with article-type publications, and 13 publications were excluded from the analysis.



Of the remaining 58 publications, 27 were found to be unrelated to artificial intelligence research or school psychological counseling and guidance activities.



It was observed that the remaining 21 publications fell within the field of artificial intelligence research and school psychological counseling and guidance.

Findings

The findings are presented under separate headings within the framework of the research questions. The sections include “Findings regarding the year, type, country, language, and journals of publications in the field of school psychological counseling and guidance,” “Findings regarding authors,” “Findings regarding institutions,” and “Findings regarding the most frequently used keywords in the publications.”

Findings on the Distribution of Publications by Year, Type, Country, Language, Journal, and Number of Citations

Table 1

Findings on the Distribution of Publications by Year

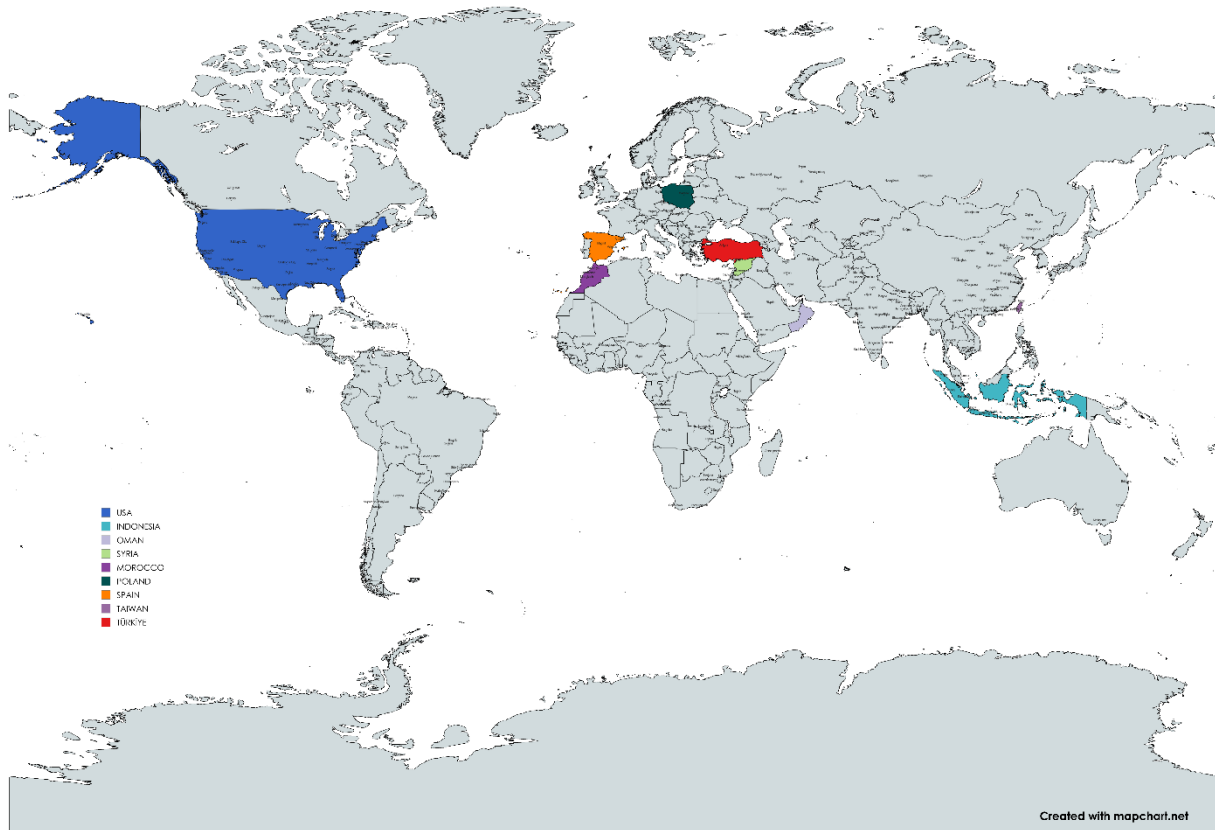
Category	Distribution of Publications	%	Graphical Representation
<u>Year</u>			
2026	9	42.85	
2025	5	23.81	
2024	4	19.04	
2023	0	0	
2022	0	0	
2021	1	4.76	
2020	2	9.52	

As seen in the research findings presented in Table 1, the first research on the use of artificial intelligence in school psychological counseling and guidance activities was conducted in 2020 with 2 publications (9.52%), and 1 publication (4.76%) was released in 2021. While no publications related to this research topic were published between 2022 and 2023, a total of 21 publications (95.24%) were published.

Table 2 lists the countries of origin for these publications along with their frequencies and percentages, while Figure 2 shows their geographical distribution.

Table 2*Findings on the Distribution of Publications by Country*

Category	Number of Publications	%	Graphical Representation
<u>Country</u>			
U.S.	13	61.90	A horizontal bar chart titled 'COUNTRY' showing the number of publications for each country. The x-axis is labeled from 0 to 14 in increments of 2. The y-axis lists the countries. The bars are: USA (13), Indonesia (2), Oman (2), Syria (2), Morocco (1), Poland (1), Spain (1), Taiwan (1), Turkey (1), and Oman (1). The bars are color-coded: USA (dark blue), Indonesia (orange), Oman (green), Syria (light blue), Morocco (purple), Poland (light green), Spain (dark blue), Taiwan (orange), Turkey (dark green), and Oman (green).
Indonesia	2	9.52	
Oman	2	9.52	
Syria	2	9.52	
Morocco	1	4.76	
Poland	1	4.76	
Spain	1	4.76	
Taiwan	1	4.76	
Turkey	1	4.76	

Figure 2*Findings on the Distribution of Publications by Country*

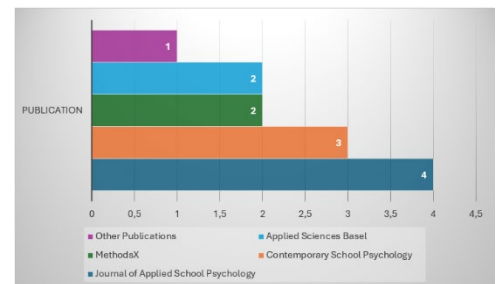
According to the research findings presented in Table 2 and Figure 2, regarding the number of publications on the use of artificial intelligence in school psychological counseling and guidance activities, the United States had 13 (61.90%), Indonesia, Oman, and Syria each had 2 (9.52%), and Morocco, Poland, Spain, Taiwan, and Turkey each had 1 (4.76%). Furthermore, since the study utilized the Web of Science (WoS) database, all 21 publications in the study (100%) were in English.

Table 3 shows the journals in which the publications appeared, along with their frequencies and percentages.

Table 3*Distribution of Publications by Journal*

Category	Number of Publications	%	Graphical Representation
<u>Name of the Journal</u>			

Journal of Applied School Psychology	4	19.04
Contemporary School Psychology	3	14.28
MethodsX	2	9.52
Applied Sciences (Basel)	2	9.52
Art Therapy	1	4.76
Counseling & Psychotherapy Research	1	4.76
IEEE Access	1	4.54
IEEE Revista Iberoamericana de Tecnologías del Aprendizaje IEEE RITA	1	4.76
Journal of Employment Counseling	1	4.76
Journal of Measurement and Evaluation ,	1	4.76



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Journal of Psychoeducational Assessment	1	4.76
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School Psychology	1	4.76
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School Psychology Review	1	4.76
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Paths to Law	1	4.76
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According to the research findings shown in Table 3, there were 4 publications (19.04%) in the **Journal of Applied School Psychology**, 3 publications (14.28%) in **Contemporary School Psychology**, two each in **MethodX** and **Applied Sciences** (for a total of 4 publications, 9.52%), while all remaining journals each had 1 publication (4.76%).

Findings Regarding Authors

This section presents the authors who have published research on artificial intelligence in school counseling and guidance activities, along with the citations received by these authors. Table 4 is based on the number of citations for the studies. To improve the readability of the table and highlight studies that are more prominent in the literature, publications with more than 5 citations were reported; those with 5 or fewer citations were excluded from the table.

Information regarding the authors of the publications, the article titles, journal names, publication years, and citation counts is presented in Table 4, sorted from highest to lowest citation count.

Table 4

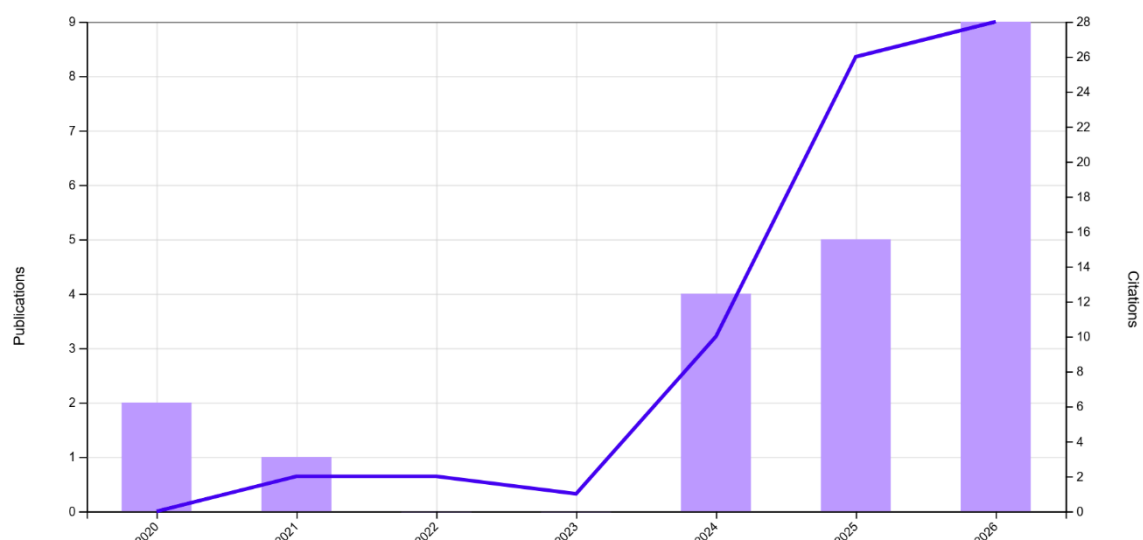
Distribution of Publications by Number of Citations

Ran k	Authors	Publication Title	Journal Name	Year of Publication	Number of Citation s (Citation Count)	Number of Citations (All Databases)
1	Majjate, Hajar; Bellarhmouch, Youssra; Jeghal, Adil; Yahyaouy, Ali; Tairi, Hamid; Zidani, Khalid Alaoui	AI-Powered Academic Guidance and Counseling System Based on Student Profile and Interests	Applied System Innovation	2024	14	16
2	Lockwood, Adam B.; Castleberry, Joshua	Examining the Capabilities of GPT-4 to Write an APA-Style School Psychology Paper	Contemporary School Psychology	2025	10	10
3	Su, Shih-Wen; Hung, Chao- Hsiang; Chen, Li-Xian; Yuan, Shyan- Ming	Development of an AI-Based System to Enhance School Counseling Models for Asian Elementary Students With Emotional Disorders	IEEE Access	2024	8	12

4	Wang, Jiandong; Liu, Jin; DiStefano, Christine; Pan, Gaofeng; Gao, Ruiqin; Tang, Jijun	Utilizing Deep Learning and Oversampling Methods to Identify Children's Emotional and Behavioral Risks	Journal of Psychoeducational Assessment	2021	8	9
5	Farmer, Ryan L.; Lockwood, Adam B.; Floyd, Randy G.; Sisco, Alec D.	How Are School Psychologists Using Artificial Intelligence in 2024? A Descriptive Study	School Psychology	2026	6	6

According to the research findings shown in Table 4, the publication “*AI-Powered Academic Guidance and Counseling System Based on Student Profile and Interests*” by Majjate et al. (2024) received 14 citations, while the publication “*Examining the Capabilities of GPT-4 to Write an APA-Style School Psychology Paper*” by Lockwood and Castleberry (2025) received 10 citations, the paper “*Development of an AI-Based System to Enhance School Counseling Models for Asian Elementary Students With Emotional Disorders*” by Su et al. (2024) received 8 citations, the paper “*Utilizing Deep Learning and Oversampling Methods to Identify Children’s Emotional and Behavioral Risk*” by Wang (2021) received 8 citations, and the publication “*How Are School Psychologists Using Artificial Intelligence in 2024? A Descriptive Study*” by Farmer et al. (2026) has received 6 citations. Figure 3 visually illustrates the citation distributions and trends of the publications examined in this study by year.

Figure 3
Citation Distribution and Trends of Publications by Year



An examination of the findings in Figure 3 reveals that the number of publications and citations has varied by year. While the number of publications and citations remained at a low level between 2020 and 2023, an increase in both indicators was observed starting in 2024. In particular, the rise in the number of publications in 2025 and 2026 was accompanied by an increase in the number of citations.

Table 5 lists the authors with the highest number of publications and the highest number of citations in research on artificial intelligence in school psychological counseling and guidance activities.

Table 5

Authors with the Most Publications and the Most Citations

Authors	Number of Publications	Number of Citations
<u><i>Authors with the Most Publications</i></u>		
Lockwood, A. B.	7	26
Choi, D.	3	5
Farmer, R. L.	2	7
Floyd, R. G.	2	7
Sisco, A. D.	2	6
Shergill, G.	2	6
Alhammami, M.	2	6
Hammami, S. N.	2	4
<u><i>Most Cited Authors</i></u>		
Lockwood, A. B.	7	26
Alhammami, M.	2	7
Hammami, S. N.	2	7
Farmer, R. L.	2	6
Floyd, R. G.	2	6
Sisco, A. D.	2	6
Choi, D.	3	5

Shergill, G.

2

4

An examination of the research findings in Table 5 reveals that Lockwood, A. B. ranks first with 7 publications. Choi, D. follows with 3 publications. Farmer, R. L., Floyd, R. G., Sisco, A. D., Shergill, G., and Newman, D. S. each have two publications. In terms of citation counts, Lockwood, A. B. stands out as the most cited author with 26 citations. Farmer, R. L., Floyd, R. G., and Sisco, A. D. each received 6 citations, while Choi, D. received 5 citations, Newman, D. S. received 4 citations, and Shergill, G. received 1 citation. When the number of publications and citations are evaluated together, it is observed that as the number of publications increases, the number of citations also tends to increase. However, it is noteworthy that some authors with fewer publications have received more citations. For example, Farmer, R. L., Floyd, R. G., and Sisco, A. D. have received more citations than Choi, D., despite having only two publications each. Overall, it is evident that Lockwood, A. B. stands out distinctly from other authors in terms of both the number of publications and the number of citations. Furthermore, the fact that some authors receive a high number of citations despite having a limited number of publications indicates that their work has a relatively high impact in the field.

Findings Regarding Institutions and Number of Publications

Table 6

Institutions with the Most Publications and Number of Publications

Institution	Number of Publications	Graphical Representation
California State University	2	Horizontal bar chart showing the number of publications for various institutions. The x-axis represents the number of publications from 0 to 2.5. The y-axis lists the institutions. The bars are: Other Institutions (1), Kent State University (2), Kansas State University (2), and California State University (2).
Kansas State University	2	
Kent State University	2	
National Yang Ming Chiao Tung University	2	
The University of Arizona	2	

University of Cincinnati	2
University of Florida	2
University of Memphis	2
University of South Carolina	1
Loyola University	1
Texas Woman's University	1

Table 6 shows the institutions with the highest number of publications in the research field. An analysis of the findings reveals that Kent State University, the University of Memphis, California State University, Kansas State University, the University of Florida, National Yang Ming Chiao Tung University, the University of Cincinnati, the University of Arizona, and the University of South Carolina are among the institutions making the greatest contributions, each with two publications. In contrast, Texas Woman's University and Loyola University are represented by one publication each. The fact that the number of publications among these institutions is relatively close indicates that research output is not concentrated in any single university. Furthermore, the fact that the majority of the institutions listed in the table are located in the United States demonstrates that publications in this research field are primarily produced by higher education institutions in that country. However, the inclusion of National Yang Ming Chiao Tung University on the list indicates that research in this field is also being conducted by institutions in other countries.

Table 7 presents findings regarding the most frequently used keywords in the field of artificial intelligence research in school psychological counseling and guidance, along with their usage frequencies, total link strengths, and the relationships between them as depicted in a network map.

Findings Regarding the Most Frequently Used Keywords in Publications

Table 7

Frequency of Keywords and Total Link Strength

Keyword	Frequency	Total Link Strength	Graphical Representation
Artificial Intelligence	11	71	
School Psychology	6	20	
Machine Learning	6	24	
Education	2	26	
Employee Welfare	2	26	
School Counseling	2	20	
Classification	2	17	
Ethics	2	16	

Analytical	2	7
Models		

Upon examining Table 7, it can be seen that the keyword “artificial intelligence” appears 11 times and has a total link strength of 71. The keywords “school psychology” and “machine learning” each appear six times, with total link strengths of 20 and 24, respectively. The keywords “education” and “employee welfare” each appear twice, and the total link strength for both concepts is 26. The keyword “school counseling” appears twice and has a total link strength of 20, while the keyword “classification” appears twice and has a total link strength of 17. The keyword “ethics” appears twice and has a total link strength of 16. Finally, the keyword “analytical models” appears twice and has a total link strength of 7 in the table.

Discussion

Findings regarding publication years indicate that artificial intelligence is a new research topic in the field of school psychological counseling and guidance. The first studies emerged in 2020; no publications appeared in 2022 or 2023; and the number of publications has increased significantly starting in 2024. This increase coincides with the widespread adoption of generative artificial intelligence technologies. Indeed, recent studies have focused on school psychologists’ and psychological counselors’ experiences with AI, their professional practices, and ethical considerations (Farmer et al., 2025; Lockwood et al., 2025). Findings regarding specific countries reveal that the majority of this research is centered in the United States. Although the emergence of studies from different countries points to international interest in the field, the low number of publications suggests that the field is still in its early stages in most countries. The fact that these publications appear predominantly in school psychology journals also supports the notion that the field’s literature has developed largely from a school psychology perspective.

Citation findings indicate that the most highly cited studies focus on applied topics rather than theoretical discussions. These studies center on artificial intelligence-supported academic counseling systems, school counseling practices, the identification of children’s emotional and behavioral risks, and psychoeducational assessment processes. The fact that the majority of highly cited studies have been published in the last few years indicates that interest in the field has intensified rapidly. Findings regarding the authors reveal that research output is concentrated among a limited number of researchers. Lockwood clearly stands out in terms of both the number of publications and citations. In contrast, Farmer, Floyd, and Sisco have received relatively high citation counts despite having fewer publications; this demonstrates that there is not always a linear relationship between the number of publications and impact. The fact that research output is shaped by a few leading researchers is consistent with the field being in its early stages of development. Findings regarding institutions show that research output is not

concentrated at a single university but is distributed across various higher education institutions. However, the fact that most of the prominent institutions are located in the United States aligns with findings at the national level. The contribution of institutions from different countries indicates that the field is gradually becoming international.

An analysis of the keyword network reveals that the studies are organized around multiple thematic clusters. The concept of “artificial intelligence,” located at the center of the network, is closely linked to other concepts in terms of frequency of use and total link strength. This indicates that artificial intelligence has become a central focus of research in the fields of school psychology and psychological counseling. First, the cluster formed by the concepts “school psychology,” “psychoeducational assessment,” “large language models,” and “AI” reflects the relationship between artificial intelligence and assessment processes in school psychology. It is evident that studies in this area focus particularly on psychoeducational assessment, report writing, documentation processes, and supporting expert decisions (Farmer et al., 2025; Lockwood et al., 2025). It is noteworthy that with the widespread adoption of large language models, the visibility of studies on the use of artificial intelligence in assessment and reporting processes has increased (Lockwood and Castleberry, 2025). This finding indicates that artificial intelligence is primarily addressed in the field of school psychology within the context of assessment and reporting processes.

Second, the cluster formed by the concepts “mental health,” “autism,” “cognitive behavioral therapy,” “social-emotional learning,” “cultural differences,” and “analytical models” indicates that AI is being addressed in the context of mental health services. It is evident that these studies focus on sentiment analysis, digital interventions, chatbots, and AI-supported applications tailored to various psychological needs (Su et al., 2024; Yıldırım, 2024; Wang, 2021). In particular, studies on monitoring the mental health of children and adolescents, developing psychological support processes, and early risk identification applications stand out in this cluster (Alhammami and Hammami, 2021; Mackowsa, 2024). Third, the cluster comprising the concepts “ethics,” “APA,” “NASP,” and “professional issues” focuses on ethical, legal, and professional responsibilities related to the use of artificial intelligence. An examination of the relevant studies reveals that topics such as privacy, data security, algorithmic biases, professional responsibilities, and human oversight are prominent (Lockwood et al., 2026). It is also evident that studies on the development of ethical principles and professional standards for the use of artificial intelligence are grouped under this theme (Carrasco, 2026; Reichart, 2026). This indicates that the use of artificial intelligence is discussed not only within the framework of technical capabilities but also in the context of professional responsibilities and limits of practice.

Fourth, the cluster comprising the concepts “education,” “training,” “tutorials,” “decision making,” “problem-solving,” “chatbots,” and “qualitative research” represents studies on the use of AI in educational processes and professional practice. Research on AI-supported learning environments,

educational technologies, professional development activities, and practical experiences appears to be concentrated along this axis (Lockwood and Brown, 2025; Ricoy et al., 2025). This finding indicates that interest in AI is not limited to technological tools alone but also encompasses educational and professional development processes. Fifth, the cluster “ ”—comprising the concepts “school counseling,” “future of work,” “career readiness,” “21st-century skills,” and “technological change”—focuses on the relationship between artificial intelligence and career counseling. It is evident that studies have concentrated on students’ career development, changing labor markets, and the skills that will be needed in the future (Anwar et al., 2026; Falcao, 2026; Majjate et al., 2024). This indicates that transformations related to artificial intelligence are beginning to be addressed within the context of career development and career counseling.

When the keyword network is evaluated as a whole, it shows that AI research in the fields of school psychology and psychological counseling has diversified around various thematic axes, such as assessment processes, mental health services, ethical issues, educational practices, and career counseling. However, the fact that the concept of “school psychology” occupies a more central position in the network structure reveals that the literature has developed primarily from the perspective of school psychology. In contrast, the relatively limited representation of the term “school counseling” in terms of frequency of use suggests that studies in the context of psychological counseling and guidance are still in their developmental stage. Therefore, it can be argued that future research focusing more on application areas specific to psychological counseling and guidance services could contribute to the development of the literature.

In this study, the scientific structure of artificial intelligence research in the field of school psychological counseling and guidance was examined through bibliometric analysis. When the findings are evaluated as a whole, it is evident that the field is quite new, rapidly growing, but has not yet consolidated around specific centers. The fact that publication output is largely concentrated after 2024 and primarily stems from U.S.-based institutions and researchers indicates that the field’s literature has been shaped by a limited number of pioneering studies. From a thematic perspective, the studies were found to vary across the axes of assessment and reporting processes, mental health services, ethics and professional responsibilities, educational practices, and career counseling; however, it was determined that the majority of the literature has developed from the perspective of school psychology, while practices specific to psychological counseling and guidance services are represented to a relatively limited extent. This picture reveals that artificial intelligence is a research area that is gaining increasing importance in the context of school-based psychological services but is still in its early stages of development. Therefore, it can be argued that the field’s development requires both a diversification of international contributions and an increase in research specific to the context of psychological counseling and guidance.

The findings of this study should be evaluated within the framework of certain limitations. The study was limited to publications indexed in the Web of Science (WoS) database and identified based on the specified keywords. Consequently, studies found in other databases were not included in the scope of the research. Furthermore, the fact that studies on the use of artificial intelligence in school psychological counseling and guidance activities are relatively new and the number of publications remains limited indicates that the findings reflect only a specific segment of the current literature. Furthermore, the bibliometric analysis method focuses more on publication, citation, and keyword patterns than on the content of the studies. Therefore, the research findings should be evaluated in terms of revealing general trends in the literature.

Based on the research findings, it is believed that increasing research on the use of artificial intelligence in the field of psychological counseling and guidance could contribute to the development of the literature. While current studies largely concentrate on school psychology, psychoeducational assessment, and reporting processes, it is noteworthy that school psychological counseling and guidance services have been addressed to a more limited extent in the context of artificial intelligence. Therefore, future research may explore the application of artificial intelligence in individual and group psychological counseling services, social-emotional learning interventions, preventive initiatives to support mental health, career counseling, career readiness, and guidance services aimed at developing 21st-century skills, as well as its use in educational and decision-making processes. Furthermore, researching school counselors' experiences with artificial intelligence, their technology adoption processes, professional evaluations, and ethical approaches could contribute to a more comprehensive understanding of the current state of the field.

Based on research findings, it may be recommended to develop professional awareness and competencies regarding the use of AI applications in school psychological counseling and guidance services. In particular, AI-supported applications can be utilized in career counseling, social-emotional learning initiatives, preventive guidance services, the identification of students' emotional and behavioral needs, data-driven needs analysis, and decision-making processes. However, it is important to view artificial intelligence not as a substitute for the psychological counselor's professional knowledge, skills, and judgment, but rather as a tool that enhances the quality of the services provided. Furthermore, it is recommended that fundamental professional responsibilities—such as student privacy, confidentiality, data security, ethical principles, and expert oversight—be upheld, and that knowledge and skills related to the use of artificial intelligence be supported through in-service training.

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