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Global Research Trends in Educational Counselling: A Bibliometric Analysis from 1976 to 2024

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Abstract. With the rise of academic pressures on education all over the world, along with mental health issues and widely differing student needs, there is no doubt that guidance counselling in schools has become a key driver of student success. The present article provides a bibliographical review of 92 articles on Counselling in Education published in Scopus from 1976 to 2024 and maps out the intellectual structure of this field and its research trends. The selection of data began with a PRISMA-driven screening of 3,363 records (automated filtering and eligibility assessment) to the final dataset. OpenRefine (keyword harmonization), BiblioMagika® (frequency and citation metrics), as well as VOSviewer (co-occurrence visualization) were used for the analysis of data. Results indicate a fast-growing number of overall research productivity in the past twenty years, with the U.S.A., India, and the Netherlands being the most productive, with Johns Hopkins University, Tuberculosis Research Center (India), and Maastricht University being the top-ranking institutions. Thematic mapping revealed main clusters were patient counselling, healthcare education, attitudes to health, risk factors for HIV lifecycle, and clinical interventions, as well as emerging topics such as the integrations of counselling in formal education, advancement on ethical and culturally sensitive practices, and strategies for structured communication on health. These findings shed light on the developmental pathway of counselling in education, which also provides some strategic implications for health researchers, practitioners, and policymakers to enhance evidence-based interventions by linking future endeavours with the global public health and educational agenda.

Keywords: bibliometric analysis; educational counselling trends; health communication in education; culturally responsive counselling

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1. Introduction

School-based counselling services contribute to the development of students and become more resilient psychologically, as well as educationally effective. In today's multicultural educational environments, students face a variety of difficulties and dilemmas aside from the problem-solving issues related to academic subjects, which are also related to emotion, socialization, and personality. In line with this, counseling services are no longer remedial but have become proactive and holistic support that supports the students in their multifaceted lives (Simbolon and Purba, 2022).

Educational counselling is an integrated practice involving one-on-one and group counselling, crisis intervention, developmental counselling, and advocacy (Al-Momani, 2022; Webster and Muro, 2022). All this support is supplemental to other traditions, like academic advising and guidance counselling. Though counselling in this instance applies to issues regarding course selections and the advancement of academic performance, the term counselling here applies to those more profound psychological, emotional or even social issues considering young learners who have offered them the abilities of how to manage anxiety and stress and exposure to bullying as well giving them the ability to know themselves as well as their own identities (Daulay et al., 2022; Hafiza and Firman, 2023).

Over the last several years, counselling has become more inclusive and more culture-reflective, which involves students with disabilities, disadvantaged or overseas background (Tatollu, 2023). Also, with the development of technology, counselling practice has been expanded with the help of digitalized applications, ethical technical aspects, and interprofessional competence (Alves et al., 2021). These trends have made counselling a central component in the growth, hardiness development, and life-long learning abilities of holistic students (Hafiza and Firman, 2023).

2. Literature Review

It is also observed that counselling services can help gain emotional resilience, academic, and educational success at any level of the scholarly stage (Daulay, 2022). It can also be facilitated by the means of counselling, which encourages engagement and stay by boosting self-confidence, social skills, and inclusive learning environment, which affects equity and sense of belonging (Alves et al., 2021).

Counselling, in particular, has become a key factor in student retention within higher education due to the shift of emphasis towards school adaptation and drop-out prevention among at-risk learners (first-generation students, international students, and special needs learners) (Amoah and Emmanuel, 2020; Webster and Muro, 2022). Self-efficacy and career preparedness can be improved with the help of original learning programmes like career guidance, psychological flexibility, and problem solving (Haris et al., 2020).

Besides the individual benefit to students, counselling fosters organizational capacity since it allows the creation of an inclusive student-centred school where

counsellors with positive relationships, empathetic, and culturally relevant can prove especially effective. It can become a learning experience to others as well (Terrell and Osborne, 2020). Nevertheless, the service might be ineffective due to sustained barriers such as counselling supply and demand mismatch, poor appraisal system, and other insufficient exposures in the professional development (Miraflor & Espinosa, 2024).

Despite the definite evidence of the positive impact of counseling in school, some significant gaps can be identified. Among them is that longitudinal research is necessary to study such effects and, in particular, in marginalized and high-risk communities (Simbolon & Purba, 2022). Second is the under-researched field of what culturally responsive and inclusive practice is, and little of it is empirically oriented in terms of how one may go about it (Tatollu, 2023).

Third, counseling services in non-formal/ community-based educational settings have not been a focus of research professionals, even though they face developmental issues similar to those of school students (Husain, 2022). Fourth, despite digital approaches and interdisciplinary work being recognized as important trends, information on their efficacy, best practices, and ethical aspects is still fragmentary (Alves et al., 2021). Lastly, systemic limitations in terms of staff capacity, workload, and institutional support also restrict the potentialities associated with counseling (Miraflor & Espinosa, 2024). To bridge these gaps, this paper uses a thorough bibliometric analysis to:

1. Map the global research landscape on counseling in education.
2. Identify the most influential journals, authors, institutions and countries in the field.
3. Examine prevailing research themes and emerging trends.
4. Highlight neglected areas that warrant further scholarly investigation.

Through synthesizing findings from across contexts, the study will contribute to an evidence base supportive of a counseling policy and practice that facilitates nondiscriminatory, comprehensive student support in schools.

3. Methods

The present review is based on literature retrieved from the Scopus database up to December 30, 2024. The choice of Scopus as the main data source is inherent to this deliberate methodological decision, for it is one of the largest and broadest world abstract and citation databases covering peer-reviewed literature (Aghaei Chadegani, Salehi, Eenhuis, Embi., & Ordonio-Medina., 2013). Scopus is broad in terms of its coverage of disciplines in science, technology, and medicine, but also in the social sciences. This feature is best suited for multidisciplinary issues such as school counseling (Falagas et al., 2008). Multidisciplinary coverage of computer science to arts and humanities offers a variety of interdisciplinary datasets as well as comprehensive and diverse ones (Mongeon and Paul-Hus, 2016).

The rigidity of the process for quality control is one of the advantages of Scopus, as this ensures that material indexed in it is also from scholarly publications, high-impact materials (Harzing and Alakangas, 2016). Also, the database is international in coverage, so that it was possible to have a full overview of global research activity at both the country and institutional level (Archambault et al., 2009). These characteristics make Scopus a resource of the highest quality for bibliometrics in coverage, scope, and reliability.

In addition to traditional data such as citation information, author affiliations, and subject categories, access to search details can help provide a more accurate analysis of the research papers/scientific literature. The full dataset used in the current study contains a wide range of descriptors, including document type, language, source type, subject area categories, and years of publication count per institution/country downloaded. All of these factors combined to serve as the basis for a comprehensive, international bibliometric analysis of counseling in education.

3.1 Search strategy

This review followed the modified Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure a systematic, transparent, and replicable selection process (Page et al., 2022). The literature search was conducted using the Scopus database with the search string: Counseling in education OR Counseling in teaching and learning. This search initially yielded 3,363 records. In the identification stage, 2,935 records were removed automatically due to ineligibility, primarily because they were indexed under subject areas unrelated to the study's focus (mainly categorized outside social sciences). No duplicate or irrelevant records were identified at this stage.

This left 428 records for screening. During screening, 69 records were excluded as they were not journal articles or conference papers. Consequently, 354 records proceeded to the retrieval stage. Of these, 253 records could not be accessed in full, leaving 101 reports for eligibility assessment. In the eligibility phase, nine reports were excluded, eight for being published in languages other than English and one for not being in its final publication stage. The final dataset therefore comprised 92 studies, which were included in the comprehensive review (see Figure 1).

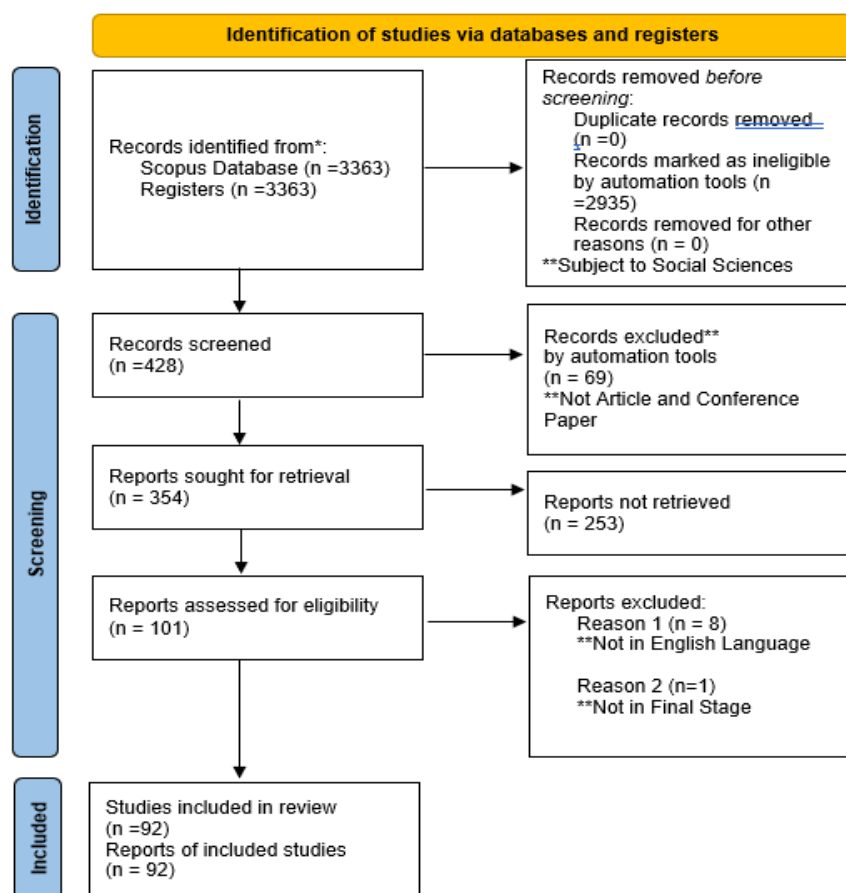


Figure 1: Flow diagram of the search strategy

Source: (Page et al., 2022)

3.2 Data cleaning and harmonization

Data cleaning and harmonization were critical in bibliometric analysis to ensure the validity and reliability of findings, particularly in counseling education research. This study used OpenRefine and biblioMagika® (Ahmi, 2023), two specialized tools designed to manage inconsistencies and standardize bibliographic metadata such as author names, institutional affiliations and keywords, elements often prone to variation across counseling-related publications. Given the interdisciplinary and diverse nature of counseling in educational contexts, these tools were essential for refining the dataset and consolidating fragmented information.

The process began with extracting records from the Scopus database in CSV format, followed by the identification of key metadata fields such as authorship and keywords for targeted cleaning using clustering functions. Bibliographic data integration has received specific focus, with discrepancies in the spelling of author names and institutional names potentially playing a major role in the results of analysis. As an example, the variation in the name of the author can discontinue his or her publication history, hence, underrating his or her academic contribution. Alternatively, the inappropriate institution description can divide the production index, concealing the actual research input of particular

organizations. Through their normalization, this research examines the co-authorship networks, institutional productivity information, as well as thematic maps to demonstrate the real picture of the research. Correct bibliographic data is invaluable to the profession of counseling education, as it enhances the promotion regarding inter-disciplinary and cross-institutional collaboration in scholarly practice as well as research.

3.3 Data analysis

The data analysis in this study was aimed at addressing the RQs through charting the academic territory of counseling in education. The document types, source types, publication languages, subject categories, and citation metrics were screened (Chankoson et al., 2023; Donthu et al., 2021). Results were presented based on conventional bibliometric dimensions: annual publication, institutions, authorship, countries, and journals (Aria & Cuccurullo, 2017; Donthu et al., 2021). This cross-cutting method allowed for establishing the most influential contributors and emergent study patterns in educational counseling. Academic impacts were calculated by bibliometric indicators (cited work; total production; h-index, g-index, m-index, number of totals cites with the given h-core) and other indices to assess the impact (Bornmann & Daniel, 2008; Harzing & Alakangas, 2016; Hirsch, 2005).

The study used co-occurrence analysis, thematic mapping, and factorial method to analyse conceptual connections and evolving themes that are frequently used methods of representing clusters of keywords and understanding the structure of a research area (Aria & Cuccurullo, 2017; Cobo et al., 2011). Such methods allowed us to identify connections between the main subfields and themes that already exist, such as student mental health, career counseling, resilience, and inclusiveness-oriented practices in counseling (van Eck & Waltman 2010; Zhao et al., 2021). Through performance measures and visual network analysis, the study may be able to virtually observe a depth of clarity in counseling in education research connections over time and how it has grown, diversified, and is commingling disciplines (Chen, 2006).

3.4 Tools

The study used an array of digital tools to conduct a comprehensive bibliometric analysis on counseling in schools. Microsoft Excel was utilized as an instrument to structure and format raw data, with minimal cleaning completed, and the first categories assigned. BiblioMagika® software was instrumental for the cleaning and normalizing of bibliographic records (author names, organization address, and country information) to harmonise data across counselling-related records.

Keywords of authors were also narrowed down and normalised via OpenRefine, which is a vital step to guaranteeing the accurate selection of recurring themes and emerging ideas in the field. After all the preprocessing and integration of the entire dataset were complete, a visual network map, created using VOSviewer, was used to visualize co-authorship relationships, co-occurrence tendencies of keyword terms, and thematic clusters of research on coaching education. Mendeley has been adopted as the reference management to utilize to reference

and arrangement bibliographies. With this accumulation of resources became possible the coherent, clear, and methodologically sound analysis of the environment of research to counseling-in-education cues, and eventually classic references, new trends, and theme areas that characterize this domain.

4. Results

The section below on the research landscape further explains the school counseling setting in a more elaborate way. Not only does it help to answer the research questions, but it also helps to build a larger picture of how the scholarly discourse in this field has developed over time, defining the dominant central themes and the new research directions. This systematic review can be considered. In turn, the study makes significant contributions that are in line with modern trends, major contributors, and thematic issues in counseling education research, and thus, advance the body of knowledge that scholars, practitioners, and policy makers should have in order to improve student well-being, the school support services, and inclusive practices.

4.1 Current landscape

To answer the first RQ about mapping of existing research in the field of counselling studies in the educational context, the distribution of publications was analyzed in terms of document type, source type, language, as well as subject area. In addition, citation metrics were analyzed to assess the scholarly influence and significance of counseling-related studies. The dataset was first organized by document type, encompassing journal articles, conference papers, book chapters and review articles. Notably, conference papers often represented emerging research presented at academic gatherings, with many later developed into journal publications or book chapters.

Drawing on a bibliometric analysis of publications spanning from 1976 to 2024, the field of educational counseling demonstrates both depth and continuity, reflecting nearly five decades of sustained scholarly engagement. As shown in Table 1, a total of 3,363 publications were identified across 49 citable years, contributed by 3,330 unique authors – indicating a strong and collaborative global research network. Of these, 628 papers had received citations, signaling the field's academic visibility and relevance. Collectively, the dataset amassed 13,411 citations, yielding an average of 12.62 citations per paper. When considering only cited papers, the average rose markedly to 21.36 citations per paper, underscoring the disproportionate influence of certain landmark studies.

The annual citation average of 279.40 reflects consistent scholarly interest over time. Author productivity was further illustrated by an average of 3.13 authors per publication, while each author contributed to an average of 4.03 citations demonstrating a balanced distribution of research impact. The citation sum within the h-core was 11,249, with an h-index of 58, a g-index of 99 and an m-index of 1.18. Together, these metrics highlight the breadth, depth and sustained influence of educational counseling research, capturing both the productivity and intellectual significance of contributions to the field.

Table 1: Citation Metrics

Main Information	Data
Publication Years	1976 - 2024
Total Publications	3363
Citable Year	49
Number of Contributing Authors	3330
Number of Cited Papers	628
Total Citations	13,411
Citation per Paper	12.62
Citation per Cited Paper	21.36
Citation per Year	279.40
Citation per Author	4.03
Author per Paper	3.13
Citation sum within h-Core	11,249
h-index	58
g-index	99
m-index	1.18

4.2 Publications by source titles

An analysis of the top source titles revealed a wide spectrum of scholarly outlets contributing to the discourse on educational counseling. As shown in Figure 2 and Table 2, *AIDS Care – Psychological and Socio-Medical Aspects of AIDS/HIV* emerged as the most prolific journal, publishing 10 articles. However, despite its output, the journal recorded only 19 citations (1.93 citations per article) and a modest h-index of 1, indicating limited citation influence relative to its publication volume.

In contrast, *Social Science and Medicine* published just four articles but achieved a substantially higher citation performance, with 30 citations (7.5 per article), alongside the highest h-index (5), g-index (5), and m-index (1), reflecting both consistent quality and sustained scholarly impact. Other notable contributors included *Patient Preference and Adherence* and *BMC Medical Education*, each with three articles and moderate citation metrics. Education-focused journals such as *Frontiers in Education*, *Pharmacy Education* and the *American Journal of Pharmaceutical Education* each produced two articles, though their citation performance varied.

Remarkably, the *Journal of Deaf Studies and Deaf Education* generated 41 citations from a single article, underscoring the potential for high impact despite limited output. Similarly, specialty outlets such as *AIDS Education and Prevention* and *Education Policy Analysis Archives* published only one article each, yet recorded substantial citation counts of 61 and 26, respectively, demonstrating strong engagement within niche research areas. Collectively, these findings highlight that while publication frequency contributes to scholarly visibility, citation impact varies considerably. This variation reflects the inherently interdisciplinary nature of educational counseling, where influential work emerges not only from education-centered platforms but also from health-related, generalist and highly specialized journals.

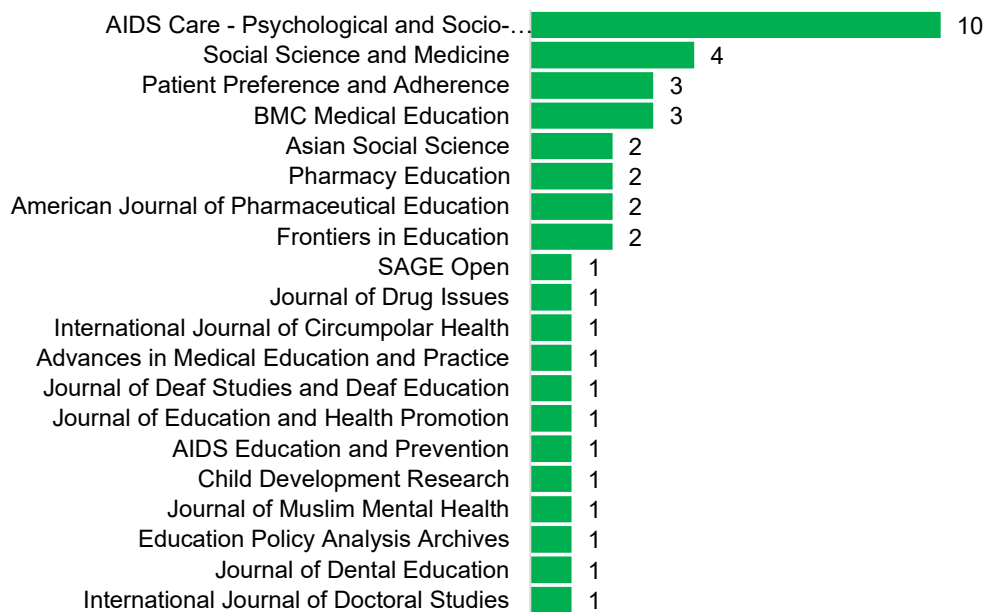


Figure 2: Top 20 Most Productive Source Title

Table 2: Top 10 Most Active Source Titles that Have Been Published

Source Title	TP	NCA	NCP	TC	C/P	C/CP	<i>h</i>	<i>g</i>	<i>m</i>
AIDS Care - Psychological and Socio-Medical Aspects of AIDS/HIV	10	60	10	193	19.30	19.30	8	10	0.500
Social Science and Medicine	4	15	4	305	76.25	76.25	4	4	0.211
Patient Preference and Adherence	3	25	2	27	9.00	13.50	2	3	0.200
BMC Medical Education	3	10	2	18	6.00	9.00	2	3	0.154
Asian Social Science	2	3	0	0	0.00	0.00	0	0	0.000
Pharmacy Education	2	8	2	7	3.50	3.50	1	2	0.056
American Journal of Pharmaceutical Education	2	8	2	3	1.50	1.50	1	1	0.125
Frontiers in Education	2	7	1	7	3.50	7.00	1	2	0.250
SAGE Open	1	3	1	14	14.00	14.00	1	1	0.111
Journal of Drug Issues	1	3	0	0	0.00	0.00	0	0	0.000

Note: TP = total number of publications; NCA = number of contributing authors; NCP = number of cited publications; TC = total citations; C/P = average citations per publication; C/CP = average citations per cited publication; *h* = *h*-index; *g* = *g*-index; *m* = *m*-index.

4.3 Highly cited documents

An analysis of the five most highly cited articles in educational counseling reveals dominant themes of healthcare integration, adolescent psychological well-being and socio-cultural contexts, with much of the research conducted in developing countries. As shown in Table 3, the most cited article is by Wolff and Roter (2011), titled *Family Presence in Routine Medical Visits: A Meta-Analytical Review*, published in *Social Science and Medicine*.

This study has received 226 citations, averaging 16.14 citations per year, and highlights the importance of family presence during routine medical visits as a bridge between counseling and healthcare through relational engagement. The second most cited article, by Cripps and Zyromski (2009) in *RMLE Online*, examines the relationship between adolescents' psychological well-being and parental involvement in middle school settings, with 70 citations (4.38 citations per year).

Similarly, Thomas et al. (2009), published in *AIDS Education and Prevention*, address predictors of sexual risk behavior and HIV infection among men who have sex with men in Chennai, India, gaining 61 citations (3.81 citations per year). In fourth place, Tumlinson et al. (2015) in *International Perspectives on Sexual and Reproductive Health* investigate the quality of care and contraceptive use in urban Kenya, with 54 citations (5.40 citations per year).

Finally, Stutterheim et al. (2011), published in *AIDS Care – Psychological and Socio-Medical Aspects of AIDS/HIV*, explore HIV status disclosure among African and Afro-Caribbean people in the Netherlands, receiving 46 citations (3.29 citations per year). Collectively, these five studies demonstrate the interdisciplinary scope of educational counseling, bridging health, education and socio-cultural issues. They also reaffirm the pivotal role of journals such as *Social Science and Medicine*, *RMLE Online* and *AIDS Care* in shaping and advancing scholarly discourse in the field.

Table 3: Top 5 highly cited articles

No.	Author(s)	Title	Source Title	TC	C/Y
1	Wolff and Roter (2011)	Family presence in routine medical visits: A meta-analytical review	<i>Social Science and Medicine</i>	226	16.14
2	Cripps and Zyromski (2009)	Adolescents' psychological well-being and perceived parental involvement: implications for parental involvement in middle schools	<i>RMLE Online</i>	70	4.38
3	Thomas et al. (2009)	Unseen and unheard: Predictors of sexual risk behavior and HIV infection among men who have sex with men in Chennai, India	<i>AIDS Education and Prevention</i>	61	3.81
4	Tumlinson et al. (2015)	Quality of care and contraceptive use in urban Kenya	<i>International Perspectives on Sexual and Reproductive Health</i>	54	5.40
5	Stutterheim et al. (2011)	HIV status disclosure among HIV-positive African and Afro-Caribbean people in the Netherlands	<i>AIDS Care - Psychological and Socio-Medical Aspects of AIDS/HIV</i>	46	3.29

4.4 Publications by authors

Table 4 presents the top 10 most productive and influential authors in the field of educational counseling, ranked by publication output and citation performance. While most authors contributed only one or two articles, several demonstrated remarkable citation impact relative to their output. Notably, Chen Guangying and He Quanxiu (both from China) emerged as the most prolific, each with two publications. However, their combined citation counts were modest, with three citations apiece, yielding an average of 1.50 citations per paper suggesting that productivity did not directly translate into high impact.

In contrast, several authors with a single publication achieved significantly higher citation influence. Jacqueline S. Laures-Gore (Georgia State University, United States) recorded 16 citations from one paper, with *citations per paper* (C/P) and *citations per cited paper* (C/CP) both standing at 16.00, underscoring strong scholarly resonance. Similarly, Yan Xu (China) and Khalil Mahmoud Al-Refaee (Jordan) each produced one paper garnering two citations, for an average rate of 2.00 citations per publication. Among all authors, Peter J. Chipimo (University of Zambia) achieved the highest overall citation count 42 citations from a single paper resulting in a C/P and C/CP of 42.00 and an *m-index* of 0.083, the highest among the top 10.

This indicates an exceptional level of influence per publication. Connie Celum (University of Washington, United States) also stood out, with 22 citations from one paper (C/P = 22.00) and the second-highest *m-index* (0.100), reflecting both relevance and sustained scholarly engagement. Other notable contributors

included Kennetha Wilson (University at Buffalo, United States) with 34 citations and Michael G. Alles (Rutgers Business School, United States) with 26 citations, each from a single publication. Across all authors, the *h*-index and *g*-index were consistently 1, indicating that every author had at least one paper cited at least once. However, *m*-index values revealed variations in research momentum, with Chipimo, Celum and Wilson demonstrating comparatively stronger academic trajectories.

Overall, while the number of publications per author was generally limited, citation impact per article emerged as the key differentiator of scholarly influence. The geographic diversity of the most impactful authors from the United States, China, Zambia and Jordan reflects the truly international engagement in advancing educational counselling research.

Table 4: Top 5 Most Productive and Influential Authors.

Full Name	Current Affiliation	Country	TP	NCP	TC	C/P	C/CP	<i>h</i>	<i>g</i>	<i>m</i>
Chen, Guangying	Henan Coal Chemical Industry Group	China	2	2	3	1.50	1.50	1	1	0.067
He, Quanxiu	Henan Polytechnic University	China	2	2	3	1.50	1.50	1	1	0.067
Laures-Gore, Jacqueline S.	Georgia State University	United States	1	1	16	16.00	16.00	1	1	0.071
Yan, Xu	Northeast Agricultural University	China	1	1	2	2.00	2.00	1	1	0.071
Chipimo, Peter J.	University of Zambia	Zambia	1	1	42	42.00	42.00	1	1	0.083
AL-Refae, Khalil Mahmoud	Al-Balqa Applied University	Jordan	1	1	2	2.00	2.00	1	1	0.077
Celum, Connie	University of Washington	United States	1	1	22	22.00	22.00	1	1	0.100
Allahverdi, Metin	Selcuk University	Turkey	1	1	5	5.00	5.00	1	1	0.071
Wilson, Kennetha	University at Buffalo	United States	1	1	34	34.00	34.00	1	1	0.200
Alles, Michael G.	Rutgers Business School	United States	1	1	26	26.00	26.00	1	1	0.059

Notes: TP = total number of publications; NCP = number of cited publications; TC = total citations; C/P = average citations per publication; C/CP = average citations per cited publication; *h* = *h*-index; *g* = *g*-index; *m* = index.

4.5 Publications by institutions

Table 5 presents the most productive institutions contributing to educational counseling research between 1976 and 2024, revealing a globally diverse network of universities and research centers with notable scholarly impact. Maastricht University (Netherlands), the University of California (United States), and the Tuberculosis Research Center (India) emerged as the most prolific, each producing four cited publications. The Tuberculosis Research Center was the most heavily cited (244) and had a very high average citation per paper (C/P) of 61.00, which means that it has had a significant impact on the field. Maastricht University was also performing well with C/P of 46.00 and the highest h-index (4) is shared with the University of California which signifies productivity and long-term scholarly use.

The Johns Hopkins University (United States) deserves a mention as well, with only three publications and receiving 473 citations and a decent C/P ratio of 157.67, the highest across all involved institutions, therefore making an influential contribution to the discipline. Other institutions, such as PRAYAS Health Group (India), the University at Buffalo (United States), the University of Bergen (Norway), and Utrecht University (Netherlands) had a total of between 132 and 75 publications (three each). These schools of thought had recorded averagely a high citation rate of more than 30.00, which does not merely mean how productive the research work was but also how relevant and resonant the work was in shaping the scholarship of educational counseling.

Table 5: Top 10 Most Productive Institutions

Institution Name	Country	TP	NCP	TC	C/P	C/CP	<i>h</i>	<i>g</i>	<i>m</i>
Maastricht University	Netherlands	4	4	184	46.00	46.00	4	4	0.286
University of California	United States	4	4	153	38.25	38.25	4	4	0.235
Tuberculosis Research Center	India	4	4	244	61.00	61.00	4	4	0.250
PRAYAS Health Group	India	3	3	132	44.00	44.00	3	3	0.214
University at Buffalo	United States	3	3	102	34.00	34.00	3	3	0.600
University of Bergen	Norway	3	3	126	42.00	42.00	3	3	0.250
Utrecht University	Netherlands	3	3	75	25.00	25.00	3	3	0.250
Hanoi Medical University	Viet Nam	3	3	63	21.00	21.00	3	3	0.429
Fenway Institute	United States	3	3	183	61.00	61.00	3	3	0.188
Johns Hopkins University	United States	3	3	473	157.67	157.67	3	3	0.214

Notes: TP = total number of publications; NCP = number of cited publications; TC = total citations; C/P = average citations per publication; C/CP = average citations per cited publication; *h* = h-index; *g* = g-index; *m* = index

4.6 Publications by countries

An overview with regard to research productivity by country, as illustrated in Figure 3 and Table 6, demonstrates the global landscape of scholarly contributions concerning educational counseling. The United States emerged as the leading contributor, producing 55 publications, the highest among all countries alongside the largest number of cited papers (50) and a total of 1,982 citations. Its strong *h*-index of 26 and *m*-index of 0.520 underscore both the volume and sustained impact of its research output.

The Netherlands, though contributing a comparatively smaller total of 15 publications, amassed 539 citations, placing it among the most impactful countries. The Netherlands ranked sixth with respect to *h*-index (14) and *m*-index (1.000), suggesting that scholarly engagement and influence in the Netherlands were stable over time. India produced 10 papers with a total of 529 citations, achieving the highest C/P (52.90) among all other countries, indicating high impact per paper.

The research influence of low-output nations was also relatively high, such as South Korea (C/P = 43.50), Zambia (C/P = 42.00), and Norway (C/P = 37.25), indicating that low-productivity countries contributed high-quality research outputs. Indonesia (20 publications), the UK (12), China (11), and Australia (10) were among the top contributing countries. Indonesia was the most prolific of the other Asian nations that were examined, but its C/P (2.50) was not strong, with less citation impact/month than others (Table 3). Australia, on the contrary, was the most productive and by weighted measure most influential with eight reports that had already yielded 210 citations (C/P=26.25). Vietnam was another notable donor, having seven publications and a *m*-index of 1.000, respectively, increasing influence, although this market has just begun to work in research.

At the bottom of the distribution, there were three publications in Malaysia, Russia, Pakistan, and Latvia, but the citation impact here was moderate, indicating a growing international presence in the educational counseling literature. Although the research materials produced by the traditionally powerful countries, i.e., the United States, Germany, and China, lead in terms of quantity and academic quality, the surfacing of works by the organizations of Vietnam, Zambia, and South Korea speaks to a diversifying research environment on the international level. The trend is indicative of the growing interest and investment in educational counseling in a variety of sociocultural, economic, and policy settings, and its more international aspect.

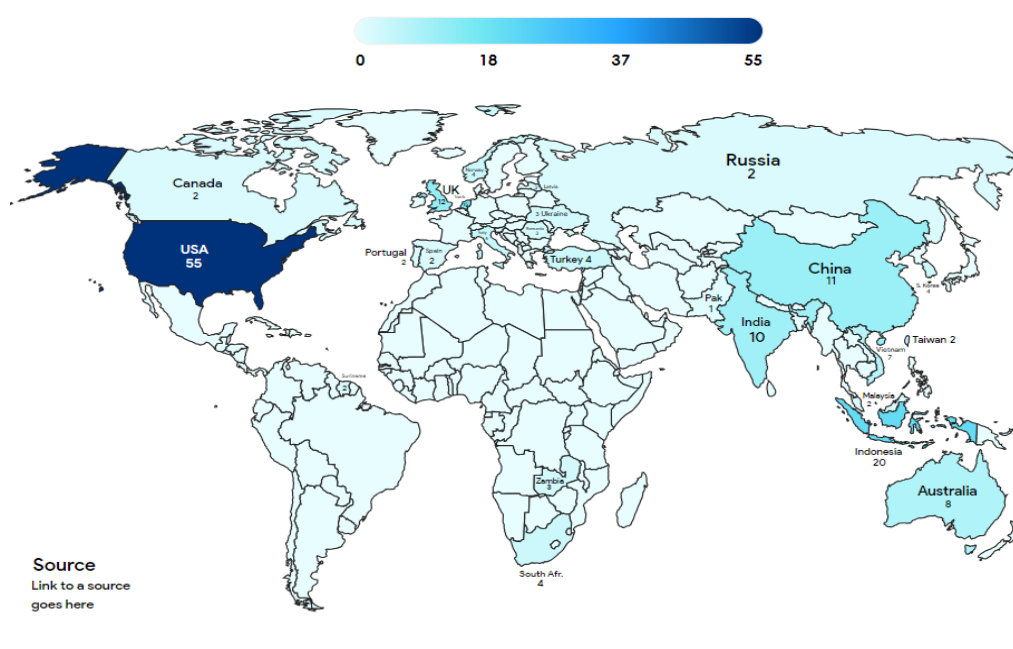


Figure 3: Visualization of Global Distribution of Counseling Education Research Publications

Source: <https://iipmaps.com>

Table 6: Top 10 Most Productive Countries in Educational Counseling Research

Country	TP	NCP	TC	C/P	C/CP	<i>h</i>	<i>g</i>	<i>m</i>
United States	55	50	1982	36.04	39.64	26	44	0.520
Indonesia	20	11	50	2.50	4.55	4	7	0.364
Netherlands	15	15	539	35.93	35.93	14	15	1.000
United Kingdom	12	12	348	29.00	29.00	10	12	0.286
China	11	8	20	1.82	2.50	2	4	0.133
India	10	10	529	52.90	52.90	10	10	0.588
Australia	8	8	210	26.25	26.25	7	8	0.189
Vietnam	7	7	147	21.00	21.00	7	7	1.000
Italy	5	4	19	3.80	4.75	3	4	0.200
Turkey	4	1	9	2.25	9.00	1	3	0.111

Notes: TP = total number of publications; NCP = number of cited publications; TC = total citations; C/P = average citations per publication; C/CP = average citations per cited publication; *h* = *h*-index; *g* = *g*-index; *m* = index

4.7 Co-occurrence analysis

The visualization shows a relatively dense co-occurrence network with themes that are closely related to each other and characterizes the theme pattern of a potential healthcare research project about patient education. At the centre, the node “humans” is identified as a nexus from which clusters of themes fan out. These three clusters, colored in red, green, and blue, are associated with distinct but not mutually exclusive lines of questioning. The top cluster is a medoid red central health care delivery-patient interaction associated with one (still it contains nodes such as health personnel, questionnaire, controlled study, and counseling). The second giant cluster, colored in green, shows the relation to the people within

the health setting, and it connects nodes such as attitude towards health, risk factors, HIV infections, etc. The network also reveals that the close relationships among patient education, counseling, and educational status are strongly interconnected, which demonstrates their central position in this research field. It is a complex diagram that captures the nested relationship between different aspects of health professional education with patient care interacting and connecting to and from one another.

The nodes are represented by terms in 3D-packages, and the connecting lines between the pairs of terms represent the conjugate-topic (strength of all topics to other topics) relationships and were arranged according to their placement in which they appear in text, as well as edge density representing their level of thematic relationship. The thickest connections were observed between patient counseling/patient education among all relationships. These trends show that counseling and educational programs are important to establish patient-centered care and promote active health management.

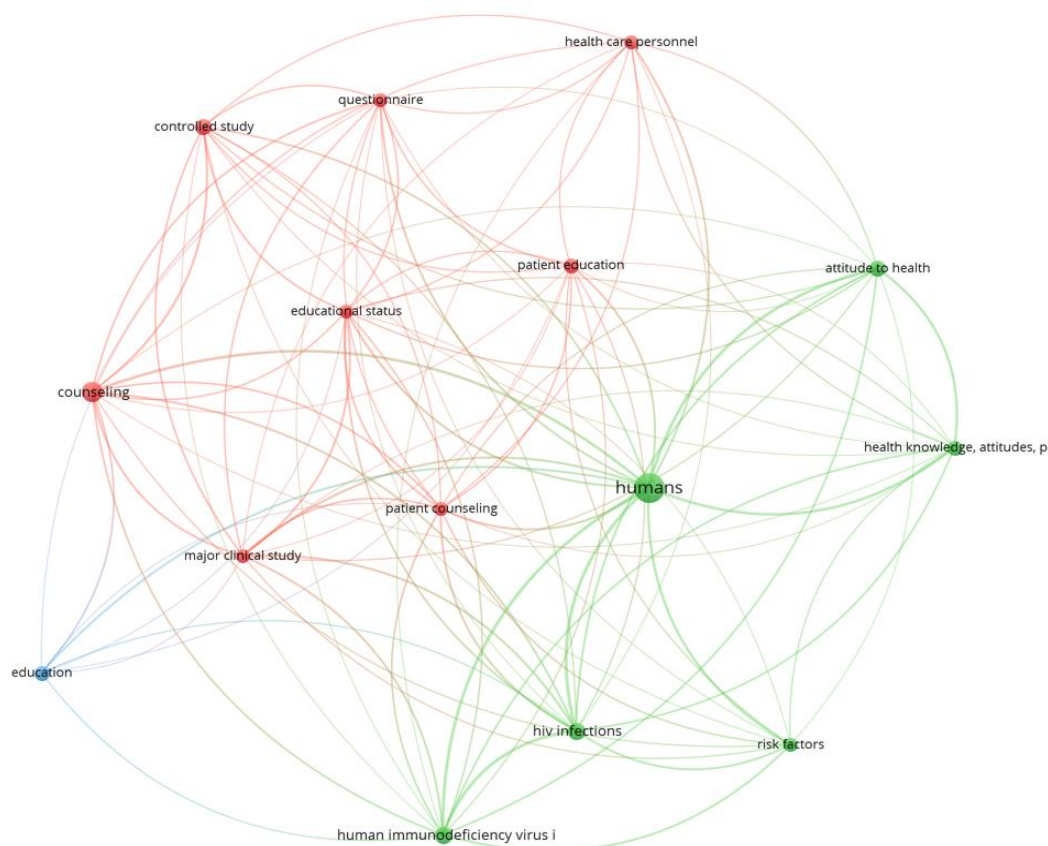


Figure 4: Co-occurrence network of the author's keywords with at least 10 occurrences

A closer examination of the co-occurrence network in Figure 4 shows that there are three thematic clusters, namely red, green, and blue clusters, which align with the domain-specific research interests in the field of healthcare, counseling, and public health. The red cluster is represented by the following words: questionnaire, patient education, educational status, controlled study,

personnel/health personnel, and counselling. This can mean that the method of theoretical intervention based on the systematic gathering of empirical data is relevant. The existence of control groups used in most of the research or the utilisation of questionnaires implies that the methodology has been considered regarding the effectiveness of such patient-centred educational programs, particularly in the healthcare setting.

The cluster brings to the fore one of the eternal intellectual dilemmas in the relation between formal education and organised communication, that refer to counselling on one side, and patient history-taking, health workers, and research design on the other. It also emphasizes the empirical accuracy of such studies but poses significant questions of how organizations can deal with the individual differences, cultural engagement, and depth of affect in counselling.

A public-health approach to behaviour change, disease prevention, and risk measurement underlines the green cluster that contains the concept of attitude to health, attitude, health knowledge, HIV infections, risk factors, and human immunodeficiency virus. The central node indicated by the human form is the essential node of common interest to individual and population-level results. The strong position of the health belief model and health knowledge reveals a cognitive-behavioural factor that reminds the idea long ago in the discipline of health psychology that giving information alone does not create durable behavioural change behaviour. This is a good example of when social, cultural, and structural determinants of health are studied in the context of HIV prevention and care.

The blue cluster, including education and major clinical study, is linked to counselling and provides connections between an academic group, university-type subgroups, including systems groups, and clinical research. More limited in its focus, this cluster is representative of how educational ideas are assimilated into care delivery: it investigates what structures the practice (curricula) and influences the after impact on the patient.

It enables a consideration of knowledge translation, teacher development, and educational resources in light of contemporary healthcare needs. All clusters have humankind in the centre node, indicating the complexity of human behaviour to health-related themes. Such a network represents the relationships of the themes in this field and predicts future cooperation among clinical care, public health, and education, which is how we can show cross-disciplinary interventions having realistic significance using empirical evidence and human science concurrently.

5. Discussion

Student counselling programs have become an irreplaceable component of becoming a well-adjusted citizen that becomes academically successful and socially proactive. Evidence-based studies have indicated that well-planned and strictly executed counselling programs can make a difference in school. However, the inconsistency of the quality of implementation, availability of resources, and programmatic prioritisation implies the fact that there should be circumstances

where change is not just possible but required. Their empirical studies can be used to valuable contribution to the merits and limitations of current approaches, and to improvements. Nonetheless, this evidence still points to the role of school counselling in engagement and success of students. By way of example, Simbolon and Purba (2022) found the attendance participation in school counselling programs to be 10 percent more than that of non-participants learnt. Such students also said that they had increased self-belief and improved socialisation.

These results suggest that being there is not a sufficient condition of counselling: it is an enabler and a feeling of self-worth, which is statistically significant almost bordering academic performance (Daulay et al., 2022). Higher education counselling interventions focusing on the enhancement of coping and promotion of positive social supports have been verified to be effective at reducing the student attrition rate (Alves et al., 2021). In line with this, Amoah and Emmanuel (2020) discovered that the counselling services provided to student teachers improved their time management and study skills required to succeed at school, as well as their career development.

6. Implication

This paper outlines current and future research directions in the area of student mental health, resilience, career counseling, and inclusive counseling services in learning institutions. The results highlight the need to conduct empirical studies that integrate digital technology and ethics grounded in cultures, especially in geographically underexplored regions and diverse educational settings (Alves et al., 2021; Tatollu, 2023). It is also important to extend research attention to non-traditional and non-formal educational places to increase the accessibility and inclusiveness of counseling services (Husain, 2022). The definition of the significant contributors and hubs of excellence, in particular, in the United States, India, and the Netherlands, offers a strong resource base to form international research partnerships.

Moreover, expanding the links between those centers that have already been established and new research communities, as is done in Vietnam and Zambia, can contribute both to building capacity on this level and to promoting a culture of transfer and adoption of contextually sensitive innovations within the counselling practice itself (Aghaei Chadegani et al., 2013; Archambault et al., 2009). Many of them likely will help to accelerate disciplinary innovation and ensure that interventions are applicable across diverse cultures and policy landscapes. In conclusion, the data indicate that student welfare and psychological counseling are a necessity in the development of academic level, formal level, as well as in social allocation.

Through cross-border cooperation, digital innovation, and contextually grounded ethical values, counseling practice in acquiring the new education needs. For counseling to remain a vibrant, equitable, and effective contribution to the international education sector, that level of investment in research, professional development, and evidence-based policy advocacy (in particular areas that are

currently under-represented) needs persistent support. These gaps have direct implications for future education policy, practice, and research.

The post-secondary school should not merely treat counselling as a support but as an extension of the school. Counsellors need to be enabled to deliver full services in terms of teaching, personal growth and advocacy. The best programs to be taught in a counselling setting that produce empathy, responsibility and resiliency would have the most impact on students performing better in school and after. The policymakers should consider investing in development of the counselling services within the under-resourced communities, including the informal sector and community schools.

National and institutional frameworks are also required to ensure that it becomes mandatory to ensure counsellors keep developing professionally to ensure that they are competent enough to manage the emerging threats, including mental health, social-emotional problems, and inclusive education. The money should be set aside towards resource development, training and cross-institutional partnerships. Further research must investigate culturally responsive and technology-based models of counselling which can be implemented in a variety of education settings. Special attention should be given to underrepresented regions, as identified in this study, to build a more globally representative knowledge base. Longitudinal and mixed-methods research can provide deeper insights into the long-term impacts of counselling interventions on student outcomes.

7. Limitations

Despite notable achievements, substantial gaps persist in the availability and scope of counselling services, particularly in non-traditional educational settings. Husain (2022) underscored the value of counselling in non-formal education, where students face challenges similar to those in formal schools. Yet, such services remain scarce, limiting equitable access as non-formal education expands. Addressing this requires inclusive, adaptable counselling models that meet diverse educational needs. A common limitation is the emphasis on academic guidance at the expense of personal development. Webster and Muro (2022) argued that effective counselling should incorporate advocacy, helping students and families navigate educational systems and secure equitable opportunities.

However, this role is usually underdeveloped, especially in clinical and special education, where the support of socio-emotional character is needed (Terrell and Osborne, 2020). The lack of professional development of counsellors also exists. Prilianto et al. (2020) outlined difficulties in implementing full advice processes not based on continuous training, which is not provided in most systems. As the daily added pressures of mental health and social-emotional issues emerged, of course, capacity building was required to remain responsive and effective since the challenges are not going to fade away in the near future (Hafiza and Firman, 2023; Haris et al., 2020).

Counselling and its role in character creation and whole-person development. This program has been found to reinforce such positive values as honesty, responsibility, and empathy (Hafiza and Firman, 2023). However, they may only be realised by the further planning, cooperation, and resource-dedication that are shadowed by academic demands (Simbolon & Purba, 2022), or even crowd out the academic work (Webster and Muro, 2022). The combination of these findings is that counselling contributes to the development of academic, personal, and social areas in a multidimensional manner (Alves et al., 2021; Brown, 2014), which is consistent with the ecological systems theory by Bronfenbrenner (Walker and Pattison, 2016).

In order to maximize such an opportunity, counselling needs to leave its traditional contextual framework and be embedded in multi-purpose, multi-adaptive programmes and supported by systemic cooperation and professional growth (Amoah and Emmanuel, 2020; Webster and Muro, 2022). When used well, counselling forms the basis of education and gives students a strong character, positive morality, and necessary skills in life that help even in the school setting and the community at large.

8. Conclusion

This is the first attempt at a comprehensive review of educational counselling research in the last fifty years and offers a comprehensive map of topics, geographical areas, institutions, and authors. The findings affirm that counselling is a critical factor in improving the well-being of students, academic performance, and overall growth of students in both secondary and tertiary academic institutions. In addition, the study contributes to the field of research by establishing priority areas of research, such as student mental health, career counselling, resilience, and inclusive practices, in terms of which an evidence base may be built to guide further research and policymaking.

However, it is also seen that there are still areas of disparity in counselling service provision, especially in non-traditional schools and disadvantaged communities. The most noticeable of the offered services in the current programs is academic guidance, which has led to a lack of socio-emotional development and advocacy, as well as both are significant to the overall well-being of the students. Besides this, the changing access to professional development predisposes the response of counsellors to emerging problems, including mental health problems, sociocultural diversity, and the digitization of counselling practice. Multifaceted management is required to eradicate these shortcomings.

In the first instance, counselling has to be adapted and contextualized also for non-formal education. Secondly, counsellors' professional enhancement needs would also have to be systematically increased so that they are able to retain their ability and satisfy the ethical requirements. Third, cross-border research networks at the global and regional levels can reduce knowledge gaps and build capacity and promote the development of culturally competent methodologies. Finally, adding a character education approach to the use of digital technologies in counselling can lead to fuller and more relevant interventions. In this manner, educational

counselling becomes not an addendum to the educational system of a country but integrated within it. It would not only better equip the students academically and career-wise, but it would also help produce a generation that is stronger, more morally sound, and ready to face life in a way needed for modern-day society.

9. Recommendation

The features of research in the educational counselling area demonstrate their strengths and weaknesses according to bibliometric indicators. A review of 92 articles constituting 49 years and 13,411 citations indicates that, whereas the field has a solid scholarly base, its inputs are overdetermined by powerful forces such as the United States, the Netherlands, and India, thus excluding emerging contributors such as Vietnam, Zambia, and Malaysia. Inequality of access to counselling in non-formal education sectors has to be remedied, which means that counselling services should be provided outside the school environment.

Current scholarly advice has been characterised as overemphasizing institutional goals at the personal level of development. Studies in the future must incorporate social-emotional learning, character education, and advocacy efforts to help cultivate empathetic, resilient, and responsible citizens. Citation-per-paper rates were high in India (52.90) and Zambia (42.00), suggesting that interventions based on local context can be highly effective across fewer publications.

It also highlights the necessity of targeted evidence-based interventions locally. The reinforcement of training counselors is necessary by establishing regular training on policies, so that there are professionals who are prepared to meet more complicated situations like those concerning mental health and cultural diversity. Moreover, international partnerships that connect the developed research facilities with emerging societies offer the basis of enhanced knowledge-transmission, capacity-building, and regionally suitable standards. These measures have the potential of promoting a more applicable, equal, and global-based educational counseling paradigm to address the academic, social-emotional, and college and career requirements of students in the 21st century.

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