

COMPLIANCE AND PROFESSIONAL ETHICS: LITERATURE REVIEW WITH BIBLIOMETRIC

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ABSTRACT

Scholarly interest in professional ethics and compliance has increased recently, as seen by the dramatic increase in publications worldwide. The growing quantity of professional ethics and compliance publications indicates that this subject has received a great deal of scientific attention. Another popular topic is the study of compliance and professional ethics. The goal of this study is to identify the trends in compliance and professional ethics studies that are appearing in esteemed publications. The data under investigation consisted of 136 research publications that were indexed. Using MS Excel and the RStudio Bibliometric program, data was processed and analyzed to build the bibliometric map of professional ethics and compliance. The results of the survey show that the number of publications about professional ethics and compliance has increased annually in the United States. Levine DM, Sulmasy DP, United States, and Journal of Business Ethics are the most sought-after authors. Trend analysis indicates that in order to keep up with the demands of the global economy, the United States needs to improve its research on compliance and professional ethics. The nations, organizations, journals, articles, sources, and topics that contributed the most have also been made public. The development of professional ethics and compliance, as well as commercial, medical, auditing, pharmacy, social, and tax ethics, are all covered in 136 research publications. Additionally, a future research agenda with specific research concerns is identified by this study. Additional research can enhance the units studied and add to resources such as Web of Science. Although the focus of this study is solely on bibliometric analysis and research flow, future investigations may emphasize a methodical corpus of published articles on a certain subject.

Keywords: *Bibliometric Analysis, Compliance, Literature Review, Professional ethics, SCOPUS*

INTRODUCTION

In any business, professional ethics are a crucial topic. Income was positively connected with compliance to professional ethical rules. It's crucial to focus on professional and educational ethics as well as adherence to the code of ethics (Nasiriani et al. 2018). Studies on compliance and professional ethics in the fields of health (Zawacki 2000; Mills and Spencer 2001; Timpka 1999; Hess 1996; Nasiriani et al. 2018; Dollarhide 2000), business (Gaumnitz and Lere 2002; Breakey 2016), social sciences (Jos 2006), auditing (Dedoulis 2006), pharmacy (Resnik, Ranelli,

and Resnik 2000), and higher education (Sheveleva 2020) are available. Because they work as a guide for decision making in ambiguous situations, ethical norms safeguard the interests of people or groups that are the subject of professional activity (Sheveleva 2020).

Since 1957, research has been conducted on compliance and professional ethics. The issue of compliance and professional ethics study has shown a tendency to repeat itself. For example, patient compliance was first mentioned in 1987 and has since been back in 1995 and 2000. Similar tendencies were seen in 1989, 1998, and 2000 when it came to the topics of bioethics and professional ethics. Between 2020 and 2022, professional ethics became a hot topic (source: biblioshiny processing Scopus data).

Findings from a number of studies on professional ethics and compliance in the medical field include teaching medical ethics during residency (Perkins 1989), ethical problems in the medical office (Julia, Dallemura, and Div 1988), ethics education on the quality of care for patients (Sulmasy et al. 1994), the ethics of compliance (Hess 1996), ethical decision making (Healy 2003), organization ethics or compliance (Mills and Spencer 2001), professional ethics in health care (Timpka 1999), compliance, ethics, and service in culture of care (Dollahide 2000), and corporate soulcraft in healthcare (Nasiriani et al. 2018).

Many business topics are covered in professional ethics and compliance research, including supply and demand in the development of professional ethics (Breakey 2016), professionalism, agency, and market failures (Kriegstein 2017), and codes of ethics of professional business organizations (Gaumnitz and Lere 2002; Bruin 2014). Still in the same sector are auditing, the auditing profession (Dedoulis 2006), Fraud detection, redress, and reporting by auditors (Hassink et al. 2012), and Ethical issues facing tax professionals (Marshall, Smith, and Armstrong 2010). Ethics and business in community pharmacy (Resnik, Ranelli, and Resnik 2000), social contract theory implications for professional ethics (Jos 2006), and the university teachers' professional ethics (Sheveleva 2020) are some other fields that address professional ethics and compliance. There is no bibliometric study of professional ethics and compliance, despite the fact that every review article links to a distinct piece of professional ethics and compliance research.

This work aims to provide a bibliometric analysis of the extensive body of work on professional ethics and compliance that has been published in journals with Scopus index from 1957 to 2023, a span of 66 years. The researcher's conclusions will explain key components and

assist all parties involved in the creation of policies pertaining to professional ethics and compliance. It will also demonstrate how the industry may advance in light of this kind of study.

The specific goal of the study is to identify solutions for the following:

1. What are the emerging patterns in compliance and professional ethics between 1957 and 2023??
2. What is the yearly average of citations for publications on professional ethics and compliance, the number of citations to the author, and the most popular article?
3. Which authors, nations, and subjects address compliance and professional ethics?
4. Which documents, authors, and sources are the most prolific?
5. Which terms are most frequently used in professional ethics and compliance?
6. How many professional ethics and compliance-related network organizations are researchers most interested in joining?
7. Which articles regarding professional ethics and compliance correspond with the group's color on the tree map and theme map?

The sections listed below make up the remainder of this article. Section 2 details the extensive procedures used in this inquiry and comes after Section 1's introduction. The bibliometric results are discussed in Section 3, content analysis is the main emphasis of Section 4 to identify important research streams, research gaps and potential study agendas are mentioned in Section 5, and a summary of the results, limitations, and future literature review are provided in Section 6.

METHOD

The foundation of bibliometrics is metadata from published papers on a certain subject. (Paltrinieri et al. 2023). Most bibliometric papers include metadata from Web of Science (WOS) or SCOPUS databases (Mohammad Kabir Hassan et al. 2022). After getting the data from the relevant database, several studies use content analysis in addition to a variety of tools, like VOSviewer and Rshiny (Mohammad Kabir Hassan et al. 2022)

a. Data Collection

The SCOPUS database was used to collect the data for this investigation (Alshater et al. 2022). While prior study has focused on this database, that is not the main reason for choosing it (M. Kabir Hassan et al. 2021), Some important factors to take into account are that it is the

largest collection of peer-reviewed transdisciplinary databases in the social sciences; compared to other options like WOS, Dimensions, and Google Scholar, it has more publications about professional ethics and compliance; additionally, the database maintains higher quality publications than many other free databases.

The study includes publications from many different fields, such as the social sciences, business, education, medicine, auditing, and taxation. Ultimately, 136 documents were found to be examined. In addition, we searched three other databases for the same item: Dimensions, WOS, and Google Scholar. Conversely, Google Scholar lacks the metadata required for bibliographic tools to assess it, making it inappropriate for bibliometric study. We consequently concluded that the data from the SCOPUS database matched our study the best. When the study began in December 2023, a search using the terms "Professional ethics" and "compliance" turned up 136 documents.

b. Research Tools

To analyze the bibliometric metadata, we employed three different programs: Excel and RStudio. One well-liked tool for examining bibliographic data is RStudio. Then, as the later charts are challenging to edit, we included Microsoft Excel to R-Studio (Alshater et al. 2022). To identify research streams, we did, however, perform a detailed content analysis of the papers.

c. Type of Analysis

There are four phases to the analysis. Firstly, we conduct a thorough performance review as a significant component of productivity. This section gathers information from the public on the database and eventually improves the literature. Furthermore, we go into important aspects of literature, including well-known writers, their birthplaces, records, sources, and organizations. We use Bradford's law in our analysis to address primary sources. Secondly, we verify our quotes again. This section covers annual citations by year, the articles that are most frequently cited, countries, author influences and sources, and other topics. Third, we performed network and connection analysis using thematic maps, co-citations, bibliographical merging, and co-occurrence (Alshater et al. 2022). The last aspect of content analysis is determining the main research streams.

RESULT AND DISCUSSION

In the findings section, we provide an overview of the information we have gathered on this topic. Next, we report the results according to our three key categories: productivity, future research challenges, network analysis, citation patterns, and identification of research streams. The data used in this study came from SCOPUS-indexed journals that were published between 1957 and 2023, as Table 1 illustrates. Of the 136 documents, 307 writers contributed in total, 54 of them were the only single author.

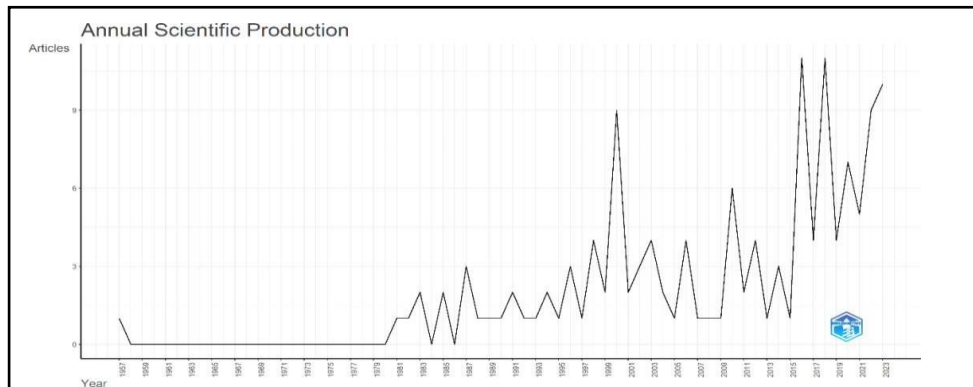
Table 1.
Main Information

Description	Results	Description	Results
MAIN INFORMATION ABOUT DATA			
Timespan	1957:2023	AUTHORS COLLABORATION	
Sources (Journals, Books, etc)	109	Single-authored docs	55
Documents	136	Co-Authors per Doc	2,32
Annual Growth Rate %	3,55	International co-authorships %	7,353
Document Average Age	14,3	DOCUMENT TYPES	
Average citations per doc	8,316	article	102
References	1	book	2
DOCUMENT CONTENTS		book chapter	3
Keywords Plus (ID)	924	conference paper	8
Author's Keywords (DE)	331	editorial	2
AUTHORS		letter	1
Authors	307	review	17
Authors of single-authored docs	54	short survey	1

The Annual Production of Science

The database compiled from Scopus shows how professional ethics and compliance research have expanded over the last 66 years.

Figure 1. There was essentially little scholarly output in this topic between 1957 and 1980, but from 1981 to 2023, it expanded quickly, with only one publication produced between 2013 and 2015. There were no publications between 1958 and 1980, and with 11 journals each in 2016 and 2018, those years saw the most publications.



Source: Authors' Analysis Using Rshiny

Figure 1. Annual Scientific Production

As you can see from **Table 2**, which details the publication of scholarly papers about professional ethics and compliance from 1957 to 2023, the number of published articles was rather low in the first 58 years, but it increased significantly in the next 8 years.

Table 2.

Annual Scientific Production

Year	Articles	Year	Articles	Year	Articles	Year	Articles
1957	1	1973	0	1990	1	2007	1
1958	0	1974	0	1991	2	2008	1
1959	0	1975	0	1992	1	2009	1
1960	0	1976	0	1993	1	2010	6
1961	0	1977	0	1994	2	2011	2
1962	0	1978	0	1995	1	2012	4
1963	0	1979	0	1996	3	2013	1
1964	0	1980	0	1997	1	2014	3
1965	0	1981	1	1998	4	2015	1
1966	0	1982	1	1999	2	2016	11
1967	0	1983	2	2000	9	2017	4
1968	0	1984	0	2001	2	2018	11
1969	0	1985	2	2002	3	2019	4
1970	0	1986	0	2003	4	2020	7
1971	0	1987	3	2004	2	2021	5
1972	0	1988	1	2005	1	2022	9
		1989	1	2006	4	2023	10

Average Annual Citations

Furthermore, the normal citations in professional ethics and compliance—both the typical citations per publication and the typical citations per year—were the basis for the study. The

research that provided the foundation for this conversation examined information from 1957 through 2023.

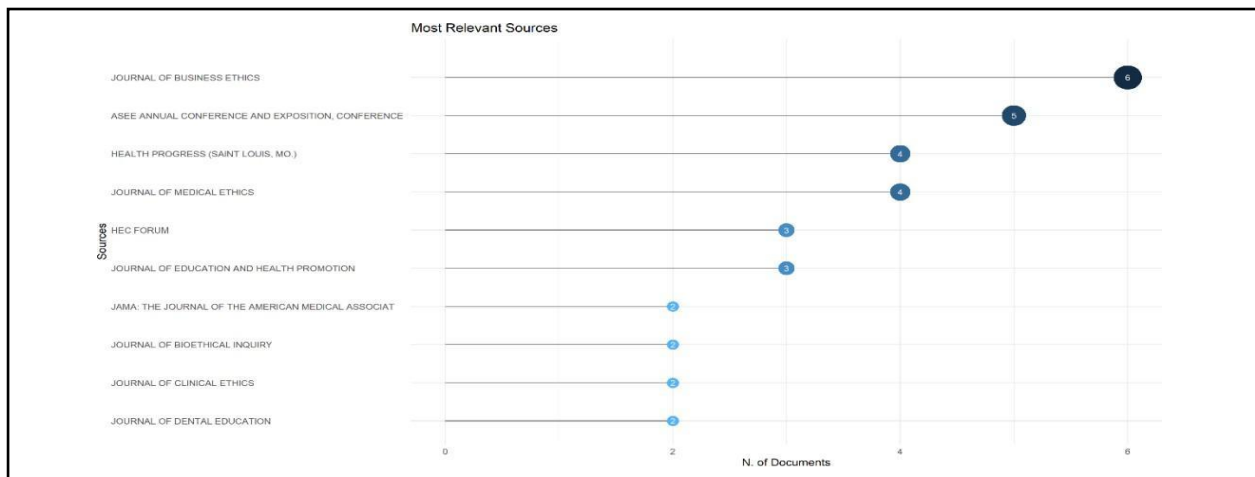
With an average of 55 citations per item, 1981 had the highest average number of citations. With 2.78 citations on average, 2015 was the highest year in terms of average number of citations annually. The years with no citations—1957, 1995, 2005, and 2008— have the lowest average number of citations per article and year, as can be seen if you closely examine the table.

Drawing from this data, an inverse proportionality can be observed between the average number of citations and the number of scientific papers produced between 2016 and 2018. Out of all the documents generated throughout those years, the scientific category produced the most. However the average number of citations was at its lowest point ever after 1957, when there were on average just 0 citations per item.

Table 3.
 Average Citations Per Year

Year	MeanTCperArt	N	MeanTCperYear	CitableYears
1957	0	1,00	0,00	67
1981	55	1,00	1,28	43
1982	5	1,00	0,12	42
1983	4	2,00	0,10	41
1985	28,5	2,00	0,73	39
1987	3	3,00	0,08	37
1988	37	1,00	1,03	36
1989	43	1,00	1,23	35
1990	2	1,00	0,06	34
1991	11	2,00	0,33	33
1992	47	1,00	1,47	32
1993	2	1,00	0,06	31
1994	25	2,00	0,83	30
1995	0	1,00	0,00	29
1996	10,33	3,00	0,37	28
1997	8	1,00	0,30	27
1998	3,5	4,00	0,13	26
1999	6	2,00	0,24	25
2000	19,11	9,00	0,80	24
2001	3,5	2,00	0,15	23
2002	26	3,00	1,18	22
2003	6,75	4,00	0,32	21
2004	1	2,00	0,05	20
2005	0	1,00	0,00	19
2006	24,75	4,00	1,38	18

Year	MeanTCperArt	N	MeanTCperYear	CitableYears
2007	2	1,00	0,12	17
2008	0	1,00	0,00	16
2009	8	1,00	0,53	15
2010	6,83	6,00	0,49	14
2011	6,5	2,00	0,50	13
2012	4,75	4,00	0,40	12
2013	2	1,00	0,18	11
2014	8,67	3,00	0,87	10
2015	25	1,00	2,78	9
2016	5,55	11,00	0,69	8
2017	3	4,00	0,43	7
2018	3,45	11,00	0,58	6
2019	6,75	4,00	1,35	5
2020	3,86	7,00	0,96	4
2021	2,2	5,00	0,73	3
2022	1,22	9,00	0,61	2
2023	2,1	10,00	2,10	1

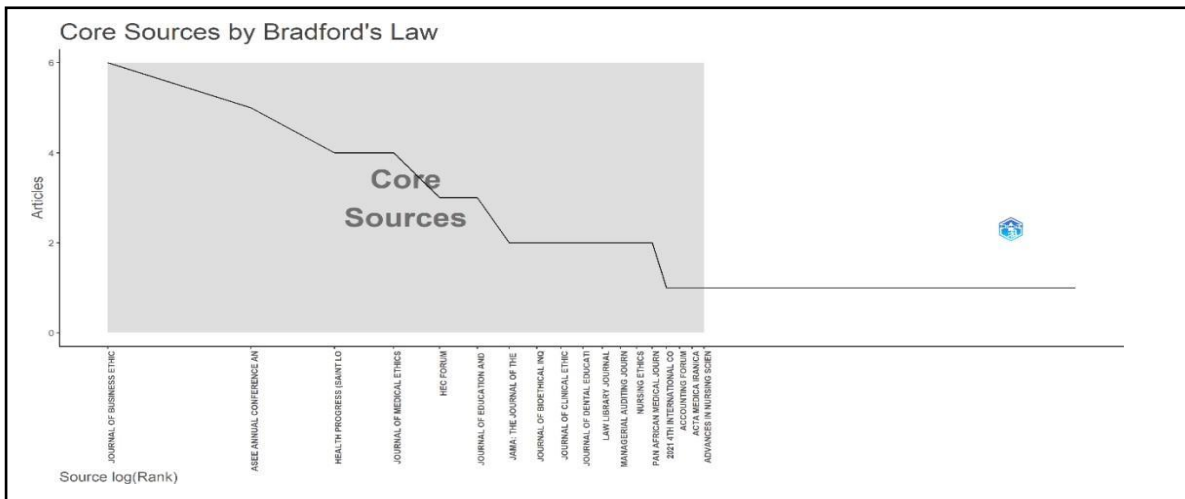


Source: Authors' Analysis Using Rshiny

Figure 2. Most Relevant Source

Most Relevance Source

Figure 2. shows the most reliable sources, as seen in the manner the graphic was displayed above. Ten articles received high ratings; the highest number was from the Journal of Business Ethics (6 articles), followed by the Asee Annual Conference and Exposition, Conference Proceedings (5 articles), Health Progress (Saint Louis, Mo.) and the Journal of Medical Ethics (4 articles), the HEC Forum and the Journal of Education and Health Promotion (3 articles), and the remaining 2 articles each.



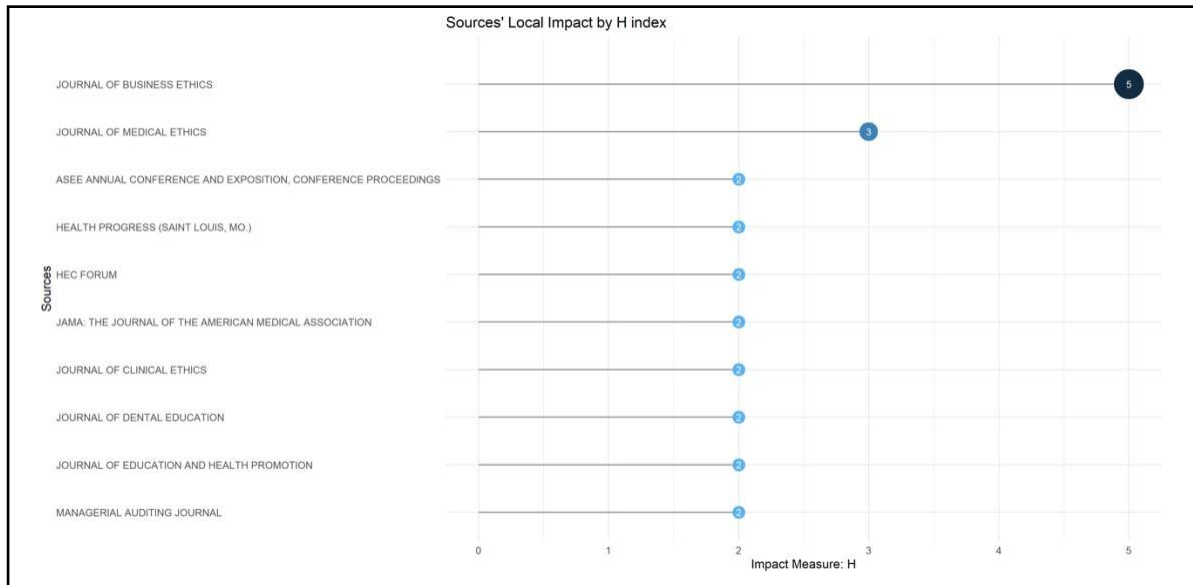
Source: Authors' Analysis Using Rshiny

Figure 3. Core Source by Bradford's Law

Bradford's Law

According to Bradford's Law of Scattering (Bradford, 1934), journals are categorized according to their decreasing publication output. A core collection of journals that are pertinent to this subject will be formed from the journals. Moreover, the number of journals and periodicals in the core and succeeding zones will essentially follow the geometric sequence 1:n:n² when many sets of zones contain the same number of articles as the core (Sumaedi et al. 2015; de Oliveira et al. 2019).

Bibliometrics' comprehensive analysis of published papers is shown in Figure 3 above. Bradford's law, which divides journals into three groups according to their total productivity—core journals, intermediate journals, and wide journals—is depicted in the following graphic. The primary journal group is indicated by the region with colored text. Only a third of the entire collection is included in this publication, as shown by the shaded region. This is demonstrated by the fact that half of the publications about professional ethics and compliance are published in 18 journals. The top three (three) core journals are Health Progress, Asee Annual Conference and Exposition, and Journal of Business Ethics.



Source: Authors' Analysis Using Rshiny

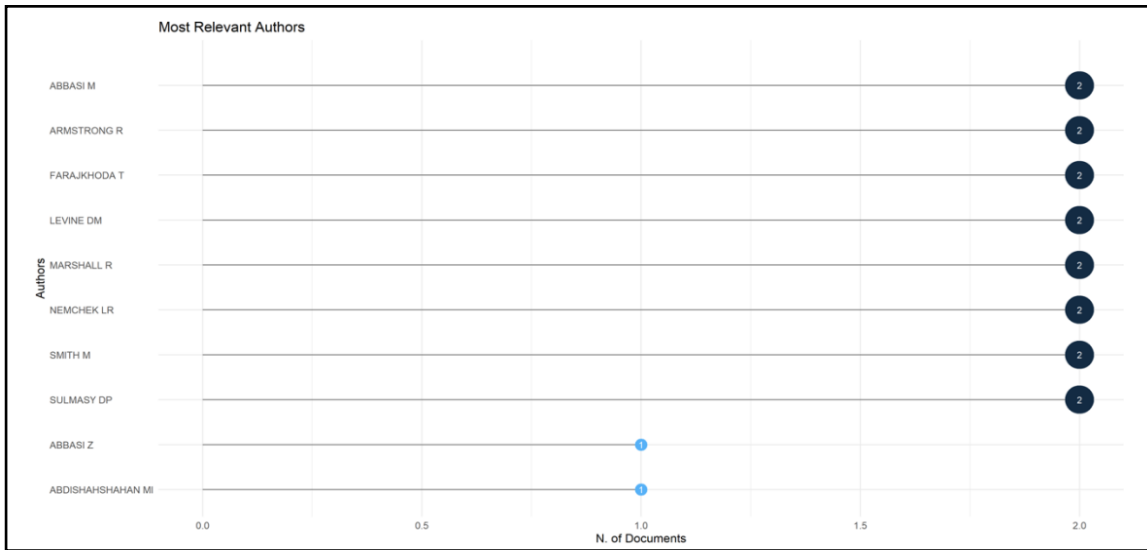
Figure 4. Sources' Local Impact By H Index

Sources' Local Impact

It was described by Hirsch (2005) as "if an author's N research paper has more than N number of citations, then the author's h-index is N." Since the total number of publications does not indicate the quality of the paper and the total number of citations is impacted by major influence publications, the primary benefit of the h-index is its ability to strike a balance between the total number of publications and the total number of citations. It achieved equilibrium between the volume and caliber of publications (Singh 2022).

Figure 4. shows that the search turned up this paper with the pertinent findings. The search index-H, also known as the H Index, is a metric that academics and researchers use to evaluate the importance and impact of their scholarly articles. Among them is Local Search Impact of the Top. The three most common journal searches, Health Progress, HEC Forum, and the Journal of Business Ethics, are included in the H index together with the Journal of Medical Ethics and the Asee Annual Conference and Exposition. Furthermore, academics and lecturers who are interested in professional ethics and compliance usually look for publications with names similar to those in the above image.

Most Relevant Authors



Source: Authors' Analysis Using Rshiny

Figure 5. Most Relevant Authors

Figure 5. Shows The table displays the range of research publications created at professional ethics and compliance, according to the writers. The table above lists the number of research articles as well as the top 10 authors. Abbasi M., Armstrong R., Farajkhoda T., Marshall R., Levine DM., Nemchek LR., Smith M., and Sulmasy DP. is a highly regarded author with two documents. One document fragment each from the other two writers is present.

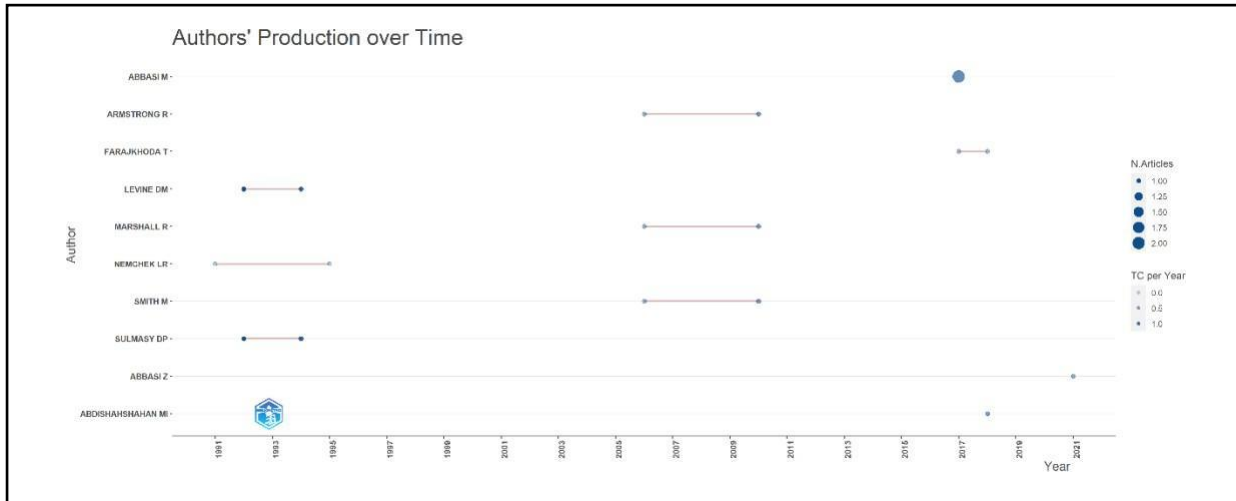
Table 4.
 Most Relevant Authors

Authors	Articles	Articles Fractionalized
ABBASI M	2	0,50
ARMSTRONG R	2	0,67
FARAJKHODA T	2	0,42
LEVINE DM	2	0,50
MARSHALL R	2	0,67
NEMCHEK LR	2	2,00
SMITH M	2	0,67
SULMASY DP	2	0,50
ABBASI Z	1	0,17
ABDISHAHSHAHAN MI	1	0,33

Table 4. Shows the research papers relevant to the percentage level of articles are shown in the above figure, serialized from top to bottom on the right side of the table. with Nemchek LR's best percentage of 2.00. Armstrong R., Marshall R., and Smith M. are in second place with a

percentage of 0.67. Third place went to Abbasi M., Levine DM., and Sulmasy DP., all with a percentage of 0.50. Five more writers received scores of 0.42, 0.33, and 0.17, in that order.

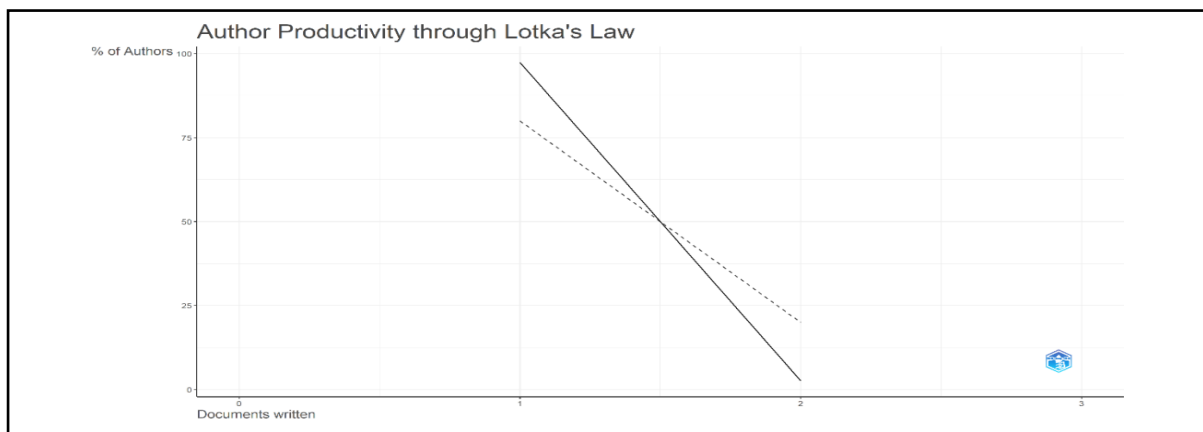
Authors' Production over Time



Source: Authors' Analysis Using Rshiny

Figure 6. Authors' Production Over Time

Figure 6. uses quotations to show the evolution. Here, "N. Articles" denotes the total number of scholarly articles published annually. The average TC per article is displayed in the "TC per Year" column. demonstrates the most reliable authors year after year. Armstrong R., Marshall R., and Smith M., who came in first, all produced articles between 2006 and 2010. Nemchek LR. was second in terms of article production from 1991 to 1995. Levine DM and Sulmasy DP wrote the third most articles between 1992 and 1994.



Source: Authors' Analysis Using Rshiny

Figure 7. Authors' Productivity Through Lotka's Law

Lotka's law

The distribution of scientific productivity among writers on a given topic is described by Lotka's Law. According to Lotka's law, a hyperbolic inverse square function is projected to represent the relative frequency distribution of author production in a given subject, with a small number of writers authoring the majority of the papers. More precisely, the percentage of authors who contribute 'n' is roughly $1/n^2$ of those who contribute one, whereas the percentage of all authors who contribute one is almost 60%. According to this, 60% of writers will only contribute once, 15% will publish twice, 7% will publish three times, and so on (Hussain, Ahmad, and Ahmed 2023).

Figure 7. efficiency when creating papers. Lotka's law was used to evaluate the 136 papers that included 307 researchers. The accompanying picture shows the impact of Lotka's law for 307 authors. 97% of persons have published one written piece or more, and 2.6% have published two.

Table 5.
Author Productivity Through Lotka's Law

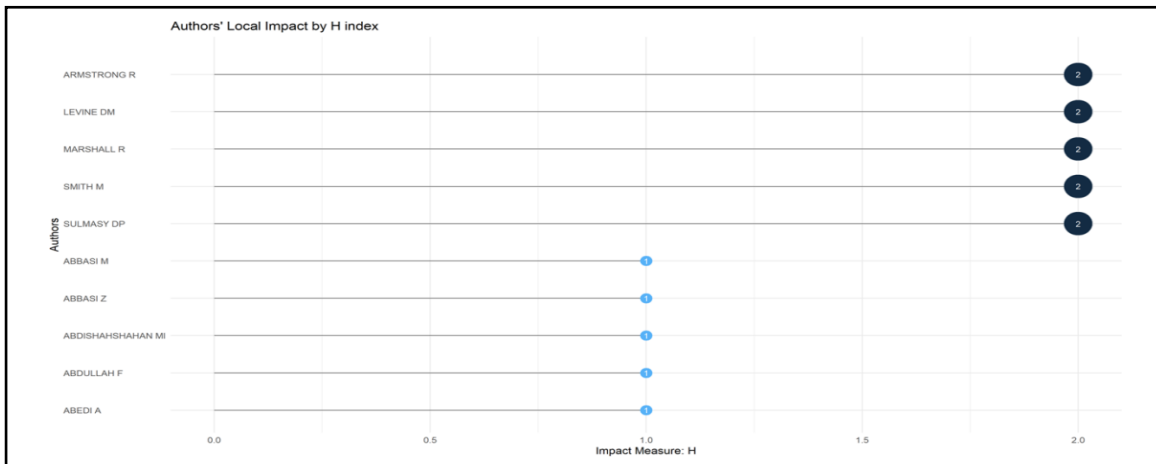
Documents written	N. of Authors	Proportion of Authors
1	229	0,974
2	8	0.026

According to Table 5. above, There is one written document and 299 authors. There are two documents and eight writers.

Authors' Local Impact

Author output is measured by the H-Index. The number of articles in which one author has been cited at least once by another author is counted to determine the H-index (M. Kabir Hassan et al. 2023).

Figure 8. The top ten sources cited. In addition to the H-index displayed in the above image, the productivity of authors is also measured by the H index of high impact sources. At the top, the h-index for Armstrong R., Levine DM., Marshall R., Smith M., and Sulmasy DP Five authors with h-indices of one were added.



Source: Authors' Analysis Using Rshiny

Figure 8. Authors' Local Impact By H Index

Table 6.

Authors' Local Impact By H Index

Element	h_index	g_index	m_index	TC	NP	PY_start
ARMSTRONG R	2	2	0,111	13	2	2006
LEVINE DM	2	2	0,063	83	2	1992
MARSHALL R	2	2	0,111	13	2	2006
SMITH M	2	2	0,111	13	2	2006
SULMASY DP	2	2	0,063	83	2	1992
ABBASI M	1	2	0,143	5	2	2017
ABBASI Z	1	1	0,333	1	1	2021
ABDISHAHSHAHAN MI	1	1	0,167	3	1	2018
ABDULLAH F	1	1	0,5	1	1	2022
ABEDI A	1	1	0,25	3	1	2020

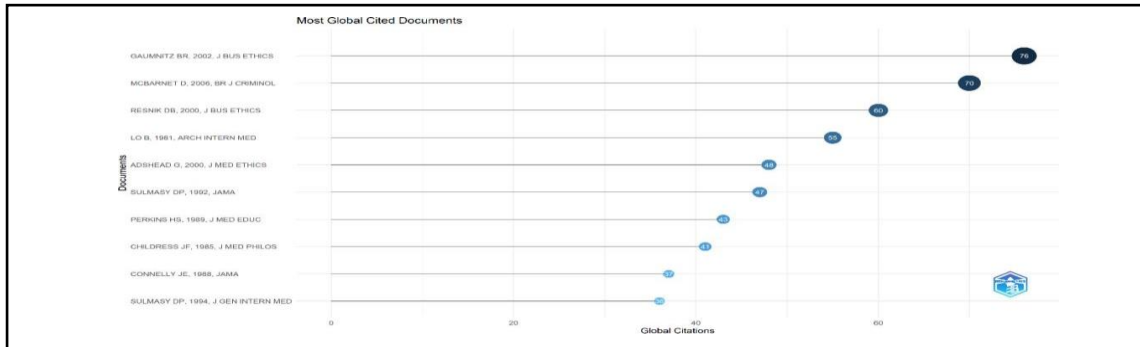
Source: computation made by the author

Author productivity. Author output is measured by the H-Index. The number of publications in which a single author has received at least one citation from another author is used to calculate the H-index. A check at the total number of publications is done using the G-Index. Lastly, the M-index considers the year of publication in addition to the H- index values (M. Kabir Hassan et al. 2023).

Table 6. shows the contributions made by the top 10 authors between 1992 and 2022 to compliance and professional ethics. Top 10 publications that an author has cited. The most influential sources, the H-index, G-index, M-index, Publication Number, and Year of Publication (start) are all displayed in the above table. The study is based only on the total number of citations received by each journal's compliance and professional ethics articles. The first authors

are Levine DM and Sulmasy DP, with 83 citations; Armstrong R., Marshall R., and Smith M. have 13 citations each, while Abbasi M. has 5 citations.

Most Global Cited



Source: Authors’ Analysis Using Rshiny

Figure 9. Most Global Cited Documents

The majority of the globally mentioned documents are shown in Figure 9. The top publications that have drawn the most attention in terms of professional ethics and compliance are Gaumnitz BR., each with 76 citations. Mc Barnet D. is another well-known work with 70 citations. Citations for Resnik DB total 60. Out of the top 10 papers, Sulmasy DP. has the fewest citations, with just 36.

Table 7.

Most Global Cited Documents

Paper	Total Citations	TC per Year	Normalized
GAUMNITZ BR, 2002, J BUS ETHICS	76	3,45	2
MCBARNET D, 2006, BR J CRIMINOL	70	3,89	
RESNIK DB, 2000, J BUS ETHICS	60	2,5	
LO B, 1981, ARCH INTERN MED	55		
ADSHEAD G, 2000, J MED ETHICS	48		
SULMASY DP, 1992, JAMA			
PERKINS HS, 1989, J MED EDUC			
CHILDRESS JF, 1985, J MED PHILOS			
CONNELLY JE, 1988, JAMA			
SULMASY DP, 1994, J GEN I			
LIN KZ, 2000, INT J AC			
HESS JD, 1996,			
HASSI			
NK SP			

Source: computation made by the author

Table 7. Display the top 10 concluded papers with the most references. We evaluated each paper with 10 or more citations in order to determine which articles are the most significant in

the field of professional ethics and compliance. The authors of the top 10 tables are listed according to their annual and cumulative citation counts. With 3.45 citations overall, Gaumnitz BR. is the author most frequently cited. Mc Barnet D. received 70 citations, for an annual citation rate of 3.89. Resnik DB, who placed third, has received 60 citations, or 2.50 citations per year. Lo B. is rated fourth with 55 citations, or 1.28 citations per year. The table above has ten additional authors.

Table 8.
Most Frequent Words

Words	Occurrences
Human	67
Bioethics and professional ethics	61
Article	47
Medical ethics	43
Patient compliance	42
United states	38
Humans	35
Ethics	33
Female	28
Health care and public health	27
Adult	24
Male	22
Professional patient relationship	21
Ethics medical	19
Decision making	18

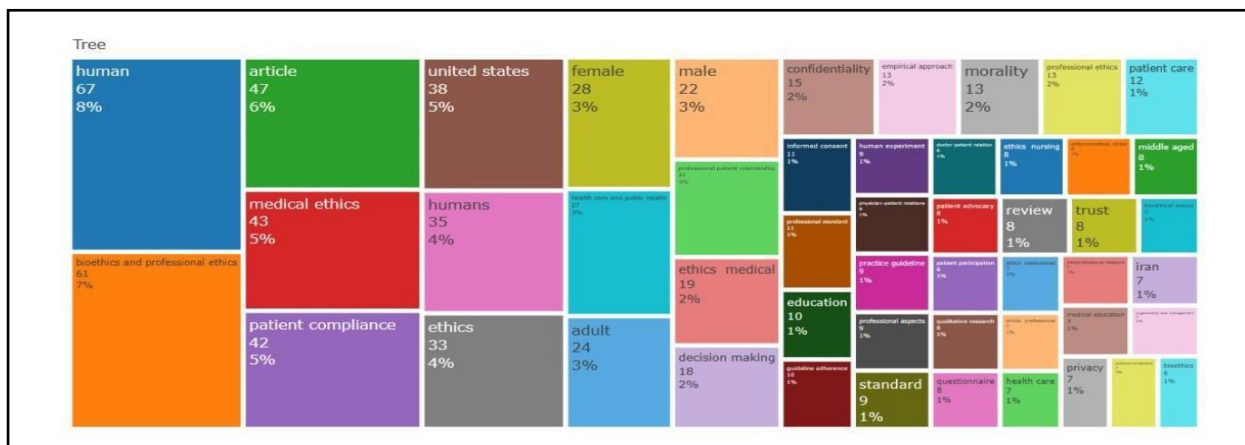
Table 8. The table above provides a look at the top 15 most commonly used terms in research journals. With a frequency of 67, "Human" comes in first. "Bioethics and professional ethics" is on frequency 61. "Medical ethics" has a frequency of 43, whereas "article" has 47. The frequencies of the other ones vary.



Source: Authors’ Analysis Using Rshiny

Figure 10. Most Frequent Words

Figure 10. The image above illustrates the words that are most commonly found in research searches. The writing is organized from largest to smallest, based on a research search. For example, the text labeled "Human," which is the largest among the others in dark blue, has the word compliance and professional ethics as its first appearance in the search results. For "Bioethics and professional ethics," which comes up second in research search results, the text is brown.

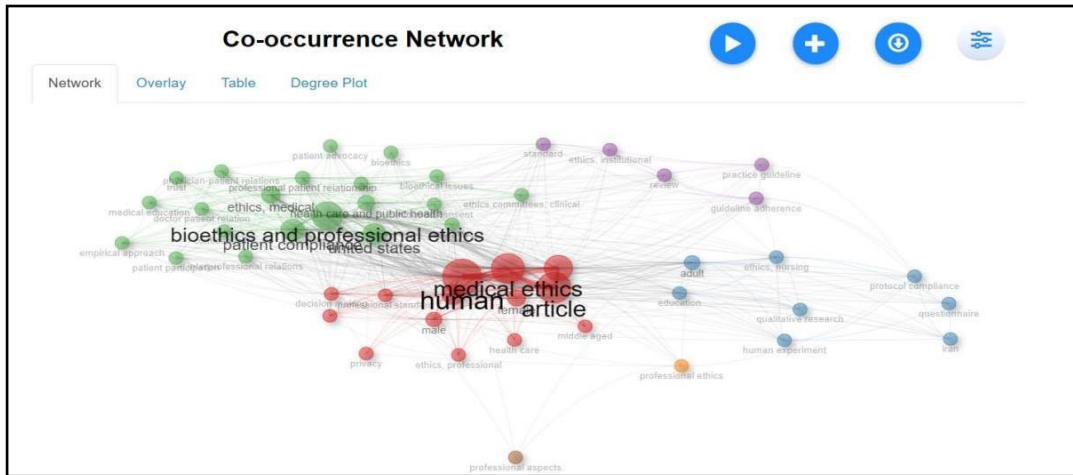


Source: Authors’ Analysis Using Rshiny

Figure11. Tree Map

Additional phrases are shown in the preceding A detailed overview of the distribution of professional ethics and compliance may be found in Figure 11. The identification process produced the following denominations. Name the top 10 terms. Article, patient care, human, bioethics and professional ethics, medical ethics, ethics, female, health care, and public health.

Co-Occurrence Network



Source: Authors' Analysis Using Rshiny

Figure 12. Co-Occurrence Network

Figure 12. As the example above shows, these networks include the name of the country—in this case, compliance and professional ethics—along with links to books about these topics that include the most commonly searched terms and highlighted passages for further study. On the other hand, the size of the knot with this connection denotes how much more significant the large, bold text is. Writing that is bold and large has an association or relationship with the writings surrounding it. The network also identified four (four) groups. Standard, ethical institutional, review, practice guideline, and guideline adherence are all included in the purple group. The United States, patient compliance, and bioethics and professional ethics are all included in the green category. Human, article, and medical ethics are included in the red group. Lastly, Iran, ethics nursing, human experimentation, education, qualitative research, and protocol compliance are all included in the blue category.



Source: Authors' Analysis Using Rshiny

Figure 13. Country Collaboration Map

Table 9.
Country Collaboration Network

From	To	Frequency
AUSTRALIA	ITALY	1
COLOMBIA	VENEZUELA	1
FRANCE	ITALY	1
INDIA	CAMBODIA	1
IRAN	MALAYSIA	1
NIGERIA	SOUTH AFRICA	1
SOUTH AFRICA	SWEDEN	1
USA	AUSTRALIA	2
USA	AUSTRIA	1
USA	CAMBODIA	1
USA	INDIA	1

The nations that have contributed the most to the development of scholarly publications on professional ethics and compliance are shown by a darker tone in Figure13. The country that has made the most contribution to the production of scientific articles is the United States, which is shown as being dark blue. Meanwhile, the light blue hue represents countries that contribute very little to the production of scholarly papers on this topic, such as Venezuela, Malaysia, Sweden, and Austria.

Table 9. indicates that the United States has developed into a hub for research on compliance and professional ethics. Australia and the United States are undoubtedly the most frequently cited countries in this field. Australia can refer to the United States for research on compliance and professional ethics, with a total frequency of five journals. Additionally, Australia and India serve as reference centers for a number of nations, including Italy and Cambodia, with a total frequency of one journal for each.

Future Research

These are 20 selected articles in compliance and professional ethics:

Author(s)	Title	Findings	Suggest for future research	Cluster
(Resnik, Ranelli, and 2000)	Resnik The Conflict Between Ethics and Business in Community Pharmacy: What About Patient Counseling?	The problem of patient counseling in pharmacies can be overcome, not by more legal requirements, but by more moral persuasion and moral education.	Sufficient research on counseling	Pharmacy
(Perkins 1989)	Theaching Medical Ethics during Residency	Important ethical ideas should be knowledgeable in obtaining informed permission, handling incompetent patients, knowing when to withhold clinical information, and making appropriate use of available resources. The department's strong commitments are essential to the success of the residency program in ethics	Medical ethics research and residents' technical education enhances harmonizes	Medical

Author(s)	Title	Findings	Suggest for future research	Cluster
(Julia, Dallemura, and Div 1988)	Ethical Problems in the Medical Office	Costs of care, psychological variables influencing choices, competency and capacity to make decisions, treatment rejection, informed consent, and confidentiality were the most frequent ethical issues raised by the patients. Patients over 60 years old were more likely to experience ethical issues	Studies on outpatient settings, including psychological aspects of patients, the distribution and costs of health services, and the issue of patients refusing therapeutic and diagnostic procedures	Medical
(Sulmasy et al. 1994)	Long-term Effects of Ethics Education on the Quality of Care for Patients Who Have Do-not-resuscitate Orders	Ethics education could change how doctors conduct medicine and enhance patient care	research to guarantee the highest level of patient involvement and informed decision-making	Medical
(Hess 1996)	The Ethics of Compliance: A Dialectic	It overcomes the conundrums caused by the power, consumerism, and beneficence difficulties that are inherent in isolated autonomy as well as the paternalistic and coercive assumptions that underlie compliance	Research on isolated autonomy and compliance	Medical
(Hassink et al. 2012)	Fraud detection, redress and reporting by	Some crucial components of fraud standards are broken by auditors.	Examine in greater detail the traits of those identified fraud instances as well as	Auditing

Author(s)	Title	Findings	Suggest for future research	Cluster
		<p>auditors</p> <p>Regarding adherence to pertinent auditing standards, there exist notable variations within audit companies. Moreover, auditors seem to exclusively come across corporate fraud in dentistry cases. Approximately 50% of auditors think they have a "significant" influence on stopping fraud</p>	<p>actual fraud cases</p>	
(Healy 2003)	Ethical Decision Making: Pressure and Uncertainty as Complicating Factors	<p>Clinical ambiguity was impacted by mental health issues, partial cognitive impairment, the interaction between physical and mental health, and the unclear cause of poor decision-making ability. Medical safety and compliance were usually the topics of pressure from other experts. Participants who felt both clinical ambiguity and pressure from other professionals reported higher levels of ethical anxiety</p>	<p>Examining ethics from various perspectives in terms of beliefs and values</p>	Medical

Author(s)	Title	Findings	Suggest for future research	Cluster
(Bruin 2014)	Pledging Integrity: Oaths as Forms of Business Ethics Management	Oaths can improve compliance, encourage professionalism, and make moral decision-making easier. The Banker's Oath, the MBA Oath, the Economist's Oath, and several more projects of a similar nature are all analyzed and evaluated using this Framework	continue as the popularity of these oaths grows	Business
(Dedoulis 2006)	The Code of Ethics and the development of the auditing profession in Greece, the period 1992–2002	The local accounting profession frequently turns to professional ethics in more globalized settings in order to give credibility to its operations and preserve its independence	Studies of local professions that are progressively becoming more global in scope and approach	Auditing
(Kriegstein 2017)	Professionalism, Agency, and Market Failures	Shareholders are directly liable for the liabilities that the market failures method creates. These are the duties that managers inherit as devoted agents	Research into what is morally expected of these investors	Business
(Jos 2006)	Social Contract Theory Implications for Professional Ethics	The endeavor that frequently drives the pursuit of professionalization in public administration as well as the search for its identity: the endeavor to forge agreement on	Several realisms were found in the social contract theory after more research.	Social

Author(s)	Title	Findings	Suggest for future research	Cluster
(Marshall, Smith, and Armstrong 2010)	Ethical issues facing tax professionals: A comparative survey of tax agents and practitioners in Australia	common principles and values and guarantee moral behavior with the least amount of outside oversight The topics that are primarily related to the performance of professional duties were scored highly by both the tax profession and tax administration	This research uses data outside Australia	Tax
(Mills and Spencer 2001)	Organization Ethics or Compliance: Which Will Articulate Values for The United States' Healthcare System?	Programs for compliance and organizational ethics are two that focus on moral behavior in healthcare organizations	Studies on legal compliance that assess an organization's ethical culture	Medical
(Timpka 1999)	Professional Ethics for System Developers in Health Care	In order to prevent failure during system development in the health services, collaboration of professional and individual values is required. a focus on cooperation, education, and socialization rather than coerced	Constructing information networks for healthcare	Medical

Author(s)	Title	Findings	Suggest for future research	Cluster
		submission. The fundamental advantage of distilling experience into a code of ethics is that it makes the place of the profession in society more clear		
(Dollarhide 2000)	The Triple-Play: Compliance, Ethics, and Service (A Winning Combination For A Successful Culture of Care)	Compliance in business transcends legal requirements. Relevant background information on compliance: departmental and organizational contexts	Studying how to keep medical professionals and employees' mindsets altered and then observing it in action throughout regular operations	Medical
(Zawacki 2000)	Corporate Soulcraft in Healthcare: The St. Joseph Health System's "Compliance-Assurance" Approach, and Other Options	The necessity to enhance Healthcare Ethics Committees has presented us with a significant chance: the chance to transform them into "mediating structures" that empower all significant stakeholders across all organizational Levels	Reliable comparison analysis to support hypotheses regarding which of the several soulcraft models currently in use	Medical
(Nasiriani et al. 2018)	The related factors of compliance to professional codes of ethics from midwives' perspective working in	The income level, applicability, and understanding of the professional ethical norms among midwives were all positively connected with their	The creation of ethical rules and their relevance	Medical

Author(s)	Title	Findings	Suggest for future research	Cluster
(Sheveleva 2020)	healthcare centers of Tehran-Iran The university teachers' professional ethics from the students' perspective	compliance with them It was discovered that full-time and part-time students held different opinions. Students enrolled full-time place greater emphasis on the personal qualities of teachers as evidence of their adherence to moral principles. Students enrolled part-time evaluate teachers more highly for their orientation to the interests of the professional community and the needs of other ethical application objects (not just professional and client). They also evaluate law, universal values, and culture more highly as the sources of teachers' professional ethics	The study examined the professional and ethical perspectives of teachers as subjects of professional activity and students as objects of their work, involving students from various specialties and universities	Education
(Breakey 2016)	Supply and Demand In The Development of Professional Ethics	The variables that pull and push for the development, modification, or maintenance of a professional ethos. Different parties may make these demands, such as specific service providers,	Future studies take into account institutional or cultural prerequisites as well as future ethical growth promoters	Business

Author(s)	Title	Findings	Suggest for future research	Cluster
		the business community, current and potential clients, and the broader public as interested parties in general		

Source: Authors' Analysis

A variety of topics, including medical, business, education, auditing, tax, social, and pharmacy studies, must be considered in future research on compliance and professional ethics.

CONCLUSION

Several articles exist that review compliance and professional ethics from throughout the globe, each concentrating on a different aspect of the subject. There isn't, however, a bibliometric analysis of compliance and professional ethics. This article's objectives are to map research in the field of professional ethics and compliance using the bibliometric method, to catalog that research, conduct a bibliometric analysis of that mapping, and to offer recommendations for future research, especially in the 66-year span of Scopus-indexed journals from 1957 to 2023. La Vie de la FIT, the first work in this topic, was published in 1957, according to the Scopus database.

Because it is transparent, objective, unbiased, and rigorous, the bibliometric technique is better than other approaches for conducting literature reviews. We decided to use bibliometric analysis for this study instead of more traditional review techniques. An effective bibliometric analysis can greatly advance understanding of a research topic or issue by empowering and encouraging academics to identify with this compliance and professional ethics research.

A brief content analysis is also included in the study to identify the primary topics of literature research. This study is different from previous ones since it includes new and significant data. There are seven questions, and the responses are listed below in five more manageable chapters. The first category's data, including the time period, document type, document content, author, and cooperation, is summarized in the study. The findings demonstrate how, in the second category, the body of research on professional ethics and compliance has developed gradually over the previous few decades. According to studies, there has been significant literary advancement in the third category for all forms of compliance and professional ethics. The most

significant attributes of each source, topic, place, literary work, author, and source are mentioned. The fourth category is a brief content analysis of each of the 136 articles in the study report. The expansion of professional ethics and compliance is reflected in this flow.

Future research has to focus on several emerging challenges related to professional ethics and compliance, such as business ethics, medical ethics, auditing ethics, social ethics, pharmaceutical ethics, education, and tax. A research agenda and a list of specific research objectives are also included in this study. The primary takeaway from this research is that areas of research that have been thoroughly examined can offer suggestions for future researchers to look into other areas that need additional inquiry.

Future scholars will be guided by the results of this study as they explore further fields of study that need more inquiry. Future studies will follow the findings of this study to further explore this problem, although the paper still has certain limitations. It's vital to remember that it only takes into account reviews and articles published in journals with a Scopus index. As a result, the majority of the articles in this research are of medium to high quality. Future research may use more databases to have a more complete overview of the literature on professional ethics and compliance. A quick content analysis of each of the 136 articles in the research paper is included in the fourth category. This flow represents the expansion of professional ethics and compliance.

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