

Research Performance at Indian Institute of Management Sirmaur: A Five-Year Bibliometric Review

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Abstract

This study aimed to evaluate the research productivity of the Indian Institute of Management Sirmaur, Himachal Pradesh, from 2019 to 2023. The study analysed 186 publications from the Scopus database using Bibliometrix and Biblioshiny of R Studio. The results showed a remarkable growth in research output, with a compound annual growth rate of 112.99%, which increased the output from 4 to 85 publications. The majority of this output consisted of articles (83.87%), indicating the institute's preference for traditional scholarly communication. Business, management, and accounting emerged as the primary focus areas, reflecting the institute's core academic strengths. The analysis also identified significant international collaborations, particularly with Canada, the USA, and Saudi Arabia, highlighting a broadened global research impact.

Keywords: Bibliometric Analysis, Management Research, IIM Sirmaur, Research Productivity, Biblioshiny, R Studio

Introduction

The Indian Institute of Management Sirmaur (IIM Sirmaur) is one of the premier management institutions in India, established with the vision of developing

transformative leaders and innovators who can navigate the complexities of a rapidly changing global landscape. Nestled in the verdant landscapes of Himachal Pradesh, IIM Sirmaur has been at the forefront of imparting high-quality education and fostering a vibrant research culture. Its commitment to academic excellence is reflected in its diverse range of programmes and research initiatives to contribute meaningful insights to the management field and beyond (Indian Institute of Management Sirmaur, 2024).

Bibliometrics, as introduced by Pritchard (1969), refers to the quantitative analysis of scholarly literature to gain insights into knowledge production, dissemination and consumption dynamics. Since its inception, the field has evolved, incorporating sophisticated metrics such as h-index, impact factors and network analysis to map the scientific landscape (Börner et al., 2003). Recent advancements in digital technology and data analytics have further expanded the capabilities of bibliometric studies, allowing for the exploration of large datasets and the visualisation of complex networks (Aria & Cuccurullo, 2017). Bibliometric analysis offers a quantitative approach to evaluating research performance across various dimensions. By analysing data such as publication counts, citation metrics, co-authorships and the distribution of research across subject areas, bibliometric studies provide a multifaceted view of an institution's research impact and scholarly communication. This methodological

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approach not only highlights an institution's contributions to the global knowledge base but also identifies emerging research trends, collaborative networks and core areas of research strength.

In the dynamic field of academic research, continuous evaluation and adaptation are crucial to sustaining and enhancing research quality and output. Understanding its research direction over the past five years is crucial for an institution like IIM Sirmaur, which strives for excellence in research and education. This period has seen significant changes in global and local research landscapes, influenced by technological advancements, shifts in policy and evolving societal challenges. Evaluating IIM Sirmaur's research performance within this context provides valuable insights into how the institution has navigated these changes, identifying areas of success and opportunities for further growth.

Review of Literature

Assessing research performance through bibliometric analysis has increasingly become a pivotal aspect of understanding and improving academic institutions' contributions to knowledge. This review of related literature explores the foundations of bibliometric analysis and its application in evaluating academic research performance. It highlights relevant studies that have provided insights into research trends within management and similar disciplines. Bibliometric analyses have been widely utilised to evaluate research performance at various levels, including individual scholars, institutions and countries. Moed (2005) highlighted its significance in assessing research impact, productivity and trends, which are crucial for policy formulation, funding allocation and strategic planning. Archambault and Larivière (2009) demonstrated how bibliometric indicators could be employed to compare the research output of universities, revealing the influence of institutional policies and practices on academic productivity.

In management studies, bibliometric analyses have been instrumental in identifying key research themes, influential authors and emergent trends. A study by

Podsakoff et al. (2008) on management research trends revealed the evolving nature of topics and methodologies, emphasising the field's responsiveness to contemporary challenges. Similarly, Kaplan and Haenlein (2014) conducted a bibliometric analysis of social media research within the business and management domain, uncovering the field's rapid growth and interdisciplinary nature.

Relevant to the context of Indian management institutions, studies like those of Kumar and Dora (2012), Tyagi (2022), Sahoo et al. (2017) and Singh et al. (2022) have explored the research output and impact of Indian business schools, pointing to significant contributions in areas such as marketing, finance and organisational behaviour. These studies not only reflect the strengths and focal areas of research within Indian management education but also highlight the importance of continuous evaluation to foster research excellence.

The literature emphasises the value of bibliometric analysis, in understanding the contours of academic research and its progression over time. For institutions like the Indian Institute of Management Sirmaur, such analyses are not just a reflection of past and present achievements but also a beacon guiding future research endeavours. As the landscape of management studies continues to evolve, bibliometric reviews remain a critical tool in charting the course of academic institutions toward more significant impact and innovation.

Objectives

The purpose of this bibliometric review is to achieve the following objectives:

- Evaluate the yearly growth trend in IIM Sirmaur's research output from 2019 to 2023.
- Determine the distribution of research outputs across various document types.
- Investigate the distribution of publications across different research areas.
- Analyse keywords to understand emerging research trends and areas.

- Explore national and international research collaborations of IIM Sirmaur.

Methodology

Data Collection: The data for this study was obtained from the Scopus database (Elsevier, 2023) using affiliation ID with a time limit of five years (2019–2023). The search string used was ((AF-ID(“Indian Institute of Management Sirmaur”, 60273192)) AND (LIMIT-TO (PUBYEAR, 2023) OR LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019))). On February 20th, 2024, 186 research papers were retrieved from Scopus in BibTeX and CSV file formats.

Data Analysis and Visualisation Tools: This study utilised two main tools: Microsoft Excel and Biblioshiny for R Studio. Microsoft Excel was used for preliminary and initial analysis due to its robust data manipulation capabilities. This included removing duplicates, categorising the data according to various parameters and preparing the dataset for more advanced analysis. For advanced analysis and visualisation, the study employed Biblioshiny, a web interface of the Bibliometrix package for R Studio. Biblioshiny offers various functionalities designed explicitly for scientometric analysis (Aria & Cuccurullo, 2017).

Data Analysis and Interpretation

Research Productivity Growth at IIM Sirmaur

Table 1 demonstrates a significant growth in research output at IIM Sirmaur between 2019 and 2023. The number of publications increased from 4 to 85 during this period. The highest annual output was recorded in 2023, accounting for 45.7% of the total 186 publications produced. The Compound Annual Growth Rate (CAGR) for this period is an impressive 112.99%. CAGR is a crucial metric for understanding growth over time, as it simplifies the increase in research productivity into a single annual rate. This growth rate indicates that IIM Sirmaur’s research output grew by an average of 112.99%

per year, highlighting the institute’s significant and dynamic increase in scholarly activities.

Table 1: Annual Research Output Growth at IIM Sirmaur (2019-2023)

Year	Total Publications	%	Annual Growth Rate
2019	4	2.15	-
2020	19	10.22	3.75
2021	30	16.13	0.58
2022	48	25.81	0.60
2023	85	45.7	0.77
Total	186	100	CAGR=112.99%

Document Type Distribution at IIM Sirmaur

Table 2 showcases a predominant emphasis on articles, representing 83.87% of IIM Sirmaur’s total publications. This highlights the institution’s preference for this established and highly regarded format for sharing research findings. Book chapters and conference papers follow, making up 5.38% and 4.30% of the output, respectively, highlighting the institute’s dedication to contributing to scholarly works and engaging in academic dialogues at various conferences. Reviews and editorials, accounting for 3.23% and 1.61%, illustrate the institution’s role in critically assessing existing research and editorial contributions. The lesser-focused document types, including errata, notes and short surveys, collectively form a minor portion of the overall output, at 1.68%.

Table 2: Breakdown of Publication Types at IIM Sirmaur

Sr. No.	Document Type	TP	%
1	Article	156	83.87
2	Book Chapter	10	5.38
3	Conference Paper	8	4.30
4	Review	6	3.23
5	Editorial	3	1.61
6	Erratum	1	0.54
7	Note	1	0.54
8	Short Survey	1	0.54
Total		186	100

Table 3: Leading Publication Venues for IIM Sirmaur Research

Sr. No.	Source Title	TP	%	Country	Publisher	h-Index	SJR	Quartile
1	Global Knowledge Memory and Communication	6	3.23	United Kingdom	Emerald Group Publishing Ltd.	35	0.35	Q2
2	Benchmarking	5	2.69	United Kingdom	Emerald Group Publishing Ltd.	74	1.19	Q1
3	IEEE Transactions on Engineering Management	5	2.69	United State	Institute of Electrical and Electronics Engineers Inc.	103	1	Q1
4	Journal of modelling in management	5	2.69	United Kingdom	Emerald Group Publishing Ltd.	37	0.58	Q2
5	Marketing Intelligence and Planning	5	2.69	United Kingdom	Emerald Group Publishing Ltd.	80	1.15	Q2
6	Emerald Emerging Markets Case Studies	4	2.15	United Kingdom	Emerald Group Publishing Ltd.	7	0.19	Q4
7	Evidence Based HRM	3	1.61	United Kingdom	Emerald Group Publishing Ltd.	17	0.46	Q2
8	Human Arenas	3	1.61	Netherlands	Springer Science and Business Media Deutschland GmbH	9	0.3	Q2
9	International Journal of Organizational Analysis	3	1.61	United Kingdom	Emerald Group Publishing Ltd.	36	0.59	Q2
10	Journal of Information Technology Teaching Cases	3	1.61	Switzerland	Springer International Publishing AG	9	0.33	Q2

Preferred Sources for Scholarly Publications

Table 3 and Fig. 1 illustrate the leading journals and sources that have featured research from IIM Sirmaur. The institute's research portfolio reflects various domains and quality indicators. "*Global Knowledge Memory and Communication*" emerges as the top source with six publications, demonstrating a preference for high-quality, interdisciplinary journals. Notably, the presence of journals such as "*Benchmarking*" and "*IEEE Transactions on Engineering Management*" in the top ranks, both recognised for their impact (with h-indexes of 74 and 103, respectively) and high SJR ratings, emphasises IIM Sirmaur's commitment to contributing to significant and influential research discussions. The list of journals is dominated by those from the United Kingdom, indicating a geographical

preference or strategic alignment with publishers in that region, particularly Emerald Group Publishing Ltd. This distribution reflects the institute's research focus areas and its strategic publishing decisions aimed at maximising visibility and impact within the global academic community.

Collaborative Networks of IIM Sirmaur

Table 4 provides an overview of the collaborations the Indian Institute of Management Sirmaur has established with other academic institutions. The table highlights O.P. Jindal Global University as one of the primary collaborators, contributing to 5.38% of the total research output. This indicates a significant collaboration between institutions within India. The institute also has notable collaborations with the Rajiv Gandhi Institute of

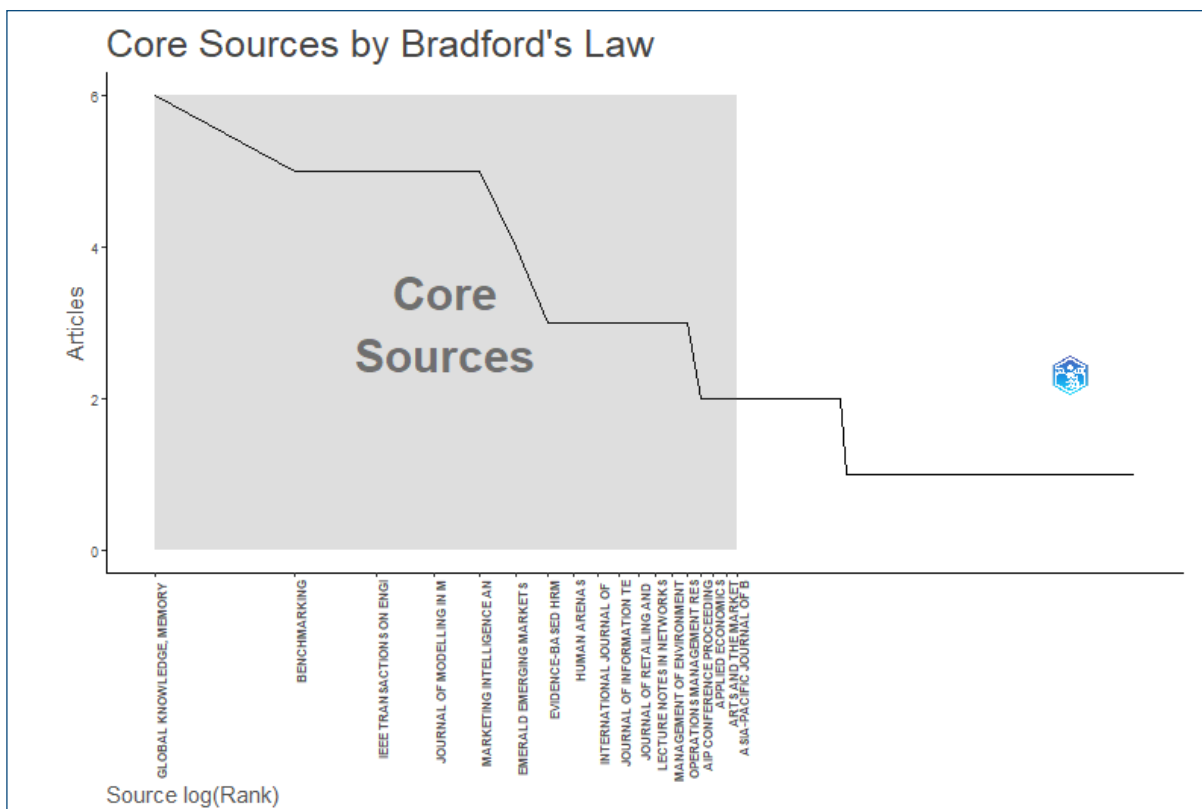


Fig. 1: Core Sources for Scholarly Publications

Petroleum Technology, Jais Amethi and Banaras Hindu University, emphasising its solid national collaboration network. Additionally, IIM Sirmaur has established partnerships with international institutions such as the University of New Brunswick in Canada and Université de Caen Normandie in France. These collaborations

contribute 7.09% of the total research output, highlighting the institute's global academic outreach and efforts to promote international research exchanges. This list of the top ten collaboration affiliations shows IIM Sirmaur's commitment to a comprehensive research approach incorporating national and international perspectives.

Table 4: Key Collaborative Affiliations of IIM Sirmaur

Sr. No.	Affiliation	TP	%	Country
1	O.P. Jindal Global University	10	5.38	India
2	Rajiv Gandhi Institute of Petroleum Technology, Jais Amethi	7	3.76	India
3	Banaras Hindu University	6	3.23	India
4	Chitkara University, Punjab	6	3.23	India
5	Birla Institute of Technology and Science, Pilani	5	2.69	India
6	Pondicherry University	5	2.69	India
7	University of New Brunswick	5	2.69	Canada
8	Birla Institute of Management Technology, Greater Noida	5	2.69	India
9	Université du Québec à Chicoutimi	4	2.15	Canada
10	Université de Caen Normandie	4	2.15	France

Global Research Partnerships

Table 5 and Fig. 2 showcase the international partnerships of IIM Sirmaur, indicating its global research impact. The data highlights a significant collaboration with Canada, which accounts for 4.84% of total collaborations and leads with 9 publications. The United States and Saudi Arabia follow Canada, indicating a diverse geographical spread of research connections. This distribution reflects IIM Sirmaur's engagement with research communities from North America, the Middle East and Europe, underlining its international outlook. The presence of countries from various continents further demonstrates the institution's commitment to fostering global academic networks and pursuing collaborative opportunities beyond its national boundaries.

Table 5: Top 10 Collaborating Countries

Sr. No.	Country	TP	%
1	Canada	9	4.84
2	United States	6	3.23
3	Saudi Arabia	5	2.69
4	United Kingdom	5	2.69
5	France	4	2.15
6	Italy	4	2.15
7	Brazil	3	1.61
8	Taiwan	3	1.61
9	Turkey	3	1.61
10	Australia	2	1.08



Fig. 2: Global Research Collaboration Map of IIM Sirmaur

Subject-Wise Distribution of Publications

Table 6 showcases the various research interests of the IIM Sirmaur. The institute strongly focuses on business, management and accounting, with 57.53% of its research publications in this field. This indicates that the institute excels in management studies and has a solid foundation.

In addition, the institute also focuses on interdisciplinary studies, with social sciences and engineering contributing to 20.97% and 17.74% of research publications, respectively, highlighting the application of management principles in different fields.

The institute also explores other areas such as economics, econometrics, finance, computer science, decision

sciences, environmental science and mathematics. This demonstrates a wide range of interests, from theoretical to applied sciences. These areas also make up a significant portion of the overall research output. Furthermore, including energy and psychology in the top 10 research areas indicate the institute’s willingness to expand into new research territories. This approach enriches the institute’s academic and practical contributions across a spectrum of disciplines.

Table 6: Publications Across Top 10 Research Areas

Sr. No.	Subject Area	TP	%
1	Business, Management and Accounting	107	57.53
2	Social Sciences	39	20.97
3	Engineering	33	17.74
4	Economics, Econometrics and Finance	27	14.52
5	Computer Science	25	13.44
6	Decision Sciences	21	11.29
7	Environmental Science	20	10.75
8	Mathematics	10	5.38

Sr. No.	Subject Area	TP	%
9	Energy	7	3.76
10	Psychology	7	3.76

Most Frequently Mentioned Keyword Analysis

The word cloud (Fig. 3) generated by Biblioshiny highlights the most frequent author keywords in the publications from the Indian Institute of Management Sirmaur. Dominant terms such as “COVID-19”, “India” and “sustainability” emphasises the institute’s focus on pressing global challenges, national context and sustainable practices. The significance of “gender”, “culture” and “tourism” reflects a commitment to exploring social dimensions and industries critical to global and local contexts. Keywords like “innovation”, “supply chain” and “sustainable development” reveal a keen interest in transformative business practices and societal betterment. This visualisation effectively encapsulates the institute’s research priorities, showcasing its dedication to addressing contemporary and future-orientated topics across various domains.



Fig. 3: Word Cloud of Top 50 Author Keywords

Most Frequently Used Keyword in Titles

The Tree Map (Fig. 4) generated by Biblioshiny depicts the most commonly used keywords in the titles of publications from the IIM Sirmaur. The leading terms, like “India”, “brand” and “COVID-19” highlight the institute’s focus

areas, reflecting national relevance and contemporary global crises. The emphasis on “study”, “impact” and “analysis” suggests a strong inclination towards research that evaluates effects and explores various phenomena. The frequent mention of “supply” and “chain” alongside “sustainable” and “management” indicates a keen interest

in supply chain management and sustainability issues. Keywords such as “tourism”, “online” and “industry” indicate research interests in specific sectors, while “social”, “engagement” and “performance” suggest an

exploration of societal and organisational dimensions. This tree map clearly visualises the thematic priorities within the institute’s scholarly output, demonstrating a broad yet focused research agenda.



Fig. 4: Tree Map of Top 50 Title Keywords

Finding and Conclusion

The bibliometric analysis of IIM Sirmaur’s research outputs from 2019 to 2023 highlights significant growth and strategic focus areas. During this period, the institute witnessed a substantial increase in research publications, growing from 4 to 85, with an impressive compound annual growth rate of 112.99%. This growth indicates the institution’s research capabilities and substantial scholarly contributions. IIM Sirmaur predominantly focuses on articles, constituting 83.87% of its publications, and prefers conventional and esteemed research dissemination channels. The institute also preferred book chapters and conference papers as type of documents for their scientific communications or academic publishing. The selection of high-impact journals, such as “Global Knowledge Memory and Communication” and “IEEE Transactions on Engineering Management” emphasises the institute’s dedication to producing quality and influential research. IIM Sirmaur also has strategic connections with specific academic circles, as evidenced by its inclination towards UK-based publishers.

The institute has strong collaborative networks that span across borders, promoting global research dialogues. Its collaboration narrative features strong ties with national institutes like O.P. Jindal Global University and international institutions, including the University of New Brunswick and Université de Caen Normandie. Noteworthy collaborations with countries, such as Canada, the USA and Saudi Arabia, highlight IIM Sirmaur’s global engagement and its role within the international academic community. IIM Sirmaur’s research interests are vast, spanning business, management and accounting, alongside interdisciplinary ventures into social sciences and engineering. This scope signifies a wide-ranging scholarly focus with practical and theoretical implications. Keywords like “COVID-19”, “sustainability” and “innovation” point to the institute’s engagement with contemporary global issues, sustainable practices and forward-thinking business models. This reflects a dedication to impactful, relevant research. In conclusion, the Indian Institute of Management Sirmaur has made significant progress in research productivity during 2019 to 2023, which has been marked by strategic publication choices, solid domestic and international

collaborations and a commitment to addressing global challenges. The institute's emphasis on high-quality publications and broad, interdisciplinary research areas highlights its position as a proactive, influential player in the academic field.

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