Evolution of Consumer Behaviour in India – A Bibliometric Analysis

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***Abstract*—This study presents a comprehensive bibliometric analysis of consumer behaviour research in India over the span of 2001 to 2024 based on the data extracted from Web of Science (WoS) database. The analysis employs R and Biblioshiny tools on 1834 articles to examine publication trends, authorship patterns, institutional contributions, thematic structures and citation networks. The findings revel a consistent upward trend in scholarly output, with the Indian institute of Management and Indian Institute of Technology emerging as leading contributors. Prominent authors such as Kumar S., Paul J., and Dhir A. have established significant citation impact and extensive collaborative networks. The thematic and factorial analyses demonstrate the evolution of research focus from traditional consumer behaviour determinants toward contemporary issues such as sustainable consumption, green marketing and digital consumer engagement. The study concludes by emphasizing the need for future research that integrates data-driven analytics, technological adoption, and cross-cultural perspectives to advance the theoretical and practical understanding of consumer behaviour in the Indian context.**

***Index Terms*—Consumer Behaviour, Bibliometric Analysis, India, Web of Science, Research Trends**

I. INTRODUCTION

Originating in the late 1950s, the field of economics expanded from applied discipline to theories and methodologies by embracing the theories from anthropology, sociology, statistics and psychology. The need to understand the thoughts, desires and the experiences of consumers and the influence of these attributes on the behaviour of consumers has increased (Malter et al., 2020). The practice of studying consumer behaviour has its origin from the 1960s, having its roots from different scientific paradigms. There are several definitions for the field of consumer behaviour (Galalae & Voicu, 2013).

Consumer behaviour is defined as "the acquisition, consumption, and disposition of goods, services, time and ideas by decision making units"(Jacoby, 1976). Meanwhile, Engel et.al (James F. Engel, Roger D. Blackwell, 1998) defines consumer behaviour as "the acts of individuals directly involved in obtaining and using economic goods and services, including the decision process that precede and determine these acts".

In today's world the understanding of consumer purchase behaviour became a significant factor for effective business operations (Cai, 2023). Several internal and external factors such as societal standards, marketing slogans, one's own belief, and product attributes have an impact on consumer behaviour which business can utilize to formulate efficient marketing strategies to satisfy consumer needs and expectations which leads to increase in sales and profit (Cai, 2023).

Consequently, to understand the trends of consumer behaviour, we have utilized bibliometric analysis in this study. The bibliometric method of analyzing the written publications and documents was introduced by Alan Pritchard in 1969. Bibliometric analysis can be considered an integral measure for evaluating research methodology by providing quantitative analysis of written publications and documents (Dulla et al., 2021). It can be defined as the study of measurement for publication trend and citation analysis for written communication. It is the subset for a similar study called webometrics. Webometrics is the study of

identifying several literatures within a specific subject area (Dulla et al., 2021).

The evolution of knowledge that happens over time and its novelty forms the foundation for scientific research leading to significant contributions to the field. The use of various tools in bibliometric methods will be helpful for researchers to identify relevant and current problems for research thus helping them provide valuable insights into the current situation (José de Oliveira et al., 2019).

As marketing specialists say, consumer behaviour is a continuous process and this will not end with the moment money gets exchanged for the goods and services. They must know the needs of consumers and the purchasing habits and should be able to influence consumers (Skrudupaitė et al., 2006).

The study of behaviour of consumers is one of the important branches in the field of marketing to understand the trends and preferences of consumers. The consumer behaviour study will be useful for tailoring the development and marketing of the product or service to match the needs of consumers. India has become a global attraction to many of the companies due to its increasing population and the increasing consumer potential (Kumar Purbey, 2020). Comparatively we have significant studies in the Scopus database and Scopus and web of science database but fewer in web of science database alone. So, this study addresses mainly the articles from the Web of Science database and conducted bibliometric analysis. In addition, most of the studies were based on niche products, while this study considered consumer behaviour in general.

The significant purpose of this study of evolution of consumer behaviour and the trends is to enable the academicians and the industry professionals to enable them to better utilize the consumer potential of India.

II. LITERATURE REVIEW

The previous studies laid the foundation like the study of Ganesh in 2023 (Dash, 2023) has measured the panic-buying behaviour of the consumer during the Covid-19 pandemic. This study focuses only on the articles on Web of science database which is related to Covid-19 and panic buying behaviour. He limited the study to the articles published after 2020 as there is no relevant literature before that. He studied 79 articles for his analysis and performed co-operation and keyword analysis (Dash, 2023).

Similarly, Akankshya (Rout, 2022) studied in 2022 about consumer empowerment during the period of 2010 – 2023 from using Scopus database exclusively. He limited his search results to the subject areas social science, Business, Management, Accounting including Finance and Economics. The major findings listed were the annual trend of publications, relevant sources and citation analysis.

More recently, the study about consumer emotions and purchase preferences is increasing as evident from the study of Konrad in 2024 (Biercewicz et al., 2024) where he studied the emotional influence of consumers in virtual environment using bibliometric methods from Web of Science, Scopus and Google Scholar database. He has used VOS viewer to generate Network visualization and distribution of the number of publications.

To study about the trends there are several articles such as the study of ecofriendly consumer behaviour research by Rekha in 2023 (Rekha et al., 2023) which studies the trends in the publication of eco friendly consumer behaviour from 2384 articles belonging to Scopus database only. The study considers the Authors, Journals and the keyword analysis for identifying trends and lists the frequently used theories in the article.

Similarly, Alvaro (Cremonezi & Souto, 2023)has mentioned the electronic word of marketing and consumer decision-making in 2023 which considers only Scopus database for the analysis and identified a significant evolution on the quantity of publications. The study also focused on the highest cited author and their affiliation using VOS viewer.

Additionally, the thematic evolution map can be used to analyse the trend which can be observed from the study of Foued in 2024 (Said et al., 2024). The study titled “Shopping Tourism: A Bibliometric review from 1971 to 2021” presented the temporal evolution of tourism and shopping using the thematic evolution map. The authors and country network collaborations will be helpful in exploring the productivity of the collaborative networks.

Based on the theoretical observations, the objectives of the study have been determined to study the evolution of the consumer behaviour in India. The objectives will be helpful to conduct our analysis and to determine the tests to carry out the study.

III. OBJECTIVES OF THE STUDY

The main objectives of this study are listed below:

1. To understand the trends of the consumer behaviour in India
2. To know the most influential authors and their citation network
3. To understand the future scope of the consumer behaviour in India.

IV. RESEARCH METHODOLOGY

The articles for performing bibliometric analysis were extracted from the Web of Science database. The keyword used for the search criteria is "Consumer Behaviour". We have obtained 65086 documents from the database. We have filtered the documents with language "English" to have only documents of English language which then resulted 64222 documents excluding 864 documents.

Furthermore, the documents are filtered by the Country "India" which resulted in 2428 documents eliminating 61794 documents. Additionally, we have filtered by the document type "Article" to exclude review articles, conference papers and book chapters. These criteria resulted in 2125 articles eliminating 303 documents. Finally, the date range of publication is restricted between 2001 and 2024, which provided us with 1834 articles excluding 291 articles. Thus, we obtained 1834 articles for our analysis.

Following this, files has been exported the search results into BibTeX files with full record and cited references. Then we run biblioshiny using the R language and we have imported the BibTex file into biblioshiny for running the bibliometric analysis. Biblioshiny enables visualization and provides us with several insights into the research data such as the overview of the articles, document and sources metrics and author metrics. Furthermore, we have utilized the following insights to understand the trends of consumer behavior. The various insights including the Annual Scientific production, most relevant authors and sources are obtained to understand the relevant authors in the field.

To predict the future scope of consumer behaviour, we have utilized thematic map and factorial analysis using keywords. Citation and co-citation analysis has been carried out to identify the influential analysis in the field. Additionally, co-occurrence network provides us with the relationship between the key terms occurring in the research.

Figure 1 explains the selection criteria we have used for filtering the articles to be used in bibliometric analysis.

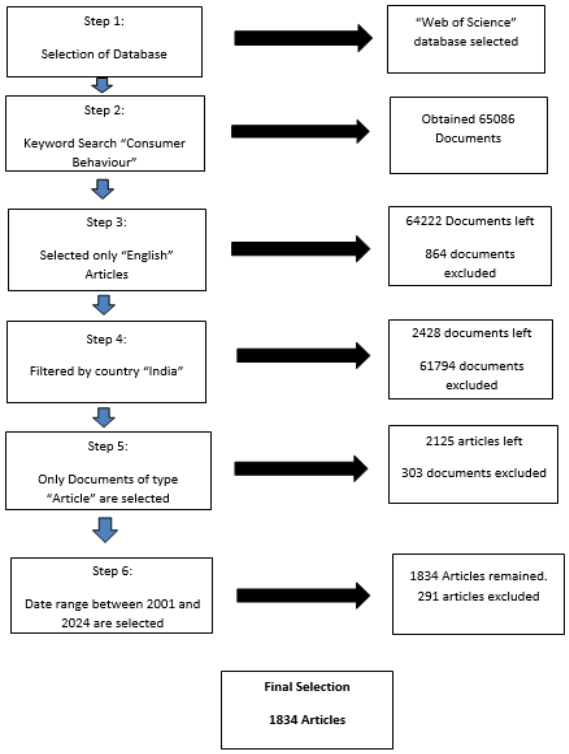


Figure 1: Selection Procedure for the Articles

V. RESULTS AND DISCUSSION

Table 1: Most Relevant Sources

Rank	Country/ Region	TP	Rank	Institution	TP
1	INDIA	1289	1	INDIAN INSTITUTE OF MANAGEMENT	152
2	USA	114	2	INDIAN INSTITUTE OF TECHNOLOGY	103
3	UNITED KINGDOM	71	3	UNIVERSITY OF DELHI	65
4	CHINA	53	4	NATIONAL INSTITUTE OF TECHNOLOGY	58
5	MALAYSIA	31	5	SWANSEA UNIVERSITY	56

6	AUSTRALIA	29	6	UNIVERSITY AGDER	52
7	SAUDI ARABIA	27	7	INDIAN INSTITUTE OF TECHNOLOGY DELHI	49
8	NORWAY	25	8	JAIPURIA INSTITUTE OF MANAGEMENT	49
9	FRANCE	20	9	UNIVERSITY OF PUERTO RICO	47
10	CANADA	11	10	INSTITUTE OF MANAGEMENT TECHNOLOGY	45

Interpretation: The most productive corresponding author countries and Institution has been ranked based on the number of publications based on bibliometric analysis in Table 1.

According to the analysis, the most productive corresponding author countries are India with the total publication of 1289 articles and the most productive institution in Indian Institute of Management with 152 publications. The least productive country among the top 10 is Canada with 11 publications and Institute of Management Technology with 45 publications.

Table 2: Most Relevant Authors and Journals

Rank	Author	TP	Rank	Journal	TP
1	KUMAR S	45	1	Journal of retailing and consumer services	132
2	KUMAR A	39	2	Journal of business research	56
3	GUPTA S	36	3	Marketing intelligence & planning	55
4	PAUL J	33	4	Journal of cleaner production	52
5	DHIR A	32	5	British food journal	50
6	SHARMA A	29	6	International journal of consumer studies	41
7	SINGH S	28	7	International journal of retail & distribution management	40
8	KAUR P	25	8	Sustainability	40
9	DWIVEDI YK	24	9	Journal of consumer behaviour	38
10	CHAKRABORTY D	22	10	Asia pacific journal of marketing and logistics	37

Interpretation: The author with highest number of publications is Kumar S with 45 publications and the journals with high publication in the topic of consumer behaviour is Journal of Retailing and Consumer services which has 132 publications in the last 25 years.

The top 10 authors and journals based on the number of publications in this field can be observed in Table 2.

Based on the above two tables we can observe that India has a significant number of research publications in the field of consumer behaviour which indicates that it is one of the growing fields of study and IIMs have significantly contributed to the field in the past 25 years.

Additionally, it can also be observed that the Journals are publishing in this topic continuously indicating consumer behaviour is one of the relevant fields of study even after more than sixty years of its origin and as mentioned by marketing specialists it is a continuous process (Skrudupaitė et al., 2006).

The Top 10 most influential authors based on the total number of citations and the Top 10 most influential journal based on the number of citations are presented in Table 3.

Table 3: Total Citations among authors and Journal

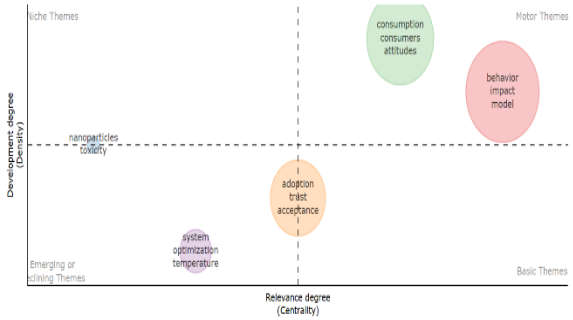
Rank	Author	TC	Rank	Journal	TC
1	DHIR A	401	1	Journal of retailing and consumer services	10888
2	PAUL J	257	2	Journal of cleaner production	6652
3	KAUR P	256	3	Journal of business research	4906
4	TALWAR S	242	4	International journal of retail & distribution management	1295
5	YADAV R	227	5	Marketing intelligence & planning	1591
6	KUMAR S	133	6	International journal of bank marketing	1436

7	PATHAK GS	133	7	International journal of consumer studies	2094
8	MOTOTAKA M	116	8	Asia pacific journal of marketing and logistics	895
9	SAKASHITA	116	9	British food journal	901
10	SADIQ M	105	10	Journal of consumer behaviour	865

Interpretation: Based on the analysis, the most influential author is Dhir A with 401 citations, and the most influential journal is the Journal of retailing and consumer services with 10888 citations in the span of last 25 years. The least influential author in the top 10 is Sadiq M with 105 citations, and the Journal of Consumer behaviour is the least influential journal in the top 10 with 865 citations.

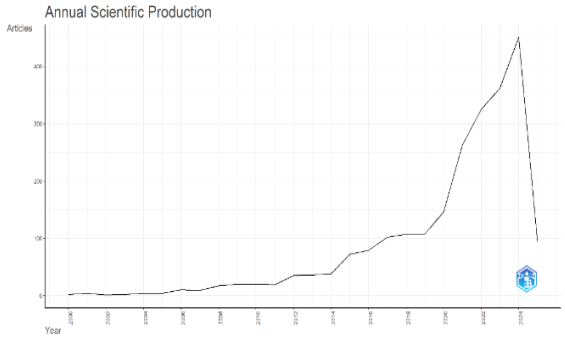
To analyse the trends of consumer behaviour we can utilize the thematic map (Rekha et al., 2023). Figure 2 shows the thematic map which indicates the trend of consumer behaviour in India based on the bibliometric analysis. Thematic map can be classified into four quadrants based on centrality and density (Cobo et al., 2015). They are basic themes, Motor themes, Niche Themes and Emerging themes. Centrality measures mean the degree of interaction that a keyword network establishes with other keyword networks. Density means how closely they are related to each other (Rekha et al., 2023).

Figure 2: Thematic Map



Interpretation: According to figure 2, the motor themes are consumption, consumers and attitudes which forms one segment and behavior, impact and model which is another segment in motor themes. Motor themes are the ones which are well developed and influential. The emerging or declining themes are system, optimization and temperature while two segments intersect two themes. Adoption, trust and acceptance intersect emerging and basic themes which means it is in middle of underdeveloped and emerging themes.

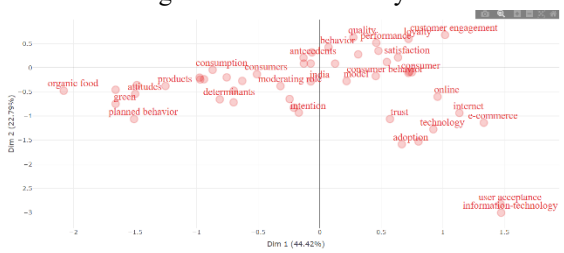
Figure 3: Annual Scientific Production



Interpretation: The above figures show the annual scientific production trend for consumer behaviour. From this figure, we can observe that the topic of consumer behaviour has been increasing over the years with the maximum publication of 370 articles in 2024 and minimum publication of 1 article in 2002 and 2023.

The year 2007 had a slight decrease but the growth has been significant since 2016 and has been increasing steadily till now.

Figure 4: Factorial Analysis



Interpretation: The factorial analysis of the keywords displays the conceptual structure of our research about consumer behaviour. The analysis uses the keywords to identify co-occurring relationships and reduces them to two dimensions to plot them to show the clusters and thematic proximity.

From the plot, we can understand that the research focused on sustainable consumption, green consumerism and theory of planned behaviour.

The cluster 1 domain studies on the left side indicate sustainable and planned behaviour research. Cluster 2 in the center denotes the core consumer behaviour and

determinants. This represents the foundational or main stream research like purchase intention, brand perception and determinants of consumer decisions. Cluster 3 represents technology and Online Context representing the digital transformation stream such as technology adoption, online purchasing behaviour and satisfaction in digital platforms. Cluster 4 indicates Customer experience and Engagement which indicates a transition from purchase intention to relationship-building and retention studies in consumer research. Finally, cluster 5 indicates information technology and User Acceptance representing a specialized domain where consumer research intersects information systems and technology adoption.

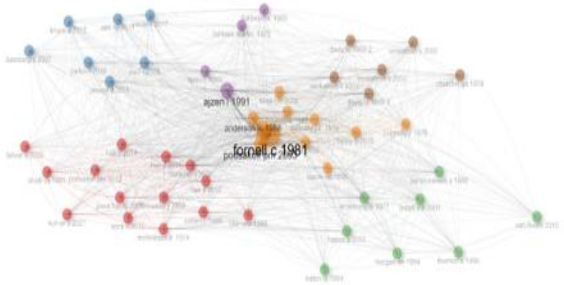


Figure 5: Co-citation Network

Interpretation: The co-citation network visualizes the intellectual structure of consumer behaviour research by mapping how frequently key authors are cited together within the same documents. Each node represents an author, while the connecting lines indicate co-citation links – the strength of conceptual association based on shared citations.

In this map, the size of each node signifies the frequency of citations received by that author, while the proximity and density of connections reglect thematic closeness among their works. The clusters are distinguished by colour.

Central Authors:

- The largest and most central nodes – Fornell C (1981) and Ajzen I (1991) and Anderson J (1988).
- Fornell is foundational in structural equation modelling and customer satisfaction measurement.
- Ajzen represents the Theory of Planned Behaviour, a dominant framework in predicting consumer intentions.
- Anderson connnects statistical modelling and satisfaction research, bridging methodological and applied consumer behaviour studies.

Cluster Interpretation:

The blue cluster represents the methodological and measurement foundation, focusing on PLS-SEM, model validation and statistical rigor in consumer research.

The orange and purple clusters represent the behavioural and technology adoption domain, integrating the Theory of Planned Behaviour (TPB), TAM models.

The leftmost clusters reflect emerging and contemporary directions, emphasizing digital consumer behaviour, social media marketing and sustainability – focused consumer studies.

Figure 6: Wordmap



Based on figure 6, the most frequent word is behaviour with 456 occurences in the documents in our search. 2022 has the most occurrences of this world. The second most popular word is impact with 246 occurences. Planned behaviour has the least number of occurrences in the top 10 with 137 in total.

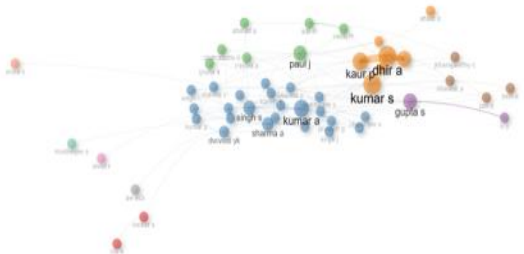


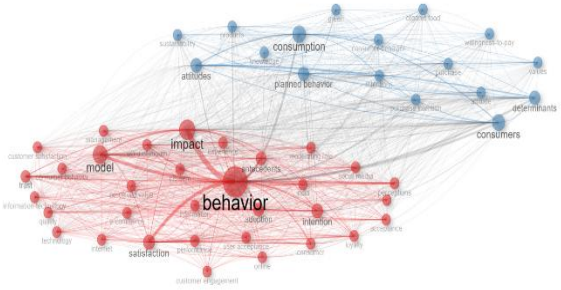
Figure 7: Collaboration Network

Interpretation: The collaboration network depicts the social structure of author partnerships in consumer behaviour research, illustrating how scholars are

interconnected through co-authored publications. Each node represents an author, while the connecting lines (edges) indicate collaborative relationships. The size of each node denotes the author's research productivity (number of publications), and the colour clusters indicate distinct collaboration groups.

In the present analysis, Kumar S, Paul J, and Dhir A emerge as the most influential and central authors in the network. Their large node size and dense interlinkages signify high levels of research output and extensive collaboration across multiple researchers. The purple cluster represents a cohesive research group focusing on digital consumer behaviour, social media usage, sustainability – oriented studies. Similarly, the blue cluster, centered around kumar S and Paul J, forms a broad and well-connected collaboration structure encompassing consumer psychology, technology adoption and online purchase behaviour.

Figure 8: Co-occurrence Network



Interpretation: The co-occurrence network shows the relationships among key terms appearing together in consumer behaviour research articles. Figure 8 shows two main clusters of co-occurring key words, indicating thematic groupings with consumer behaviour research.

The red cluster shows the keywords of behaviour impact, model intention, satisfaction, social media and technology which represents the behavioural and technological dimension of consumer research. The terms impact and model indicate that researchers in this stream often develop or test theoretical models like the Theory of Planned Behaviour (TPB), Technology Acceptance Model (TAM), Stimulus-Organism-Response (S-O-R) frameworks to explain consumer behaviour outcomes like loyalty or purchase intention. The core keywords of red cluster are behavior, impact, model, intention, satisfaction, social media, technology.

The blue cluster focuses on consumption patterns, attitudinal factors and determinants of purchase decisions, particularly in sustainable or food related contexts. The presence of planned behaviour links these groups conceptually to behavioural intention theories but with a stronger focus on pre-purchase determinants like values, attitudes or environmental concerns. The core keywords of this cluster are consumption, attitudes, consumers, determinants, planned behaviour, sustainability, willingness to pay, food.

The linking keywords like planned behavior and consumer behavior serve as bridges between the two clusters. This connection implies that consumption determinants (attitudes, sustainability, willingness to pay) influence behavioral outcomes (intention, satisfaction, loyalty).

VI. CONCLUSION

A. Figures and Tables

The bibliometric exploration of consumer behaviour research in India from 2001 to 2024 reveals a remarkable trajectory of academic growth and intellectual diversification. The steady rise in annual scientific production, culminating in over 450 publications in 2024, reflects the expanding recognition of consumer behaviour as a dynamic and essential field within marketing and management. Indian researchers, particularly those affiliated with premier institutions such as the Indian Institutes of Management and the Indian institute of Technology, have significantly contributed to shaping this field through high-impact publications and collaborative networks with global scholars.

The co-citation and co-occurrence analyses underscore the intellectual foundation of this domain, built upon the seminal frameworks of Ajzen's Theory of Planned Behaviour and Fornell's work on structural equation modelling and satisfaction theory. The conceptual structure derived from factorial and thematic mapping highlights four dominant research streams – sustainable consumption, core behavioural determinants, technological transformation, and organizational outcomes – each contributing uniquely to the evolution of consumer studies

Furthermore, the collaboration network indicates a progressive consolidation of scholarly communities, with prolific authors such as Kumar S, Paul J, and Dhir A. Driving interdisciplinary research bridges behavioural theory, marketing analytics, and digital ecosystems. This interconnectivity suggests that consumer behaviour research in India has matured into a cohesive and globally relevant knowledge domain, increasingly aligned with international research frontiers.

In conclusion, the study provides comprehensive insights into the intellectual, thematic, and institutional evolution of consumer behaviour research in India. It demonstrates the country's growing academic influence, the diversification of research methodologies, and the responsiveness of scholars to emerging socio-technological changes. Future research should deepen its focus on consumer analytical, cross-cultural behavioural patterns, and the integration of artificial intelligence and big data into consumer insight models. Such directions will further enhance India's contribution to the global discourse on consumer behaviour.

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