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Bibliometrics Study of Retail and Consumer Behavior Articles (1971-2022)

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A Bibliometrics Study of Retail and Consumer Behavior Articles (1971-2022)

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Abstract: This paper conducts a bibliometric analysis focusing on retail and consumer behavior studies. The research addresses key research questions exploring the landscape and evolution of academic contributions in this domain. Leveraging the Scopus database, the research analyzes a significant corpus of 2,111 documents from 1971 to 2022. The findings reveal a distinct surge in scholarly output, reflecting an escalated interest in understanding consumer behavior, particularly in digital environments, influenced by factors such as sustainability and ethical concerns. The research also identifies leading countries and institutions in document production, highlighting the dominance of the United States, the United Kingdom, India, China, and other leading institutions. The analysis also identifies prolific authors, prevalent research themes, and major publications, emphasizing the evolving demand of retail strategies and consumer behavior research.

Keywords: retail; consumer behavior; bibliometrics; marketing trends; research community

Introduction

The relationship between retailing and consumer behavior has long been a central academic research focus. Mishra, Singh, and Koles (2021) examine how omnichannel retailing strategies significantly impact consumer decision-making. Similarly, Lin et al. (2019) explored gender-specific variations in online purchasing decisions, highlighting how retail environments are tailored to influence disparate consumer segments. These studies affirm that retail strategies and environments are intricately designed to shape consumer choices. Retail environments and strategies influence consumer decision-making processes. Collectively, these studies underscore the complex interplay between retailing and consumer behavior. The importance of understanding how businesses offer products and services, coupled with the motivations and actions of the consumers who buy them, cannot be overstated.

Li, et al., (2020) explained that retailing involves the process through which goods and services are sold to consumers. From traditional brick-and-mortar stores to the sprawling digital marketplaces of today, the retailing landscape has undergone tremendous transformation over the decades (Johannson 2020). How products are presented, the environments in which they are sold, and the strategies employed to entice potential buyers have all evolved in response to changing consumer demands and technological advancements (Zhao et al., 2021). On the other side of this dynamic is consumer behavior. It seeks to unravel the complex web of reasons that dictate consumers' purchasing decisions. Whether influenced by personal preferences, societal trends, or economic factors, understanding the 'why' behind consumer choices is pivotal for retailers aiming to tailor their offerings effectively.

The ongoing evolution in retail environments and consumer decision-making processes presents an ever-shifting challenge for scholars and practitioners alike. Historically, the 21st century witnessed significant shifts in retail paradigms, moving from local shop-centric models to large-scale retail chains and e-commerce platforms. Similarly, consumer behavior saw transformations driven by globalization, technological innovations, and changing societal values (Ramazanov et al.,2021). In the context of retailing and consumer behavior, such an analysis aids in discerning the trajectory of scholarly thought and influential researchers (Purcărea et al., 2020). By analyzing trends, identifying

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significant contributors, and highlighting core thematic areas, bibliometric studies can provide invaluable insights into the state of research in any given field (El Akrami et al., 2023). This paper aims to fill this gap by answering the following research questions (RQs):

RQ1: What is the publication trend and distribution of document types over time in the field?
RQ2: What countries and institutions yield the most and most publications in consumer behavior and retailing?
RQ3: Who are the most prolific authors in the field, and what is their impact?
RQ4: What are the field's popular research themes or topics, and how have they evolved over time?
RQ5: What are the most frequently cited papers in the field, and what do they contribute to the literature?

Historical Overview of Retail and Consumer Behaviour

The history of retailing can be traced back to ancient civilizations, where marketplaces were established as trade centers. Over the centuries, retail has evolved in response to societal and technological changes (Wang, 2021). In the 21st century, the rise of department stores, supermarkets, and shopping malls transformed the retail landscape, offering consumers unprecedented variety and convenience. The latter part of the century saw the inception of e-commerce, facilitated by the Internet, fundamentally reshaping consumer purchasing habits.

Consumer behavior, the study of why and how consumers make purchase decisions, has been a subject of interest for centuries. Early studies were predominantly psychological, focusing on individual decision-making processes (Joseph & Gaba, 2020). However, with the advent of marketing as a discipline in the 21st century, the scope expanded to incorporate sociological, cultural, and economic perspectives (Vargo et al., 2023). Fundamental theories emerged, like Maslow's hierarchy of needs, which postulates a tiered approach to understanding consumer motivations. The advent of e-commerce platforms in the early 21st century marked a pivotal shift, catalyzing further research into online consumer behavior. E-commerce modified purchasing methods and revolutionized customer relationship management, analytics, and targeted marketing (Kumar et al., 2019). Firms began to recognize the importance of personalization and convenience, employing algorithms to customize consumer experience and thus influence purchasing decisions (Hosanagar et al., 2013). These technological advancements led to an unprecedented disruption in traditional retail, compelling them to integrate online strategies to maintain competitive advantage. As Wang et al. (2016) highlighted, the seamlessness and accessibility provided by platforms like Amazon and Alibaba have had a profound impact on the consumer purchase cycle, with a ripple effect on shopping habits, loyalty, and even impulse buying.

The study of consumer behavior has evolved substantially over the years, reflecting changes in society, technology, and market dynamics. While earlier models were rooted in psychology, the field has incorporated sociological, cultural, and economic perspectives, subsequently adapting to the digital transformation that has swept the retail landscape. The burgeoning e-commerce sector has significantly altered traditional consumer behavior patterns, inviting continuous scholarly exploration.

Technological and Ethical Paradigms in Modern Retail

Influence of Technology on Consumer Behavior

Technology has reshaped retail structures and consumer behavior. The ubiquity of smartphones and the rise of social media have provided consumers with many information sources (Sharmin et al., 2020). Reviews, unboxing videos, and influencer endorsements on platforms like YouTube and Instagram are pivotal in shaping purchasing decisions. One foundational study by Duhigg (2012) in the "New York Times" elaborated on how data analytics could predict consumer behavior to an alarming extent, underscoring the capabilities of technology in personalizing retail strategies. However, the ethical implications of such personalization, notably concerning privacy and data security, have become increasingly scrutinized (Martin, 2018). In this light, ethical considerations

have been recognized as an integral part of retail technology adoption, with concerns related to data misuse and consent featuring prominently in scholarly dialogues (Zuboff, 2019).

The role of social media in consumer decision-making processes is increasingly evident. Platforms like Instagram and YouTube are replete with influencer marketing, reviews, and unboxing videos that mold consumer perceptions and decisions (Smith et al., 2020). While this opens new vistas for marketing strategies, it also triggers ethical debates around disclosure and the authenticity of online endorsements (Wojdynski & Evans, 2016). The technological change in retail provides an unprecedented possibility for understanding and influencing consumer behavior. Studies have also demonstrated that concurrently pose ethical dilemmas that have yet to be comprehensively addressed in academic literature. Technological advancements significantly drive the evolution of consumer behavior in modern retail (Sima et al., 2020). These technological shifts provide a fertile ground for academic inquiry, particularly regarding their ethical ramifications. The continual changes in consumer behavior necessitate an ongoing scholarly investigation, enriching the existing bibliometric studies within the marketing field.

Bricks-and-Clicks: Integrating Physical and Digital Retail

The bricks-and-clicks model, which merges online and physical retail, has become increasingly prominent as a strategy for traditional retailers. Companies like Walmart and Target have effectively adopted this model, offering 'click-and-collect' services that allow consumers to purchase items online and pick them up in-store (Mason & Jarvis, 2023). This strategy combines the convenience of online shopping with the immediacy and tactile satisfaction of physical retail, creating a hybrid consumer experience. The significance of this model lies in its ability to cater to evolving consumer preferences influenced by technological advancements. The click-and-collect service capitalizes on digital capabilities for personalized advertising and efficient inventory management, thus enhancing consumer satisfaction and loyalty (Verhoef et al., 2015).

Additionally, retail globalization necessitates a localized approach to accommodate different cultural preferences in shopping habits. Studies indicate that consumer behavior varies significantly across cultures, making retailers need to tailor their strategies to specific markets (De Mooij, 2018). The bricks-and-clicks model is agile enough to adapt to these culturally specific preferences, enabling retailers to provide localized, personalized services globally. The bricks-and-clicks model represents an effective strategy for traditional retailers to compete in the digital age, providing a seamless, hybrid shopping experience that accommodates varying technological and cultural consumer preferences. Thus, this model addresses current consumer needs and offers a scalable framework for the future, making it a subject of interest for further academic investigation in marketing.

Sustainability and Ethical Consumerism

The 21st century has seen a surge in consumer awareness about environmental and ethical issues. The demand for sustainable products, fair trade, and ethical sourcing has risen. Retailers, in response, have incorporated sustainable practices not only as a moral imperative but also as a strategy to appeal to the environmentally-conscious consumer (Pinto, 2020). In addition, technology continues to evolve at an unprecedented rate, and the retail sector is poised for further transformation. While nascent, concepts like virtual reality shopping, drone deliveries, and cashier-less stores hint at the future trajectory of retail (Bauer et al. 1215). Moreover, these technological shifts introduce ethical complexities. For example, drone deliveries, while reducing carbon footprints, raise concerns about surveillance and data privacy. Consumer behavior scholars find the VOS Viewer an invaluable resource for dissecting intricate questions that extend beyond simple purchasing trends. By visualizing complex bibliometric data, they can delve into deeper issues, such as ethical considerations and societal implications of consumer choices. Recent studies by Basu et al. (2023) suggest that VOS Viewer enables a nuanced exploration of consumer psychology and decision-making processes, thereby opening up avenues for research that seeks to understand the evolving landscapes of consumer interests and ethical consumption.

Materials and Methods

Bibliometric analysis, a quantitative research method, is essential for systematically examining vast scientific literature collections (Donthu et al., 2021). Its primary function is to explore patterns, relationships, and trends within a specified research area. Such an analysis is valuable for comprehending the landscape and evolution of a particular domain, in this case, the interplay between retailing and consumer behavior. Scopus is one of the world's leading databases for finding academic papers. The study chose it because it has many articles on retailing and consumer behavior. It allowed us to search for many papers simultaneously and was crucial for ensuring our research covered as much ground as possible (Adams, 2015).

The study primarily sourced its data from the Scopus database, which is recognized for its comprehensive collection of peer-reviewed research literature. Scopus provides a balanced blend of journals, conference proceedings, and patents, making it a fitting choice for a study intending to capture the multifaceted nature of retailing and consumer behavior research over the decades (Burnham, 2006).

The following earch criteria were employed to ensure the relevancy of the documents:

TITLE-ABS-KEY (retail OR retailing AND "consumer behavior" OR "consumption behavior") AND PUBYEAR > 1961 AND PUBYEAR < 2023 AND (LIMIT-TO (SUBJAREA , "BUSI") OR LIMIT-TO (SUBJAREA , "SOCI") OR LIMIT-TO (SUBJAREA , "DECI") OR LIMIT-TO (SUBJAREA , "PSYC")) AND (LIMIT-TO (LANGUAGE , "English"))

In accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, this study has undertaken a rigorous data collection and filtration process to explore the relations between consumer behavior and retail within a defined academic context. The research embarked on a comprehensive search commencing from the earliest publications on the subject, culminating in the year 2022, judiciously excluding documents from 2023 and certain papers from 2024 since the dataset from these years is not complete for usage. The initial search span yielded a corpus of documents indicative of the prolific scholarly activity within consumer behavior and retail domains.

The search was meticulously narrowed to four specific subject areas to ensure the pertinence of the literature to the study's focus areas. These areas were selected based on their direct implications and contributions to the overarching themes of retail and consumer behavior. Consequently, documents were excluded from the categories of Business, Management, and Accounting (2,737 documents), Social Science (768 documents), Decision Science (239 documents), and Psychology (163 documents). This strategic limitation was pivotal in refining the search results suitable to the study's investigative drive. The exclusion of potentially related domains such as Economics, Econometrics, and Finance (467 documents), Computer Science (280 documents), Environmental Science (258 documents), and Engineering (191 documents), among others, was a conscious decision to anchor the study within the most significant parameters without diluting its focus. The prioritization of relevance over breadth ensured the research aligned with the most influential factors shaping consumer behavior in retail contexts.
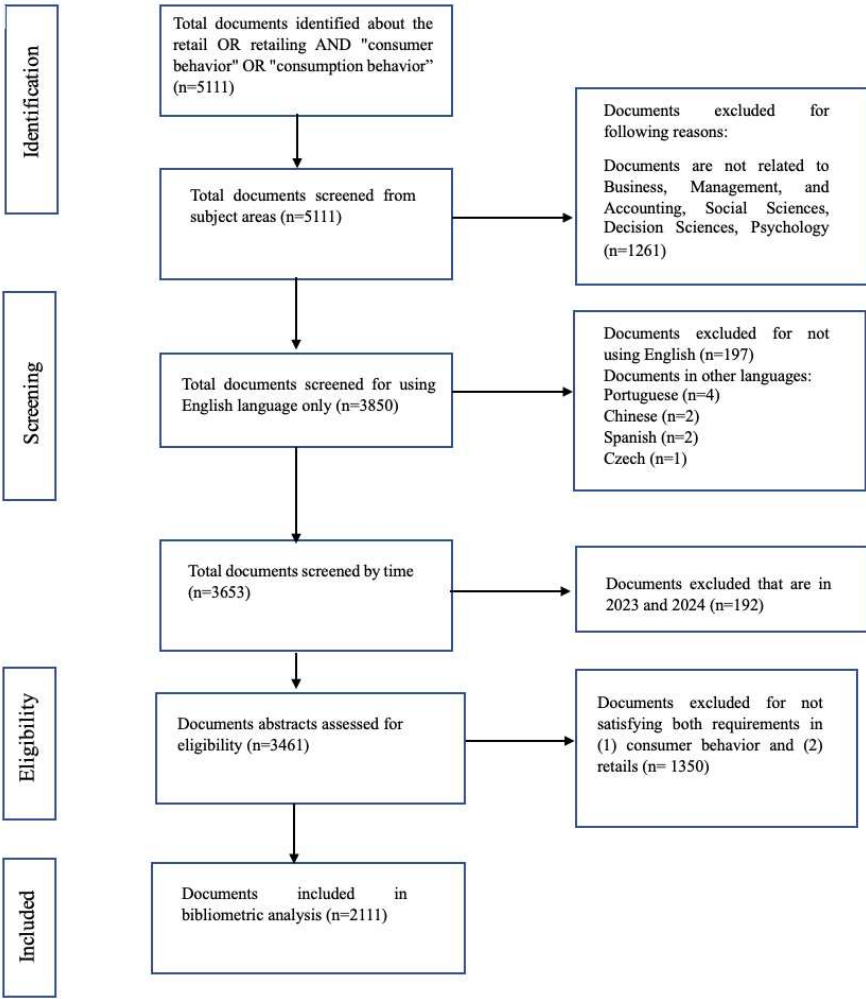
Figure 1. Application of PRISMA.

The PRISMA guidelines necessitate criteria and systematic processes, contributing to the credibility and reproducibility of research findings (Moher et al., 2009). The resulting dataset from this scrupulous process offers a robust foundation for subsequent analysis (Kahrass, et al., 2021). The findings drawn from these carefully curated sources are expected to provide significant insights into consumer behavior and retail dynamics, potentially illuminating pathways for future scholarly exploration. Furthermore, the language criterion was established to consider only documents published in English, recognizing it as the main language of the global academic community, thereby maximizing the accessibility and applicability of the findings. The initial yield from the Scopus database comprised 5,111 documents. After language filtration, the corpus remains 3,461 English language papers. The PRISMA framework guided the exclusion of papers that satisfied one of the criteria central to this research: consumer behavior or retail. Employing PRISMA enhances the precision of data selection and ensures transparency in the research process. It allows for delineating the research's scope with an explicit, replicable method. Such a meticulous approach is echoed in the literature, where PRISMA's structured process is lauded for its capacity to filter and substantiate the quality of systematic reviews (Page et al., 2021). In this vein, the present study's adherence to PRISMA's systematic criteria underscores its scholarly rigor. This refinement was instrumental in distilling the dataset to a core of 2,111 documents, embodying a precise match for the research question at hand.

Results

Longitudinal growth and types of document

Figure 2 presents document distributions from 1971 to 2022. There are four types of documents: book chapter (labeled in green), conference paper (labeled in yellow), review (labeled in blue), and journal article (labeled in green). *"The marketing mix and buyer behaviour in the television rental market"* by Livesay F. is the first article published in 1971 in the European Journal of Marketing. This study examines the application of marketing principles in the TV rental market. It was conducted by surveying over 200 customers about the pros and cons of renting a TV, thereby providing suggestions to improve rental TV market marketing efficiency and maintain customer loyalty.

Journal articles dominate the timeline, highlighting a strong focus on primary research. Publications were limited from 1971 to the mid-1990s, suggesting the field's nascent stage. However, a surge in articles appeared by the late 1990s, with conference papers and reviews following suit post-2000. This increase in conference papers implies heightened scholarly collaboration. While reviews and book chapters are less frequent, consistent growth is noted post-2010, indicating their role in synthesizing insights. The post-2015 period displays a balanced mix of all document types, signifying the field's evolution and diverse academic contributions.
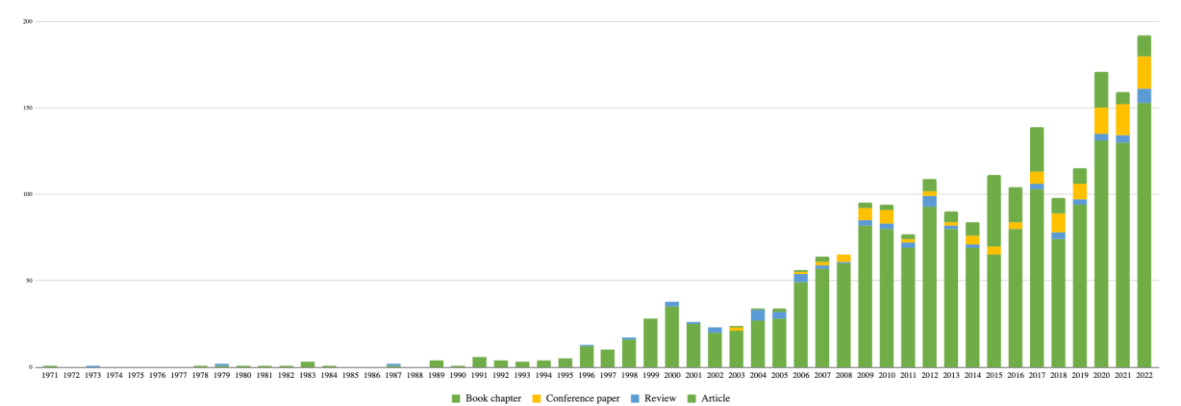

Figure 2. Number of types of documents per year (1971 - 2022).

Countries

Figure 3 represents the academic engagement of countries within the domain of consumer behavior and retail, emphasizing temporal trends in publication. In this representation of academic engagement among countries, each node represents a country involved in contributing to publications. The node's magnitude reflects the number of published works. Larger nodes indicate countries with a higher volume of publications. The United States, with an average publication year of 2012, alongside the United Kingdom (2011), Canada (2011), and Australia (2014), emerge as significant contributors, indicating their longstanding influence in the field. These influences with countries such as New Zealand, Belgium, and the Netherlands demonstrate a cluster of advanced research activity with publications averaging between 2010 and 2013. The colors of nodes are to determine the average publication years of each country, spanning from dark purple (before 2012) to yellow (2022). Countries represented by yellow nodes, such as Bangladesh, Yemen, and Morocco, display active involvement, highlighting the expansion of academic contributions to this domain. Two recent massive players in publishing about consumer behavior and retail are India and China, illustrating an average publication year of 2017-2018, along with green nodes, for example, Germany and Japan, averaging 2015, showcasing a spectrum of growing engagement. This cartographic representation shows the historical depth of contributions and indicates the evolving landscape of international research collaboration.

Of 190 documents that the United States collaborated with other countries, the United States with China had the leading number of documents, 24. The United States also has 19 with South Korea, 15 with Australia, 12 with India, 11 with Germany, and 10 with the United Kingdom. Of the 24 articles the United States wrote about China, most were from Purdue University and Zhejiang University, with an average publication year of 2022. 19 articles were co-written by the United States and Korea, with Seoul National University being the leading contributor, with an average publication year of 2020. The United States and Australia cooperated in producing 15 articles. Second place as the country with the most collaboration, the United Kingdom has 11 documents with France, 8 with Canada, and 7 with Germany. IESEG School of Management and Reading University contributed 3 out of 10 articles written by the United Kingdom and France. Of the 8 articles written by the authors from the United Kingdom and Canada, most were from the University of Waterloo and Manchester Metropolitan University. Interestingly, Austria collaborated on 16 documents overseas, and 7 of them were with Germany.
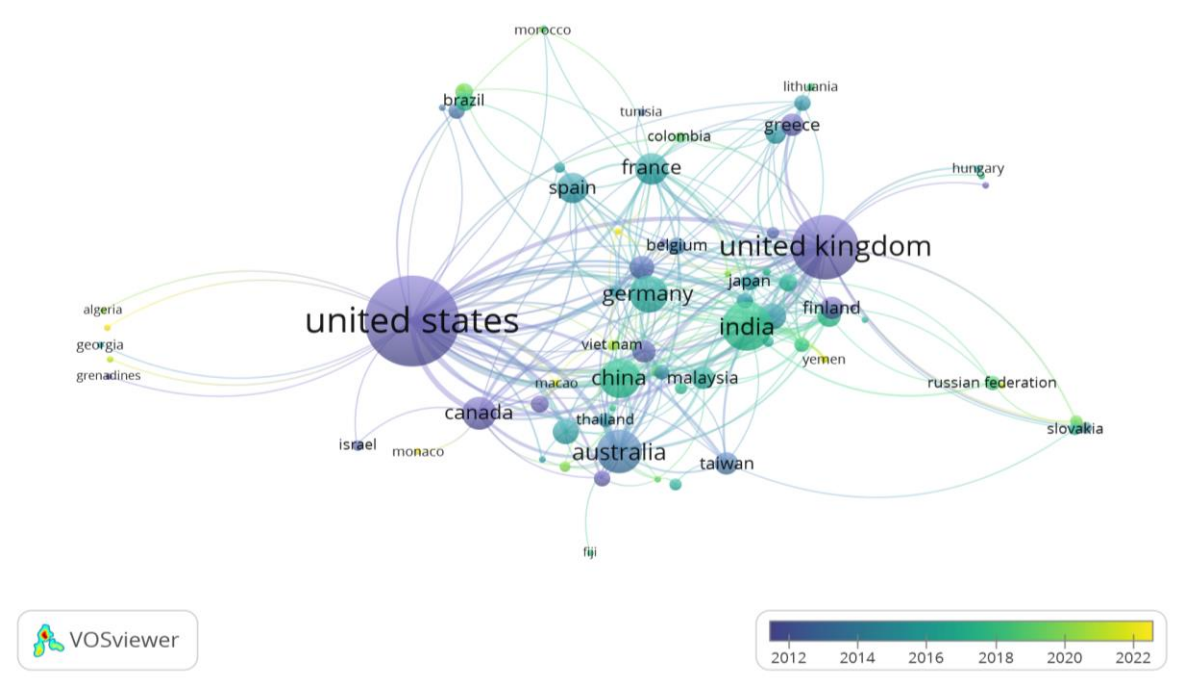

Figure 3. 81 countries publishing in the field of consumer behavior and retailing.

Based on the number of documents and citations, the tables present a scholarly output and its impact in a given academic field, presumably related to consumer behavior and retail. Table 1 indicates that the United States leads in document production and citation impact, followed by the United Kingdom and India. This suggests a concentration of academic activity in these countries. However, in terms of citations, countries like the Netherlands and Finland outperform their ranking in document numbers, pointing to a higher impact per document.

Table 1. 20 countries with the most documents and citations.

No	*Country*	*Documents*	*No*	*Country*	*Citations*
1	The United States	591	1	The United States	26,482
2	The United Kingdom	299	2	The United Kingdom	11,738
3	India	178	3	Australia	5,783
4	Australia	141	4	India	4,485
5	China	119	5	Netherlands	4,463
6	Germany	103	6	Finland	3,671
7	Canada	80	7	Canada	3,297
8	France	72	8	Germany	3,037

9	Spain	68	9	China	2,842
10	Italy	53	10	Italy	2,409
11	South Korea	45	11	Spain	2,386
12	Netherlands	44	12	South Korea	2,143
13	Taiwan	40	13	France	2,105
14	Finland	39	14	Belgium	1,763
15	South Africa	38	15	Taiwan	1,557
16	New Zealand	37	16	New Zealand	1,508
17	Malaysia	37	17	Greece	1,463
18	Greece	36	18	South Africa	1,330
19	Sweden	31	19	Sweden	1,097
20	Brazil	27	20	Norway	1,005

Institutions

The VOSviewer map describes the scholarly landscape from 1971 to 2022, highlighting 245 institutions with varying degrees of contribution to a specific academic domain. Institutions such as the University of South Carolina, California State University, and the University of Pennsylvania in the United States, alongside Monash University in Australia, are prominent, with peak contributions around 2012. Meanwhile, Manchester Metropolitan University in the United Kingdom, the University of Manchester, United Kingdom, and the University of Wisconsin, United States, anchor the network with substantial input averaging back to 2009. Early contributors, including Purdue University, United States, Brunel University, United Kingdom, the University of Birmingham, and Florida State University, United States, trace their crucial input to an average year of 2005. The vital participation is evident from yellow nodes such as North-West University, South Africa, and the University of Waterloo, Canada, marking global research engagement's expansive and inclusive nature within this academic terrain. This visual analysis underscores the dynamic interplay between long-established and emerging contributors, reflecting a robust and collaborative international academic community.
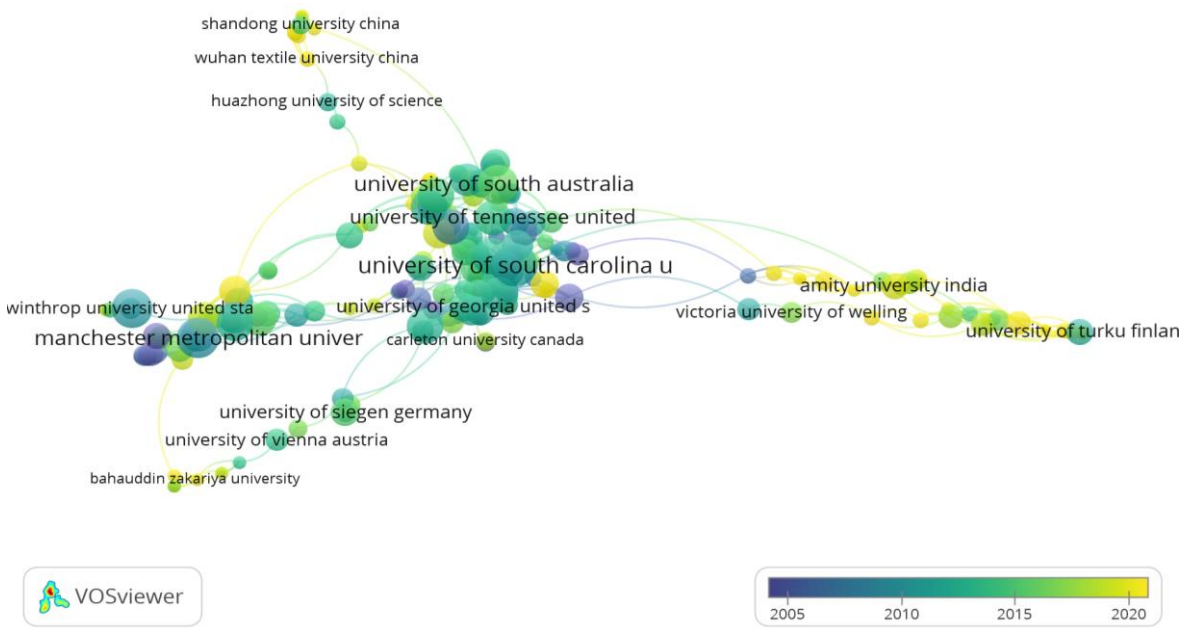

Figure 4. Overview of 245 institutions contributed articles.

Table 2. Institutions with the most documents and citations.

No	Institutions	Documents	No	Institutions	Citations
1	University of South Carolina, United States	22	1	University of Groningen, Netherlands	1,659
2	Manchester Metropolitan University, United Kingdom	19	2	Maastricht University, Netherlands	1,379
3	Athens University of Economics And Business, Greece	18	3	Northwestern University, United States	1,330
4	University of South Australia, Australia	18	4	Middlesex University, United Kingdom	1,236
5	University of North Texas, United States	16	5	Babson College, United States	1,195
6	University of Wisconsin, United States	15	6	University of Alberta, Canada	1,188
7	University of Pennsylvania, United States	15	7	University of Memphis, United States	1,159
8	Griffith University, Australia	15	8	Athens University of Economics And Business, Greece	1,106
9	University of Stirling, United Kingdom	15	9	Texas A&M University, United States	1,079
10	Monash University, Australia	15	10	North-West University, South Africa	1,073
11	University of Tennessee, United States	15	11	University of North Texas, United States	946
12	California State University, United States	15	12	University of Wisconsin, United States	928
13	Middlesex University, United Kingdom	13	13	University of Connecticut, United States	889
14	University of Manchester, United Kingdom	13	14	Creighton University, United States	859
15	Curtin University, Australia	13	15	Duke University, United States	851
16	The University of Manchester, United Kingdom	13	16	University of Pennsylvania, United States	847
17	Cardiff University, United Kingdom	12	17	Lappeenranta University of Technology, Finland	841
18	The Hong Kong Polytechnic University, Hong Kong	12	18	Griffith University, Australia	839
19	Northwestern University, United States	11	19	University of South Carolina, United States	804
20	Michigan State University, United States	11	20	New York University, United States	711

Table 2 provides the distribution of scholarly output across various institutions. In the top 20 institutions with the most documents, there are 8 institutions from the United States, 6 from the United Kingdom, 4 from Australia, 1 from Hong Kong, and 1 from Greece. Regarding citations, the United States has an overwhelming number of institutions, 12 out of 20. The University of Groningen in the Netherlands leads in citations, suggesting high-impact research. Contrastingly, the University

of Memphis in the United States has fewer documents but a notably high citation count, pointing to evidence-based work in the field. Also, it shows that the University of South Carolina leads in the number of documents. This implies focusing on quantity over impact or the institution's work gaining recognition. One key observation is the dominance of U.S. institutions in both tables, emphasizing the country's role as a scholarly contributor in this field. Also noteworthy is the appearance of institutions from diverse geographical regions, indicating the global nature of the research.

Community

From 1971 to 2022, the authorship landscape within the described academic field is illustrated through a network of 117 authors, segmented into clusters by collaboration patterns and research focus. The visualization identifies key contributors such as Pantano E., with a prolific output of 16 documents, averaging a publication year 2017, indicating a central role in recent academic discourse. Notable contemporaries include Dennis C., with 15 documents anchored around 2012, and Kim J., who presents a slightly recent influence with 17 documents averaging 2014. The latest wave of research, predominantly from 2020 to 2022, is represented by yellow nodes, where authors Yang X. and Wang S., each with 2-3 publications, explain the cutting edge of current scholarly output. This thematic cartography highlights individual scholarly contributions and the dynamic interconnections between researchers, reflecting a vibrant and evolving academic collaboration network.
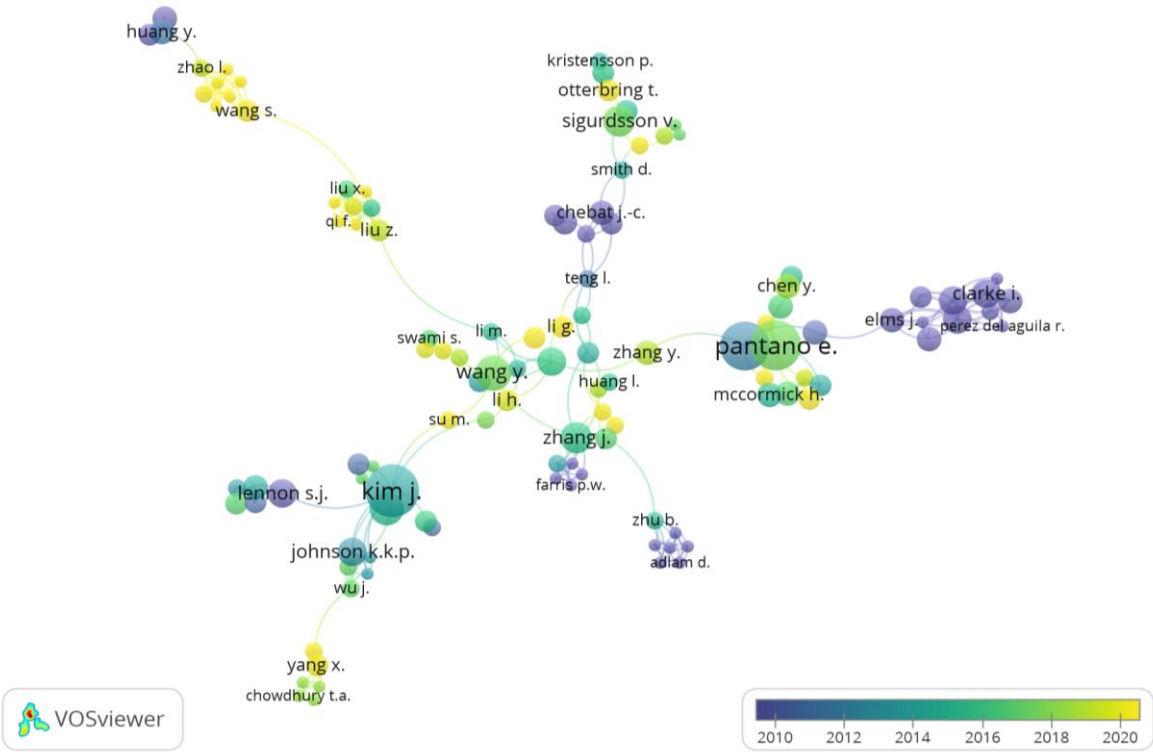

Figure 5. 117 authors with the highest impact.

Table 3 illustrates the prolific nature of authors based on document count. Kim J. emerges at the peak with 17 documents, showcasing high academic activity. However, a different metric of success is evident. Grewal d., with just five documents, has amassed 1806 citations, positioning him as the most influential author. This dichotomy underscores that a large volume of work, as demonstrated by Kim J., does not necessarily equate to the most impactful research. Pantano e.

Table 3. Authors with the most documents.

No	Author	Affiliation, Country	Documents	First Publication
1	Kim, Jihyun	Iowa State University, United States	17	A consumer shopping channel extension model: Attitude shift toward the online store
2	Pantano, Eleonora	University of Bristol, United Kingdom	16	Entertainment in retailing: The influences of advanced technologies
3	Dennis, Charles	Middlesex University, United Kingdom	15	From bricks to clicks: Understanding the e-consumer
4	Rajagopal Rajagopal	EGADE Business School, Mexico	13	Buying decisions towards organic products: An analysis of customer value and brand drivers
5	Carpenter, Jason M.	University of South Carolina, United States	12	Consumer demographics, store attributes, and retail format choice in the US grocery market
6	Foxall, Gordon R.	Cardiff University, United Kingdom	9	Consumers' perceptions of micro-retail location: Wayfinding and cognitive mapping in planned and organic shopping environments
7	Schramm-Klein, Hanna	University of Siegen, Germany	9	Moderating role of involvement in building a retail brand
8	Vrechopoulos, Adam P.	Athens University of Economics and Business, Greece	8	Internet shopping adoption by Greek consumers
9	Moore, Marguerite	North Carolina State University, United States	8	Consumer demographics, store attributes, and retail format choice in the US grocery market
10	Bruwer, Johan	The University of Adelaide, Australia	8	Region of origin as choice factor: wine knowledge and wine tourism involvement influence
11	Wang, Yunzeng	University of California, Riverside, United States	8	Channel strategies for durable goods: coexistence of selling and leasing to individual and corporate consumers
12	Park, Jungkun	Purdue University, United States	7	E-customers' third party complaining and complimenting behavior
13	Swoboda, Bernhard	University of Trier, Germany	7	Moderating role of involvement in building a retail brand

14	Dhir, Amandeep	University of Agder, Norway	6	Why do people use food delivery apps (FDA)? A uses and gratification theory perspective
15	Phau, Ian	Curtin University, Australia	6	Factors influencing the types of products and services purchased over the Internet
16	Zhang, Jie	University of Maryland, United States	6	Crafting integrated multichannel retailing strategies
17	Sigurdsson, Valdimar	Reykjavik University, Iceland	6	The behavioural economics of neutral and upward sloping demand curves in retailing
18	Nichols, Bridget Satinover	Northern Kentucky University, United States	6	'That item is mine!' Consumer competitiveness and need for control: A study of internet auction bidding
19	Grewal, Dhruv	Babson College, United States	5	Challenges and opportunities in multichannel customer management
20	Verhoef, Peter C.	University of Groningen, Netherlands	5	Challenges and opportunities in multichannel customer management

Keywords

The visual map of current research in consumer behavior reveals distinct thematic clusters defined by key terms and average publication years. Consumer behavior (average publication year 2012) and retailing (2011) are central to the discourse, indicating foundational focus areas. The chart shows emerging topics, represented by yellow nodes, encompassing 'COVID-19' and 'consumer preferences,' reflecting adaptive research post-2020 and preference for individual choice patterns. The proliferation of 'digitalization' and related constructs such as 'augmented reality' and 'omnichannel' underscores the field's engagement with the digital landscape's evolution. Notably, 'qualitative' research has gained prominence with the highest publication in 2020, demonstrating a methodological shift. Dark purple nodes, dating from 2008 to 2011, include 'customer loyalty' and 'internet,' alongside 'financial services' and 'virtual banking,' mapping the historical trajectory of consumer behavior studies. This division also covers demographic and sector-specific insights, from 'older consumers' to 'supermarkets,' and integrates ethical considerations with terms like 'ethics,' reflecting the breadth and evolution of the field.
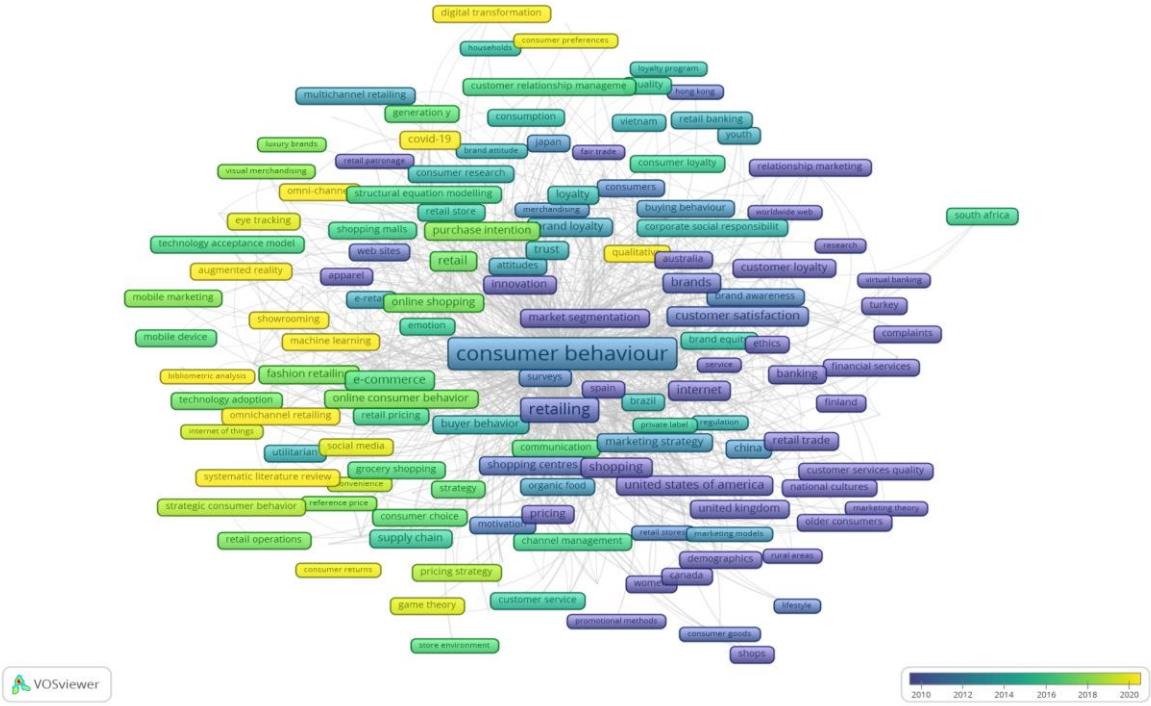
Figure 6. 300 most popular keywords.

Major publications

Table 4 indicates that the top 20 most cited documents revolve around understanding and analyzing various aspects of consumer behavior in different contexts. They explore factors influencing online shopping, such as decision-making aids, technology acceptance, store image, and website quality. Moreover, several studies focus on specific niches, such as organic food consumption, the impact of the COVID-19 pandemic on purchasing behavior, and the relationship between corporate social responsibility and consumer trust.

Table 4. Compilation of the top 20 most cited publications.

Title	Author	Year	Journal	Citations
Consumer decision making in online shopping environments: The effects of interactive decision aids	Häubl G., Trifts V.	2000	Marketing Science	1,074
Consumer reactions to electronic shopping on the World Wide Web	Jarvenpaa, S.L.; Toad, P.A.	1996	International Journal of Electronic Commerce	936
Enticing online consumers: An extended technology acceptance perspective	Chen L.-D., Gillenson M.L., Sherrell D.L.	2002	Information and Management	859
Challenges and opportunities in multichannel customer management	Neslin S.A., Grewal D., Leghorn R., Shankar V., Teerling M.L., Thomas J.S., Verhoef P.C.	2006	Journal of Service Research	708
On the relationship between store image, store satisfaction and store loyalty	Bloemer J., de Ruyter K.	1998	European Journal of Marketing	652

Wine online: Search costs affect competition on price, quality, and distribution	Lynch Jr. J.G., Ariely D.	2000	Marketing Science	642
Multichannel customer management: Understanding the research-shopper phenomenon	Verhoef P.C., Neslin S.A., Vroomen B.	2007	International Journal of Research in Marketing	627
Customer Experience Management in Retailing: Understanding the Buying Process	Puccinelli N.M., Goodstein R.C., Grewal D., Price R., Raghubir P., Stewart D.	2009	Journal of Retailing	592
Subjective norms, attitudes and intentions of Finnish consumers in buying organic food	Tarkiainen A., Sundqvist S.	2005	British Food Journal	584
Identifying key factors affecting consumer purchase behavior in an online shopping context	Park C.-H., Kim Y.-G.	2003	International Journal of Retail & Distribution Management	539
Consumption self-control by rationing purchase quantities of virtue and vice	Wertenbroch K.	1998	Marketing Science	535
Consumer behavior and purchase intention for organic food: A review and research agenda	Rana J., Paul J.	2017	Journal of Retailing and Consumer Services	523
Searching for experience on the web: An empirical examination of consumer behavior for search and experience goods	Huang P., Lurie N.H., Mitra S.	2009	Journal of Marketing	500
Convergence and divergence in consumer behavior: Implications for international retailing	De Mooij M., Hofstede G.	2002	Journal of Retailing	440
Unusual purchasing behavior during the early stages of the COVID-19 pandemic: The stimulus-organism-response approach	Laato S., Islam A.K.M.N., Farooq A., Dhir A.	2020	Journal of Retailing and Consumer Services	434
Competing during a pandemic? Retailers' ups and downs during the COVID-19 outbreak	Pantano E., Pizzi G., Scarpi D., Dennis C.	2020	Journal of Business Research	381
The missing link between corporate social responsibility and consumer trust: The case of fair trade products	Castaldo S., Perrini F., Misani N., Tencati A.	2009	Journal of Business Ethics	369
Effects of reputation and website quality on online consumers' emotion,	Kim J., Lennon S.J.	2013	Journal of Research in	351

perceived risk and purchase intention: Based on the stimulus-organism-response model			Interactive Marketing	
Buying or browsing: An exploration of shopping orientations and online purchase intention	Brown M., Pope N., Voges K.	2003	European Journal of Marketing	346
Decomposing the value of department store shopping into utilitarian, hedonic and social dimensions: Evidence from Finland	Rintamäki T., Kanto A., Kuusela H., Spence M.T.	2006	International Journal of Retail & Distribution Management	331

Discussion

Our findings show a significant change in research topics from 1971 to 2022. During the late 20th and early 21st centuries, the focus of research articles mainly revolved around psychological theories in consumer behavior and retail, such as "An exploratory investigation of theoretical expectancy in a retail channel: Content and concurrent validity" in 1991 by LaFleur and Arnold or"Deshopping - the art of illicit consumption" in 1999 by Schmidt et al. Academic articles focusing on exploring and establishing theories in consumer purchasing choices flourished during this period. From 2008 to 2011, keywords found primarily in academic articles included "customer loyalty," "internet," and related services. Therefore, the content of the studies also emphasizes services arising due to the explosion of the Internet, such as "Store atmosphere in web retailing" by Manganari et al. in 2009, "Purchasing vacation packages through shop-at-home television programs: An analysis of consumers' consumption motives" by Walsh and Gwinner in 2009; and "Competition online and the preference ordering of offers" by Kirkbride and Soopramanien in 2010. It points to a shift in the field of consumer behavior research that is placing more emphasis on the role of the Internet and related services. It also reflects a shift in retail market interest driven by the development of technology, which is from traditional shopping experiences to virtual experiences.

From 2020 onwards, the social situation has become the main factor in research articles. "Unusual purchasing behavior during the early stages of the COVID-19 pandemic: The stimulus-organism-response approach" by Laato et al., and "Competing during a pandemic? Retailers' ups and downs during the COVID-19 outbreak" by Pantano et al., newly published in 2020 but in the top 20 most cited documents. That shows the strong influence of social issues on the academic research field in general and the retailing field in particular. In addition, 2020 also marks the birth of many models, such as "hybrid," "multi-channel," and "personalization." Therefore, the discourses are designed to explore how customers interact with these models rather than exploring customers' purchasing motivations as before. As Joseph and Gaba discussed, early studies mainly explored psychological perspectives, focusing on the individual's decision-making process (Joseph and Gaba, 2020). However, new trends in the 21st century promote research topics in retail and consumer behavior, expanding the scope of interaction with various technological and socio-economic factors.

RQ1: What is the publication trend and distribution of document types over time in the field?

There has been a discernible escalation in publication volume in the field, with significant growth observed from 1971 to 2022. The period post-2013, in particular, has witnessed a marked upsurge in scholarly output, indicating a burgeoning interest in consumer behavior and retail studies. The rapid growth of online shopping during this period has increased interest among researchers in understanding consumer behavior in digital environments (Verhoef et al., 2015). This shift has spurred numerous studies exploring various aspects of online consumer behavior, from e-commerce decision-making to website quality's impact on purchase intention. There are also clear changes in consumer preferences, such as an increased focus on sustainability, organic products, and corporate

social responsibility (Boccia et al., 2019; Taghikhah et al., 2021) It has spurred research on how these factors influence consumer decision-making. The field is dominated by research articles, which are followed by reviews and conference papers. This distribution suggests a field rich in empirical research with periodic syntheses of existing knowledge and discussions disseminated through academic conferences.

RQ2: What countries and institutions yield the most and most publications in consumer behavior and retailing?

Based on the number of documents and citations obtained from 2010 to 2023, the United States has strongly contributed a series of academic documents in the field of consumer behavior and retail, with a number of up to 591 documents on 2,111 documents, receiving 26,482 citations. The United States leads in document production and citation impact, followed by the United Kingdom and India. This result correlates with Mahadevan and Joshi's previous research. Their bibliometric analysis also indicates that research in this field is currently dominated by the United States and the United Kingdom (Mahadevan & Joshi, 2022). At the same time, institutions are considered important factors in contributing to this huge number of publications. The data highlighted that the University of South Carolina from the United States, Manchester Metropolitan University from the United Kingdom, and Athens University of Economics and Business from Greece have the highest contributions, with the number of documents being 22, 19, and 18, respectively. Meanwhile, the University of South Carolina leads in the number of publications, which shows the dominance of United States institutions, emphasizing its role as a key academic contributor in these fields. Similarly, Manchester Metropolitan University also proves the United Kingdom's considerable research and publishing capacity.

RQ3: Who are the most prolific authors in the field, and what is their impact?

According to data about the authorship of 117 authors, classified into clusters by collaboration patterns and research focus, identifying the main contributors: Kim J., with 17 articles and 1098 citations, is considered the largest contributor, followed by Pantano E., with a rich number of documents including 16 documents and 1456 citations; Dennis C., with 15 documents and 946 citations. It demonstrates their high scholarly activity. However, considering the number of citations, they are not the most influential authors. Grewal d., with five documents, accumulated 1806 citations, making him the most influential author. One of the reasons for this influence is his collaboration with influential researchers and his exploration of future retail trends in the digital world. Also, this dichotomy suggests that the number of studies does not necessarily equate to the ability to produce the most powerful impact.

RQ4: What are the field's popular research themes or topics, and how have they evolved over time?

Consumer behavior in the technological age has undergone many major changes. The popularity of smartphones and social media has reshaped how consumers purchase. Platforms like Instagram and YouTube have created marketing strategies through reviews and unboxing videos, optimizing these strategies by analyzing personal data. Still, the ethical issues involved also raise concerns about privacy and data security. However, it cannot be denied that the continuous changes in consumer behavior due to the influence of technology is a potential topic and deserves more in-depth academic exploration. "Bricks-and-Clicks" is a prominent new business model of the 21st century that combines online and offline shopping (Ofek, 2011). It allows consumers to buy online but pick up in-store, providing a blended shopping experience that suits diverse consumer preferences. Omnichannel has become one of the leading trends in the retail industry due to its ability to integrate technological applications and personalization (Wollenburg, 2018). It is a new but essential topic that academic researchers should pay closer attention to. Ultimately, the sustainability and ethical consumerism trend is driven by increased consumer awareness of environmental and ethical issues (Gillani & Kutaula, 2018). Therefore, retailers need to commit to sustainable practices not only as a moral imperative but also as a key strategy to meet the needs of environmentally conscious consumers. This topic also opens research paths to promote green marketing, ethical consumption, and sustainable supply chain management.

RQ5: *What are the most frequently cited papers in the field, and what do they contribute to the literature?*

"Consumer decision making in online shopping environments: The effects of interactive decision aids" by Gerald Häubl and Valerie Trifts in 2000, published by Marketing Science with 1074 citations, is the most frequently cited paper in the field of retail and consumer behavior. It explores how consumers make purchasing decisions in a thriving e-commerce landscape. Specifically, the authors delve into investigating the nature of the effects that interactive decision-support tools may have on consumer decision-making in an online shopping environment. "Consumer reactions to electronic shopping on the World Wide Web" in 1996 by Sirrka L. Jarvenpaa and Peter A. Todd in the Journal of Marketing is another featured article with 946 citations revolving around understanding how consumers react to electronic shopping on the World Wide Web. It collected consumer responses through an open survey of 220 shoppers, thereby confirming that consumers perceive the advantages of online shopping, but the interface of websites does not meet their needs. It explores how web design, usability, and interactivity aspects influence consumer perception and choice. Both articles share a common focus on research on consumer behavior in the digital environment. The publication time of the two articles marks the milestone of a new trend: a strong retail transformation from brick-and-mortar stores to online stores. The articles contribute to the academic world as a means to advance knowledge about e-commerce and consumer behavior in the digital environment.

Conclusion

This study employed bibliometric analysis to explore the complex relationship between retailing and consumer behavior. It highlights the international scope of academic contributions, revealing the need for more cross-border collaborations to address existing research gaps. The historical review shows that retail strategies and consumer preferences are mutually influential, adapting over time due to societal changes and technological advancements. Technology emerges as a significant disruptor, altering retail structures and consumer decision-making. While it offers benefits like personalization, ethical concerns around data privacy are flagged as an area requiring further scholarly attention. The finding reveals that academic contributions in retailing and consumer behavior are geographically diverse, though institutions in the United States significantly influence the volume and impact of research. This global involvement necessitates a balanced focus on research quality and quantity for future studies. Various document types, including articles, reviews, and conference papers, indicate a rich and evolving academic discourse. This diversity demonstrates the field's ability to adapt, embracing modern tools like big data analytics and machine learning. Lastly, the growing emphasis on ethical considerations, propelled by the ease of data collection and analysis, marks a crucial pivot. Scholars and practitioners must now diligently navigate the ethical dimensions of their research and applications. The study also notes the rise of the 'bricks-and-clicks' model, indicating the retail sector's adaptability to changing consumer preferences by blending online and physical shopping experiences. The research is a foundational reference for future academic work, identifying emerging themes and ethical dilemmas that require ongoing investigation.

Limitation and future research

The present bibliometric analysis, while comprehensive in its scope, has limitations. Foremost among these is the absence of an in-depth exploration of the contributions of each individual author. The quantitative nature of this study inherently focuses on broader trends and patterns, which may overshadow the impact of single contributions that may have significantly influenced the field. Additionally, the investigation did not extend into the examination of the multidisciplinary implications of consumer behavior and retail, particularly in areas intersecting with technological advancements and sustainability concerns, which could have enriched the contextual understanding of the trends observed. A systematic review is proposed to complement the bibliometric findings for future research. Unlike bibliometric analyses, which quantitatively map the landscape of a research field, a systematic review would allow for a qualitative synthesis of evidence, focusing on the

robustness and validity of the research outcomes. It would enable a detailed examination of methodologies, discussions, and theoretical frameworks, facilitating an understanding of the elaborate relationships between consumer behavior and retail dynamics. Such an approach contributes to the academic discourse by providing a thorough and critical evaluation of the literature, thereby identifying gaps and providing a focused agenda for future studies in the field.

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