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Serbian Journal of Management 19 (1) (2024) 51 - 70

Serbian  
Journal  
of  
Management

## A BIBLIOMETRIC AND THEMATIC REVIEW OF GREEN MARKETING AND GREEN CONSUMER BEHAVIOR RESEARCH FROM 2000 TO 2022

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(Received 14 July 2023; accepted 29 December 2023)

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### Abstract

Overconsumption habits of consumers have led to the exhaustion of resources at the blazing rate which causes damage to the environment. Green marketing evolved as an important medium to satisfy human wants with minimum negative impact on the eco system. Thus, many researches been conducted in the area of green marketing over the last two decades. However, the discussion of its impact on consumer behavioural context is still having deficit of systematic and thorough bibliometric research. This paper aiming to consolidate the standard research on green marketing by bibliometric study of published papers and articles during last 22 years from 2000 to 2022. In addition, the results show evolving trends of keywords, productive and impactful countries, organizations or institutions, authors, research articles and journals; international collaborations and authorship patterns on green marketing and its impact on consumer behavior. During the study period, a gradual increase in the research on green marketing is observed which has surmounted after Covid 19 spread. A total of 482 articles that were published in 216 journals, books, conference proceedings, etc catalogued in renowned index namely, Scopus and WOS (Web of Science) for this period were identified and analysed using bibliometric technique. Future researches may cover other databases for more comprehensive analysis.

*Keywords:* green marketing, green consumer behavior, bibliometric review, thematic evolution

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### 1. INTRODUCTION

Urbanization and modernization of society, rising earnings, health hazard and

shifting ways of life is giving upswing to numerous challenges associated with consumption globally. World is dealing with critical environmental issues like

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DOI: 10.5937/sjm19-45515

biodiversity loss, adverse climatic changes, accelerated exhaustion of non-renewable resources and many more environmental mayhems. In order to deal with them, today people are rapidly reallocating their inclinations for organic food (Rana & Paul, 2017; Kautish et al., 2019). Consequently, few of the crucial areas of concern midst the community and the academia are natural environment and environmentalism (Ali et al., 2011; Rahbar & Wahid, 2011). All these has induced corporates to reconsider and formulate strategies to modify their conventional production and consumption practices alongside preserving environmental sustainability (Jaiswal & Kant, 2018, Jaiswal et al., 2022). To accomplish this a research advocated the focus of marketing personnel on likings & preferences of consumers (Cherrier et al., 2011) and apart from this focus should be on the need to analyse the process of taking purchase decision, so as to plan the promotion of green products (Paul et al., 2016). Thus, the concept of green marketing came into existence.

Green marketing is composed of two words viz, “green” and “marketing”. It is an eco-friendly idea of promoting and fulfil the need and wants of consumers by providing them environmentally safe and healthy products (Polonsky, 2011; Cheng, 2016). Also, Green marketing includes all activities related to marketing like, production, planning, price, process, promotion, and personnel, executed by organizations for their consumers, these activities are performed purposefully to minimize impact of company’s goods & services on the environment (Zhang & Dong, 2020). Talking of eco-friendly products, products which utilize materials harmless to environment, are recyclable and demand lesser packaging

are green products (Chen & Chai, 2010).

Covid 19 has paced the need and want of green products which resulted in many regional establishments of small companies fulfilling the demand by supplying sustainable products. Improvement in public support is observed for governments environmental sustainability initiatives post covid 19 outbreak as compared to pre covid situation (Ofori, 2021). In developing nations, Organizations and researchers adapted this spurs as green marketing practices namely; green advertising, eco-branding, eco-labelling etc, for encouraging eco-friendly lifestyle through endorsing green products (Chen et al., 2020; Jaiswal et al., 2022). In the viewpoint of Chin et al. (2018), these strategies involve promoting environmentally friendly products and practices, as well as highlighting the company's commitment to sustainability through environmental labeling, branding, and advertising which is also supported by Jaiswal et al. (2022). When applied correctly, ecolabels have the potential to serve as an impactful communication strategy, and on combining with environmental claims, can exhibit a good’s ecological characteristics to end users, as stated by Taufique et al. (2017). Thus, in order minimise and eliminate any harmful environmental effect a system for eco labelling and sustainable advertisement of products and services is put into action (Lai & Cheng, 2016). Alternatively, a gap is inferred between what consumer intend to purchase and what he actually purchases which forms a narrative that there is an intention behavior gap in their psychology of many consumers (Gupta & Ogden, 2009; Kautish et al., 2019). Few researches advocated that green advertising creates a favourable atmosphere which encourages sustainability likely to influence customers’

norms and then their belief system which in turn influence consumer purchase decision (Jahari, 2022). Some researchers also highlighted the significant preference of green brands which is a result of social institutional ambience driving millennial's likings (Roxas & Marte, 2022). As few researches it has been observed that keywords namely; "circular innovation" & "sustainable marketing" (Gupta et al., 2016; Lučić et al., 2019) are making pace and becoming popular among researchers.

This research is directed to achieve following objectives:

1) To gather and describe the characteristics of various studies on green marketing and its impact on consumer behavior,

2) To systematically arrange and structure the green marketing and green consumer behavior literature generated in last twenty-two years,

3) To analyse and interpret the structured results in order to ascertain some fruitful findings viz., prominent authors, top journals, most impactful articles along with thematic evolution of green marketing emerging areas for research.

## **2. EXPERIMENTAL (RESEARCH)**

### **2.1. Theoretical framework**

Theory of planned behavior (Ajzen, 1991) and its extension, theory of reasoned action has been intensively used by investigators & researchers globally. TPB structure claims belief to behavior relationship in consumption of green products mediated and moderated through "subjective norms", "attitude" and "perceived behavioural control"; which is extended by integrating

some other factors (Wei et al., 2017; Chin et al., 2018; Sreen et al., 2020). Scholars from developed and developing countries in order to study green buying behaviour practiced few customised models through the inclusion of cognitive measures and practices like perception towards eco-label, green brands, environmental concern, environmental knowledge for the products oscillating from general eco-friendly goods (Chan, 2001; Lai & Cheng, 2016) to green luxury goods (Kaur et al., 2022); from environment friendly clothes (Kang et al., 2013; Khare & Sadachar, 2017) to organic foods (Pham et al., 2018). Within the epitome of eco-sustainable and competitive brink, significant green marketing practices namely; ecolabels, green advertising and sustainable branding, are being accepted and practiced by organizations in developing nations to publicise sustainable consumerism and green goods (Chin et al., 2018).

Some conceptual studies focused on examining sustainable consumption through Social cognitive Theory (Bandura, 1977, 1986). SCT work on the interrelationship of three factors; environmental, personal and its outcome on behavioural interact (Bandura, 2001; Shahangian et al., 2021). Social sanction i.e., external and self-efficacy i.e., internal found out as a major factor in determining green consumer behavior (Lin & Hsu, 2015) but this study didn't evaluated the mediating association of environmental factors and personal factors. To counter this study by Jahari et al. (2022) tests the mediator personal attributes on pro-environmental and external environment consumer behavior. Some researchers also worked on factors like individual beliefs (Bandura, 1999; Stern, 1999); self-regulation and moral action (Bandura, 2002) etc.

Although there are few more theories in

original and extended form utilized by the researchers but Theory of Planned Behavior (Ajzen, 1991) is most trusted and experimented theory to study the influencing factors determining green consumer behavior (Wei et al., 2017; Chin et al., 2018)

## 2.2. Bibliometric Analysis

Bibliometric methods are helpful in ascertaining recent and emergent research areas, and reviewing the most significant published academic and research articles. Bibliometric technique is a type of quantitative or statistical method employed to examine the trends in the publication of “research articles”, “conference papers”, and other documents of scholarly significance. “It outlines a systematic process for scanning available materials, creating mind maps to organise the literature review, mapping the structure of the study area, and ultimately compiling a bibliography” (Kar & Harichandan, 2022).

Bibliometric analysis as a technique has been selected for this study as it helps in mapping the research landscape by identifying key contributors, prolific journals, and trending topics within green marketing domain which will help researchers to understand structure and evolution of the domain. It can also enable researchers to identify recent trends and hot topics/keywords in green marketing to stay updated and helps to identify research gaps. Bibliometric analysis are useful in conduction systematic literature reviews by processing large volume of scholarly publications.

## 2.3. Research Methodology and data screening

### 2.3.1. Method

Bibliometric analysis of 482 articles published over the last twenty-two years (2000–2022) provide empirical and factual insight into research trends on green marketing and its various practices. Additionally, on the basis of article’s impact and citations, this study analyses emerging trends in the research on the subject domain under study.

### 2.3.2. Database selection

Today we have many credible abstracting and indexing databases like Scopus, Web of Science (WOS), PUBMED etc. among these databases two multidisciplinary databases viz, SCOPUS and WOS are highly renowned and regarded globally. For our study we have chosen SCOPUS and WOS indexing and abstracting scientific databases.

### 2.3.3. Query (Identification)

The following search query was run in the topic field of Scopus database on 20th June, 2022 at United University, India:

(TITLE-ABS-KEY (green AND marketing) AND KEY (consumer AND behavior))

The following search query was run in the topic field of WOS database on 20th June, 2022 at United University, India:

(TITLE-ABS-KEY (green AND marketing) AND KEY (consumer AND behavior))

This query has resulted in identification of 619 articles, books, conference proceeding etc on the green marketing literature and

with keywords related to consumer behavior. These articles are then fed into the second step of the flow model (Figure 1) known as Screening.

Time frame chosen for selection of publications was from year 2000 till June, 2022 which is set in the database criteria. There is no limitation on languages and thus articles consists of various languages including English, Spanish, Portuguese etc. Titles and abstracts of all selected and accepted papers are screened individually.

#### ***2.3.4. Criteria for inclusion and exclusion of articles (Screening)***

This step is further divided into two sub steps viz., 1) Duplication removal 2) title and abstract screening.

#### ***2.3.5. Duplication removal***

Search result details of 619 publications (from Step 1: Identification) are imported on an excel file. After careful observation and using the functionalities of MS-Excel 105 duplicate records (titles indexed in both the journals) are deleted by manual screening in excel (Figure 1). 504 remaining records are screened further by title and abstract evaluation.

#### ***2.3.6. Title and abstract screening***

Title and abstract of 504 articles are evaluated for relevancy and significance. 482 records are shortlisted for further evaluation to check the eligibility

#### ***2.3.7. Eligibility & Inclusion***

482 articles full text is read & evaluated to check whether they are eligible for the study

or not. Eligible articles are basically those which contains the literature about green marketing and its impact on consumer behavior. Also, articles that contain literature on green marketing practices. All 482 articles are found to be eligible for further analysis in this eligibility check (Figure 1).

#### ***2.3.8. Tools for data analysis***

Various tools & softwares are used for data analysis including MS-Excel, Biblioshiny and VOS Viewer.

### **3. RESULTS**

#### **3.1. Collected data summary**

Table 1 represents a summary for the shortlisted data after going through all the stages of the flow diagram (Figure 1).

#### **3.2. Analysis of the Overall Growth Trend (in terms of total publications and mean total citations per article)**

In reference to Figures 2 and 3 and Table 2, year 2002 don't have any publications thus it is missing in the table and can be observed from the graph. A significant increase in the number of publications is being observed over the years. Boom in publications has been observed after year 2014. Most successful years in terms of published articles is 2021 with 87 articles (highest). Whereas, highest average article citation per year is observed in year 2022 with 0.97 value. The analysis highlights the fact that after the impact of covid 19 green marketing research witnesses a great upswing due increase demand of green products globally.

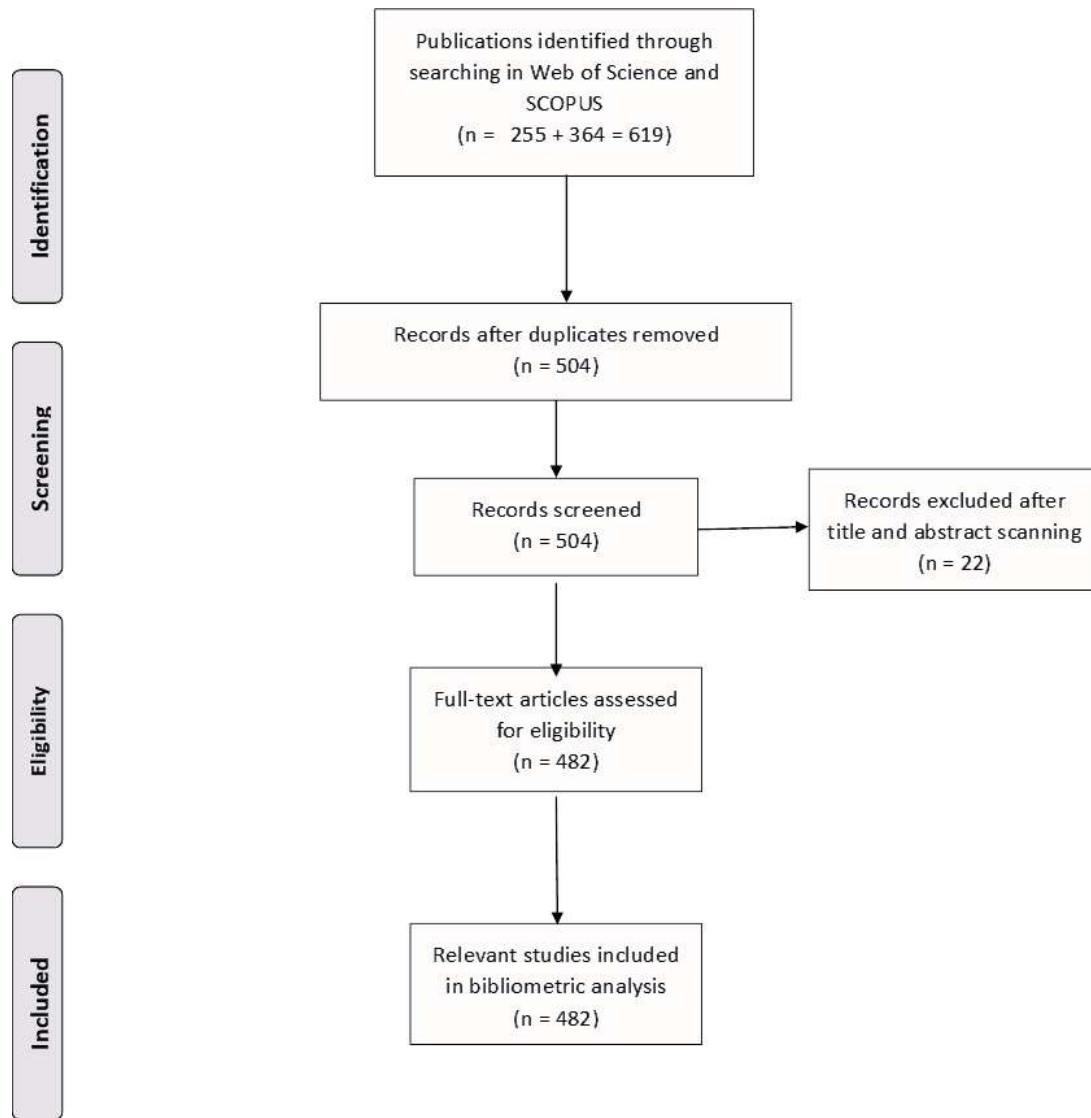


Figure 1. Flow diagram for data identification and screening

Table 1. Summary of collected data

Particulars	Data value
Timespan	2000 – 2022
Sources (Journals, Books, conference proceedings, etc)	216
Number of documents	482
Number of Authors	1294
Authors of single author documents	48
International Co-authorship	20.12%
Author's Keyword	1458
References	11982
Average citations per document	45.36
Document Average age	5.1 years

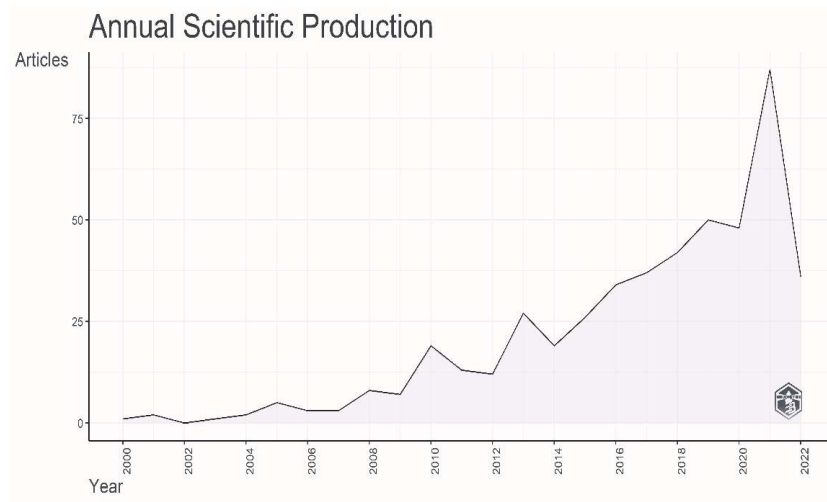


Figure 2. Annual scientific production

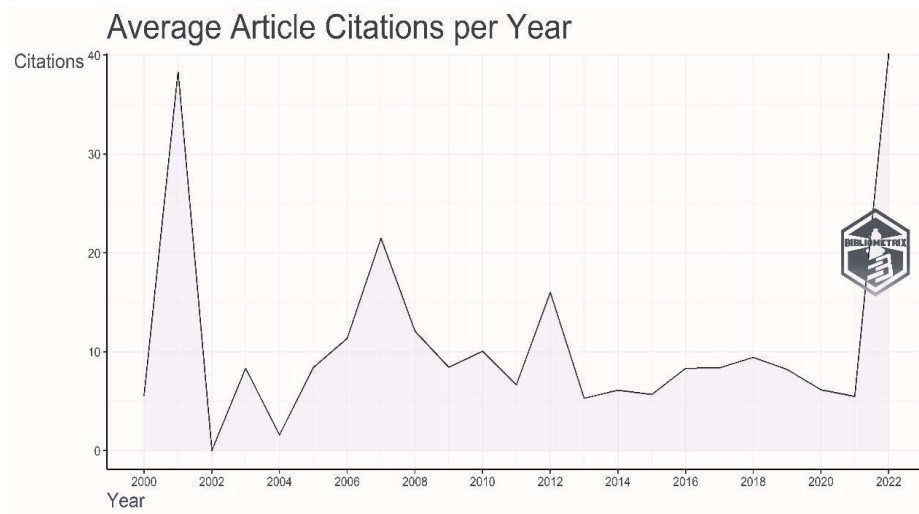


Figure 3. Average Article citations per year

### 3.3. Top Ten Publishing Countries

In reference to Table 3, United States of America (USA) is the top most productive country with outstanding 63 publications and whopping 3381 citations, followed by China with 53 publications and 1354 citations. India hold the third platform with 37 publications and outstanding 1807 citations which is more than seven countries among top ten countries on the list during the period

of study. Germany bottoms the list with only 14 publications. List shows that India, United Kingdom (UK), Australia and Spain despite of having less publications have good number of citations for their articles which may be the result of the quality of research they are doing on green marketing. Among the four countries mentioned above United Kingdom (UK) has only 16 publications but with 1447 citations it has exemplified the quality of publications they have.

*Table 2. Overall growth trend*

<b>Year</b>	<b>Total articles</b>	<b>Mean Total citations per article</b>
2000	1	122.00
2001	2	803.50
2002	0	0.00
2003	1	158.00
2004	2	28.50
2005	5	143.00
2006	3	181.67
2007	3	322.00
2008	8	169.00
2009	7	109.57
2010	19	120.58
2011	13	73.15
2012	12	159.83
2013	27	47.67
2014	19	48.89
2015	26	39.77
2016	34	49.94
2017	37	41.89
2018	42	37.71
2019	50	24.58
2020	48	12.29
2021	87	5.48
2022	36	0.97

### 3.4. Top Ten influential journals

In reference to Table 4, the journal “Sustainability” stands first in the table with 54 publications and 453 citations which is followed by Journal of Cleaner Production with 35 publications and 1972 citations. It is astonishing to see that Journal of Consumer

marketing has only 10 publications but highest number of citations (3043 citations) among the top ten. Journals like, Journal of Cleaner production” (IF: 11.072), Business strategy and the environment” (IF: 10.801), “Journal of Business Research” (IF: 10.969) and “Journal of Retailing and consumer services” (IF: 10.972) are in the top ten

*Table 3. Top ten publishing countries*

<b>Country</b>	<b>Articles</b>	<b>TC</b>
USA	63	3381
China	53	1354
India	37	1807
Malaysia	20	565
Italy	17	325
Spain	17	775
United Kingdom	16	1447
Australia	15	849
Korea	15	676
Germany	14	484



*Table 4. Top ten influential journals*

Sources	TP	TC	IF	Q	Publisher	Country
Sustainability	54	453	3.889		MDPI	Switzerland
Journal of Cleaner Production	35	1972	11.072	1	Elsevier	Netherland
Business strategy and the environment	18	1033	10.801	1	John Wiley and Sons	United Kingdom
International journal of consumer studies	16	913	7.096	2	Wiley-Blackwell Publishing	United Kingdom
British food journal	12	150	3.224	2	Emerald	United Kingdom
Journal of consumer marketing	10	3043	3.4	2	Emerald	United Kingdom
Journal of business research	9	849	10.969	1	Elsevier	Netherland
Marketing intelligence and planning	9	1149	4.338	2	Emerald	United Kingdom
Journal of retailing and consumer services	8	1382	10.972	1	Elsevier	Netherland
Journal of Business Ethics	7	358	2.44	1	Springer	Netherlands

*Table 5. Most prolific authors*

Authors	Affiliation and country	TP	TC	FY of Publication	H-index
Khare A	University of Allahabad, India	5	276	2014	5
Kim Y	Kyungnam University, South Korea	5	530	2010	4
Jansson J	UMEA University, Sweden	4	364	2009	4
Kautish P	Modi University of Science and Technology, India	4	86	2018	4
Lee S	Northern Illinois University, USA	4	252	2010	4
Wang J	Zhejiang Univ. of finance & economics, China	4	281	2012	4
Mohd S N	Universiti Utara, Malaysia	4	86	2019	2
Chen Y	National Taipei University, Taiwan	3	74	2015	3
Grimmer M	University of Tasmania, Australia	3	254	2013	3
Grinstein A	North-eastern University, USA	3	217	2012	3

journals list with each having Impact factor greater than 10, making them an influential bouquet of research publication vent.

### 3.5. Most prolific authors

In reference to Table 5, “Khare A (India)” and “KIM Y (South Korea)” surfaced as most productive authors with five publications each along with 276 and 530 citations respectively. “Khare A” also have

highest h – index. They are followed by five authors viz, JANSSON J, KAUTISH P, LEE S, WANG J and MOHD S N with 4 publications each. Notably India and USA have two authors each in the list producing research articles on green marketing.

### 3.6. Top ten most cited articles on green marketing

In reference to Table 6, number of citation

Table 6. *Top ten most cited articles*

Title	Author	Journal	Year	TC
“Targeting consumers who are willing to pay more for environmentally friendly products”	Laroche, M.	“Journal of consumer marketing”	2001	1518
“Going green to be seen status reputation and conspicuous conservation”	Griskevicius, V.	“Journal of personality and social psychology”	2010	937
“Predicting green product consumption using theory of planned behavior and reasoned action”	Paul, J.	“Journal of retailing and consumer services”	2016	705
“Exploring consumer attitude and behaviour towards green practices in the lodging industry in India”	Manaktola, K.	“International journal of contemporary hospitality management”	2007	556
“Pro environmental products marketing influence on consumer purchase decision”	Pickett-Baker, J.	“Journal of consumer marketing”	2008	551
“Opportunities for green marketing young consumers”	Lee, K.	“Marketing intelligence and planning”	2008	445
“An investigation of green hotel customers decision formation developing an extended model of the theory of planned behavior”	Han, H.	“International journal of hospitality management”	2010	427
“Consumer attitude and purchase intention toward green energy brands the roles of psychological benefits and environmental concern”	Hartmann, P.	“Journal of business research”	2012	422
“Green marketing legend myth farce or prophesy”	Peattie, K.	“Qualitative market research: an international journal”	2005	371
“Consumer behavior and purchase intention for organic food a review and research agenda”	Rana, J.	“Journal of retailing and consumer services”	2017	327

Figure 4. *Keyword analysis*

ranges from 327 to 1518 in time period 2001 to 2017. The research also show that article titled “Targeting consumers who are willing to pay more for environmentally friendly products” published in “Journal of consumer marketing” in the year 2001 was the top performing publication authored by “Laroche M” with 1518 citations. This is followed by articles written by “Griskevicius V (2010)” with 937 citations, “Paul J (2016)” with 705 citations. Lastly, the article titled “Consumer behavior and purchase intention for organic food a review and research agenda” had 327 citations published in 2017.

### 3.7. Keyword Analysis and thematic evolution of green marketing

#### 3.7.1. Keyword analysis

Keyword analysis (Figure 4) resulted in 1458 keywords used by the authors of green marketing literature for selected set of records for this study. Using biblioshiny, we

have constructed a word cloud of used keywords by the authors in the domain area by feeding the record of documents understudy. It is observed from the given word cloud and the subsequent table, that top five keywords used are ‘green marketing’, ‘green purchase’, ‘purchase intention’, ‘organic food and ‘environmental concern’. Inferencing the collective meaning derived from these keywords, most of researchers in last two decades are interested in understanding the concept of sustainability & green marketing and trying to evaluate the impact green marketing and sustainability have on consumer buying behavior. Theories like theory of Planned behavior (Aijen, 1981) explaining the intention-behavior gap is being used by many researchers in their study of green consumer behavior.

#### 3.7.2. Thematic evolution

In reference to Figure 5, thematic evolution is significant to detect, map and visualise conceptual domains and their sub-

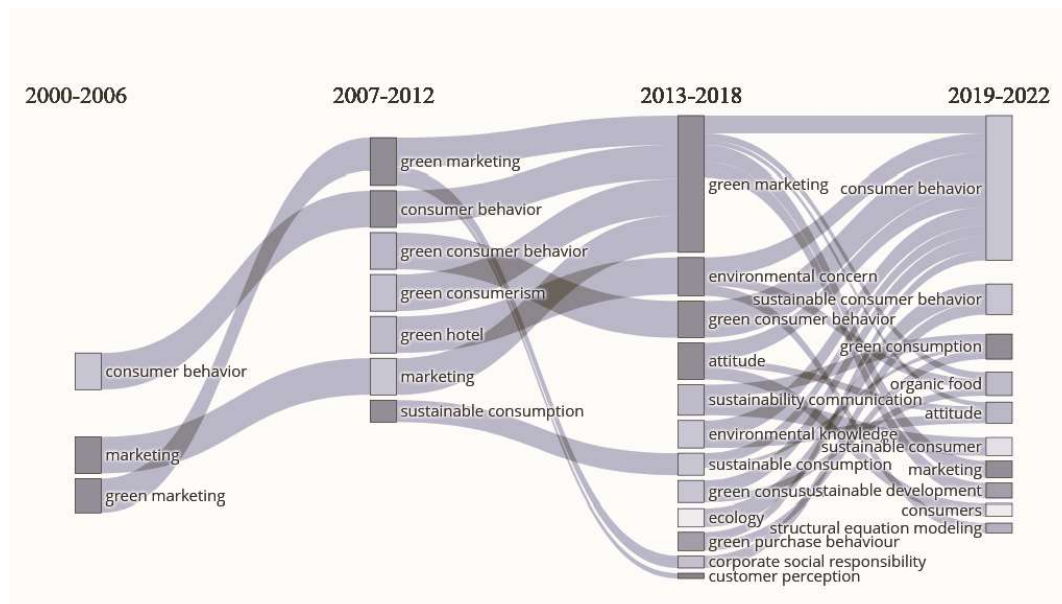


Figure 5: Thematic evolution (Time slices)

domains to quantify the thematic evolution of the green marketing literature over a period of twenty-two years. For comprehensive analysis and visualisation of themes and sub-themes of last twenty-two years, four time slices viz., 2000-2006, 2007-2012, 2013-2018 and 2019-2022 are used. Each time slice is analysed to evaluate the evolution of green marketing themes and sub-themes to infer the green marketing research growth and extension of new sub-themes.

**Time slice 1:** 2000-2006 (Figure 5) witnesses only 3 major keywords green marketing, consumer behavior and marketing. Green marketing was not much established and practiced concept thus, majority of research on green marketing in this period was theoretical and qualitative in nature. Researchers were working on the exploration of the concept and trying to link it with consumer behavior. Most of the early researches were from developed countries and China although being the developing nation was one of the major contributor. This time slice Firstly, helped grasping the interest of future researchers in the domain and secondly, it builds a knowledge stream about various green marketing components and its use can improve environmental (Hafsa and Turgut, 2013).

In **Time slice 2:** 2007-2012 (Figure 5) some others terms like green consumer behavior, green consumerism, green hotel and sustainable consumption came into existence. This period embarks the companies' efforts to understand the consumers behavior towards their sustainable practices and the factors moderating this behavior. During this tenure researchers were extending their understanding over sustainable consumption and green consumers.

**Time Slice 3:** 2013-2018 (Figure 5) uncurtains many more sub-themes namely, sustainable communication, environmental knowledge, green consumer, ecology, corporate social responsibility and customer perception. This phase researchers were extending their understanding towards cognitive factors affecting consumers green products purchase decisions and introduction of factors like environmental knowledge & sustainable communication showcase the interest of marketers in analysing the current awareness level of consumers for using green marketing tools. It also shows that future research (after year 2018) will concentrate more on consumers knowledge, attitude and perception towards green products and green marketing in the wider sense.

**Time slice 4:** 2019-2022 (Figure 5) witnesses many niche but focused themes such as consumer behavior, sustainable consumer behavior, green consumption, organic food with more researches on consumer behavior towards green marketing. Time slice 4 is also a very vital phase as it witnesses the outbreak of Covid 19. This time slice represents pre, during and post covid time period where we can observe the shift towards the interest on analysing consumer behavior towards green marketing activities. Global buying trends has shown an increase in buying organic eco-friendly products, which most of the organization in the area want to encash and thus green consumer behavior studies rocketed during this duration.

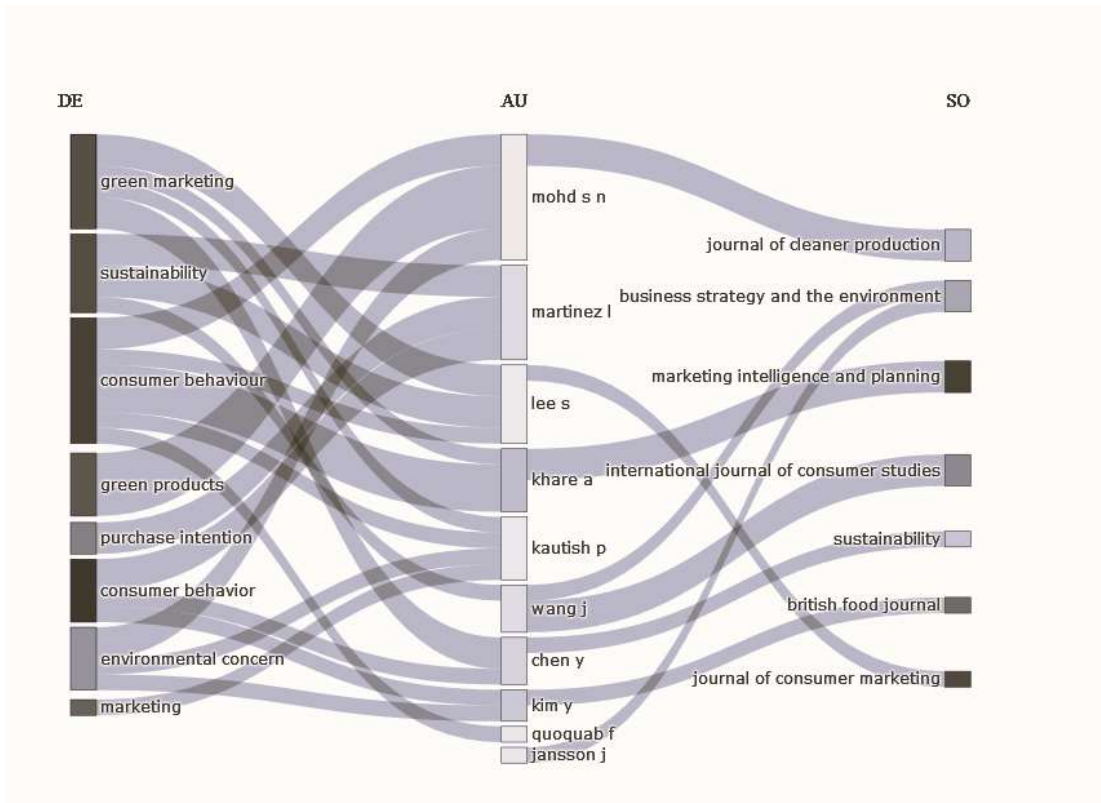


Figure 6. Three factor analysis- keyword, author, sources

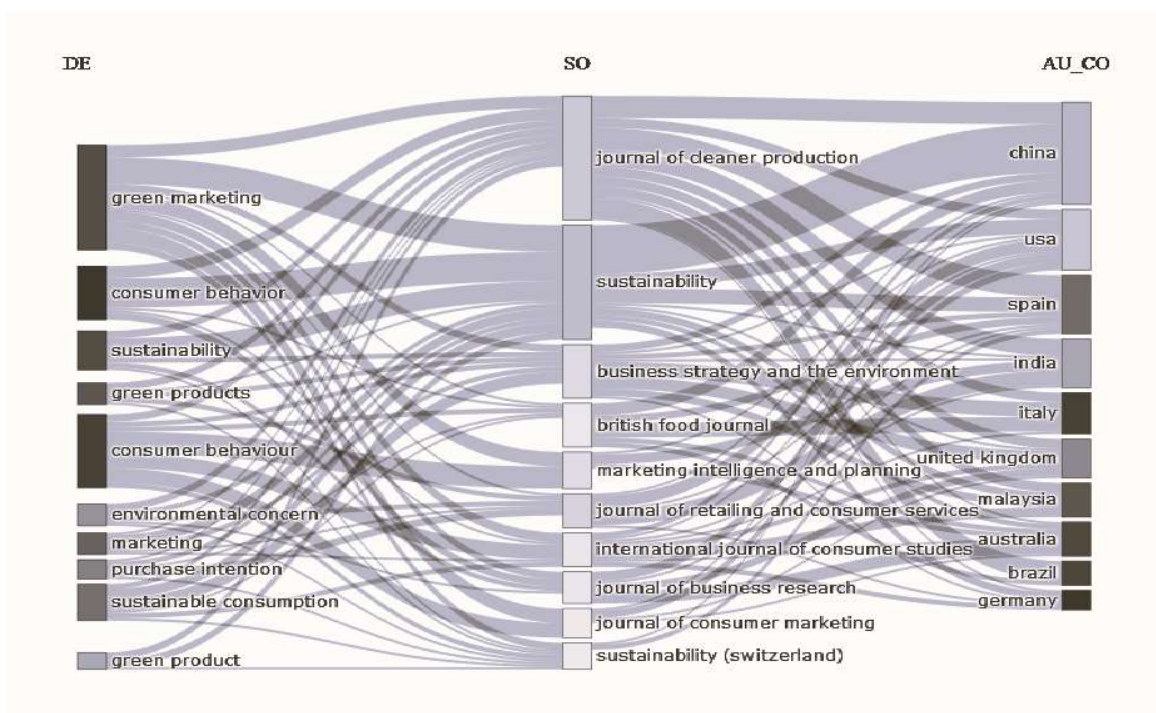
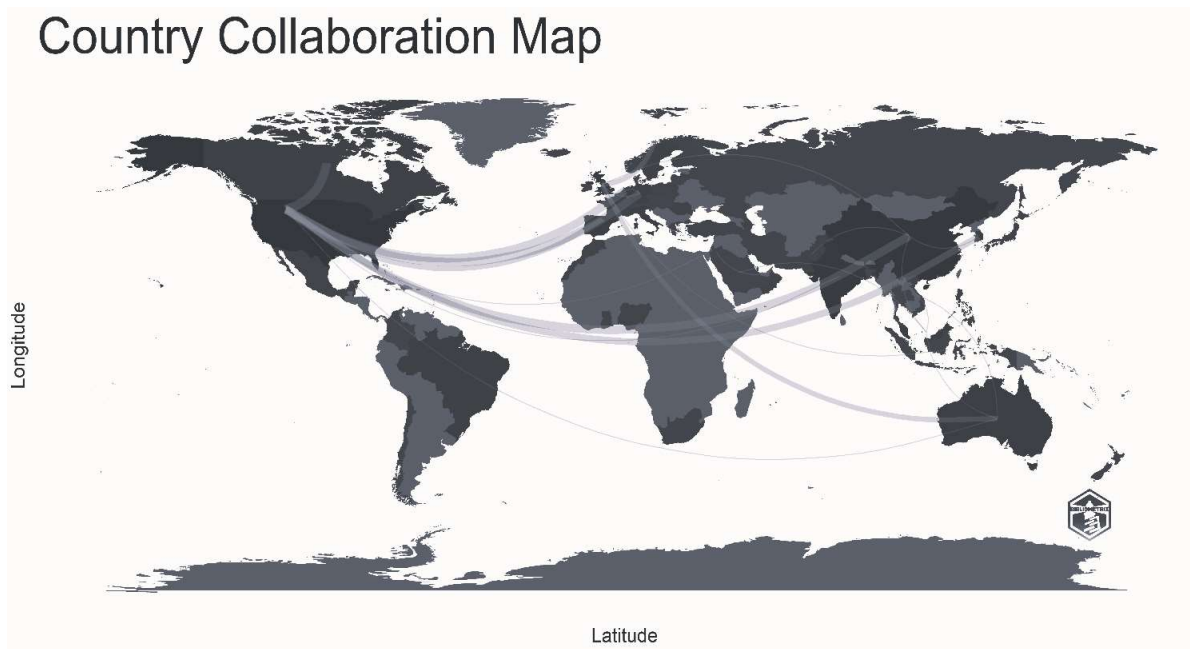


Figure 7. Three factor analysis- keyword, sources, countries



Table 7. *Country collaboration*

From	To	Frequency
USA	Canada	6
USA	China	5
USA	Germany	5
USA	Netherlands	5
USA	Korea	4
United Kingdom	Australia	3
United Kingdom	Norway	3
USA	France	3
Australia	Vietnam	2
China	Korea	2
China	Malaysia	2
China	Pakistan	2
China	United Kingdom	2
Germany	Netherlands	2
Jordan	United Arab Emirates	2
Malaysia	Australia	2
Malaysia	Saudi Arabia	2
Malaysia	Vietnam	2
United Kingdom	Germany	2
United Kingdom	Indonesia	2
USA	Australia	2
USA	India	2
USA	Israel	2

Figure 8. *Country collaboration map*

### 3.8. Three factor analysis

#### 3.8.1. *Keywords, author, sources*

In reference to Figure 6, top authors, i.e., Mohd S N., Wang J., Lee S., Khare A., and sub areas, i.e., green marketing, sustainability, consumer behaviour and green products, had a sound relationship with green marketing itself. The eminent authors prefer to publish in sources, i.e., Journal of Cleaner Production, Marketing intelligence and planning, Journal of consumer marketing, International Journal of Consumer studies and sustainability.

#### 3.8.2. *Keywords, sources, countries*

In reference to Figure 7, leading keywords are green marketing, consumer behaviour, sustainability, sustainable consumption and green products which are strongly and significantly related with Journal of cleaner production, sustainability, business strategy and the environment, British food journal and marketing intelligence and planning, which are further related to most productive countries viz., China, USA and Spain. One thing worth noting that India even being in the introductory stage of research on green marketing domain is at the fourth position in terms of emerging keywords and publications in many eminent journals.

### 3.9. Country collaboration map

In reference to Table 7 and Figure 8, USA surfaced as the leading collaborator with Canada (6 publications). Followed by China, Germany and Netherland (5 publications each), and Korea with USA (four publications). There were three collaboration

of United Kingdom with Australia and Norway each.

## 4. DISCUSSION

On analysing the bibliometric data, it is observed that the total publications from the top 10 most productive and leading countries amounted to 55.39% of total publications all over the globe as investigated in the research. Few countries like USA with maximum publications (63) & citations (3381) which is in line with the results derived from researches by Saleem et al. (2021); and China enjoys the second position in the list on the basis of total publications (53) but almost one-third total citations (1354) as compared to USA. United Kingdom with only 16 publications but have quite good number of citations (1447) which makes it the most influential country in terms of average citations per published article (90.44) on green marketing. Although, leading authors are neither an American nor a British. They are from India (Khare A) and South Korea (Kim Y) with five publications each as per the study. It is interesting to observe that two authors affiliated with Indian institutions are in the top ten with h-index of five and four respectively.

Increasing research interest on green marketing is observed around the globe in last two decades and number of publications are progressing in these years specially in the last decade, which is line with the sustainable development goals (SDG) set by United Nations for developing countries to which governments are putting forward too (Bebbington & Unerman, 2018; Grainger-Brown & Malekpour, 2019). It has been observed that highest number of articles (87) are published in year 2021, which is just after

the Covid 19 outbreak and shows the increasing interest of researchers in this particular area. Companies are also observing it as an opportunity to discount, due to rising demand of green products after covid 19.

Four out of the ten most influential and preferred publication journals for green marketing are listed in quartile 1(Q1) of SSCI. Three from these are from Netherlands only. Second position is bagged by The Journal of Cleaner Production with 35 total publications and 1972 total citations. Although, Journal of Retailing and Consumer Services ranks last in the influential Journal list with only 8 publications but two out of these eight articles are in the list of 10 most cited published articles on green marketing. Similarly, Journal of Consumer marketing has published two highly cited articles on the green marketing literature and it is ranked seventh with highest number of total citations (3043 citations). Journal of Business Research has one article in the most cited list of articles. It is unsurprisingly noticed that all these articles were from developed countries having a thorough peer review process and in English language. Also, Journal of Retailing and Consumer Services, Journal of Consumer Marketing and Journal of Business Research; are all dedicated journal in business/management classification.

As from the three-factor analysis diagram of the current study, it is observed that China and USA had extensively used green marketing, green products, sustainability and consumer behavior as keywords and had published their researches in highly influential journals including Journal of Cleaner Production and Sustainability. These journals are reputable and highly cited

journals in green research and sustainability. Thus, for researchers who have interests in green marketing or sustainability can review the works published in these journals and can also publish their articles in them. Few Authors like Mohd S N, Lee S and Khare A are some prominent authors working on green marketing and consumer behavior; so, they can refer by researchers on green marketing for collaboration as well as their own research in the area.

Division of green marketing literature under study over the last twenty-two years is yielded a varied set of data and in order to analyse the how this variation occurs over the time period, a thematic evaluation with four time slices is applied. Although, initial time slices were mainly focused on qualitative analysis of the domain of green marketing and consumer behavior but 3rd and 4th time slices has witnessed more of quantitative analysis with increased stress on niche themes like green consumption, sustainability structured equation modelling (SEM) were observed. Thematic evaluation observed a very interesting 4th time slice which covered the research period of pre, during and post covid scenarios. This slice represents the impact of covid on green marketing research and through analysis it is found that research on green marketing got a boost post covid and themes like organic food, green consumer behavior and green attitude gain prominence. It is observed that last two decades have witnessed extensive research on green marketing with diverse themes and creation of body of knowledge (Kumar, 2016).



## 5. CONCLUSION

Green marketing is not a novel domain but various practices of green marketing are not much evaluated area and there is a lack of comprehensive bibliometric study on it. This study aims to provide a comprehensive review and bibliometric analysis of research published on green marketing practices and its subsequent impact on consumer behavior for the period from 2000 to 2022. Also, study quite significantly helps in identifying the current and future research sub domains in green marketing and green consumer behavior. Lots of previous research were mainly focused on gathering data from either

Scopus or WOS database but a comprehensive research having data records from both the databases (Scopus & WOS) were missing (Ye et al., 2020) and thus, this study fulfils this gap. A post covid green consumer behavior study was missing, this study tries to cover that part also. Thematic evolution analysis done in this study is missing in last few bibliometric study as evident in bibliometric researches by Kar and Harichandan (2022) and Saleem et al. (2021), which is also available in this study. Lastly, this study also incorporates the research publications written in all the languages available resulting in a global literature review work on green marketing.

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## БИБЛИОМЕТРИЈСКИ И ТЕМАТСКИ ПРЕГЛЕД ИСТРАЖИВАЊА ЗЕЛЕНОГ МАРКЕТИНГА И ЗЕЛЕНОГ ПОНАШАЊА ПОТРОШАЧА ОД 2000. ДО 2022.

Sulabh Agarwal, Richa Singh Dubey

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### Извод

Навике прекомерне потрошње потрошача довеле су до исцрпљивања ресурса великом брзином што наноси штету животној средини. Зелени маркетинг је еволуирао као важан медиј за задовољавање људских жеља са минималним негативним утицајем на еко систем. Стога су многа истраживања спроведена у области зеленог маркетинга у последње две деценије. Међутим, расправа о његовом утицају на контекст понашања потрошача и даље има недостатак систематског и темељног библиометријског истраживања. Овај рад има за циљ да консолидује стандардно истраживање зеленог маркетинга библиометријским проучавањем објављених радова и чланака током последње 22 године од 2000. до 2022. Поред тога, резултати показују трендове развоја кључних речи, продуктивне и утицајне земаље, организације или институције, ауторе, истраживачке чланке и часописе; међународне сарадње и ауторске обрасце о зеленом маркетингу и његовом утицају на понашање потрошача. Током периода истраживања примећује се постепени пораст истраживања о зеленом маркетингу који је превазиђен након ширења COVID-а 19. Библиометријском техником идентификовано је и анализирано укупно 482 чланка који су за овај период објављени у 216 часописа, књига, зборника конференција итд. каталогизираних у реномираном индексним базама и то Scopus и WOS (Web Of Science). Будућа истраживања могу покривати друге базе података ради свеобухватније анализе.

*Кључне речи:* зелени маркетинг, зелено понашање потрошача, библиометријски преглед, тематска еволуција

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