

Trending Dynamics in Green Consumer Behavior: A Bibliometric Analysis

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Abstract

In the past few years, there has been widespread recognition of the value of safeguarding the sustainability of the environment. Numerous investigations have called attention towards the ecological risks linked to rising consumption and manufacturing commotion. As a result, ecologically anxious consumers have indicated a greater affinity for products, widespread demand, advocacy for the environment, and severe legislation have compelled sustainability devoted enterprises to redirect their attention towards creating environmentally cognizant goods for the environment sentient consumers. The paper presents a complete picture of the investigation that has already been undertaken on the concept of 'green consumers' behaviour' over the preceding 30 years, unravelling the conceptual framework of the area as well as identifying significant research inadequacies. The current investigation will employ bibliometric methodologies and other indices to determine the advancement of research within the domain of green consumer behaviour. Furthermore, the R Studio bibliometric analysis programs with the VOS viewer application were utilized to visualize intellectual linking and current trends. A bibliographic evaluation of 1574 Scopus-indexed records was carried out, which included the complete study of the publication, numerous source patterns as well as their index-based effects across (1992–2022), trendy researchers regarding collective citations and H-index impact, developed/developing country significance, stated references, and word dynamics via keyword-advancing network evaluation while focusing on a considerate demonstration of an array of bibliometric analysis approaches and steps as well as extensive descriptions, including unified examinations of comparison, that underline the key elements associated with each methodology. The findings of this study would provide business executives, including university academics, with refreshingly advanced perspectives on this burgeoning subject. This kind of information might be useful in devising tactics that entice green consumers. The research will additionally assist policymakers in boosting green consumer behaviour.

Keywords: Consumer behaviour, Green marketing, Sustainability, Green product, Bibliometric analysis.

1. Introduction

As the world population is increasing at an incredible rate it is hard for global environmental system to keep up with the recurring demand of consumer's basic needs. Therefore, the fallouts are deadly world issues like resource exploitation, vastly toxic gas emission, world hunger, imbalance in the ecosystem, global warming, exploitation of flora and fauna, multiple pollution catastrophes and the most dangerous of them all is the looming question mark on the entire existence of this planet's future generations. One of the most crucial issues of this

day and age is sustainability, which has grown into a hotly debated subject. In last few years companies are also stirring in the direction of eco-friendly business approach through innovating effective green products and philanthropically environment safety amenities. Though green marketing of eco-friendly products and environment indorsed standards companies tries to link themselves with their clientele and presents themselves as socio-environment custodian which gives them a unique business approach in the competitive market and in due course creating a niche for them to grow into (Kaur et al. (2022; Haski-Leventhal et al., 2021). But not just actions and activities undertaken by industries exploits the environment but also the global inhabitants are equally responsible for their superfluous abuse of natural resources which increases carbon foot prints in the milieu on quotidian basis. Numerous discussions have focused on how sustainable consumption can lessen adverse environmental consequences along with exactly what drives consumers to lean towards green consumption, which sooner or later results in their green consumer behavior (Ern et al., 2022; Khanet al., 2020). It is a theory that holds consumers accountable for addressing environmental issues by implementing ecologically beneficial habits, for example using natural products, renewable power sources, and goods produced by companies with minimal impact on the planet, such instances led by consumers are observed as their green cognizant consumption which contributes in the conservation of the environment for the benefits of both existing and upcoming generations of this world (ElHaffar et al., 2020; Nguyen et al., 2019). Over the eons both emerging and advanced nations have witnessed an increase in environmentally conscious consumption (Kumar and Yadav, 2021). White et al., (2019) stated that green customers are people who conduct themselves in an efficient manner that benefits the natural world and society while simultaneously improving the quality of their own lives. The consumers are ready to pay high prices for green products; this sudden shift happened because in this modern era consumers are far more aware about green consumptions dynamics and wants to protect both their health and environment. All the previous groundbreaking research conducted in this domain, highpoints the perilous pieces and settles various novel findings which helps the lawmakers, governments, industries as well as the public to introduce notable environment protection laws, to launch new earth friendly schemes and policies, to utilize resources through ecofriendly disciplined conducts without instigating any harm in the society and to make sustainable decisions when required. Nevertheless, executives, researchers from academia, and administrators have found it challenging to accurately comprehend green consumers and extricate all its characteristics which brand them as an initial foundation for the classification mainly because of a shortage of agreement on its dynamics along with several other variables (Kumar and Yadav, 2021). Works from the past and the present have attempted to provide prospective researchers with a holistic strategy for investigating and concepts, but their recommendations are subject-specific and fail to include a comprehensive list of references thus, investigations lacks a thorough examination of the major topics, important discrepancies and potential outcomes which are important to create an in-depth cohesive outline for the scholar so they can have proper combined references for their studies (Foroudi et al. (2020). Therefore, it's important to study various aspects of green consumer behavior on all levels which allows researcher to understand how influenced consumers constructed decisions can induce inclusive environmental security.

Many studies have been conducted in past which applied diverse techniques to understand the existing subtleties present in literature of green consumer behavior. Some explored highly popular research article through citation analysis methods. Others focused on discipline for the study and some investigated through co-citation and citation investigation scholars highlighted major trends and paved a way for the future literature-based studies. Therefore, bibliometric analysis is important as it provides systematic aid for the assessment amid various articles, researchers, institutions, countries and creates a mapping of dominating keywords. Through this a clear theoretical hierarchical structure can be engendered which offers wide range of future sustaining dynamics. The main aim of this paper is to highlight the trending dynamics in the field of green consumer behavior, so that

future researchers can have a proper reference outlined. Apart from this, the paper offers an understanding of wide variety of bibliometric analysis techniques and methods, proper explanations and the cohesive comparative analyses highlights the critical features of each technique and variable existing in the dataset of this study.

Through this paper a fine visualized mapping is provide which will be supportive in the field of academics, legislation, and administration.

2. Purpose of the Study

The objective of the study is to identify the following:

- (i) The growth in the number of publications over the years.
- (ii) Which source has highest number of publications and Index based impact?
- (iii) Which author and country has the highest number of citations and number of publications?
- (iv) Which reference as the highest impact?
- (v) The emerging authors keyword trends and word dynamics in this field of study.

3. Materials & Methods

R-package software was used for the systematic bibliometric analysis, this is an open-source medium inscribed in R language (Aria and Cururullio, 2017), which allows to conduct various kinds of bibliometric research. This software offers wide variety of tools. These analysis tools provide the facility to carry out in-depth study of the data set extracted from web of science (WOS), Scopus, dimensions, PubMed, and many more other scientific sources. This software aids to generate tabular and graphical visualizations and emphasizes the contemporary trends in the carefully chosen data. R-package latest bibliometric version (4.0.1), helps to load a web interface app called Biblioshiny, to conduct bibliometric study firstly the selection of most crucial keywords was finalized. Then, these keywords were further used to identify systematic data, through essential filtering which was then extracted from the Scopus database in CSV file format on October 3rd, 2022 (**Table. 1**). In the end a total of 1574 documents of English language were selected for the study which was published from the year of 1992-2022.

3.1. Data Assortment

Step 1- The first step included selection of search option which was - (Article title, Abstract and Keyword) then certain keywords were carefully chosen as an input which were - (green AND consumer AND behavior OR TPB OR FMCG AND products). After this a total of 1,700 documents were found.

Step 2-Then to make the data more systematic additional filters were used which are stated below-

- a.** For the year filter option, the time of (1992-2022) was selected which resulted in total of 1,698 documents.
- b.** After this in the document type filter Articles, Conference Paper, Book Chapters and Books were selected for the study and Review, Conference Review, Short Survey, Notes and Data Paper were excluded from the existing data. After this only 1612 documents were left.
- c.** Then for the language filter, English language was selected which decreased the data to 1574 documents.

Step 3- In the last step 1574 Documents of CSV file was extracted from Scopus Database on October 3rd, 2022 and further study was conducted.

Chart 1, shows the flow of steps taken for selecting and filtering of data before extracting it from the Scopus database in CSV file format. In Table 1 the basic information about the extracted data which was further used to conduct the desired analysis through R-package bibliometrix software version (4.0.1) tools set.

Chart 1: Flow chart of selecting and filtrating for extraction of data

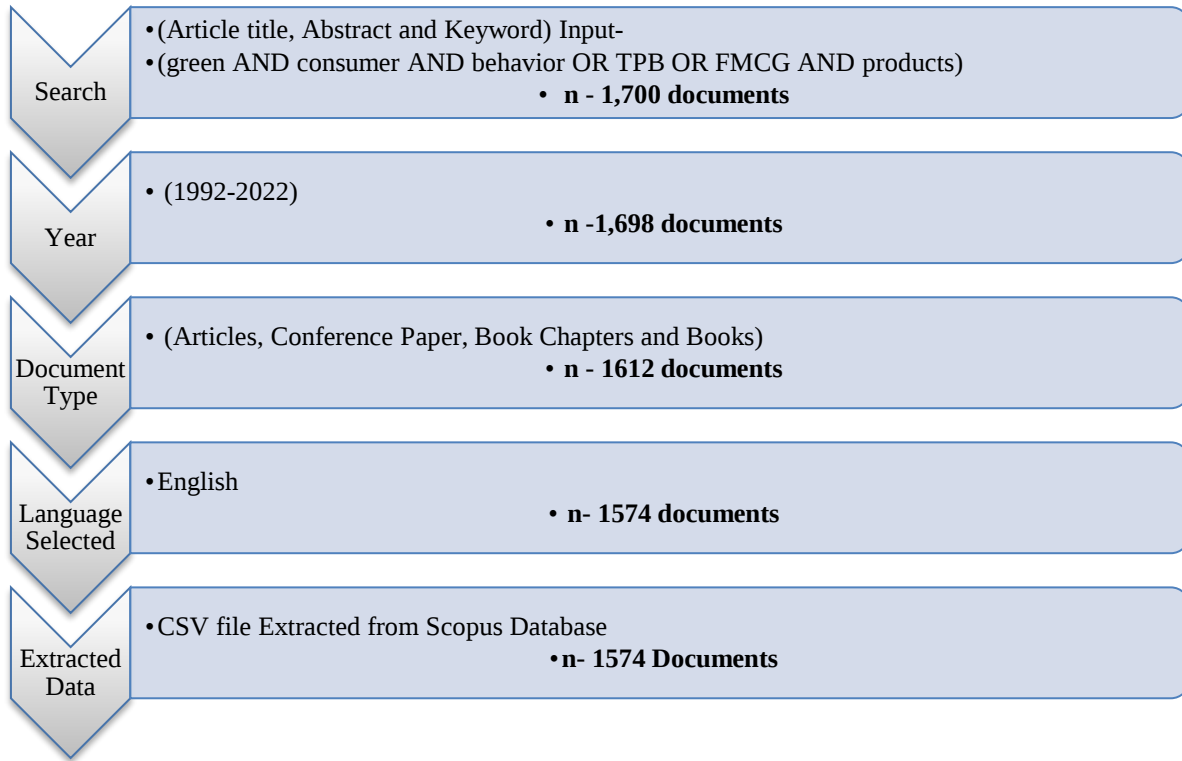


Table 1: Basic information of the extracted data

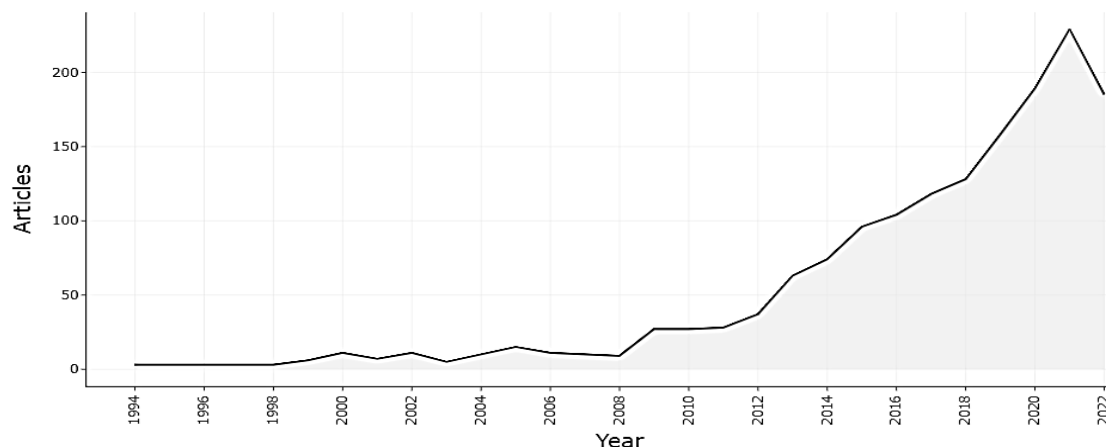
DESCRIPTION	RESULTS
Documents	1574
Annual Growth Rate	15.86 %.
Sources	662
Authors	3933
Language	English
Duration	(1992-2022)
Document type	Articles, Conference Paper, Book Chapters and Books
Data Extraction Source	Scopus
Extracted Data File Type	CSV

4. Result Analysis and Discussions.

4.1. Annual Scientific Products

The very first analysis was to identify the overall scientific research publications between the periods of 1992-2022. Table 3 depicts the top 10 years in which the highest number of publications were recorded. The highest number of 229 research publications were recorded in the year of 2021, followed by the year of 2020 with a publication of 189 articles and on then in year 2022 around 185 documents were published. Through the R package (bibliometrix) software and biblioshiny tools it was found out that when it comes to green consumer behavior the overall estimated annual growth rate between 1992-2022 is around 15.86 %. After year 2010 a rapid thriving in the number of published research articles can be seen in Figure 1. Although, year 2022 has shown a downward curve in the number of publications, but it is expected that in the approaching stretch the quantity of chronicled research in the field of green consumerism is going to rise radically.

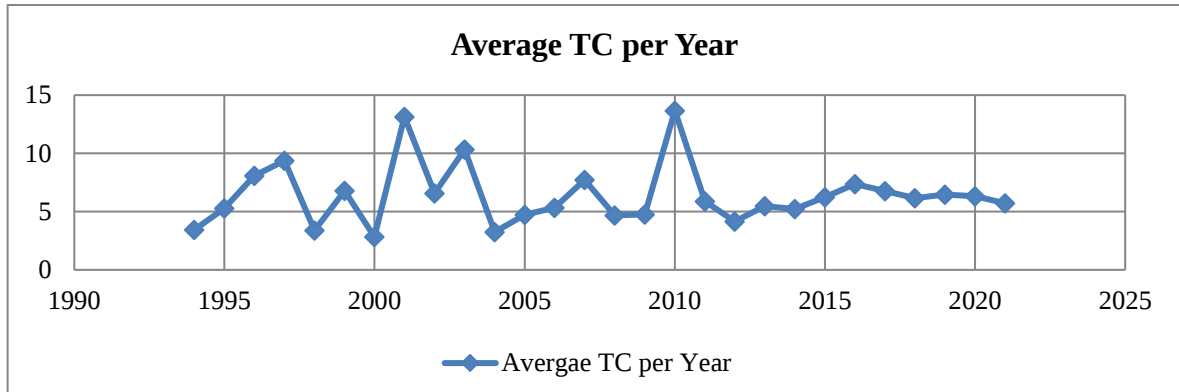
Figure 1: Top 10 years with highest number of publications



4.2. Average Citation per Year

Figure 2 depicts the highest average total citation per year stretched to 13.67, which was recorded in the year of 2010 with a total of 27 documents involved and second highest average total citation per article of 164.07. However, 276 the highest average total citation per article was recorded in the year of 2001 and its average total citation per year were 13.14 with 7 documents in statistics. The years of 2001 and 2010 both have almost identical average total citation per year but the number of documents involved has a huge difference of 20 documents between them. This difference shows that in the year of 2001, only 7 documents were published which were the main trailblazers behind this emerging field of study they acted as the vital protagonist for the expansion of awareness by stressing on the gaps and necessity of detailed research in the area of green consumerism.

Figure 2: Average citation per year.



Also, in the year of 2017 a total of 118 numbers of documents are involved which is highest among the top 10 years (Table 2), but still relatively the average total citation per year and per articles remain low. According to the authors the main reasons behind this can be that the year of 2016 is only six years old as compared to the year of 2001 which occurred two decades ago, hence all the documents published in year 2001 has earned an extensive recognition among the researchers because they are regarded as the noteworthy foundations under this scope.

Table 2: Top 10 years with highest average total citations per year

Year	N	Average TC per Article	Average TC per Year
2010	27	164.07	13.67
2001	7	276	13.14
2003	5	196.2	10.33
1997	3	234	9.36
1996	3	210	8.08
2007	10	115.8	7.72
2016	104	44.2	7.37
1999	6	156.33	6.8
2017	118	33.79	6.76
2002	11	131.36	6.57

4.3. Most Relevant Sources

Figure 3 shows source dynamics over the period of 1992-2022 how various sources published research articles and, in the years, or (2000) business strategy and environment had high cumulate occurrence comparatively to other journals. After 2008 journal of cleaner production started increasing in term of cumulate occurrence and then in the years of 2014 a lot more journals started collectively growing their individual score and the number of publications amplified radically after that point. At first, the journal of cleaner production led the graph, but by 2019, Sustainability (Switzerland) had surpassed all reputable older journals to become the predominant publisher in this field of study.

Figure 3: Source dynamics over time – (1992-2022)

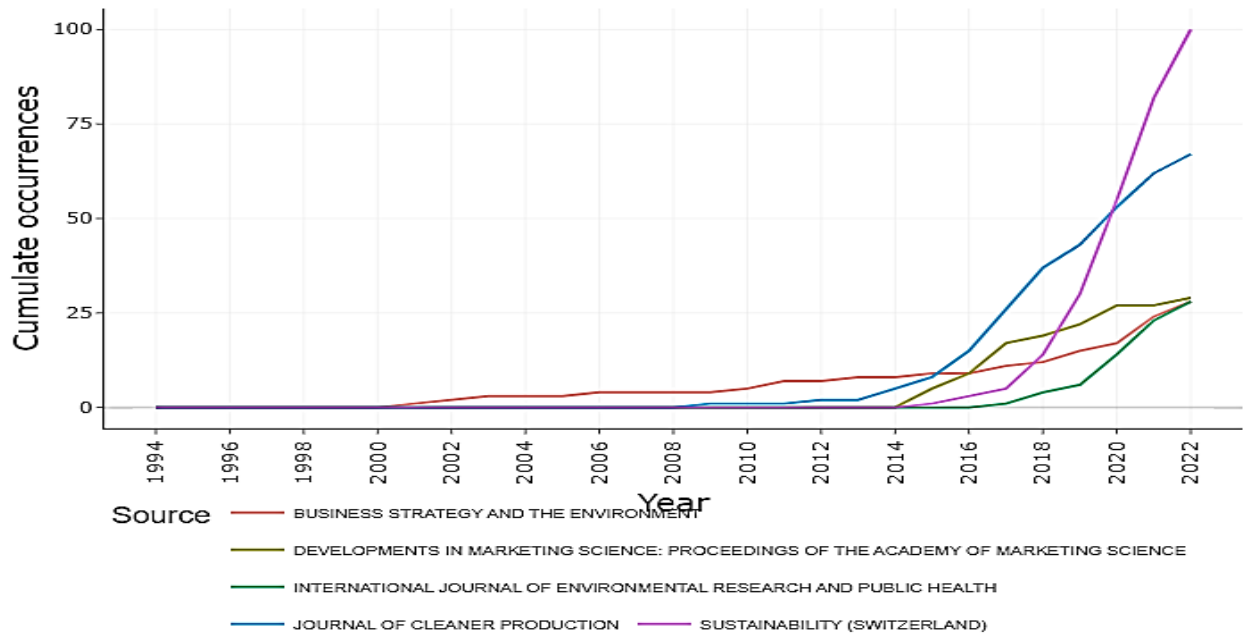


Table 3: Top 10 most relevant sources (based on number of publications)

Position	Sources	Articles	Total Citations (TC)	Publisher
1	SUSTAINABILITY (SWITZERLAND)	100	1432	Springer
2	JOURNAL OF CLEANER PRODUCTION	67	4393	Elsevier
3	DEVELOPMENTS IN MARKETING SCIENCE: PROCEEDINGS OF THE ACADEMY OF MARKETING SCIENCE	29	16	Springer
4	BUSINESS STRATEGY AND THE ENVIRONMENT	28	1807	Wiley Blackwell
5	INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH	28	320	MDPI
6	JOURNAL OF RETAILING AND CONSUMER SERVICES	23	2371	Elsevier
7	JOURNAL OF CONSUMER MARKETING	19	4339	Emerald

8	IOP CONFERENCE SERIES: EARTH AND ENVIRONMENTAL SCIENCE	18	21	IOP Publishing
9	MARKETING INTELLIGENCE AND PLANNING	17	1040	Emerald
10	RESOURCES, CONSERVATION AND RECYCLING	17	900	Elsevier

The most relevant source is Sustainability (Switzerland) published by Springer with 100 articles, 1432 total articles and 20 h-index followed by Journal of Cleaner Production which is published by Elsevier has a total of 67 articles, 4394 total articles and 36 h-index.

In the Table 3. there is a protrusive gap between the top two sources publications and index impact as compared to the rest of eight journals as it is critical to recognize that when it comes to the greatest quantity of documents produced, Sustainability (Switzerland) ranks first due to its open access policy and high acceptance rate; likewise, when it comes to the most prevalent number of total citations, the Journal of Cleaner Production stands highest considering that it is a relatively mature publishing journal with an abundance of documents released under it, as well as certain extensively renowned contributions to research in this subject related to ecological consciousness. The explanation of this cause is grounded in the exploration led by the authors. The whys and wherefores behind this gap can be that the top two journals with the highest number of articles and index impact focus only on the areas of green consumerism/production and sustainability; hence, the number of articles published and referred in this field will be higher when compared to other journals that offer a wide range of area research. These can be considered some of the rationales why these two top journals continue to be prominent among researchers, who frequently rely on them for the research they publish.

Table 4: Top 10 sources local impact (H-index)

Position	Sources	H-Index
1	JOURNAL OF CLEANER PRODUCTION	36
2	SUSTAINABILITY (SWITZERLAND)	20
3	BUSINESS STRATEGY AND THE ENVIRONMENT	19
4	JOURNAL OF CONSUMER MARKETING	17
5	JOURNAL OF RETAILING AND CONSUMER SERVICES	14
6	MARKETING INTELLIGENCE AND PLANNING	13
7	ENERGY POLICY	12
8	INTERNATINAL JOURNAL OF CONSUMER STUDIES	12
9	INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH	11
10	JOURNAL OF INTERNATIONAL CONSUMER MARKETING	11

Sources: Local Impact (H-index, G-index, M-index & TC) and Source Dynamics (1992-2022).

In Table 4 and Table 5 the H-index and G-index are calculated, basically H-index is a numerical measure that uses published statistics and citations to evaluate the relevance, worth and extensive inference of aggregate

research accomplishments whereas , the G-index is computed according to the breakdown of citations accumulated from a particular publication, which means that a given assortment of publications is arranged in descending order according to the total number of citations obtained over the period. Therefore, the top three sources with highest H-index and G-index are Journal of Cleaner Production with 36 and 66, Sustainability (Switzerland) with 20 and 34 and Business Strategy and Environment with an index of 19 and 28.

Table 5: Top 10 sources local impact (G-index)

Position	Sources	G-Index
1	JOURNAL OF CLEANER PRODUCTION	66
2	SUSTAINABILITY (SWITZERLAND)	34
3	BUSINESS STRATEGY AND THE ENVIRONMENT	28
4	JOURNAL OF RETAILING AND CONSUMER SERVICES	22
5	JOURNAL OF CONSUMER MARKETING	19
6	MARKETING INTELLIGENCE AND PLANNING	17
7	INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH	17
8	RESOURCES, CONSERVATION AND RECYCLING	17
9	BRIISH FOOD JOURNAL	15
10	INTERNATINAL JOURNAL OF CONSUMER STUDIES	14

Now in Table 6 the M-index statistics are given basically it is alike version like the H-index, which has been depicted annually since its inception. The h-index typically increases with tenure duration; therefore, the m-index can be employed during which this represents a limitation. The M-index presupposes continuous investigation since its initial publication. Considering patterns of citation differ widely throughout disciplines, the index works well when evaluating establishments that specialize in the same subject. The most relevant sources in M-index table are Journal of Cleaner Production ha 2.57, Sustainability (Switzerland) has 2.5 and Environment, development and Sustainability has 2. In both H-index and M-index Sustainability (Switzerland) is on the third place but in the M-index the third highest source is Business Strategy and Environment because this journal is rather older and has been publishing for an extended period, establishing an ongoing stream of publications, whereas Sustainability (Switzerland) operates as a relatively young journal; thereby, due to its long-term perpetual publication of documents, the journal of Business Strategy and Environment achieved its third place on the M-index table.

Table 6: Top 10 Sources Local Impact (M-index)

Position	Sources	M-Index
1	JOURNAL OF CLEANER PRODUCTION	2.57
2	SUSTAINABILITY (SWITZERLAND)	2.5
3	ENVIRONMENT, DEVELOPMENT AND SUSTAINABILITY	2

4	INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH	1.83
5	INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH	1.75
6	JOURNAL OF RETAILING AND CONSUMER SERVICES	1.4
7	ENVIRONMENT SCIENCE AND POLLUTION RESEARCH	1.33
8	SUSTAINABLE PRODUCTION AND CONSUMPTION	1.25
9	JOURNAL OF BUSINESS ETHICS	1
10	MEAT SCIENCE	1

4.4. Author and Countries Impact

4.4.1. Authors Impact

a. Authors local impact – Total Citation

Figure 4 shows the top authors with highest local total citations TC, here ‘local’ means the authors present in the extracted CSV data file. Laroche M has the highest local TC of 1591, closely followed by Barbaro-Forleo G and Bergeron J who both have attained same local TC of 1570. On the third place is Paul J with 1225 local TC’s. These top four authors have contributed substantially in the field of “green consumer behaviour” They have set the route for future research that will further investigate this subject matter for the evolution of sustainable development in the global community through their pioneering study assiduousness, as a result, they earned the distinction of being the most quoted author.

Figure 4: Top 10- Authors local impact – Total Citations

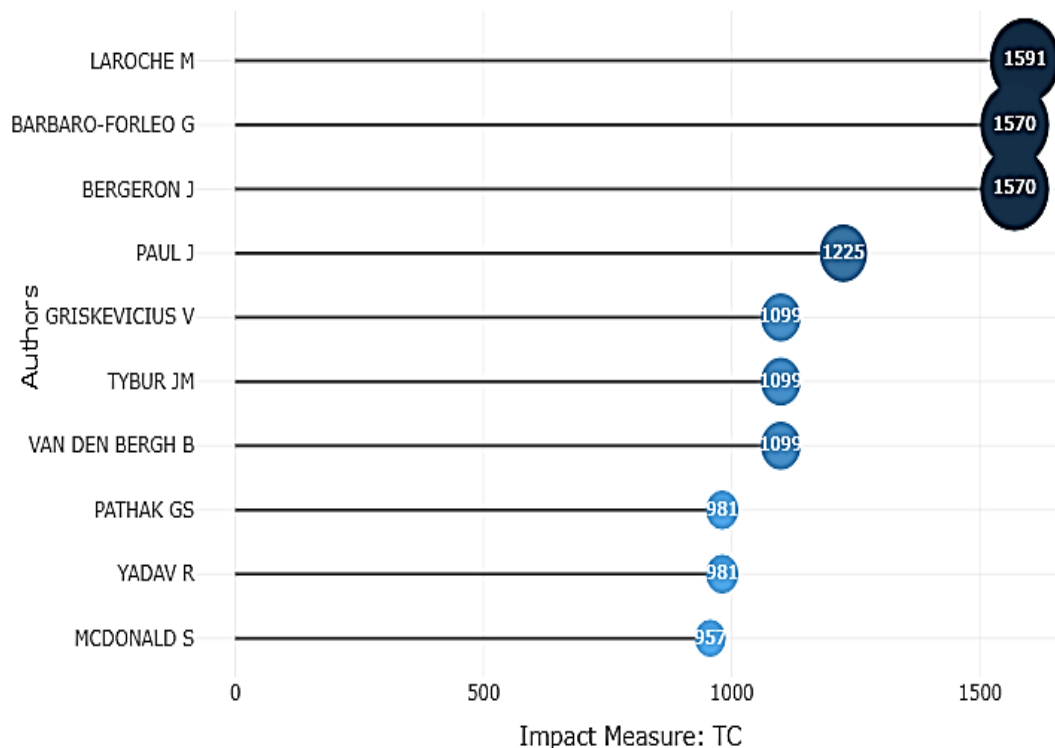
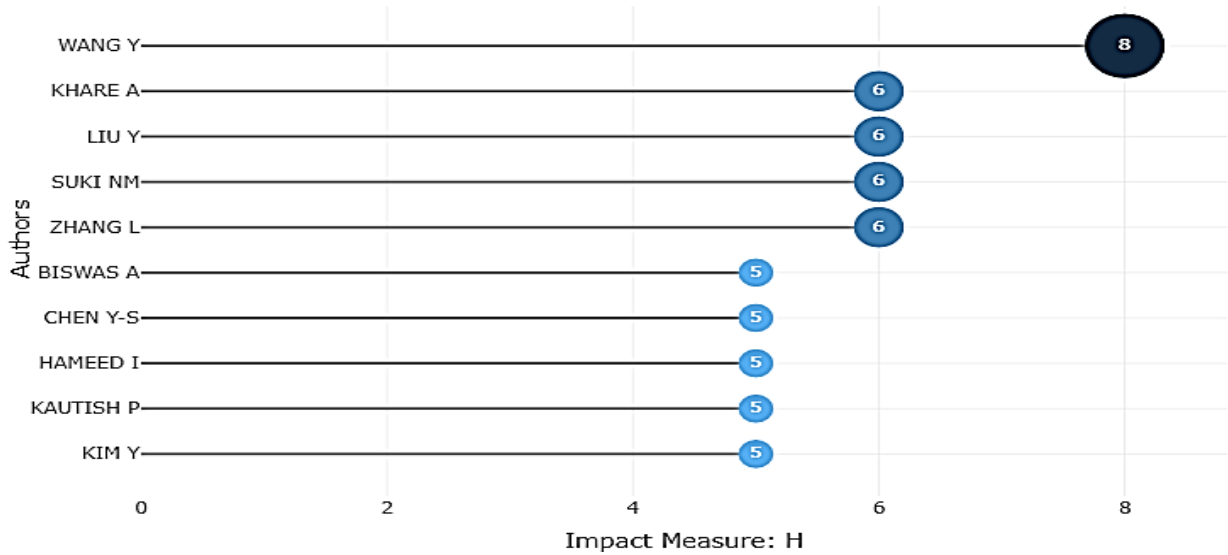
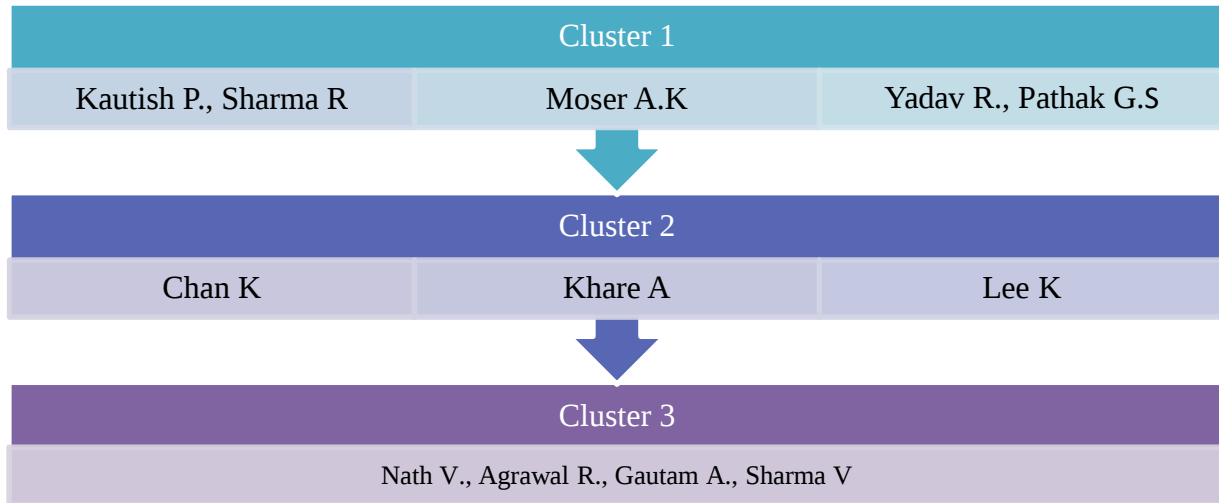


Figure 5: Authors local impact – H-Index



The H-index represents a numerical indicator that uses published statistics and citations of authors to determine the significance, intellectual worth, and diversity of overall findings from their research. Here Figure 5 gives a comprehensive understanding about the top 10 authors with highest H-index impact present in the local extracted dataset. The author Wang Y has emerged as the author with highest H-index of 8 vigilantly trailed by four assorted authors namely: Khare A, Liu Y, Suki nm and Zhang L who all have generated same H-index of 6. And then there are five authors namely: Biswa A, Chen Y-S, Hameed, Kautish P and Kim Y who have earned similar H- index of 5. These authors have gained a high impact rate and have been highly cited by researchers because they offer extensive informative literature that pieces together all the previous works and delivers an exhaustive synopsis about this field of research by bridging the key research gaps. Furthermore, there are 1518 authors in the dataset and after the selection of minimum number of published document 2 and minimum number of citations of an author 2, only 43 authors meet the threshold which created three clusters with 7 items in total. The cluster comprises an assembly of nodes that are connected in some way. Each node in the network is allocated to a specific cluster. The tenacity variable determines the total number of clusters. The greater the numerical value of this dimension, the more clusters there are.



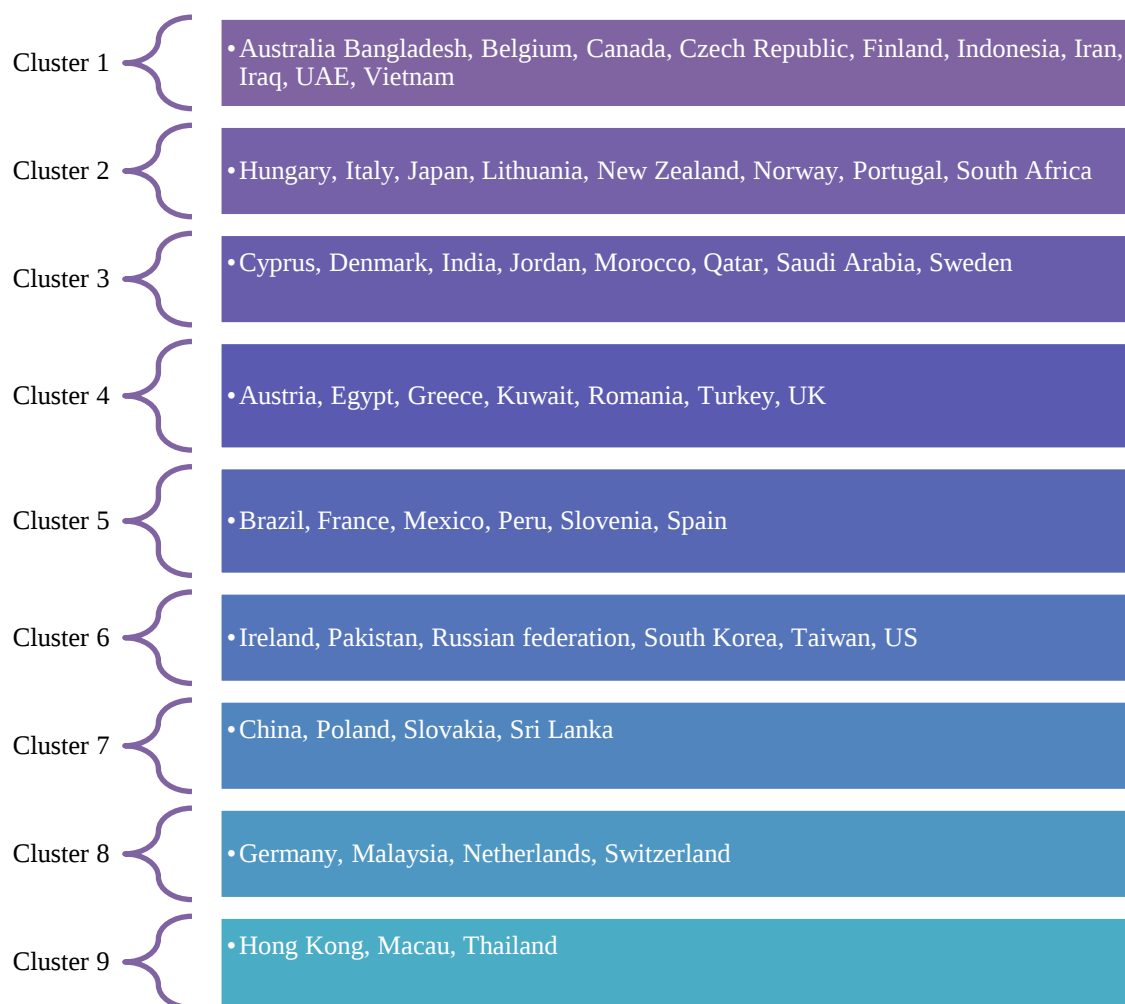
4.4.2. Countries Impact

Most cited countries

From Table 7, it is visible that USA who is a vastly developed country has the highest total citations TC of 7779 among all the countries present in the dataset, but still USA does not have the highest average citations per year followed by another developed nation China with second highest total citations TC of 4915 closely followed by rapidly developing country India with 3283 total citations TC. In the dataset it was concluded that Indian and Chinese studies have gained popularity due to their diverse and edifying research works which ultimately provided a lot of assistance to the other nations for their own empirical based research on sustainable consumption of the consumers. In addition, India has emerged as the developing-nation representation in this study, with Malaysia following slightly below on the table. Here, is a total of 100 countries in the dataset and after the selection of minimum number of published document 2 and minimum number of citations of an author 10, only 67 countries meet the threshold. Nine clusters are formed with 57 items in total given below.

Table 7: Top 10 most cited countries based on TC

Position	Countries	Total Citations (TC)	Average Citations per Year	Developed/Developing Countries
1	USA	7779	56.36	Developed
2	CHINA	4915	19.89	Developed
3	INDIA	3283	32.18	Developing
4	UK	2905	78.51	Developed
5	AUSTRALIA	1658	50.24	Developed
6	GERMANY	1628	39.7	Developed
7	ITALY	1406	27.56	Developed
8	FRANCE	1267	42.23	Developed
9	CANADA	1088	54.4	Developed
10	MALAYSIA	1034	17.52	Developing

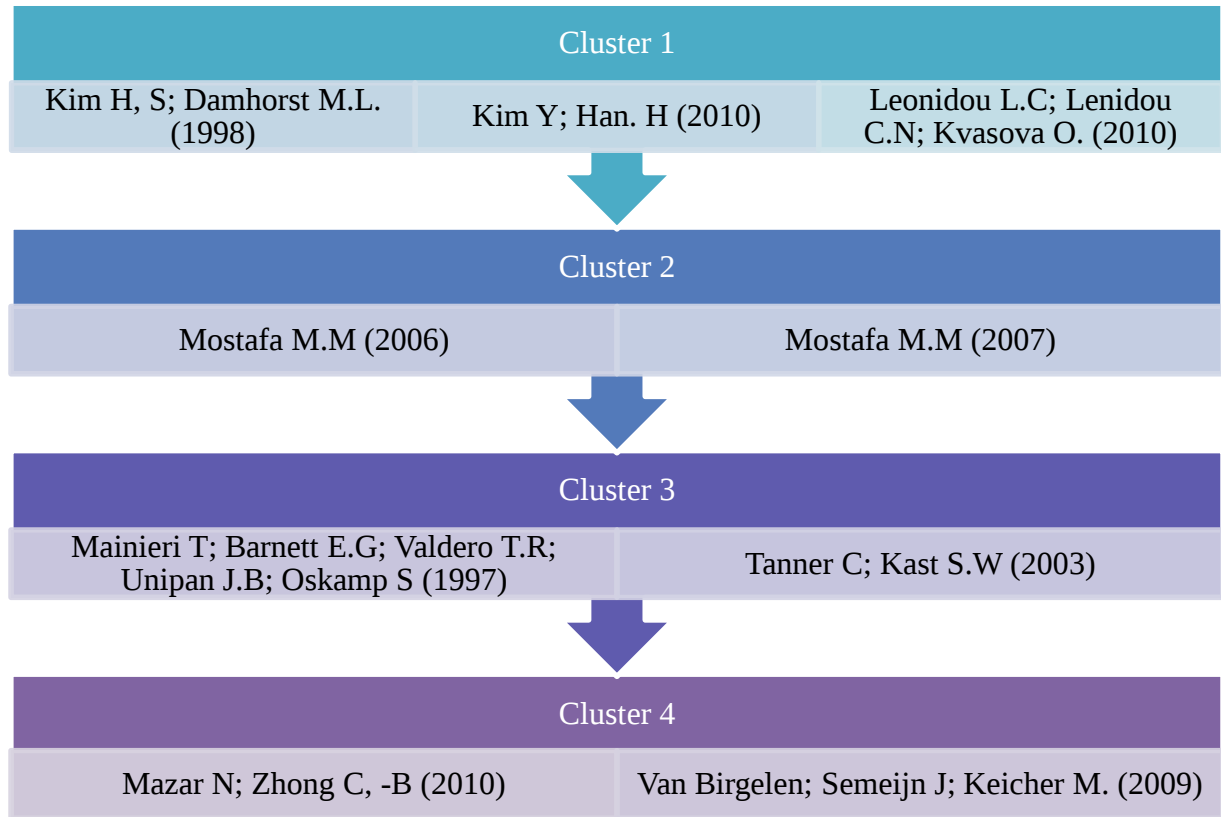


Most local cited references

Table 8: Top 10 most local cited references

Position	Cited References	Citations
1	HAIR, J.F.	58
2	RINGLE, C.M.	48
3	WANG, Y.	45
4	FORNELL, C.	41
5	HAN, H.	37
6	WANG, J.	35
7	YADAV, R.	35
8	SARSTEDT, M.	33
9	CHEN, Y.S.	32
10	LOBO, A.	30

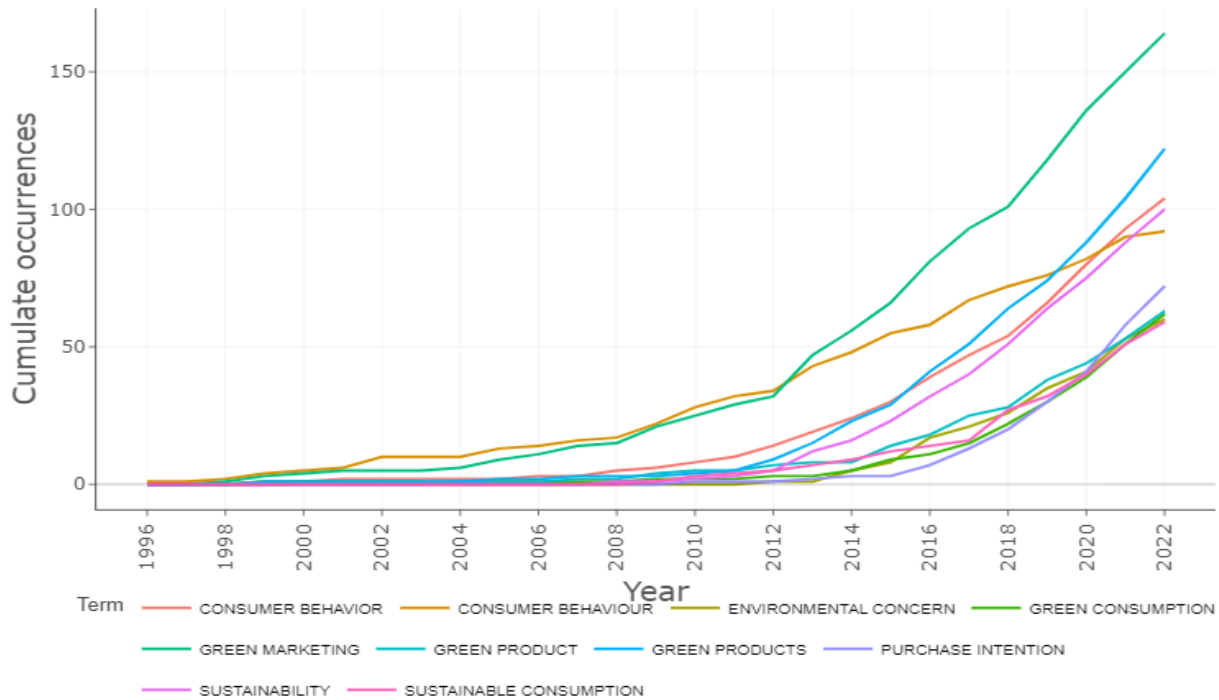
Table 8 shows that Hair, J.F has the highest citations of 58 and on the second place comes Ringle, CM with 48 citations and on the third-place lays Wang, Y with 45 citations. These top three cited references in the data provides a significant indication about the researcher's prerequisite when it comes to the quality of published research. When bibliographic coupling was conducted on the 1574 documents present in the dataset, the threshold was found to be 121 documents that have more than 100 citations in total, and four clusters were formed.



5. Word Dynamics & Trending Keyword

5.1. Word Dynamics

Figure 6: Word dynamics of authors' keywords over the years – (1992-2022)

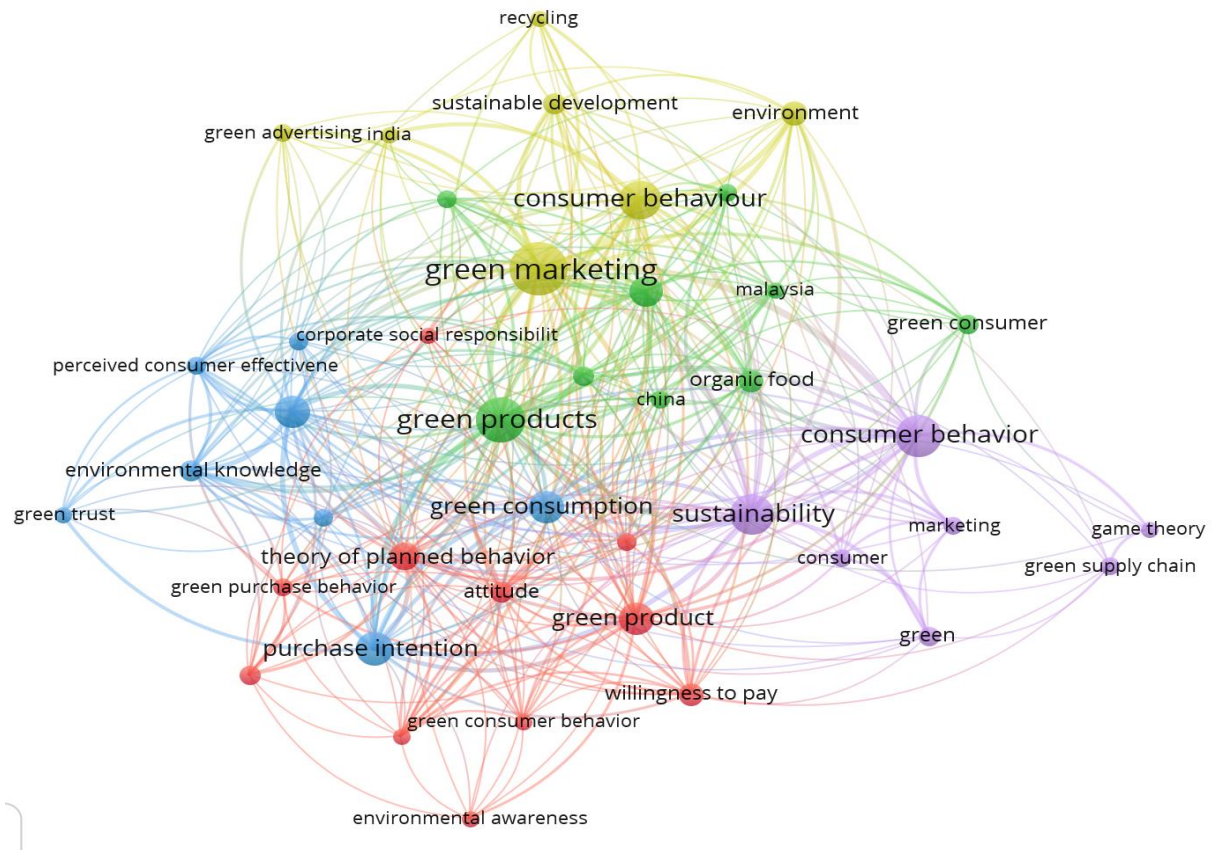


Word dynamics means that how a 'word' or 'keyword' have shown a dynamic appearance throughout the years based on their frequency in the published research articles. Both 'Consumer Behavior' and 'Consumer Behavior' have been appearing since (1996) and their frequency is increasing rapidly specially since early (2000's). Along with them from the year of (2012) various words like 'Environmental Concern', Green Marketing', 'Sustainability', Green Product', 'Purchase Intention', 'Sustainable Consumption' and 'Green Consumption' has shown enormous increase in their presences drastically.

5.2. Trending Authors Keyword

Figure 7 shows an inclusive network visualization map of all the authors' keywords along with their corresponding clusters they are placed into. The color of the dot shows the group of clusters and network is depicted by the curved lines between the authors' keywords.

Figure 7: Most trending keywords

**Table 9:** Top 10 most frequently used keyword

Position	Terms	Frequency	Percentage of Tree Map
1	Green Marketing	164	10%
2	Green Products	122	7%
3	Consumer Behavior	104	6%
4	Sustainability	100	6%
5	Consumer Behavior	92	5%
6	Purchase Intention	72	4%
7	Green Product	63	4%
8	Green Consumption	62	4%
9	Environmental Concern	60	4%
10	Sustainable Consumption	59	3%

From the above fig and Table 9 it is concluded that the most recurrent authors keyword in the dataset is ‘Green Marketing’ with a frequency of 164 and it covers 10% of the authors keyword tree map domain, followed by ‘Green Product’ with 122 frequency and covers 7% of the data space. Then, on the third place comes ‘Consumer Behavior’ with 104 frequency and covers around 6% of the dataset. Lastly on the fourth place comes ‘Sustainability’ with a frequency of 100 and it also cover 6% of the sphere. There are 3897 Authors keyword in

the dataset out of which only 42 authors' keywords occurred ≥ 15 times in total. Five clusters are formed with 42 items in them (Figure 7). Clusters and their respective items are given below.

Red Cluster 1	Green Cluster 2	Blue Cluster 3	Yellow Cluster 4	Purple Cluster 5
•Attitude •Consumer •Social Responsibility •Environmental Awareness •Environmental Consciousness •Green Consumer Behaviour •Green Product •Green Purchase Behaviour •Green Intentions •Theory of Planned Behaviour •Willingness to Pay	•China •Circular Economy •Green Consumer •Green Consumers •Green Products •Malaysia •Organic Food •Sustainable Consumption •Theory of Planned Behaviour	•Environmental Attitude •Environmental Concern •Environmental Knowledge •Green Consumption •Green Purchase Behaviour •Green Trust •Perceived Consumer Effectiveness •Purchase Intention.	•Consumer Behaviour •Environment •Green Advertisement •Green Marketing •India •Recycling •Sustainable Development	•Consumer •Consumer Behaviour •Game Theory •Green •Green Supply Chain •Marketing, Sustainability

6. Conclusions

The purpose of this research was to formulate and visualize immaculate record of all the green consumer behavior literature published and indexed in Scopus database from the year of (1992-2022). After the essential filtration total of 1574 articles published in English language were shortlisted and bibliometric analyses was done through R-package latest bibliometric version (4.0.1). Substantial findings have been looked into, and they are best summed up as outlined below: scientific mapping was done through R studio which focused on researchers, articles countries, sources, institutions and keywords for the conceptualization of the topic clusters, research impact, collaboration among countries, progression of the sources over the time, concluding status on the basis of citations and number of publications, mapping of leading reference impacts, determination of trending keywords and most importantly future research projections. R studio software aligned and visualized a comparative positioning for all the leading research variables present in the extracted data. Relevant clusters are subsequently provided through unraveling the discipline's cognitive framework which provides an extensive summary of green consumer research, outlines major study gaps, and highlights several promising directions. The conceptual input may aid in the eventual creation of future pertinent investigations to address noted research gaps. Managers in companies can gain knowledge from statistical information and concentrate on cutting-edge and specific fields like the use of green power and environmentally friendly techniques. Administration can use

these components to support legislative efforts as environmentally friendly policy has emerged as an area of study having potential for further development. The blueprint for the approach asserts that an additional advantage for decision-makers is to concentrate on a particular issue, specifically the utilization of renewable energy with the goal to remove barriers to environmentally conscious intake, a national educational strategy may be applied to urge elements of environmentally conscious behavior. The removal of barriers to sustainable consumption could serve as a goal for other government-funded endeavors. Other suggestions for the future research are that more studies should be done in various disciplines like economics, social science so that it can emphasize the standing influence of green consumer behavior in the world economy and societal status. Also, leading articles published in other languages should be included in the research data so that prominent findings and variables are not left out. Lastly novel and advance software's should be used together or exclusively to accomplish advance detailed mappings and premeditated metaphysical theories.

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