

A Systematic Mapping Study on Green Purchase Intention



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ABSTRACT: The purpose of this research is to analyze and identify research that has been conducted within green purchase intention, and to classify the characteristics of this research. The researcher conducted a structured study to search and analyze literature related to this topic. The researcher found 67 primary studies published between 2000-2020 and classified them based on the year of the study, the country of publication, the focus of the research, the locus of the research, the type of research, and the research method. This mapping study provides the first systematic review of the current state of research on green purchase intention. However, the number of high-quality studies available is still limited.

KEYWORDS: purchase intention, green purchase intention, systematic mapping study

I. INTRODUCTION

Consumers have adapted to green company practices and green purchasing habits, according to earlier surveys. The threat presented by the loss of natural resources and the environment has been recognized by nations all over the world. According to Biswas and Roy (2015), the effects of environmental harm include global reliance, environmental degradation (soil, water, and air), ozone layer depletion, diminished quality of social life, and poorer health. The two causes that harm the environment are nature and humanity (Muliaman, 2015). Environmental damage can result from human actions that don't take environmental health into consideration. Because of the substantial damage, the environment is less healthy, which increases the risk of natural disasters including landslides, forest fires, floods, and clean water shortages..

People need to be more wise in how they conduct their activities because there are many issues that arise from human acts that harm the environment. People frequently use items without thinking about how they might affect the environment. The amount of waste produced is not surprising given that the modern way of life frequently uses plastic materials in packaging.

Due to the waste issue, businesses have begun developing business strategies that focus on environmental development and protection in order to lessen the impact of their operations on the environment (Joshi & Rahman, 2015; Wu, 2015). Buying items that lessen negative environmental effects is related to buying ecologically friendly goods (Chan, 2001). Customers will be drawn to businesses, goods, or services that care about the environment if they are aware of how important the idea of environmental sustainability is (Mas'od & Chin, 2014). Environmental concerns have a positive impact on businesses that care about the environment as well as the development of environmentally friendly products..

If the products are accompanied by sufficient and trustworthy information, people are more likely to purchase environmentally friendly products. This means that businesses must give consumers accurate information in order to improve customer perceptions of the risks associated with utilizing these items (Peattie, 1992). Environmental ideas have become far more significant in emerging nations in recent years (Arli, Tan, Tjiptono, & Yang, 2018)..

Reduced non-recyclable trash output in all activities is one way the community can demonstrate its concern for the environment. Today, an increasing number of producers offer ecologically friendly goods. Environmentally conscious products are those that take the environment into account at every stage of production, including raw material selection, manufacturing, transportation, and product use (Lestari, 2019)..

Utilizing green products is a development that can significantly affect the environment. In order for businesses to encourage the usage of environmentally friendly products, it is necessary for the public to be aware of the value of doing so. With this understanding, it is hoped that they will produce and sell their products in a way that is ecologically friendly.

Numerous studies have discovered an association between green purchase intention and green purchase behavior that is both favorable and significant (Akehurst et al., 2012; Kanchanapibul, Lacka, Wang, & Chan, 2014; Kumar et al., 2017; Lai & Cheng,

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2016; Yadav & Pathak, 2016). However, according to certain studies, there is no correlation between the intention to make green purchases and the actual behavior of making green purchases (Chan and Yam, 1995). (Wong et al., 1996; Crane, 2000; Chan, 2001). According to Akehurst, Afonso, and Martins Gonçalves' (2012) study, consumers who were more environmentally conscious had higher intentions to make green purchases. Environment-Related Issues More so than the mediating factor of green purchase intention, consumer behavior affects green purchase behavior.

II. LITERATURE REVIEW

According to the theory developed by Azjen (1991), there are three concepts that influence a person's formation of intentions or intentions to perform a behavior. These concepts are attitudes, subjective norms, and perceived behavioral control. Intention is considered a prerequisite for carrying out the actual behavior. The main factor in the theory of planned behavior (TPB) is the individual's intention or desire to perform a certain behavior. Intention shows how strongly a person wants to try and act in order to perform a behavior. In other words, the stronger a person's intention to engage in a particular behavior, the more likely the actual behavior will be carried out (Azjen, 1991). According to Yadav and Pathak (2016), intention also refers to an individual's readiness to perform a certain behavior.

Growing environmental consciousness among the general population affects consumer behavior, especially in terms of developing green purchase intentions (Aekhurst et al., 2012). "Green purchase intention" refers to customers' desire to acquire environmentally friendly goods and their motivation to do so because they not only pay attention to a product's ecological qualities but also take the environment's effects into account while making these purchases (Jaiswal and Kant, 2018). Green purchase intention can alternatively be understood as a person's opportunity and desire to think carefully about his purchasing decisions and favor ecologically friendly products over conventional ones (Rashid, 2009).

III. RESEARCH METHODS

The purpose of this study is to better understand the Green Purchase Intention study and lay a solid foundation for future research. Researchers looked for articles that covered green purchase intentions in an international internet database called Scopus. A literature study technique that uses a systematic mapping study (SMS) is appropriate because it is backed up by 2,511 publications about purchase intention that were found in the Scopus electronic database (Kitchenham, 2011; Petersen et al., 2008).

In order to find reliable and pertinent results in electronic databases, broader research questions must be devised to meet the study's aims. In his analysis, the researcher assesses search outcomes that are pertinent to the Green Purchase Intention study based on the formulation of the key questions, which are as follows:

RQ1: On what area of the study's topic is the research focused?

RQ2: What kinds of research techniques and articles were used?

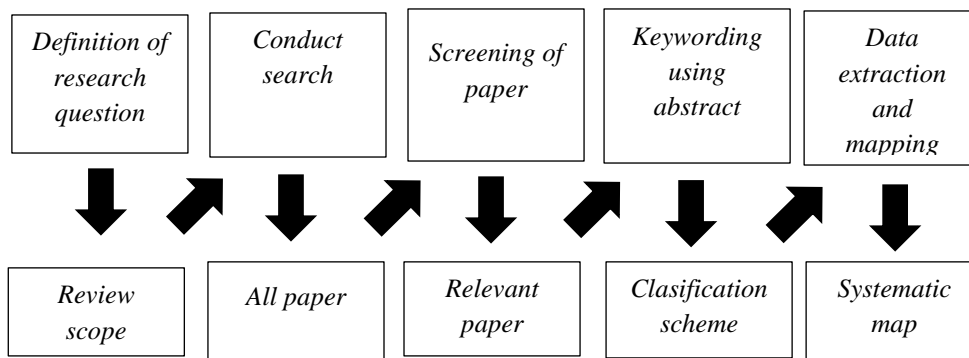
RQ3: How has the subject changed over time in each nation?

This study used the Systematic Mapping Study (SMS) method, which is a secondary study. SMS has its roots in Study Literature Review (SLR), which is a method used in information technology research (Kitchenham, 2011). Research with the SLR approach aims to identify, evaluate, and interpret all available and relevant literature sources related to the research questions that have been formulated (Kitchenham, 2011; Petersen et al., 2008; Barbosa and Alves, 2011; Banaeianjahromi & Smolander, 2016). SLR is typically performed to first reach a conclusion about the topic; second, to identify gaps in the research and make recommendations for future studies; and third, to position new research activities by providing context (Kitchenham, 2011). The type of research activity that has been conducted in this study is referred to as SMS. SMS gives a high-level summary of a particular field of research without going into much detail about the research problems (Petersen et al., 2008). To put it another way, SMS research can be seen as a strategy to acquire an overview of a specific research area (Kitchenham et al., 2011).

Search Process

The search and analysis techniques must be as precise as feasible in order to increase the accuracy of SMS studies. As a result, this part goes over how to choose data sources, use search-string methods, and establish exclusion and inclusion criteria. The search methodology from Petersen et al. (2008) and Banaeianjahromi and Smolander (2016) is used in this work. As a result, this part goes over how to choose data sources, use search-string methods, and establish exclusion and inclusion criteria. The search methodology from Petersen et al. (2008) and Banaeianjahromi and Smolander (2016) is used in this work. Every step in this process has an effect, and the mapping process ends with a systematic map (systematic mapping). With reference to the research carried out and in accordance with guidelines from Kitchenham (2011) and Petersen et al., the researcher outlines the entire SMS method employed in this study in Figure of SMS Process (2008). The Scopus electronic database was searched online by researchers.

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SMS Process (Petersen et al, 2008)

Using a technique described by Banaeianjahromi and Smolander (2016), who make reference to the work of Barbosa and Alves, search strings, or search keywords, were constructed (2011). Defining the primary keyword is the first stage. Examining well-known studies in the area of intended green purchases is the second step. Finding alternate keyword forms to employ in the search process is the third stage. The final step, according to Banaeianjahromi and Smolander (2016), is to create a single search string using Boolean operators. The search terms "purchase intention" and "green purchase intention" yield 67 results when used with the Boolean AND operator. The number of articles returned by the search string "Purchase Intention" will reach 2,511 if the Boolean operator is not used. In the Scopus electronic database, the search string is used to do searches on all aspects of the article, including the title, abstract, and keywords. One of the mapping study's actions is to identify the category of excluded articles (also known as exclusion criteria) and article inclusion in order to prevent irrelevant articles from being included and relevant articles from being included in the analysis (Petersen et al., 2008). The researcher now decides the inclusion and exclusion criteria in accordance with the objectives and study questions. Articles that did not discuss buying intentions or had no connection to the research question were excluded. While articles addressing excellent corporate governance and being pertinent to the study issue are the admission criteria.

Classification Step

The researcher divides the articles into three specified components as part of the systematic mapping procedure in order to examine and categorize articles that have been filtered based on criteria. According to Petersen et al. (2008), the first grouping of publications is according to research focus/procedure in order to examine and categorize articles that have been filtered based on criteria. According to Petersen et al. (2008), the first grouping of publications is according to research focus. Second, according to Wieringa et al.'s classification, papers are categorized according to their type (paper type) (2005). Third, papers are arranged using references from the research and the research techniques. The three categories used in this study's classification procedure are described in Table of Inclusion and Exclusion Criteria.

Inclusion	Exclusion
<p>Studies that concentrate on competitive advantage</p> <p>English</p> <p>Only academic journals and articles</p> <p>Peer-reviewed papers that have been completed</p>	<p>Articles that do not discuss competitive advantage</p> <p>Languages other than English</p> <p>Dissertations, theses, book chapters, product specifications, presentations, work reports, trade literature, editorial notes, and esoteric</p> <p>Manuscripts that have not undergone peer review</p> <p>Repetition of research</p>

Table of Inclusion and Exclusion Criteria

Paper Type	Explanation
<i>Validation Research</i>	The investigative technique is novel and has not been used in actual investigations (experimental or observational).
<i>Evaluation Research</i>	The evaluation approach includes the investigative method and puts it into practice.
<i>Solution Proposal</i>	It is suggested that problems be solved; these suggested solutions may be brand new, useful, or pre-existing.
<i>Philosophical Paper</i>	By utilizing a taxonomy or conceptual framework, this research offers a fresh viewpoint on an already existing topic.

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Methods	Information
Quantitative Method	The Rapid Assessment Process, secondary data, ethnography, focus groups, in-depth interviews, diaries, and language analysis are examples of qualitative approaches.
Qualitative Method	Sample designs, hypotheses, and tests—all statistical formulations—are presented via the quantitative approach.
Mix Methods	At every stage of the research process, mixed-model studies and methodologies that integrate qualitative and quantitative techniques in their methodology (such as during the data gathering stage) blend the two approaches.

Table of Classification Category

RESULT AND DISCUSSION

Scopus has released the findings of a systematic mapping of 67 papers covering green purchasing intentions in this area. These articles were mapped according to the categories of research focus, research locus, techniques, paper type, and research method in various parts of the world. The outcomes of this mapping provide responses to earlier-posed research questions.

No.	Category	Information	Total
1	Year	2000 – 2005	3
		2006 – 2010	1
		2011 – 2015	12
		2016 – 2020	51
2	Country of Origin of Publication	Denmark	1
		Egypt	1
		China	12
		Germany	1
		Nigeria	1
		Vietnam	3
		Korea	1
		Malaysia	8
		Iran	3
		Taiwan	4
		Turkey	4
		Indonesia	5
		USA	6
		India	9
		Slovenia	1
		Ghana	1
3	Research Focus	<i>Marketing Mix</i>	1
		<i>Green Purchase Acceptance Scale</i>	1
		<i>Actual Green Purchase</i>	1
		<i>Willingness to Buy</i>	1
		<i>Environmental Advertising</i>	1
		<i>Green Purchase Intention</i>	34
		<i>Behavioral Intention</i>	1
		<i>Purchase Intention</i>	9
		<i>Green Market Performance</i>	1
		<i>Green Brand Evangelism</i>	1

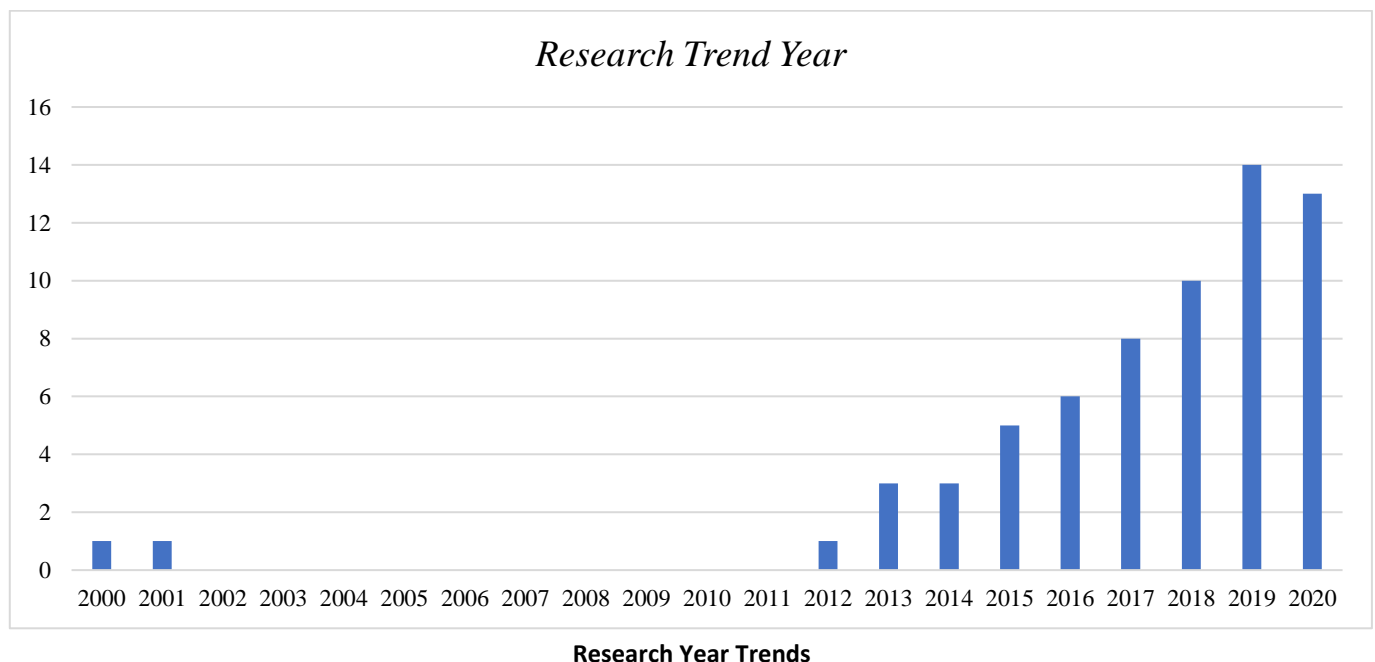
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		<i>Green Consumerism</i>	1
		<i>Loyalty</i>	1
		<i>Green Behavior</i>	1
		<i>Green Purchase Behavior</i>	12
4	Research Locus	<i>Academic</i>	1
		<i>Consumer</i>	54
		<i>University Student</i>	4
		<i>Students</i>	4
		<i>Worker/Entrepreneur</i>	1
		<i>Employee</i>	3
5	<i>Paper Type</i>	<i>Validation Research</i>	60
		<i>Evaluation Research</i>	5
		<i>Solution Research</i>	0
		<i>Philosophical Paper</i>	0
		<i>Experience Paper</i>	2
6	<i>Method</i>	<i>Mix Method</i>	7
		<i>Qualitative</i>	1
		<i>Quantitative</i>	59

Table of Results of Green Purchase Intention Systematic Mapping

Research Focus (RQ1)

We categorized 67 articles according to the study topic area researched in order to respond to the first research focus question. The percentage of topics studied is shown in Figure of Research Trend Year, with the most researched topics having a research focus of 34 articles on green purchase intention, 12 articles on green purchase behavior, 9 articles on purchase intention, and 1 article from each of the following topics: marketing mix, green purchase acceptance scale, willingness to buy, environmental advertising, behavioral intention, green market performance, green brand evangelism, green consumerism, loyalty, and green behavior.



Types of Articles and Research Methods (RQ2)

Based on the type of publication, research is divided into five categories: validation research, evaluation research, solution proposal, philosophical paper, and experience paper (Petersen et al. 2008). Here is an explanation of each of these groups:

- a) Validation research: Applying a novel technique that has not yet been used in actual practice.
- b) Evaluation research: The approach has been used in practice, and its effectiveness has been assessed.

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- c) Solution Proposal: giving a solution to an issue, whether it be a fresh idea or a tried-and-true method.
- d) Philosophical paper: Integrating fresh perspectives with existing conceptual or ethical frameworks.
- e) Experience paper: Express the author's personal insight into what is being done in practice.

According to this classification, it is known that validation research makes up 90% of the field, evaluation research makes up 7%, solution proposal make up 0%, philosophical papers make up 0%, and experience papers make up 3%.

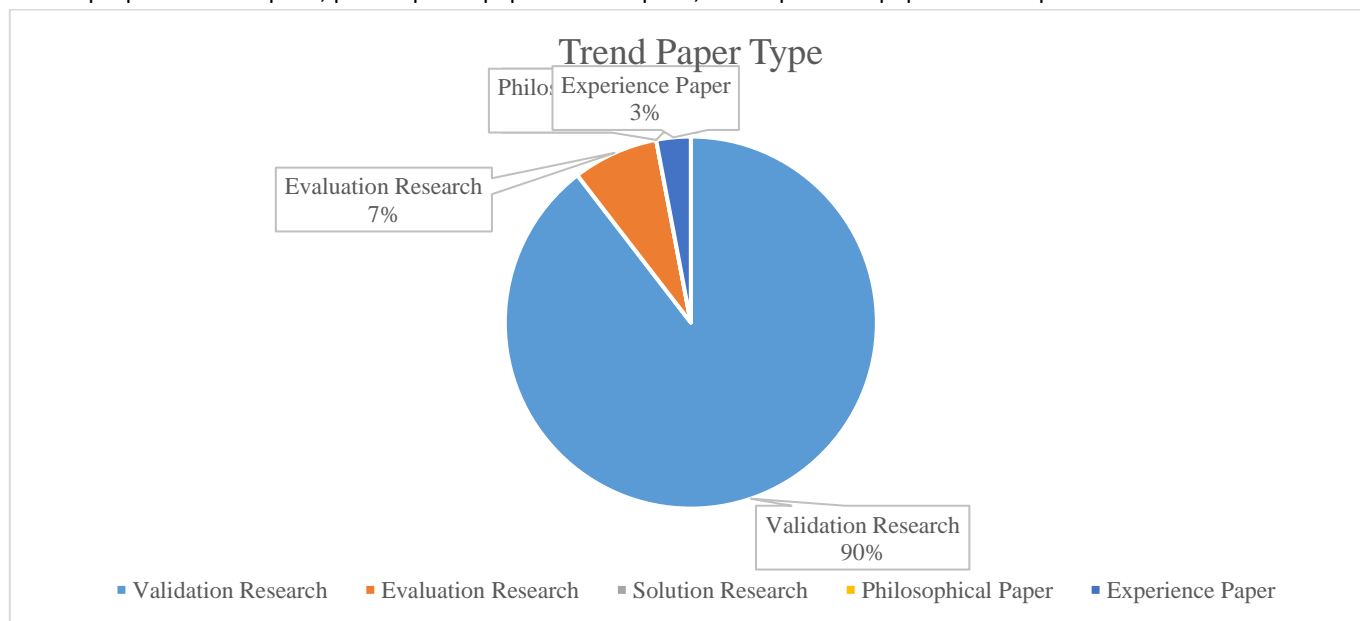


Figure of Trend Paper Types

In addition, prior research is categorized according to the research methodology, citing the views of B. A. Kitchenham (2007), Petersen et al. (2008), and Wieringa et al. (2006). Based on Figure of Trend Research Methods, a quantitative, qualitative, and mixed methodology approach was applied for this systematic mapping. Because this strategy intends to test and assess intent, quantitative research on green purchase intention is the most frequently conducted. 73% of the articles make use of quantitative methodology. Additionally, there are articles that employ the mixed-techniques approach in up to 23% of cases and qualitative approaches in up to 4% of cases.

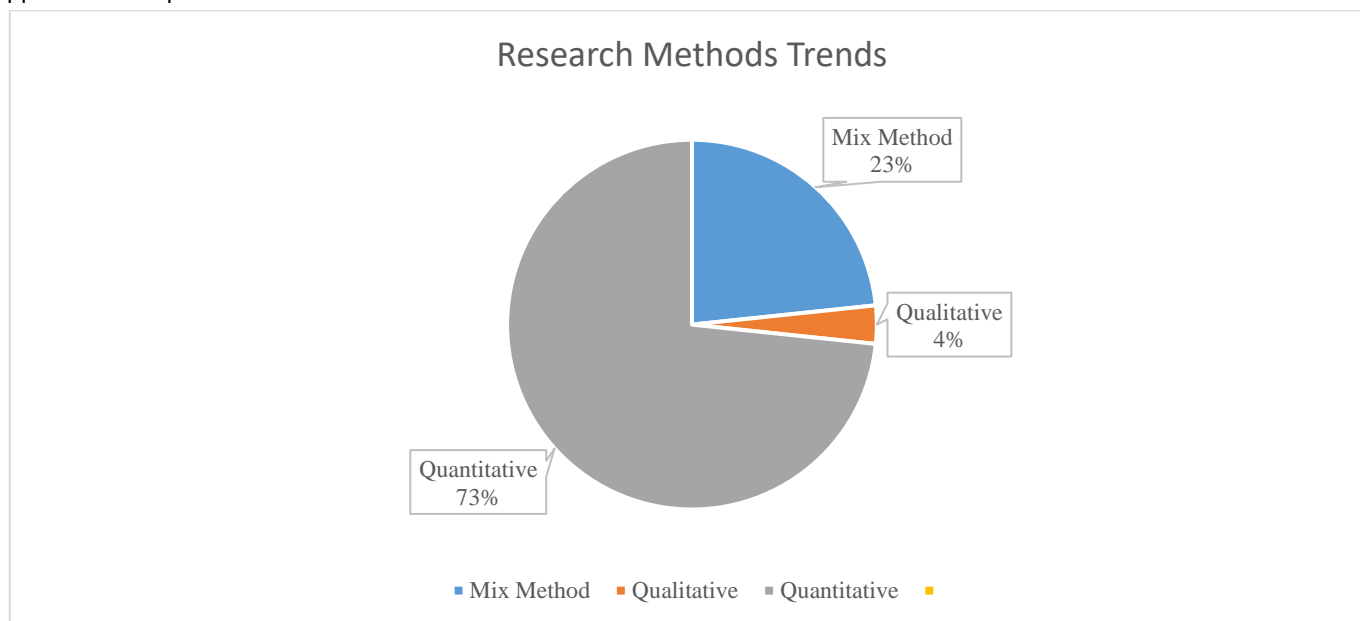


Figure of Trends in Research Methods

Publication Trends in Each Country Over Time (RQ3)

According to the information that is currently accessible, 67 articles from 20 different countries have examined the subject of green purchase intention. China, India, and Malaysia were the nations that did the most research, each with 12 studies each. In

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contrast, there are still only a few research from 17 other nations. For instance, there are only five reported studies from Indonesia. The average number of articles per country is still only a tiny amount, despite the fact that the number of articles is quite dispersed. Researchers and academics in Indonesia can take use of this circumstance to study consumers' intentions to make green purchases.

According to the grouping of articles by year of publication, the period between 2016 and 2020 is when there is an increase in scientific publications. With 14 articles in 2019 and 13 in 2020, there was a notable rise in research. This circumstance demonstrates that academics and marketing professionals have been paying attention to research on green purchase intention, a topic that is currently in demand.

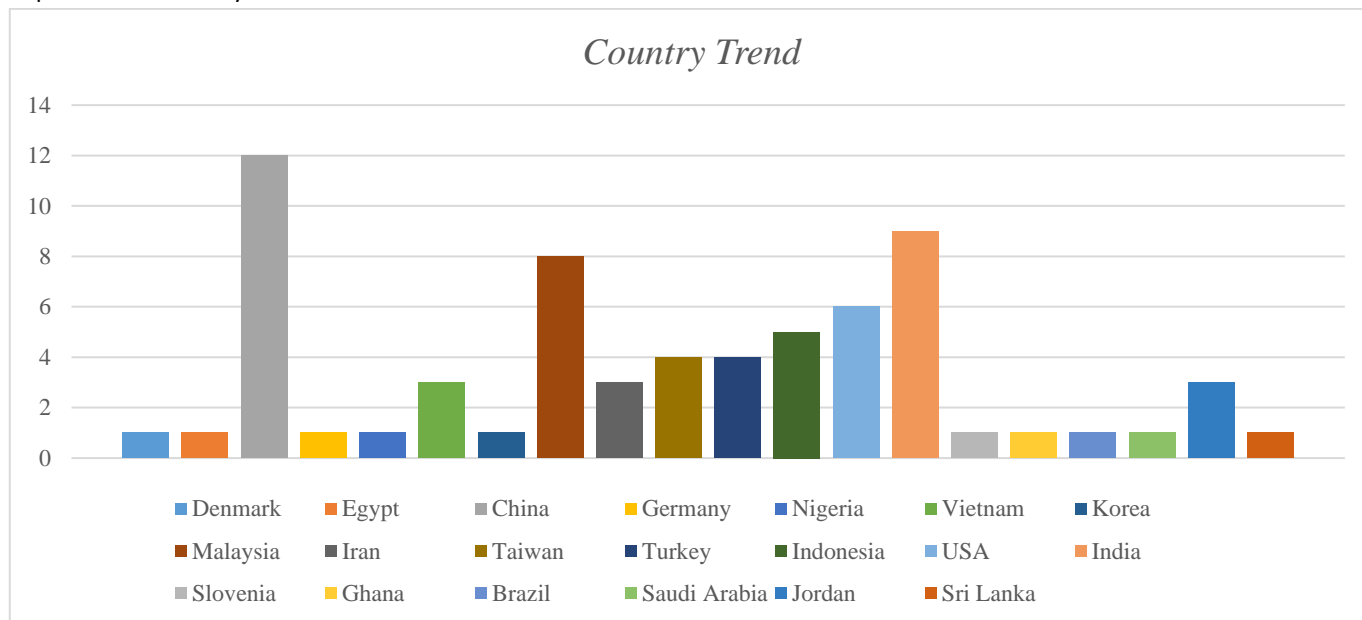


Figure of Country Trends

CONCLUSIONS

Being conscious of the significance of getting back in touch with nature can impact your decision to make green purchases. This implies that people are more likely to pay attention to goods or services that have a smaller negative impact on the environment. They tend to favor goods and services that are environmentally responsible and support morals that are in line with nature's restoration.

This study maps the literature on green purchase intentions found in the Scopus scientific database. The major goal of this study is to give a summary of the literature on green purchasing intentions as a way to boost corporate competitiveness. The results of this study are anticipated to help firms manage and grow using a green purchase intention approach.

To identify the research emphasis that has been examined in that location, researchers in this study used the systematic mapping study approach (Kitchenham, 2011; Petersen et al., 2008; Banaeianjahromi and Smolander, 2016). Following a rigorous mapping of 67 research publications, the researchers came to the following conclusions:

1. The focus on the green purchasing intention study, which has been covered in 30 articles, has received extensive research.
2. A validation study is the article type that is most frequently employed, accounting for 60 articles.
3. China, with a total of 12 papers, generates the most research on consumers' intentions to make green purchases.

The Systematic Mapping Study (SMS) research method is an efficient way to find relevant study topics and regions that require more investigation. By highlighting current research gaps, the study's findings offer advice to other academics planning their own future research. Researchers can use SMS to better grasp the state of a field of study and choose how to proceed with additional study.

REFERENCES

- 1) Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- 2) Akehurst, G., Afonso, C., and Goncalves, M., H. 2012. Re-examining green purchase behaviour and the green consumer profile: new evidences, *Management Decision*, 50(5):972-988.
- 3) Arli, D., Tan, L. P., Tjiptono, F., & Yang, L. (2018). Exploring consumers' purchase intention toward green products in an emerging market: The role of consumers' perceived readiness. *International Journal of Consumer Studies*, 42(4), 389–401.

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- 4) Biswas, A., & Roy, M., (2015). Leveraging factors for sustained green consumption behavior based on consumption value perceptions: testing the structural model. *Journal of Clean Production*, 95, 332-340.
- 5) Chan, R.Y.K. (2001), "Determinants of Chinese consumers Green Purchase Behavior", *Psychology and Marketing*, Vol. 18 No. 4, pp. 389-413.
- 6) Chan, R.Y.K. and Yam, E. (1995), "Green movement in a newly industrializing area: A survey on the attitudes and behavior of the Hong Kong citizens", *Journal of Community and Applied Social Psychology*, Vol. 5 No. 4, pp. 273-284.
- 7) Crane, A. (2000), "Marketing and the natural environment: what role for morality?", *Journal of Macromarketing*, Vol. 20 No. 2, pp. 144-54.
- 8) Jaiswal, D., & Kant, R. (2018). Green purchasing behaviour: A conceptual framework and empirical investigation of Indian consumers. *Journal of Retailing and Consumer Services*, 41, 60-69.
- 9) Joshi, Y., & Rahman, Z. (2015). Factors Affecting Green Purchase Behaviour and Future Research Directions. *International Strategic Management Review*, 3(1), 128-143.
- 10) Kanchanapibul, M., Lacka, E., Wang, X., & Kai, H. (2014). An empirical investigation of green purchase behaviour among the young generation. *Journal of Cleaner Production*, 66, 528-536.
- 11) Kitchenham, B. (2011). Guidelines for Performing Systematic Literature Reviews in Software Engineering. EBSE Technical Report, School of Computer Science and Mathematics. Keele University. UK, 1-57.
- 12) Kumar, A., Luthra, S., Khandelwal, D.K., Mehta, R., Chaudhary, N., Bhatia, S., 2017a. Measuring and improving customer retention at authorised automobile work-shops after free services. *J. Retail. Consum. Serv.* 39, 93e102.
- 13) Lai, C.K., Cheng, E.W., 2016. Green purchase behavior of undergraduate students in Hong Kong. *Soc. Sci. J.* 53 (1), 67-76.
- 14) Mas'od, A., & Chin, T. A. (2014). Determining socio-demographic, psycho-graphic and religiosity of green hotel consumer in Malaysia. *Procedia- Social and Behavioral Sciences*, 130, 479-489.
- 15) Nik Ramli Nik Abdul Rashid. 2009. Awareness of eco-label in Malaysia green marketing initiative. *International Journal of Business and Management*. 4, 132-141.
- 16) Peattie, K. (1992), *Green Marketing*, Pitman Publishing, London.
- 17) Wieringa, R., Maiden, N., Mead, N., & Rolland, C. (2006). Requirements Engineering Paper Classification and Evaluation Criteria: A Proposal and A Discussion. *Requirements Engineering*, 11(1), 102-107. doi: <https://doi.org/10.1007/s00766-005-0021-6>
- 18) Wong, V., Turner, V. and Stoneman, P. (1996), "Marketing strategies and market prospects for environmentally friendly consumer products", *British Journal of Management*, Vol. 7 No. 3, pp. 263-81.
- 19) Wu, S.-I. (2015). Effect of green consumption perception degree on relationship model of green consumption behavior. *Journal of Management and Strategy*, 6 (2), p109. doi:10.5430/jms.v6n2p109
- 20) Yadav, R., Pathak, G.S., 2016a. Young consumers' intention towards buying green products in a developing nation: extending the theory of planned behavior. *J. Clean. Prod.* 135, 732-739.



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