

PAPER • OPEN ACCESS

Effect of Consumer Skepticism on Consumer Intention in Purchasing Green Product

To cite this article: Rinaldi Bursan *et al* 2022 *IOP Conf. Ser.: Earth Environ. Sci.* **1027** 012037

View the [article online](#) for updates and enhancements.

You may also like

- [Linking green skepticism to green purchase behavior on personal care products in Indonesia](#)
Masayu N Syadzwinia and Rifelly D Astuti
- [Psychological and experiential factors affecting climate change perception: learnings from a transnational empirical study and implications for framing climate-related flood events](#)
Gala Munoz-Carrier, Dana Thomsen and Gary J Pickering
- [Rumor propagation meets skepticism: A parallel with zombies](#)
Marco Antonio Amaral and Jeferson J. Arenzon



ECS The Electrochemical Society
Advancing solid state & electrochemical science & technology

241st ECS Meeting

Vancouver, BC, Canada. May 29 – June 2, 2022

ECS Plenary Lecture featuring
Prof. Jeff Dahn,
Dalhousie University

Register now!

Effect of Consumer Skepticism on Consumer Intention in Purchasing Green Product

Rinaldi Bursan¹, Driya Wiryawan¹, Habibullah Jimad¹, Indah Listiana^{1*}, Maya Riantini¹, Helvi Yanfika¹, RAD Widyastuti¹, Abdul Mutolib² and Dina Arini Adipathy³

¹University of Lampung, Indonesia

²University of Siliwangi, Indonesia

³Magister Management University of Lampung, Indonesia

* Corresponding Author: indahlistiana1@gmail.com

Abstract. The image of environmentally friendly products is often seen as bad, consumer doubt that environmentally friendly products are really made with environmentally friendly raw materials. This attitude is known as consumer skepticism (doubt) towards products with an environmentally friendly label. Consumer skepticism occurs because product advertisements contain confusing information as well as consumer insecurity about the raw material for products that the company claims are environmentally friendly. The aims of this study aims to determine the effect of consumer skepticism on green purchase intention. This study uses a theoretical approach to consumer behavior control and attitude, perceived value and environmental consciousness associated with consumer intentions to buy green products in Bandar Lampung. The study was conducted on April until June 2020. The sample in this research were consumers who had been buying green product. The research sample was calculated using the Lemeshow method, with a margin of error of 5%, the minimum number of samples was 236 samples. The analysis tool used is regression model. The results of this study are the reduction of consumer skepticism about the intention to buy due to the use of social media to promote green products. Meanwhile, the influence of consumer value perceptions and environmental awareness will increase on the purchase intention of green products. The implication of this research is that companies must pay attention to communication about green products that are produced so as to reduce consumer doubt. Another impact if consumers consume green products will lead to environmentally friendly perceptions and attitudes.

1. Introduction

Environmentally friendly products are classified as new products made to overcome the existing problem of global warming, as well as to anticipate further environmental damage [1]. These products usually have the 3R (reused, reduce and recycle) mark on the product packaging and can be clearly identified by consumers. As a form of innovation, this environmentally friendly product takes a long time to socialize its benefits and be adopted by the wider community [2] [3]. The target of this eco-friendly product covers all consumer groups. Various studies on environmentally friendly products are associated with consumer attitudes resulting in consumer skepticism, because they doubt the content of the raw materials so they doubt consumers to make purchases [1] [4] [5] [6].



Consumers will associate environmentally friendly products with the company's awareness of environmental sustainability. Consumers give positive responses to companies that produce environmentally friendly products so that they have the intention to make purchases [7] [8] [9] [10]. Companies that maintain environmental sustainability will lead to positive perceptions of consumers who have a view of consuming environmentally friendly products. Consumers' perceptions of the value of environmentally friendly products will cause consumers to make purchase intentions for the products produced by the company [2] [6] [11] [12] [13].

Companies that produce environmentally friendly products will be appreciated by consumers who have the awareness to consume environmentally friendly products. This product has more value in terms of self-esteem, because someone who uses the product is considered to adhere to environmentally conscious behavior that is better than others. Thus, consumers who use environmentally friendly products will feel an increase in self-confidence [14] [15] [16].

The effectiveness of this environmentally friendly product begins with consumer awareness of the existence and function of the product. Consumer awareness of a product is usually used as an indicator of the success of the product's performance [6]. Because, after awareness is owned by consumers, then consumers will try the product until they finally decide to become regular consumers or not [17].

2. Theoretical Background

Skepticism is the attitude of a person's doubts in understanding a certain situation or event. This attitude of doubt arises due to the lack of information that a person gets about an object [18]. Meanwhile, according to [19], it is said that skeptics believe that all claims of any truth seem vague or doubtful, those who skeptics advocate hanging decisions. This is reinforced by the opinion of that consumer doubt arises because information about a product is incomplete so that the communication made by the company is not well received by the company [20].

Research conducted by Awamate and Deb (2021) results in consumer skepticism in a product that will reduce consumer buying intentions on organic food products. The attitude of consumer skepticism arises because of doubts about raw materials, incomplete information on packaging and communications made by the company confuse consumers. Another cause of the decline in consumer purchase intentions for environmentally friendly products due to skepticism is that the price of environmentally friendly products is perceived to be more expensive than other products and the benefits obtained both to health and to the environment have not been communicated properly by the company [1] [6]. Based on the opinion of Awamate and Deb [4], and Chen and Chang [6], the first hypothesis of this study is formulated as follows:

H1: consumer skepticism has a negative effect on consumer purchase intentions

Consumers who buy environmentally friendly products are based on consumer awareness of the benefits of the product not only on individual consumers but also on environmental preservation. Consumer awareness of the environment causes consumers to consume these products, because they can be reused and can reduce waste and can decompose quickly [10] An environmentally conscious attitude will provide knowledge to consumers, and form attitudes and environmental awareness so that it causes purchase intentions to make purchasing behavior for environmentally friendly products, although sometimes consumers will pay more. Another thing that consumers face is that the variety of environmentally friendly products is still limited [7].

Research conducted by Bhaduri and Copeland [8] describes that consumers who have environmental awareness will buy products that are also environmentally friendly, although at a higher price. Silva [16] resulted in a higher consumer awareness attitude towards the environment, the higher the purchase intention for the product. So that the second hypothesis is formulated as follows:

H2: environmental awareness has a positive effect on consumer purchase intentions

An environmentally conscious attitude will shape consumers' perceptions of the value of environmentally friendly products. Consumers will form congruence between perceived value and

environmentally friendly products. The stronger the consumer's congruence with the product, the higher the purchase intention [6] [12] The consumer's perception of the value of environmentally friendly products is obtained after consumers evaluate the product or feel the benefits.

This perception will foster consumer purchase intentions for environmentally friendly products. Mimouni and Parguel [21] resulted in the perception of consumer value for environmentally friendly products causing consumers to seek information about the product, thereby generating purchase intentions. This is reinforced by research conducted by Sindhuri [22] which states that the purchase intention of environmentally friendly products is carried out by consumers who have a positive perception of the benefits of these products. Thus, the third hypothesis is formulated as follows:

H3: perceived value of environmentally friendly products has a positive effect on consumer purchase intentions

3. Methodology

Type of research is a survey and is carried out April to June 2020. This research was conducted in Bandar Lampung City by distributing questionnaires to consumers who made purchases of environmentally friendly products. The questionnaire given is given the initial question whether the respondent has ever made a purchase of environmentally friendly products. This question is intended so that consumers are able to provide answers based on their knowledge of environmentally friendly products. The distribution of the questionnaire was carried out online based on the consideration of the Covid-19 pandemic which was still ongoing at the time this research was conducted.

This research is descriptive of causality in order to know the relationship between the independent variable and the dependent variable. The population of this study is unknown, so the number of samples used in this study refers to the opinion of the sample using the Lemeshow method [23], with a margin of error of 5%, obtained a minimum sample size of 236 samples. Data analysis used descriptive analysis to determine the characteristics of research respondents and to find out the demographic background of the selected sample. Multiple linear regression was used to determine the effect of the independent variable on the dependent variable

This study has 3 independent variables, namely skepticism, environmental, consciousness and green perceived value and 1 dependent variable, namely purchase intention. The indicators used for both independent and bound variables refer to Chen and Chang [6]. All research indicators use a 5-point Likert scale. All indicators have been tested for validity using factor analysis and reliability of the indicator is calculated by the Cronbach alpha method [23].

4. Result and Discussion

4.1. Profile of Responden

The majority of consumers who consume environmentally friendly products are the young age group between 17 – 26 years as much as 42% and the age group 27 – 36% as much as 37%. If you pay attention to the age group, it seems that most of the millennial groups are characterized by easy access to information via smartphones and care for the environment. Profession that consume environmentally friendly products are entrepreneurs as much as 31%, private employees as much as 25% and civil servants as much as 16%. If you pay attention to the respondent's work, it can be seen that he has a good profession so that he has the ability to make purchases of environmentally friendly products. S1 education dominates as much as 36%, then S2 as much as 25% and S3 as much as 11%. Consumers have a good level making it easier to find information and evaluate environmentally friendly products.

4. 2. Hypotehesis Testing

All hypotheses were tested by comparing the p value with the value of $\alpha = 5\%$. The results of hypothesis testing are in Table 1 below:

Tabel 1. Hypothesis Testing

	β	t-value	p-value	R	R ²	F-value	F-sig
Consumer Skepticism	-0.209	-2.714	0.011	0.670	0.450	26.129	0.000
Environmental Consciousness	0.526	4.216	0.005				
Green Perceived Value	0.157	2.661	0.019				

Note : significant at 0.05 level

The results of the regression calculation show that the dominance of the environmentally conscious attitude variable on consumers' purchase intentions for environmentally friendly products is significantly 0.526. If the results of the regression coefficients are compared with the tabulated data, there is consistency in the answers. Consumers qualitatively state that consumers consume environmentally friendly products because of the company's strong commitment to preserving the environment and consumers realize that environmentally friendly products will preserve the environment.

The results of the regression calculations show that the dominance of the skepticism/doubtful attitude variable towards consumers' purchase intentions is only -0.197. This negative value implies that companies producing environmentally friendly products are able to suppress consumer skepticism or doubt, so that consumers' purchase intentions will increase. The study findings provide empirical evidence that its effect on customer intention to buy environmentally friendly products is strongly influenced by scepticism. Consumers who have a high level of skepticism towards environmentally friendly products, they tend to have lower attention and lower knowledge about environmental issues. This is due to the reluctance of consumers to seek information and knowledge of the benefits of environmentally friendly products.

The variable that has the smallest effect is the perception variable on the value of environmental awareness, which is only 0.157. The consumer's perception of the value of environmentally friendly products is formed from the environmental campaigns carried out by the company and its benefits to society. This means that the campaign carried out by the company has not been fully effective in shaping consumers' perceptions of the value of environmentally friendly products.

The results of this study indicate that consumer skepticism, environmental awareness and consumer value perceptions have a significant influence on purchase intention. This study also shows the same results as the research of Chen and Chang [6] and Awate and Deb [4], the difference is only in the value of the variable effect coefficient. This is presumably due to differences in respondent characteristics, differences in the number of respondents and differences in analytical tools.

5. Conclusion

The attitude of consumer scepticism towards environmentally friendly products is due to the lack of information about the benefits of these products on the environment. This causes consumers to have doubts about whether the product really uses environmentally friendly materials so that it can reduce the negative impact on the environment (reuse, reduce, recycle). Meanwhile, an environmentally conscious attitude will form congruence with environmentally friendly products. The more congruent

causes an increase in consumer purchase intentions for environmentally friendly products such as food and beverages products. Meanwhile, consumers' perceptions of value will be formed if doubts about environmentally friendly products can be eliminated, so that consumers will change their purchase intentions into purchasing decisions.

Acknowledgment

This research was conducted by a lecturer at the Faculty of Economics and Business, Department of Management and the Faculty of Agriculture, University of Lampung. We appreciate those who have facilitated this research. In addition to that, we also thank the reviewers for their corrections and suggestions.

References

- [1] Bae, M. 2018 Overcoming Skepticism toward Cause-Related Marketing Claims: The Role of Consumers' Attributions and a Temporary State of Skepticism *Journal of Consumer Marketing* **35** 2 pp 194–207 doi:10.1108/JCM-06-2016-1827
- [2] Bursan, Rinaldi and Listiana, Indah and Ardeno, R, Bangsawan, Satria and Jimad, Habibullah and Mutolib, Abdul 2020 Consumer attitude toward using eco-friendly plastic bags: A green marketing approach. In: ULICoSTE 2020, 18 – 19 November 2020, Bandar Lampung.
- [3] Listiana, Indah and Sumardjo, Sumardjo and Dwi, Sadono and Prabowo, Tjitropronoto 2018 Affecting Factors the Capacity of Freelance Extension Agents and Its Impacts on Farmers *International Journal of Business and Social Science International Journal of Business and Social Science* **9** 1 pp 1-10 ISSN 2219-1993
- [4] Amawate, V and M. Deb 2021 Antecedents and consequences of consumer skepticism toward cause-related marketing: Gender as moderator and attitude as mediator *Journal of Marketing*.
- [5] Anuar, M. M., K. Omar, and O. Mohamad. 2013 Does Skepticism Influence Consumers Intention to Purchase Cause-Related Products? *International Journal of Business and Social Science* **4** 5 pp 94-98
- [6] Chen, Y.-S. and Chang, C.-H. 2012 Enhance green purchase intentions. The roles of green perceived value, green perceived risk, and green trust *Management Decision* **50** 3 pp 502-520
- [7] Barbarossa, C. and Pastore, A. 2015 Why environmentally conscious consumers do not purchase green products: A cognitive mapping approach *Qualitative Market Research* **18** 2 pp 188-209 <https://doi.org/10.1108/QMR-06-2012-0030>
- [8] Bhaduri, G. and Copeland, L. 2021 Going green? How skepticism and information transparency influence consumers' brand evaluations for familiar and unfamiliar brands *Journal of Fashion Marketing and Management* **25** 1 pp 80-98. <https://doi.org/10.1108/JFMM-08-2019-0175>
- [9] Listiana, Indah and Hudoyo, Agus and Prayitno, Rio Tedy and Mutolib, Abdul and Yanfika, Helvi and Rahmat, Ali 2020 Adoption Level of Environmentally Friendly Paddy Cultivated Innovation in Pringsewu District, Lampung Province, Indonesia. *Journal of Physics: Conference Series* 2020 **1467** pp 1-8 ISSN Print: 1742-6588 Online: 1467-012025
- [10] Copeland, L. and Bhaduri, G. 2020 Consumer relationship with pro-environmental apparel brands: effect of knowledge, skepticism and brand familiarity *Journal of Product & Brand Management* **29** 1 pp 1-14 <https://doi.org/10.1108/JPBM-03-2018-1794>
- [11] Albayrak, T., Aksoy, Ş. and Caber, M. 2013 The effect of environmental concern and scepticism on green purchase behavior *Marketing Intelligence & Planning* **31** 1 pp 27-39 <https://doi.org/10.1108/02634501311292902>
- [12] Shin, S. and Ki, E.-J. 2019 The effects of congruency of environmental issue and product category and green reputation on consumer responses toward green advertising *Management Decision* **57** 3 pp 606-620 <https://doi.org/10.1108/MD-01-2017-0043>
- [13] Ulusoy, E. and Barretta, P.G. 2016 How green are you, really? Consumers' skepticism toward brands with green claims, *Journal of Global Responsibility* **7** 1 pp 72-83. <https://doi.org/10.1108/JGR-11-2015-0021>

- [14] Golob, U., Kos Koklic, M., Podnar, K. and Zabkar, V. 2018 The role of environmentally conscious purchase behaviour and green scepticism in organic food consumption *British Food Journal* **120** 10 pp 2411-2424 <https://doi.org/10.1108/BFJ-08-2017-0457>
- [15] Priporas, C.-V., Kamenidou, I. (E)., Nguyen, N. and Shams, R. 2020 The impact of the macro-environment on consumer scepticism towards cause-related marketing: Insights from an economic crisis setting *International Marketing Review* **37** 5 pp 841-861 <https://doi.org/10.1108/IMR-04-2019-0124>
- [16] Silva, M.E., Sousa-Filho, J.M.d., Yamim, A.P. and Diógenes, A.P. 2020 Exploring nuances of green skepticism in different economies *Marketing Intelligence & Planning* **38** 4 pp 449-463 <https://doi.org/10.1108/MIP-10-2018-0435>
- [17] Zhang, L. and Hanks, L. 2017 Consumer skepticism towards CSR messages: The joint effects of processing fluency, individuals' need for cognition and mood, *International Journal of Contemporary Hospitality Management* **29** 8 pp 2070-2084 <https://doi.org/10.1108/IJCHM-11-2015-0666>
- [18] Ju, I. 2017 The effects of advertising skepticism in consumer prescription drug advertising: The moderating role of risk disclosure location *International Journal of Pharmaceutical and Healthcare Marketing* **11** 4 pp 395-411. <https://doi.org/10.1108/IJPHM-10-2016-0054>
- [19] Newman, K.P. and Trump, R.K. 2019 Reducing skepticism about corporate social responsibility: roles of gender and agentic-communal orientations, *Journal of Consumer Marketing* **36** 1 pp 189-196. <https://doi.org/10.1108/JCM-02-2018-2577>
- [20] Pomeroy, A. and Johnson, L.W. 2009 Advertising corporate social responsibility initiatives to communicate corporate image: Inhibiting scepticism to enhance persuasion, *Corporate Communications: An International Journal* **14** 4 pp 420-439. <https://doi.org/10.1108/135632809109987>
- [21] Mimouni Chaabane, A. and Parguel, B. 2016 The double-edge effect of retailers' cause-related marketing: When scepticism cools the warm-glow effect, *International Journal of Retail & Distribution Management* **44** 6 pp 607-626 <https://doi.org/10.1108/IJRDM-08-2015-0126>
- [22] Sindhuri P, Julianna P, Timo O, Friederike V, Werner W 2017 The Effect of Consumer Scepticism on the Perceived Value of a Sustainable Hotel Booking *J. Tourism Hospit* **6** 312 [doi:10.4172/2167-0269.1000312](https://doi.org/10.4172/2167-0269.1000312)
- [23] Lemeshow, S., Hosmer, D. W., Klar, J., & Lwanga, S. K. 1990 Adequacy of sample size in health studies. Chichester: World Health Organization: John Wiley & Sons