

Indian Journal of Modern Research and Reviews

This Journal is a member of the '*Committee on Publication Ethics*'

Online ISSN:2584-184X



Research Paper

Green Consumerism and Sustainable Development: Emerging Trends and Challenges

Dr. M Dillip Anand ^{1*} Dr.D.Savithiri ² Dr. M Mahalakshmi ³

¹Assistant Professor, PG & Research Department of Economics, Presidency College (Autonomous), Chennai, Tamil Nadu, India

²Associate Professor, PG & Research Department of Economics, ADM College for Women (A) Velippalaiyam Nagapattinam Tamilnadu, India

³ Assistant Professor, PG & Research Department of Economics, A.V.C. College (Autonomous), Mannampandal, Mayiladuthurai, Tamil Nadu, India

Corresponding Author: * Dr. M Dillip Anand

DOI: <https://doi.org/10.5281/zenodo.18390143>

ABSTRACT

Economic development and environment are intercorrelated, interdependent and complementary to each other. It has observed that environmental protection is needed for the security of future generations. After the industrialisation, the whole world has been facing vital challenges for sustainable development. The increasing world population are creating environment crisis because the demand for resources for both consumption and production has been rising rapidly beyond the production capacity of natural resources. Similarly, pressure maintains on the absorbing capacity of the environment and different types of environmental degradation have started. Environmental crises are creating very harmful effects on the health of human beings. Therefore, environmental protection requires making a sustainable way of development. Today, there are many Academicians and environmentalism have been creating awareness among consumers as well as producers for sustainable development by using green products and services. Modern living styles and excessive exploitation of natural resources have been creating challenges for the environment, and negative environmental impact on health has been experienced by different types of consumers and manufacturers. Economic activities are generally moving around the consumers. So, manufacturers always try to understand the consumer behaviour about the demand for green products. Presently, producers have been doing green marketing strategies for pursuing an innovative way of sustainable development because consumers' behaviour has been changing according to their demand for green products. This study tries to explain the concept of green consumer and their role towards green products and sustainable development. Green consumer behaviours mean the purchasing made by the consumer which will be eco-friendly and sustainable products that can be recycled and minimise the environmental impact, and avoid the uses of those products which can be harmful to society and the environment. This paper tries to explain the consumers' preference regarding green commodities and also tries to find out the factor which is responsible for their choices of green products. Two determining factors have taken into account for the study of this paper. First Socio-demographic condition (age, gender, qualifications, occupation, income), second is environmental concern, which has taken as a determinant factor for this paper. The producer must understand the influencing factors of consumer purchasing behaviour of green products for attracting them to their products. This study uses qualitative approach through direct personal interview and questionnaires form respondent of Bhagalpur city to know the consumers perception towards the purchasing of eco-friendly products. Analysis has conducted on the basis of descriptive statistic which has analysed by the SPSS software. Primary data and secondary data also used for collecting information regarding the consumers purchasing behaviour of green commodities. This study has find out that the educated people having more concern about the ecofriendly product or purchasing of green product. They can understand the value of scarcity of the natural resources and also protect the future of the coming generation by conserving natural resources through motivating sale of green product. Green marketing will enhance by demand of green products. This study has found association between the educated consumers and their attitudes towards green product.

Manuscript Info.

- ✓ ISSN No: 2584- 184X
- ✓ Received: 09-08-2025
- ✓ Accepted: 25-09-2025
- ✓ Published: 30-10-2025
- ✓ MRR:3(9):2025;135-141
- ✓ ©2025, All Rights Reserved.
- ✓ Peer Review Process: Yes
- ✓ Plagiarism Checked: Yes

How To Cite this Article

Anand MD, Savithiri D, Mahalakshmi M. Green consumerism and sustainable development: emerging trends and challenges. Ind J Mod Res Rev. 2025;3(9):135-141.

KEYWORDS: Green consumer, green product, green marketing, eco-friendly, sustainable development.

1. INTRODUCTION

Economic development across the world cannot ignore sustainable way of development. Emerging environmental challenges added new concept for marketing with green marketing, green consumer and producer. Green consumers mean those who purchase the green product to satisfy the needs through purchasing Organic products, eco-friendly and energy saving products. These consumption pattern will mobilise sustainable development and also it protect present as weather as future generation. Green consumer is those people whose purchasing behaviour preserved our environment by adopting green product to satisfy their requirement. These consumers are very much aware and very conscious to their health and environmental challenges. The behaviours of green consumers towards green product generating innovative thinking among the producer to develop new technology which can be helpful for protecting the people's to environment problems.

Therefore green consumers' perception or behaviour determined by their environmental concern and their social demographic situation. These two factors are important for finding consumers attitude toward the green product. Socio demographic factors like consumers' age, gender, qualification, occupation and income have been influencing their purchasing behaviour of green products. As the consumers age increasing they will be worrying about their health and motivated to purchase organic products. As the consumer getting education they will be more concern about the uses of eco friendly product. Consumers income also influencing there purchasing decision for buying green products.

2. REVIEW OF LITERATURE

Green consumer and Green Marketing terms come earlier 1990s. The first workshop held in 1975 on "Ecological Marketing" by American Marketing Association. Green Marketing comes in light in early 1990s. The concept of green consumer and green consumerism has been rising since 1980s. Heninon and Kinnear (1976) said that, environmentally conscious consumer is green consumer. Antil (1984) explain socially conscious consumers' behaviours have been associated with green consumerism which highlight Environment protection. Weiner and Doescher (1991) they explain Pro-social consumer behaviour is the base of green consumerism. Mintal (1995), Studied that there were significant gap between actual green purchasing and Consumers concerned about the product. According to Davidson et al. (1985), consumer personal experience and knowledge correlated with their purchasing behaviour. But the consumer attitude and behaviour to product was contradictory while purchasing green product. Mainichi et al. (1997) highlighted that the correlation between green product and consumer attitude was low. Antonio et al (2009) expressed that consumer attitude, intention and behaviours will be recognised by knowing green consumerism and it will be stimulating by their environmental awareness. Tweneboah -Koduah (2011) study found that Ghanaian consumer behaviour have affected by low level of awareness for green marketing and green product prices also influence their buying behaviour of green products.

3. OBJECTIVE OF THE STUDY

1. To find out the impact of determinant factors on green consumer behavior.
2. To examine the consume preferences towards green product.

Hypothesis

1. There are association found between determinant factors and green consumer behaviour.
2. The consumers preferences towards green product has influenced by their environmental concerns.

Analysis and discussion

The determinant factors of green consumer behavior have analysis and found that socio-Demographic and environmental concern have influenced the buyers' behavior for purchasing green product.

Socio-Demographic factors: - Socio demographic factors include gender, age, qualification, occupation, and income. These factors are playing vital role for influencing green consumer behaviour. The data collected through primary and secondary methods to gather information of green consumer behaviour. Primary data has collected by interview and questionnaires. Secondary data somehow collected by internet, newspaper etc.

1. **Gender-** The attitude of women consumers are quite difference from the attitude of male while purchasing goods. Table-1 shows classification of the gender, from 60 respondent females are 35 (58.3), and 25 (41.7) are male responder. It has observed from the others studies that female respondents were very much responsible regarding the consumption of green products.

Table-1: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	25	41.7	41.7	41.7
	Female	35	58.3	58.3	100.0
	Total	60	100.0	100.0	

2. **Age** - It is very important demographic factor of human behaviour. About table so that the age of green consumers. 60 respondents are there under which five respondents are below 25 years, 18 and from the age group of 25 to 35 years, 17 are from 36-45 years, and 20 respondents from the age 45 and above years as shown in Table 2.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 25	5	8.3	8.3	8.3
	25-35	18	30.0	30.0	38.3
	36-45	17	28.3	28.3	66.7
	Above 46	20	33.3	33.3	100.0
	Total	60	100.0	100.0	

Qualification- qualification is one of the important factor which enhance the consumer to purchase green goods the cognitive knowledge of the consumers provide more judgmental quality to them for sustaining their environment. It has observed that the qualified people or educated people are more attractive towards green products because they are more aware about the importance of green product and its uses for maintaining ecological balance. Table-3 presenting that, 11.7% is inter, 25.0 % are graduate, 28.3% are postgraduate, and 13.3% are professional course, 21.7% PhD holder out of 60 respondend. This study highly qualified people are more agree and strongly agree for using green-products to sustain our environment.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inter	7	11.7	11.7	11.7
	Graduat	15	25.0	25.0	36.7
	Post Graduate	17	28.3	28.3	65.0
	Professional course	8	13.3	13.3	78.3
	Ph.D	13	21.7	21.7	100.0
	Total	60	100.0	100.0	

4. Occupation- occupation is also one of the important social demography factors which decide the purchasing power of the green consume. Table-4, showing 8.3% are students, 50% are service holders, 23.3% are self employees, 18.3% are retired persons out of 60 responded. It has observed that job holders are more prone to use green product rather than others.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	5	8.3	8.3	8.3
	Service Holder	30	50.0	50.0	58.3
	Self-Employee	14	23.3	23.3	81.7
	Retired	11	18.3	18.3	100.0
	Total	60	100.0	100.0	

5. Income- consumer's income is very important factor to influence their purchasing behaviour of green commodities. Income provides them purchasing power and to be a additional expenditure over reputed green commodities so it has observe that though having high income they are purchasing more green communities. Out of 60 respondent 21.7 % belongs to below 35000 income group, 41.7% peoples are belonging from 35000 to 70000 income group, 25.0% belongs to 70000-105000 Income level, 11.7% of responded belonging from more than 105000 income level showing in table-5.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 35000	13	21.7	21.7	21.7
	35000–70000	25	41.7	41.7	63.3
	70000–105000	15	25.0	25.0	88.3
	Above 105000	7	11.7	11.7	100.0
	Total	60	100.0	100.0	

Environmental concerns

Environmental concern are analysing with the help of 8 statements. Each statement of the questionnaires is measures on 5 point likert scale from strongly disagree (score =1) to strongly agree (score = 5).

Statement	N	Minimum	Maximum	Mean	Std. Deviation
Environmental challenges increasing day by day.	60	1	5	4.17	.924
Environmental protection required for saving future generation.	60	1	5	4.17	.886
Environmental degradation creating types of health issues.	60	1	5	4.07	.899
uses of green product will sustain our environment.	60	1	5	4.00	1.025
Uses of LED will save our money and energy.	60	1	5	3.95	1.126
Paperpackaging is better than plastic packages.	60	1	5	4.02	1.049
Uses of green protect our health.	60	2	5	4.15	.777
Eco-labeling and green advertisement influencing green purchasing.	60	1	5	3.80	.917
Valid N (listwise)	60				

Table-6, showing the environmental concerns which has measured by eight statement and mean value of these statement lies from 3.80 to 4.17 and standard deviation from 0.886 to 1.126. It means green consumers have agreed with these statements

1) Environmental challenges increasing day by day: This statement showing by table-7, that there are 3.3% responding strongly disagree, and 5.0% are disagree, 5.0% are neutral and 48.3% responding are agree, 38.3% are strongly agree. The mean of this statement is 4.17 on 5 point scale and standard deviation 0.924. It shows that the consumers are strongly agreed with the statement. Green consumers are very much aware about the environmental challenges which are increasing day by day in the present scenario.

Table 7: Environmental challenges increasing day by day.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	3.3	3.3	3.3
	Disagree	3	5.0	5.0	8.3
	Neutral	3	5.0	5.0	13.3
	Agree	29	48.3	48.3	61.7
	Strongly agree	23	38.3	38.3	100.0
	Total	60	100.0	100.0	

- 2) Environmental protection required for saving future generation:** - Today's consumer knows that the interest of future generation can be protected by the path of sustainable development. Table-8, showing 36.7% consumers are strongly agree, 45% are agree, 8.3% are neutral, 3.3% are this disagree, 6.7% are strongly disagree. Mean for the statement is 4.17 on 5 point scale and standard deviation is 0.886. It means that consumers are strongly agreed for the statement.

Table 8: Environmental protection required for saving future generation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	4	6.7	6.7	6.7
	Disagree	2	3.3	3.3	10.0
	Neutral	5	8.3	8.3	18.3
	Agree	27	45.0	45.0	63.3
	Strongly Agree	22	36.7	36.7	100.0
	Total	60	100.0	100.0	

- 3) Environmental degradation creating types of health issues-** consumer behaviour for green products are very much influence by the consumer's health issues. Today's consumers are strongly concern with their health. Table-9, showing that 33.3% responded are strongly agree, 41.7% responding are agree, and 16.7% responded are neutral, 8.3% responded are strongly disagree. Mean for this statement is 4.07 on 5 point scale and standard deviation is 0.899. It implant that consumers were aware regarding the negative impact of environmental degradation on health. They are agreeing with the statement.

Table-9: Environmental degradation creates types of health issues.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	5	8.3	8.3	8.3
	Neutral	10	16.7	16.7	25.0
	Agree	25	41.7	41.7	66.7
	Strongly agree	20	33.3	33.3	100.0
	Total	60	100.0	100.0	

- 4) Uses of green product will sustain our environment:** - consumers know that the environment protection required for saving the interest of future generation. They also agree that the environmental degradation causes different type of health issues so prefer to use Green product to come over from this challenges. Table no.10, showing responded frequency and percentage regarding above statement. Mean for this statement is 4.00 on 5 point scale and standard deviation is 1.025, it shows that respondent is agreeing with this statement.

Table-10: Uses of green products will sustain our environment.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	6	10.0	10.0	10.0
	Disagree	3	5.0	5.0	15.0
	Neutral	9	15.0	15.0	30.0
	Agree	20	33.3	33.3	63.3
	Strongly agree	22	36.7	36.7	100.0
	Total	60	100.0	100.0	

Fig.-1: Gender wise (Uses of green product will sustain our environment)

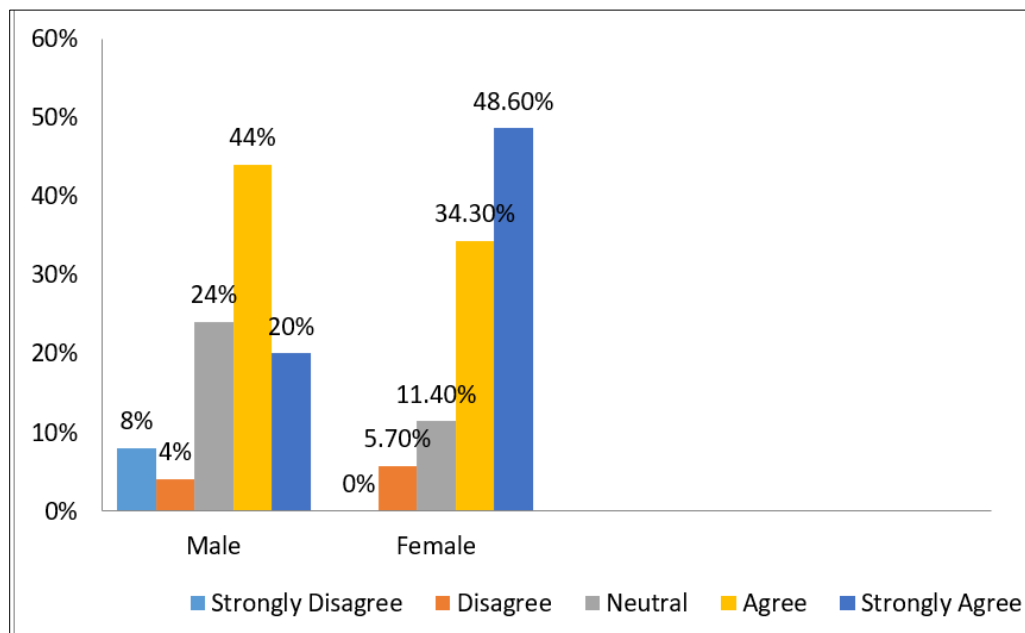


Fig-1, shows results of the analysis done on the statement for “uses of green product will sustain our environment”, this study

found that the females have more awarded and environmentally concerned.

Fig-2: Qualification wise (Uses of green product will sustain our environment)

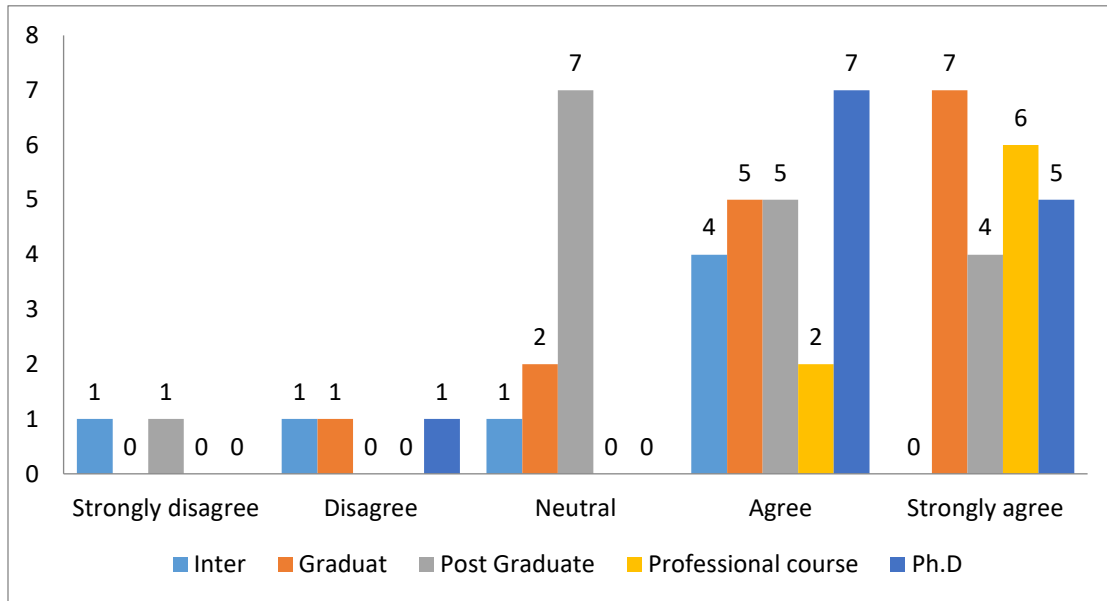


Fig. 2, shows that the qualified consumers have very much concerned to the above-mentioned statement and the analysis result establishing relationships between the green consumer attitude and their qualification are associated to each other.

responded are agree, 8.3% respondent are neutral, 5.0% are disagree and 6.7% are strongly disagree. The mean of this statement is 4.02 on a 5 point scale and its standard deviation is 1.049. It shows that consumer is agreeing with this statement.

5) Use of LED will save our money and energy: - consumers know the uses of LED appliances as green product will save our money and energy. This statement represented by table-11, that 33.3% responded are strongly agree, 41.7% responded are agree, 10% respondent are neutral, 6.7% respondent are disagree and 8.3% respondent are strongly disagree. Mean is 3.95 on 5 scale and standard deviation is 1.126, it shows that consumer buying behaviour for green product like LED appliances have motivated by its quality of money saving and energy conservation.

Table-11: Uses of LED will save our money and energy.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	5	8.3	8.3	8.3
	Disagree	4	6.7	6.7	15.0
	Neutral	6	10.0	10.0	25.0
	Agree	25	41.7	41.7	66.7
	Strongly agree	20	33.3	33.3	100.0
	Total	60	100.0	100.0	

6) Paper packaging is better than plastic packages: - The consumer of Bhagalpur City shows their preference to the use of paper packaging rather than plastic packages. Table no.-12 showing 33.3% responded are strongly agree, 46.7%

Table-12: Paper packaging is better than plastic packages.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	3	5.0	5.0	5.0
	Disagree	4	6.7	6.7	11.7
	Neutral	10	16.7	16.7	28.3
	Agree	21	35.0	35.0	63.3
	Strongly agree	22	36.7	36.7	100.0
	Total	60	100.0	100.0	

7) Uses of green product protects our health:- consumer responses for this statement expressing their concerns for the health care. Consumer eco-friendly products and organic products will provide fit and disease free life. This statement expressed by table no.-13, 33.3% strongly agrees, 46.7% agree, 8.3% neutral, 5.0% disagree, and 6.7% strongly disagree. Mean value is 4.1 5 on the five point scale and standard deviation is 0.777. This shows that the consumer are agree and prefer to use green product for healthy living.

Table-13: Uses of green products protect our health.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	4	6.7	6.7	6.7
	Disagree	3	5.0	5.0	11.7
	Neutral	5	8.3	8.3	20.0
	Agree	28	46.7	46.7	66.7
	Strongly agree	20	33.3	33.3	100.0
	Total	60	100.0	100.0	

- 8) Eco labelling and green advertisement influencing green purchasing:-** The consumer will trust on the Green Marketing by surety given by the producer for the green product manufacturer by them. The manufacturer attracts the consumer for the purchasing of green product by applying Eco- labelling schemes. It shows their responsibility to environmental impact and green advertisement insure consumer that products are less harmful, more eco-friendly. Consumers responses for this statement are showing by table no.-13, 18.3% strongly agree, 46.7% are agree, 15% are neutral, 15.0% are disagree and 5.0% strongly disagree. The mean of this statement is 3.80 and its standard deviation is 0.917. This show the consumers are preferred to use product by using green advertisement and also attracted eco- labelling for green purchasing.

Table-13 : (Eco-labelling and green advertisement influencing green purchasing)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	3	5.0	5.0	5.0
	Disagree	9	15.0	15.0	20.0
	Neutral	9	15.0	15.0	35.0
	Agree	28	46.7	46.7	81.7
	Strongly agree	11	18.3	18.3	100.0
	Total	60	100.0	100.0	

4. CONCLUSION

The present study clearly establishes that green consumer behaviour has a significant and positive association with its key determinant factors, including environmental awareness, attitudes, perceived benefits, and social influence. The findings indicate that as consumers become more conscious of environmental issues and sustainability, their preference for eco-friendly and green products increases substantially. This shift in consumer behaviour reflects a broader transformation in consumption patterns, where environmental responsibility is increasingly integrated into purchasing decisions. The study further highlights the critical role of producers and marketers in responding to this evolving consumer mindset. To effectively attract and retain modern consumers, producers must redesign their marketing strategies by incorporating sustainability into product development, packaging, and processing methods. The adoption of advanced and environmentally friendly technologies

can help reduce ecological impact while enhancing product quality and brand image. Green packaging, efficient resource use, and sustainable production practices are no longer optional but essential for long-term business competitiveness. Moreover, the research emphasizes the importance of consumer education and awareness in promoting green consumption. Producers and policymakers should focus on strengthening green communication through advertisements, labeling, and information campaigns that clearly convey the environmental benefits of green products. By enhancing consumer knowledge and trust, firms can stimulate positive attitudes and preferences towards sustainable products. Overall, the promotion of green consumer behaviour not only supports business growth but also contributes significantly to sustainable development and environmental conservation.

REFERENCE

- Antil JH. Socially responsible consumers: profile and implication for public policy. *Journal of Micromarketing*. 1984 Fall;4(2):18–39.
- Antonio C, Sergio R, Francisco MJ. Characteristics of research on green marketing. *Business Strategy and the Environment*. 2009;18:223–239.
- Braimah M, Tweneboah-Koduah EH. An exploratory study of the impact of green brand awareness on consumer purchase decision in Ghana. *Journal of Marketing Development and Competitiveness*. 2011;5(7):11–18.
- Davidson AR, Yantis S, Norwood M, Montano DE. Amount of information about the attitude object and attitude–behavior consistency. *Journal of Personality and Social Psychology*. 1985;49(5):1184–1198.
- Henion KE, Kinnear TC. Measuring the effect of ecological information and social class on selected product choice criteria importance ratings. In: *Ecological Marketing*. Chicago: American Marketing Association; 1976. p.145–156.
- Mainieri T, Barnett EG, Valdero TR, Unipan JB, Oskamp S. Green buying: the influence of environmental concern on consumer behavior. *Journal of Social Psychology*. 1997;137(2):189–204.
- Spruyt A, Hermans D, De Houwer J, Vandekerckhove J, Eelen P. On the predictive validity of indirect attitude measures: prediction of consumer choice behavior on the basis of affective priming in the picture–picture naming task. *Journal of Experimental Social Psychology*. 2007;43(4):599–610.
- Weiner JL, Doescher TA. A framework for promoting cooperation. *Journal of Marketing*. 1991;55:38–47.

Creative Commons (CC) License

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY 4.0) license. This license permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.