

Intention to Buy Sustainable Products Based on Consumer's Information and Perceptions about "Green": The Mediating Role of Attitudes

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Abstract: In the past decades, both research and practice in society related to environmental and sustainability issues have been on the global agenda. The great challenge is to reconcile the interests of consumers, organizations, and the environmental preservation agenda, coupled with economic development in terms of consumption. Within this scenario, this study investigates the intention to buy sustainable products from the information and perceptions of consumers regarding environmental issues, when mediated by the attitudes toward sustainable products. To reach this goal, a survey was applied to Brazilian citizens from a region linked to nature. The data were analyzed using structural equation modeling, and the series of regressions trough the macro process. The results indicate that the formation of attitudes is more influenced by information about sustainability than by the perceptions of the consumers. Moreover, the data reveal the crucial mediating role of the attitude toward sustainable products to construct an equally sustainable behavior in terms of consumption when measured by the intention to buy sustainable products. These results suggest that a phase of information generation on sustainability is in the transition to a stage linked to the construction and solidification of beliefs.

Keywords: Sustainable consumption; Consumer behavior; Attitudes

1. Introduction

1.1 Context

A topic of great interest in social marketing issues concerns the individual's behavioral change in environmental issues^[2]. For changes and social improvements to occur throughout the chain, must changes occur in the individual, or are the structures that influence in a determinant way? Despite the ideological, theoretical, and practical debate, there remains a gap between people's assessments of environmental issues and their environmentally responsible behavior^[3]. Changing behavior in relation to environmental issues is constrained by an interconnected network of entities, such as government (regulating economic activities and the right to consume for pleasure and one's choice), suppliers, and other enterprises in a free-market economy^[4] until reaching the consumers themselves. However, this network, to a large extent, is based on the perception and attitude of the people involved in these processes regarding environmental issues, their importance, and their impacts.

Seeking to reconcile both views, within this debate between structure and individual, this study investigates the intention to buy sustainable products from the lens of information that the consumer acquires and the perceptions that he or she develops on the structures that deal with the sustainable consumption, mediated by the attitude.

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Especially since the 1970s, theories about social causes emerged, among them, a broad line of concepts related to social marketing^[5]. Over the past few years, a vision on sustainability has been consolidated that aligns economic, financial, social and environmental axes, leading to a series of structures involving companies, government and its public policies, and society in general^[6]. These initiatives are still at a level of searching for legitimacy, since even some important countries in the global scenario refuse to make environmental commitments. On the other hand, consumers have a vision about sustainability issues that consider social and environmental dimensions^[7].

Environmental impacts and environmental deterioration are mostly caused by the behaviors, attitudes, and values of human beings, in their individual gesture, or in the management of organizational structures. However, in short, it is a human choice.

The number of people concerned about the environmental issue has increased, and organizations have been looking to green marketing strategies to adjust to new consumer expectations, as well as to meet the requirements of environmental laws that encourage or even force companies to contribute to the environment, mitigating environmental degradation, such as the reduction of solid waste, the collection of used packaging, the correct disposal of products, and the reduction of the emission of polluting gases in the atmosphere^[6].

It remains a challenge, currently the development of attitudes to become aware of the environmental crisis of the planet, to the point that this awareness can become a change in behavior, habits, and lifestyles of people and consumers, aimed at sustainable consumption, which will result in new practices in relation to nature, restoring respect in the living of humans with other living beings^[4]. In most places in the world, sustainability is not an issue of major concern. However, there are still some places where nature and human activity have to live together. It happens due to law imposition, or because people recognize it is important. Brazil is considered a place most linked to nature and its issues.

More than 80% of the North of the State of São Paulo, in Brazil, is occupied by the Atlantic Forest, vegetation that goes back to a past not yet touched by man. The region has rich biodiversity and is surrounded by a seafront also covered by diverse other natural riches, such as rivers and springs, waterfalls, endangered animals, or unique in its kind. There have been some governmental and private investments in the area, with programs and incentives aimed at environmental awareness and preservation of these regions, such as the emergence of award to sustainable cities, among other actions. However, do consumers realize and have been sensitized with these actions? Does green marketing actually influence the buying process of consumers in a region surrounded by nature? These questions constitute the basis of discussion of this work. To what extent can an entire network composed of individuals, private and public organizations, in addition to the ecosystem itself, achieve some change through the interaction between consumer and structure? It is believed that mere exposure to sustainability-related structures is not enough to change behavior. The attitude, as a behavioral trigger for a particular object of attitude^[8-10] must be crucial in this process, mediating the relationship between the consumer and his choices, such as purchase intention to sustainable products.

Given the current importance of the theme, this research had the general objective of analyzing the behavior of the consumers of a selected sample in coastal cities in relation to sustainable consumption, when they acquire information about social and environmental issues. For the accomplishment of the study, there were collected answers of consumers of coastal cities. The data of the variables were analyzed in SPSS 21.0 and were also analyzed confirming factorial means^[11] to seek to establish the descriptive relations between the variables, and later, the elaboration of the model of structural equations. To test for moderation and mediation, we followed procedures of a series of regression analysis^[1].

2. Theoretical Review

In this section, the theoretical concepts used in the study and their operational and constitutive definitions are reviewed, as well as the hypotheses arising from the relationships are stated, constituting a proposed structural model to be tested.

2.1. From social marketing to green marketing, the role of information

In the 1970s the broadening of the concept of marketing, from a narrow area of study focused on products and consumption led to encompass several other emerging issues at the time, such as consumer psychology, services and

social causes, giving birth to a greater concern with environmental issues related to consumption among academics^[5]. It is increasingly perceived the importance of companies developing strategies and projects focused on sustainability and green marketing, conceptualized as the various business activities related to both consumer satisfaction and reduction of negative impacts of consumer activities^[12].

Taking into consideration that consumers have been increasingly aware of environmental issues and sustainability, and a better quality of life, new opportunities have been created for the launch of environmentally concerned products. Moreover, to respond to the wishes of this group of consumers, and create new competitive advantages for companies, strategies have been developed focusing on environmental issues, called "green marketing strategies" Green marketing seeks to guide, develop, and institute desires and needs in consumers, aiming to reach the marketing objectives of organizations, with the lowest possible environmental impact. In this line of thought, green marketing is a set of strategies and marketing policies used to develop the sustainable communication of an organization to captivate a certain public, so as to increase its market share and consolidate its strategic positioning, the differentiation of its products, competitive advantage, and services offered^[5].

In this sense, green marketing has been disseminated to gather environmental and ethical values in organizations through the invention and diffusion of new goods and services, where the demand is subject to the ecological conscience on the part of consumers. An important fact is that environmental marketing is not only an interest of environmental entities, which act in a global context to protect the environment, and promote social balance, but also is an interest of companies that are willing to support and develop activities that seek to soften or suppress the causes of environmental degradation, and thus improve the quality of life of all. Companies can capitalize on environmental issues, reaching better brand image, and good reputation. It is noticeable that the concern of companies with their institutional image is greater than their desires in relation to the planet^[13]. Companies started to debate the trade-off between the consumption and their impacts in the medium and long term. Consumers, in particular, balance the exchange between sustainability and preservation of the environment, versus the hedonic pleasure of consumption.

In this way, the crucial role of information in the construction of awareness regarding sustainability is observed, at the same time as there is the stimulus to consumption. Marketing managers play a crucial role in establishing strategies that are able to reconcile the interests of consumers, businesses, and society^[14]. Every time people are given information about the impacts of consumption on the environment and sustainability, and this consumer often finds himself between conflicting choices^[14]. One way to combine these diverse interests is through sustainable behavior, and thereby, this kind of consumption is encouraged^[15], by the consumption of sustainable products^[13]. The first action enables communication strategies that can be effective in consumer persuasion, while the second strategy combines diverse interests of society^[6]. A sustainable product is a representation of environmental, economic, and social interests. This leads us to the first hypothesis of this study.

 H_1 : Information about green marketing will have a positive and significant influence on purchase intention of sustainable products;

As the final result is buying the product, we also expect that this behavior is also influenced by conditional processes related to the person. This influence is not only on consumer behavior but also on its main antecedent, attitude, or otherwise the mental representations and predispositions that we have in acting.

2.2. Consumer attitude

The determining factor of influence in the behavioral process of the individual, and therefore of the consumer, is the attitude. By attitude, one understands a general assessment that we make about anything, in other words, an overall evaluation. The attitude precedes behavior in most situations, in which people are directed to act^[8-10]. That is, the behavior in relation to an object will be the result of the attitude developed in relation to this object of attitude. In the context of consumption, this relationship is also established for the various situations involving consumers^[16], including consumption of healthy products^[17], for example, when people usually develop a favourable attitude towards a healthy product because they had previously developed a good one to fruits. Attitudes can be divided between two parameters: Object-related attitude – refers to the object as a product, questioning which product one prefers the most – and behavioral attitude and its consequence – is strongly related to the intentions, being evaluated whether to buy certain product is bad or good^[18]. Most often, attitudes are measured by preferences, that is, an individual will consume that product which he or she prefers, either by brand, value attributed, or other reason. Preferences are ways of arranging attitudes about one object over another. However, the fact that the consumer prefers a particular product does not mean that he intends to buy this product. Having a favorable attitude toward a marketing stimulus such as a brand or a product is an important but not a determinant condition for product choice^[10].

The formation of attitudes is often heavily influenced by advertisements and other marketing stimulus, because when a product is exposed through the media, consumers will form their beliefs about the attributes of the product, and thus their preferences increase accordingly. Attitudes can change according to how they are constructed and are more susceptible to change when confronted with indirect experiences (such as seeing an ad or hearing about it), and less likely to experience direct object-related experiences^[18]. In this paper, we present the results of an empirical stimulus. It is expected that people concerned with environmental and sustainable issues intend to purchase sustainable products^[19,20]. This leads us to the formulation of the second and third hypothesis of this study.

 H_2 : Information on green marketing will have a positive and significant influence on attitudes towards sustainable products;

 H_3 : The attitude toward sustainable consumption will have a positive and significant influence on the intention to purchase sustainable products.

At the same time that people evaluate the information they receive more deliberately about sustainability, a parallel process occurs in which perception, a more intuitive mechanism of people decision making, influences the formation of consumer attitudes^[16].

2.3. Perception of the consumer

Taking into account that people have different ways of perceiving, seeing, and interpreting the things that surround them, it is also imperative to evaluate consumer perception as a mechanism of influence on their responses to sustainability. These parallel, and dual mechanism, of a more deliberate and conscious evaluation, and another one more intuitive and almost unconscious, linked to perception, occur simultaneously^[21,22].

Perception depends, in addition to physical stimuli, on the relation of these stimuli to the individual's inner conditions with the environment. Is characterized as a rather emotional process, that is pre-attentive^[23], where perceived information already affects attitudes. Perception is strictly limited to the individual, where the way he or she perceives and absorbs the information will influence his attitudes and preferences. Some authors^[16] exemplify that a consumer may perceive a seller who speaks fast as false and aggressive; another one can see this same salesman as helpful and intelligent. People may have different perceptions of the same object of attitude^[24], which implies that their responses will also differ. Based on this aspect, we propose the fourth and fifth hypothesis of this study.

 H_4 : Perceptions of sustainable products will positively and significantly influence attitudes toward sustainable products;

 H_5 : Perceptions about sustainable products will positively and significantly influence the intent to purchase sustainable products.

Figure 1 shows all the hypothesis proposed, and altogether, they represent the framework to address the objectives of this study.

The sixth hypothesis of this study (H_6) points to the mediation of the attitude toward sustainable consumption, for the relations between information about Green and intention to buy sustainable products and perception about sustainable products and intention to buy sustainable products. In this model, we summarize the hypothesis to be tested. One of the main objectives of this study is the mediating role of attitudes to better predict an intention to buy sustainable products, as a way to measure how consumers can engage in sustainability issues.

3. Method

For the accomplishment of this quantitative research, a survey was applied through a digital platform, between April 10, 2017, and November 24, 2017, with a link sent by email, stimulating the snowball method. In the instrument of data



Figure 1. Theoretical model. Source: The authors.

collection was contained the variables information about Green, perception about sustainable products, attitude toward sustainable consumption. and intention to purchase sustainable products, as well as demographic data. To verify the respondents' attitudes toward sustainable consumption, 14 questions were elaborated, with two statements drawn from a study about green consumer behavior^[25], and four assertions of ecologically conscious behavior^[25] scale. To verify the intention to purchase sustainable products, five items were applied using a seven-point Likert interval scale^[26]. To ascertain the perception of ecological products, other measures of consumer behavior were used^[27]. To explore the conditional effects a series of regressions were undertaken^[1].

For statistical analysis, SPSS v.21.0 software was used for data analysis and exploration. For the structural equations modeling (SEM), we used the software SmartPLS2^[28] that is best suited to reduced samples and non-parametric data distribution considering the procedures suggested^[11] to validate the model and test hypothesis 1-5. For mediation tests, the procedures were a series of regression analysis^[1], using SPSS v. 21 software, to test hypothesis 6.

4. Results

It was obtained a total of 384 valid questionnaires. Regarding the respondents' age, 42.16% are concentrated in the age range of 21-30 years; 22.06% of respondents are between 31 and 40 years of age; 15.20% of the sample is up to 20 years old; 12.25% between 41 and 50 years, 7.35% between 51 and 60 years, and 0.49% indicated to be over 60 years. In the analysis of purchasing power of respondents, using the ABEP (Brazilian Association of Research Companies)^[30], the social class that obtained the highest percentage was Class B2 with 33.58%, then Classes C1 with 25.74%, B1 with 16.67%, C2 with 15.44%, and A2 are 5.15% of the sample, D with 3.19% and, finally, the Class E with 0.25%. That is, in Class B with 50.25%, in Class C with 41.18%, A2 with 5.15%, D with 3.19%, and Class E with 0.25%, demonstrating that a large part of the sample has considerable purchasing power, according to Brazilian standards. Classes O and E are considered to be lower classes.

Regarding gender, 53% of the respondents are female and 47% are male. It was verified that the predominance of the sample is of people with complete superior level, reaching 34% of the respondents. Twenty-six percent of the students enrolled in higher education, 24% had completed secondary education, 9% of those interviewed did not complete higher education, 3% had incomplete secondary education, 2% did not complete primary education, and 2% indicating that the vast majority of respondents are highly educated, able to read, interpret and assimilate the proposed questions.

4.1. Confirmatory analysis

In this subsection, the analysis criteria for the confirmatory model will initially be presented. In the sequence will be presented and discussed the results achieved through the SEM technique.

4.1.1. Data analysis criteria

Initially, we observed the absence of multicollinearity with variance inflation factor (VIF) of $<5^{[11]}$. For the SEM, the partial least square method was used based on a correlation matrix, since the data were not normal^[11], using the software SmartPLS2.0M3^[28]. The criteria for validation of the SEM were the convergent validity analysis, with factorial loads above 0.7 and average variance extracted (AVE) above 0.5. The discriminant validity was analyzed by means of the correlation of items larger in their dimensions than their correlation with other constructs (cross loadings), and the square root of the AVE of the construct was still analyzed when it is superior to any correlation of this with the other constructs of the constructed model^[30].

For the analysis of adjustment, the model was considered the suitability index model (goodness of fit), obtained through the geometric mean of the mean R^2 (determination coefficient, which observes the explained variance of the construct or part of the proposed model) and the average AVE. This indicator is considered adequate, in the applied social sciences, when above $0.36^{[11]}$.

We also observed R^2 evaluate how much the model explains of the endogenous variables. It is considered 2% low, 13% average, and 26% as large indicators.

We also observed indicators of internal consistency through the Cronbach's alpha (CA) and the composite reliability (CR) indicators, higher than 0.6 and 0.7, respectively. The path coefficients of the causal relationships must be higher than 0.7^[11]. The bootstrapping procedure was also performed to evaluate the significance of structural relationships. It was considered a critical value of 1.96 for the Student's t test (95% confidence) to hypothesis tests^[11].

5. Results

Table 1 presents the collinearity indicators (VIF<0.5). This indicates that there is no high correlation between the items of the variables. They were all suited to use in the model.

The analysis of convergent validity and internal consistency of the scales is shown in Table 2. The discriminant validity is shown in Table 2, with the AVE, CR, explained variance (R^2), and CA as expected.

It is also possible to analyze the discriminant validity through Table 3, with the cross loadings, that is, the correlation of the items with its construct and the other constructs.

Structural analysis indicated significant paths among the constructs of the model, as shown in Table 4.

All these indicators point out to the quality of the fit of the model, and confirmation of the hypothesis. Figure 2 demonstrates these results.

The proposed model explained 44.7% of the construct variance intention to purchase sustainable products. We also confirmed the mediation of attitude toward sustainable products for the relationship between information about green \rightarrow intention to purchase sustainable products (confidence interval [CI]: 0.263-0.475), and for the relation perception about sustainable products \rightarrow intention to purchase sustainable products (CI: 0.244-0.412), confirming H₆.



Figure 2. Final structural model. Source: The authors.

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Item	VIF	Item	VIF
AT_2	1,145	INT_1	2,874
AT_3	2,272	INT_2	2,496
AT_4	2,017	INT_3	2,079
AT_5	1,53	INT_4	3,076
AT_6	2,637	INT_5	1,855
AT_7	2,845	INF_3	2,009
AT_8	1,757	INF_2	2,149
AT_9	1,462	INF_1	2,487
AT_10	1,521	PRE_1	2,486
AT_11	1,511	PRE_2	2,599
AT_12	1,11	PRE_3	2,5
AT_13	1,075	PRE_4	1,636
AT_14	1,148		
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Source: The authors. VIF: Variance inflation factor

Table 2. Discriminant and convergent validity

Construct	AVE	CR	R ²	CA	1	2	3	4
1. Attitude towards sustainable consumption	0.654	0.904	0.698	0.867	0.808^{*}			
2. Information on green marketing	0.681	0.864		0.766	0.805	0.825*		
3. Intent to purchase sustainable products	0.666	0.909	0.447	0.874	0.649	0.595	0.816*	
4. Perception of sustainable products	0.765	0.907		0.847	0.727	0.706	0.564	0.875*

Source: The authors. *Square root of AVE, AVE_{mean} =0.683, R^{*}_{mean} =0.572, GoF=0.628, AVE: Average variance extracted, CR: Composite reliability, CA: Cronbach's alpha

6. Discussion of the Results

The results indicate that the proposed model is robust and confirms all the hypothesis proposed. The model was also able to adequately explain attitude in relation to sustainable consumption ($R^2=69.8\%$) and intention to buy sustainable products ($R^2=44.7\%$). This indicates that consumers can develop positive attitudes towards sustainable consumption, and these attitudes follow the same valence. If one has information about sustainable products, or perceive this information positively, the result of the process in consumers mind will be to buy this kind of products and reconcile consumption and environmental concern. However, it is observed that the main contribution of this study was to identify the mediating role of attitude in relation to intention in the context of sustainable consumption, and thereby, several implications can be discussed. The most important of them is that for consumers to buy sustainable products, more than information and stimuli, they need to develop beliefs toward sustainable consumption.

The relationship between information on green marketing and the intention to buy sustainable products is significant (Γ =0.151; *t* [384]=2.195; 0.001), but this ratio when mediated by attitude in relation to sustainable consumption is stronger (Γ =0.583 *t* [384]=13.167; *P*<0.001), that is, there is a relationship conditioned and significant to attitude formation (Sobel test=5.095, *P*<0.001, CI: 0.263-0.475)^[1] when related to a situation where information influences sustainable consumption. This is relevant insofar as one of the barriers important to predict sustainable behavior, and even in implementing this behavior, is the incentive to search for information. After decades of encouraging sustainable consumption with a crucial role of information on the subject^[5], we see that it is still important to continue generating information. However, it is suggested that we should move from an informational phase to consolidate the belief about the importance of sustainable consumption^[7,19], as proposed in this study by the mediation of attitude to be developed in relation to sustainable products consumption.

Table 5. Cross loading						
Items	1	2	3	4		
AT_1	0.8	0.667	0.456	0.568		
AT_3	0.815	0.662	0.478	0.581		
AT_4	0.775	0.589	0.509	0.539		
AT_6	0.815	0.637	0.648	0.575		
AT_7	0.836	0.699	0.52	0.669		
INF_1	0.734	0.868	0.539	0.658		
INF_2	0.664	0.849	0.552	0.574		
INF_3	0.586	0.755	0.36	0.506		
INT_1	0.619	0.497	0.841	0.495		
INT_2	0.52	0.473	0.83	0.457		
INT_3	0.504	0.521	0.777	0.504		
INT_4	0.522	0.501	0.876	0.453		
INT_5	0.469	0.431	0.751	0.381		
PRE_1	0.632	0.634	0.426	0.871		
PRE_2	0.611	0.566	0.539	0.878		
PRE_3	0.663	0.655	0.512	0.875		
Source: The	authors					

Table 3. Cross loading

Table 4. Structural indicators and hypothesis tests

Hypothesis	Relationship	Original	Average of 500 subsamples	Standard error	t test	<i>P</i> -value	Status
		Coefficient	-				
H1+	Information about green	0.151	0.152	0.069	2.195	< 0.01	Accept
	marketing→intent to buy						
	sustainable products						
H2+	Information about green	0.583	0.587	0.044	13.167	< 0.001	Accept
	marketing→attitude						
	toward sustainable						
	consumption						
H3+	Attitude toward	0.414	0.418	0.075	5.513	< 0.001	Accept
	sustainable						
	consumption \rightarrow intent to						
	buy sustainable products						
H4+	Perception of the	0.314	0.311	0.048	6.609	< 0.001	Accept
	price of sustainable						
	products→attitude						
	toward sustainable						
	consumption						
H5+	Perception of the	0.157	0.153	0.064	2.465	< 0.01	Accept
	price of sustainable						
	products \rightarrow intent to buy						
	sustainable products						

Source: The authors

It was also confirmed the mediating role of attitude in relation to sustainable consumption (Sobel test=4.218, P=0.001, CI: 0.244 < -0.412)^[1] for the relationship between the perception of sustainable products and the intention of purchase sustainable products which also is significant ($\Gamma=0.157 t$ [384]=2.465; P<0.001), but with a weaker relation than the relation between perception and attitude in relation to sustainable products ($\Gamma=0.314$, t [384]=6.609, P<0.001). This indicates that people continue to be influenced by their perceptions about sustainability and the environment but are also conditioned on the formation of attitude toward sustainable consumption, and related issues.

As more impulsive, perceptions facilitate analysis of information and the formation of attitude and was also confirmed (H_4 , Γ =0.344, t=6.609, *P*<0.001). In this way, the path formed by the construction of sustainable responses to consumption, starting with consumer perceptions, is an alternative path, although less controlled by organizations and entities related to environmental and sustainable issues. Nor should it be neglected by these institutions, for they are less cognitively controlled than conscious evaluations. Providing clues that may lead to more unconscious assessments should affect customer responses as well.

Finally, these results confirm the mediation of attitude in relation to intention as proposed^[9]. In the context of sustainable consumption, this is also confirmed by the strength of the relationship between attitude in relation to sustainable consumption and the intention to buy sustainable products (Γ =0.414, *t* [384]=5.513, *P*<0.001). In other words, for the consumer to engage in sustainable behavior in relation to consumption, it must be conditioned to an attitude favorable to the consumption of sustainable products.

7. Final Considerations

The main objective of this study was to analyze consumers' attitudes toward sustainable consumption and to verify the influence of green marketing on the purchase decision, noting the intention to buy sustainable products and consumer perceptions about these products.

Through the results, it was observed that the sample of consumers practices basic actions of sustainable consumption, as the separation of the garbage and the preference for products that save energy. It has been noticed that there is the appreciation of the characteristics of the "green" products by these consumers, and they are predisposed to pay more for these products when they perceive its benefits and its added value. Therefore, these results give companies the opportunity to get ahead of the demand and to differentiate itself in relation to its main competitors to supply the unmet needs of consumers concerned with the environment, and the consumption. Companies must develop communication for sustainable issues in order to attract the public that supports the idea of a sustainable development, so as to increase their market share, and not just to consolidate the strategic positioning of their brands as environment friendly, but also being so.

The main theoretical contribution of this study is to point out that in addition to information, actions should be developed to stimulate the sedimentation of beliefs and attitudes toward sustainable products so that environmentally responsible behavior can solidify. This study suggests evidence that the informational phase should give rise to, or be complemented by, the construction of attitudes toward environmental issues. The stage of bringing information about environmental issues should give way to another stage more related to the psychological processes of consumption. In short, consumers are not eco-friendly, yet have shown an interest in becoming so. The high price of ecological products services is a major obstacle for consumers to start using this type of product, but attitudes formation and change regarding environmental issues help promote more sustainable behavior, also when related to consumption.

For further studies, it is suggested that attention must be given to specific categories of products, if the profile of consumers who are more willing to buy these products is analyzed. Such research proposals can contribute to the broadening of knowledge about the subject. For the global agenda on sustainability, this study contributes to the integrated management of both organizations' and entities' views related to sustainability (generating information) as well as to the understanding of consumers' vision and development of their attitudes as a crucial aspect that must be addressed.

References

Hayes AF. Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-based Approach. New York: Guilford Publications; 2017.

- Spotswood F, Chatterton T, Morey Y, *et al.* Practice-theoretical Possibilities for Social Marketing: Two Fields Learning from Each Other. Journal of Social Marketing 2017;7(2):156-71. Available from: https://www.search.proquest.com/ docview/1895037344accountid=43603. [Last accessed on 2017 Jul 21].
- 3. Hargreaves T. Practice-ingbehaviour Change: Applying Social Practice Theory to Pro-environmental Behaviour Change. Journal of Consumer Culture 2011;11(1):79-99.
- 4. Butler C, Parkhill KA, Pidgeon NF, *et al.* Energy Consumption and Everyday Life: Choice, Values and Agency through a Practice Theoretical Lens. Journal of Consumer Culture 2016;16(3):887-970.
- 5. Kotler P. Reinventing Marketing to Manage the Environmental Imperative. Journal of Marketing 2011;75(4):132-5.
- 6. United Nations. Sustainable Development Goals: 17 Goals to Transform Our World. Available from: http://www. un.org/sustainabledevelopment. [Last accessed on 2017 Jul 21].
- 7. Luchs MG, Miller RA. Consumer Responsibility for Sustainable Consumption. In: Handbook of Research on Sustainable Consumption. Cheltenham: Edward Elgar Publishing; 2015. p. 254-67.
- 8. Allport GW. The Nature of Prejudice. Reading, MA: Addison-Wesley; 1954.
- 9. Bagozzi RP. Attitudes, Intentions, and Behavior: A Test of Some Key Hypotheses. Journal of Personality and Social Psychology 1981;41(4):607-27.
- 10. Eagly A, Chaiken S. The Psychology of Attitudes. San Diego: Harcourt Brace Jovanovich College Publishers; 1993.
- 11. Hair JF, Sarstedt M, Hopkins L, *et al.* Partial Least Squares Structural Equation Modeling (PLS-SEM): An Emerging Tool in Business Research. European Business Review 2014;26(2):106-21.
- 12. Tiwari S, Tripathi DM, Srivastava U, *et al*. Green Marketing-emerging Dimensions. Journal of Business Excellence 2001;2(1):18-23.
- 13. Young W, Hwang K, McDonald S, *et al.* Sustainable Consumption: Green Consumer Behavior when Purchasing Products. Sustainable Development 2010;18(1):20-31.
- 14. Luchs MG, Kumar M. Yes, but this Other One Looks Better/works Better: How do Consumers Respond to Trade-offs between Sustainability and other Valued Attributes? Journal of Business Ethics 2017;140(3):567-84.
- 15. Kiss G, Pataki G, Köves A, *et al.* Framing Sustainable Consumption in Different Ways: Policy Lessons from Two Participatory Systems Mapping Exercises in Hungary. Journal of Consumer Policy 2018;41(1):1-19.
- 16. Bagozzi R, Gürhan-Canli Z, Priester J, *et al.* The Social Psychology of Consumer Behavior. New York, UK: McGraw-Hill Education; 2002.
- 17. Prestwich A, Hurling R, Baker S, *et al.* Implicit Shopping: Attitudinal Determinants of the Purchasing of Healthy and Unhealthy Foods. Psychology and Health 2011;26(7):875-85.
- 18. Albarracín D, Johnson BT, Zanna MP, *et al.* Attitudes: Introduction and Scope. The Handbook of Attitudes. Mahwah: Lawrence Erlbaum; 2005. p. 3-19.
- 19. Laroche M, Bergeron J, Barbaro-Forleo, *et al.* Targeting Consumers who are Willing to Pay more for Environmentally Friendly Products. Journal of Consumer Marketing 2001;18(6):503-20.
- 20. Luchs MG, Phipps M, Hill T, *et al.* Exploring Consumer Responsibility for Sustainable Consumption. Journal of Marketing Management 2015;31(13-14):1449-71.
- 21. Bassili JN, Brown RD. Implicit and Explicit Attitudes: Research, Challenges, and Theory. In: The Handbook of Attitudes. Mahwah: Lawrence Erlbaum; 2005. p. 543-74.
- 22 . Bettiga D, Lamberti L, Noci G. Do Mind and Body Agree? Unconscious versus Conscious Arousal in Product Attitude Formation. Journal of Business Research 2017;75:108-17.
- 24. Logan GD. Attention and Preattention in Theories of Automaticity. American Journal of Psychology 1992;105: 317-39.
- 25. Roberts JA. Green Consumers in the 1990: Profile and Implications for Advertising. Journal of Business Research 1996; 36:217-31.
- 26. Schwepker CH, Cornwell TB. An Examination of Ecologically Concerned Consumers and Their Intention to Purchase Ecologically Packaged Products. Journal of Public Policy and Marketing 1991;10(2):77-101.
- 27. Bruner GC, Hensel PJ, James KE. Marketing Scales Handbook-a Compilation of Multi-item Measures for Consumer Behavior and Advertising. IV South-Western Educacional Publication; 2005.
- 28. Ringle C, Wende S, Will A. SmartPLS 2.0 (Beta). Hamburg: University of Hamburg; 2005.
- 30. ABEP. Brazilian Association of Research Companies: Standard Criteria for Economic Classification Brazil. São Paulo: ABEP; 2013.