Greenwashing in environmental marketing strategy in the brazilian furniture market

Greenwashing em estratégia de marketing ambiental no mercado moveleiro brasileiro

Márcia Vieira de Alencar Caldas[1] , Alípio Ramos Veiga-Neto[1] , Luciana Gondim de Almeida Guimarães[1] ,
Ahiram Brunni Cartaxo de Castro[2] , Glauber Ruan Barbosa Pereira[3]

[1]Programa de Pós-graduação em Administração, Universidade Potiguar (UnP), Natal (RN), Brasil. E-mails: marciacaldasarquiteta@gmail.com; alipio.veiga@gmail.com; lugondim@gmail.com
[2]Diretoria de Administração, Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Norte (IFRN), Natal (RN), Brasil. E-mail: brunnicastro@hotmail.com
[3]Universidade Federal do Amapá (UNIFAP), Amapá (AP), Brasil. E-mail: adm982@gmail.com

Abstract: Environmental marketing tries to develop strategies to strengthen the entrepreneurial image and connect environmental appeal to products and brands. However, the companies' reputation may be undermined if the green message uses false or inaccurate information, making it seem that theory and practice are far apart. As a consequence, the damage can be irreversible from the consumers' viewpoint. This research aimed at raising and analyzing environmental marketing strategies that denote the practice of greenwashing from the point of view of consumers in the national furniture market. To reach the objective suggested, the research took place in two steps. The first step encompassed a qualitative approach, in which data were collected through interviews. The second step used the quantitative approach, a survey-collection method, and the application of questionnaires with consumers. As a result, it was possible to see that the variables concerning environmental marketing that can be perceived as greenwashing are mostly "preference for environmental products", "interest in green information", "brand-associated trust", "green purchase incentive advertisement" and "a green guidebook generates environmental credibility". The results led to the conclusion that consumers are aware of environmental issues and prefer green products, but greenwashing practices undermine the perception of the company's image and its brands.

Keywords: environmental marketing, greenwashing, green marketing strategy, furniture market.

Resumo: O marketing ambiental busca desenvolver estratégias para fortalecer a imagem empresarial e vincular o apelo ambiental aos produtos e marcas. Contudo, a reputação das empresas pode ser prejudicada se a mensagem verde usa informações falsas ou imprecisas, deixando transparecer que o discurso e a prática estão distantes. Como consequência, o prejuízo pode ser irreversível na percepção dos consumidores. Esta pesquisa objetivou levantar e analisar estratégias de marketing ambiental que denotam a prática de *greenwashing* na percepção de consumidores do mercado moveleiro nacional. Para alcançar o objetivo proposto, a pesquisa ocorreu em duas fases: a primeira com abordagem qualitativa, na qual os dados foram coletados em entrevistas. A segunda fase utilizou abordagem quantitativa, método de coleta *survey* e aplicação de questionários com consumidores. Como resultado, verificou-se que as variáveis de marketing ambiental que podem ser percebidas como *greenwashing* são, predominantemente: "preferência por produtos ambientais", "interesse pela informação verde", "confiança associada à marca", "divulgação incentivada de compra verde" e "guia verde gera credibilidade ambiental". Os resultados permitiram concluir que os consumidores têm consciência sobre as questões ambientais e preferência por produtos verdes, mas práticas de *greenwashing* prejudicam a sua percepção da imagem da empresa e de suas marcas.

Palavras-chave: marketing ambiental, *greenwashing*, estratégia de marketing verde, mercado moveleiro.

1 INTRODUCTION

Environmental marketing tries to promote strategies to develop positive attitudes that strengthen the differentiated image of the company, its products, and services, by providing brands with an environmental appeal (Lopes & Pacagnan, 2014). To meet the expectations of clients that are favorable to the environment, organizations get together to adopt new strategies that are pushed by more attentive consumers and by legal obligations. Besides consumers, investors also bet on socially responsible organizations (Chen, 2010; Kim & Lyon, 2015; Budică & Dumitru-Traistaru, 2015). Therefore, the trend towards sustainable practices rebound off the market that coordinates the development that is more environmentally balanced and has economic methods. In this context, the organizations that are more able to formulate and set strategies to reach the green market will be ahead in the market (Setiadi et al., 2017; Yang et al., 2013).

The participation of Brazil in international meetings and appointments such as the Agenda 21 and the Eco-92, the Johannesburg Conference or Rio+10, the admission of Brazil into the Marrakech Process, and the Rio+20, brought the country into the discussion about the environmental cause and set guidelines for the matter concerning the environment. Laws, policies, and action plans were set, such as the National Policy of Solid Waste, the National Policy of Climate Change, and the Action Plan for Sustainable Production and Consumption (Dias, 2009). Since then, the determination of consumption patterns started to be discussed worldwide, and this includes the organizations' context, for governmental actions bring together new attitudes into the market concerning the taking of decisions, such as green certification, selective collection, the source of raw material, reverse logistics (Temur & Bolat, 2017), the use of renewable sources, waste reduction, the use of clean energies (Miguel et al., 2012), and forest management (Bonilla-Bedoya et al., 2017), among others.

Concerning consumers' behavior, it is known that building user's education, adding new clients into the ecologically sustainable market segment, and influencing the consumer during the purchase can be a challenge nowadays in complex and dynamic environments, for the behavior of the consumer who is ecologically aware structures new market perspectives. Demographic, technological, and psychographic aspects can also characterize the groups that are interested in the green cause. Social responsibility communication through green marketing must be committed to the assertive display of the actions that are adopted either as sustainable or as sustainable aspirations, for people's concern with the environmental cause lead them to take on an attitude of differentiated consumption, one that is connected to new values and attitudes that show a concern to protect, benefit and minimize the negative impacts over the environment (Silva et al., 2020; Palazzo et al., 2016; Grimmer & Woolley, 2014).

To Lins & Silva (2010), the concern of the organizations to convey a social-environmental image that it does not have can purposefully adhere to the "green stroke" or "green make-up" (Barbieri & Silva, 2011), as it is known in Brazil, and which is characterized for masking up the real attitudes that are adopted concerning sustainability (Marquis et al., 2016). The Brazilian term is more popular in international literature as greenwashing and it was introduced by the United Nations Conference and announced by the environmental institution called TerraChoice, which defined it as the act of deceiving consumers about a company's environmental practices or the environmental benefits of a product or service. The green attitude that is wrongly advertised through inaccurate information may undermine a brand's reputation and its image, and it can be irreversible when consumers are vigilant (De Jong et al., 2018; Majláth, 2017; Budică & Dumitru-Traistaru, 2015).

This reality is not different in the Brazilian furniture market, despite the nature of the activity and the environmental impact it causes, for companies oftentimes use the green speech and mechanisms, such as green certificates, to develop greenwashing practices. Therefore, the way the characteristics are being advertised and shown to the consumers and how they see the actions practiced by the organizations resulted in guidelines for the development of this article.

From this setting, there was a need to know the perception of furniture consumers concerning the topic under study and to try to answer the following question: which

environmental marketing variables that are identified by consumers denote the practice of greenwashing as an entrepreneurial strategy in the national furniture market?

This research aimed at raising and analyzing the environmental marketing strategies that denote the practice of greenwashing from the perception of consumers in the national furniture market. From the academic point of view, according to Akturan (2018), studies that address the consumers' perception of environmental marketing strategies and which denote the practice of greenwashing are still limited. Besides, articles that raise variables for the analysis of the phenomenon in the organizations' practices are still under development (Parguel et al., 2015).

The furniture sector was chosen due to its activity nature because the demand for new attitudes upon extracting and processing this sector's raw material hits society and the environment directly. According to the Sectorial Panorama of Wood and Furniture, established in 2009 by the Brazilian Agency of Industrial Development (Suzigan & Furtado, 2010), the furniture area market has the growth of a national industry with the mastery of micro and small organizations. Besides, it has fractured characteristics with different operation niches, including those turned to the green market. Certification, for example, was a tool developed to lead new behaviors that are related to the adoption of conservation and native forest management methods worldwide. Thus, it ensures protection acts that guide the consumers' choices since it shows value-added items, which can make a difference, such as energy efficiency and the use of recycled materials, among others (Barbieri & Silva, 2011).

2 SOCIAL-ENVIRONMENTAL RESPONSIBILITY, ENVIRONMENTAL MARKETING, AND GREEWASHING

Social-environmental responsibility incorporates entrepreneurial actions aimed to surpass the observation of the current legislation and socially advance through practices that meet the demands and respect the environment (Boff, 2017), building possibilities that are aimed at the market as a strategy. Entrepreneurial investment in social responsibility actions, including those that are multi-modal (seals, certifications, accrediting institutions, and social media, among others), may emphasize a positive image by meeting marketing aspects. In this context, environmental marketing aims at launching into the market products and services that have an environmental appeal, from conception to production, by working out the manufacturers' environmental responsibility (Budică & Dumitru-Traistaru, 2015).

Some scholars defend that environmental marketing is linked only to the publicity and the promotion of green products (Stall-Meadows & Davey, 2013). However, the adequate conceptual application lies in the search to meet human needs, having fewer impacts on the environment (Silva et al., 2020; Yang et al., 2013). Yet, the practice of the marketing that adheres to environmental issues brings in advantages by strengthening the relationship between consumers and the organization, and favoring growth and profitability, besides adding an optimistic image concerning the brand of the product that adheres to the green cause (Cassilha et al., 2004).

In their studies, Veiga-Neto et al. (2014) reinforce that, from the entrepreneurs' point of view, environmental marketing is relevant as a strategy. Internal environmental issues must be aligned, advertising must value the environmental issue by showing information of the benefits for society, and the participation of the organization in campaigns that are linked to the green cause must reinforce the image and the relationship of the consumer with the brand assertively and with corporate social responsibility (Lee et al., 2018), by avoiding greenwashing practices.

The use of the term "greenwashing" refers to something that gets ecological attributes and uses the image that fits environmental principles when, in fact, it disguises part of the actions by highlighting positive aspects concerning the environment and masking up other aspects that can be harmful (Delmas & Burbano, 2011; Schmuck et al., 2018). Greenwashing brings in an adequate entrepreneurial image into the environmental speech. However, it hides steps and processes or minimally contributes to the environment as it values punctual attitudes on behalf of the image that is environmentally adequate (Barbieri & Silva, 2011).

The United Nations Conference introduced the term greenwashing in 1992. From then on, there has been some direction of actions in several countries in the sense of checking and fighting

off fake appealing advertisement and the use of environmental marketing with deceitful practices. Organizations such as Greenpeace, the Federal Trade Commission, English agency Futerra, and American consultancy company TerraChoice design guidebooks, handbooks, and guidelines turned to companies to avoid mistakes when advertising their products (Makower, 2012).

According to Ottman (2017) and Laroche et al. (2001), consumers in the entire world already have different opinions upon analyzing green offers to purchase products. Thus, the organizations' good intention to seem appropriate or righteous must show several factors that include the green speech.

From the consumer's point of view, building credibility is the new challenge imposed on environmental marketing management, which demands its operation more completely more and more. The distorted environmental commitment of the real practice adopted can contribute to a broken reputation as it interferes with the organizations' credibility in the market (Rahman et al., 2015; Dahlstrom, 2011).

Authors Diffenderfer & Baker (2010) confirm the ideas presented and, in their studies, they point out the evidence of greenwashing as "eco-exaggeration" since they argue that the growing labeling of products seen as good for the environment and with few green attributes strengthens the practice to fool consumers. Therefore, the use of green guidebooks may lead organizations that wish to display their environmental attributes in a way that is clear and necessary in order not to create the practice of greenwashing (Diffenderfer & Baker, 2010).

This way, the image shown by the organizations may be a strategic differential. However, the operation must be legitimate and true (Silva et al., 2020; Barbieri & Silva, 2011). According to Zhang et al. (2018), companies must promote substantial environmental initiatives instead of greenwashing actions to secure consumers and increase sales.

In this setting, the application of environmental certifications, international entities, regulating systems, and governmental legislation represent the growth of society about environmental issues. That is why a stricter attitude against the use of greenwashing is observed (Yang et al., 2013; Cassilha et al., 2004).

Studies developed by Chen & Chang (2013), Marquis et al. (2016) and Guo et al. (2017) also identified that consumers are unable to decide about purchasing when companies don't pass on trust in their green actions. The interpretation and the reliability level of information may hamper the understanding and bewilder the perception of green appeal by undermining what will determine the purchase and making organizational actions skeptical. Based on this, the authors developed a theory that determines the perception about greenwashing in two categories: green risk perceived and green trust, which are used when the consumer becomes dependent on the product, service, or a certain brand, and which is the result of the environmental performance associated to the credibility exposed.

Greenwashing was also investigated by Walsh & Mitchell (2010), who pinpointed six items that show the difficulties to identify greenwashing actions, according to Table 1, below.

Table 1. Difficulties to identify greenwashing actions

Greenwashing practices – difficulties to identify them
(1) product similarity with so-called environmental qualification, which prevents from identifying whether a certain product is greenwashing.
(2) difficulty to identify products based on environmental resources used
(3) excess of environmental characteristics that impair the real identification in the product presented
(4) the growing availability of products offered, which undermines the choice concerning the environment
(5) even after acquiring the product, the consumer rarely finds enough information on the product acquired
(6) insecurity concerning real environmental benefits and characteristics

Source: Adapted from Walsh & Mitchell (2010).

Previous studies developed by Laufer (2003) had shown that greenwashing is appointed when the company management maximizes environmental actions that are structured to maximize the dissemination of green appeal by omitting noxious attitudes and valuing those

that have partially green relevance. Table 2 shows the dimensions related to the practices of greenwashing as identified by the author.

Table 2. Dimensions to measure greenwashing actions

Greenwashing dimensions
(1) if the product discreetly masks up its environmental characteristics
(2) if the product uses graphic and visual aids that fool the consumers concerning its environmental characteristics
(3) if there is a vague and non-verifiable green appeal
(4) if it exaggeratedly emphasizes the green functionality it really has
(5) if the product display omits some information and makes it look greener than it really is

Source: Adapted from Laufer (2003).

To Laufer (2003), the dimensions presented can be summarized into three elements that encompass the practice of greenwashing: being something confusing, camouflaging appearance, and adopting a questionable attitude. Greenwashing is, therefore, a shortcut to "misleading manipulation" (Lee et al., 2018; Siano et al., 2017; Seele & Gatti, 2017). The methodological procedures that enabled this research will be discussed next.

3 METHODOLOGICAL PROCEDURES

The research was developed in two steps, one with a basic qualitative approach (Merriam, 1998), with exploratory purposes and with a case-study investigation (Godoy, 1995), and the other one with a quantitative approach (Costa, 2011) and a survey method with a descriptive and cross-section purpose (Freitas et al., 2000).

The research analysis framework was based on literature through studies published by Laufer (2003), Cassilha et al. (2004), Dias (2009), Walsh & Mitchell (2010), Diffenderfer & Baker (2010), Dahlstrom (2011), Barbieri & Silva (2011), Chen & Chang (2013), Lyon & Montgomery (2013), De Vries et al. (2015), Rahman et al. (2015), Palazzo et al. (2016), and Boff (2017) and Ottman (2017).

During the qualitative step of the research, we carried out five semi-structured interviews (Gaskell, 2002) from January to February 2015, with managers of furniture micro-enterprises in the city of Natal, Brazil, which were chosen by convenience (Cooper & Schindler, 2016), to identify variables that complement those of literature, according to Appendix A. The saturation principle was used to limit the number of participants at this stage (Godoi et al., 2006).

Interviews were recorded with the respondents' consent and transcription took place in a second moment. The main points of contribution were recorded through theme analysis (Nowell et al., 2017), described afterward.

The second step of the interview took place through a questionnaire designed from the analysis framework used and the variables raised in the interviews performed. The questionnaire had 30 closed-ended questions that were divided into four blocks, with a Likert-type scale (Costa, 2011) containing five statements ranging from "fully agree" to "fully disagree". We used a non-probabilistic sample and by convenience (Freitas et al., 2000). We used the criterion suggested by Pasquali (1999) that 5 to 10 individuals by item in the tool will be enough for the sample size.

We applied the questionnaire on-line between May and August 2015, with consumers of products from furniture companies identified in social networks. A total of 231 consumers voluntarily participated in the research: 16 from the Southeast region of Brazil, three from the North and Mid-West regions and out of Brazil, two from the South region, and 204 respondents from the Northeast region.

Tables 3 and 4 show the variables related to the greenwashing strategies raised in literature and which composed the research tool. The variables were identified in different tables because they

were inserted at random into two blocks of statements to keep respondents from jumping to conclusions about one single answer without reading it entirely.

Table 3. Greenwashing variables (strategies) – block 1

#	Variable	Statement	Authors
V01	Vague label information	I avoid products whose labels have vague expressions about environmental practices, such as "friends of nature" or "ecologically correct".	Laufer (2003)
V02	Green media appeal	I link an ecological picture to the company when the visual communication contains images of landscapes or forests.	Laufer (2003)
V03	Belief in green advertisement	I believe in companies whose ads contain words such as sustainability, reforestation, recyclable, biodegradable, and reusable.	Laufer (2003); Boff (2017)
V04	Ecological falsehood	The use of the word sustainability is hollow when the company hides internal procedures that can jeopardize the environment.	Boff (2017); Ottman (2017)
V05	Product's green certificate	I consider green products those that use green identification such as "friends of nature" or "ecologically correct".	Dahlstrom, (2011)
V06	Camouflaged green actions	I don't believe in products that don't display real green attitudes clearly.	Rahman et al. (2015); De Vries et al. (2015); Dahlstrom (2011)
V07	Frailty in green actions	During the purchase, I can't decide when I believe something is wrong concerning how green action arguments are presented.	De Vries et al. (2015); Chen & Chang (2013); Walsh & Mitchell (2010)
V10	Appealing green labels	I don't trust the credibility of labels that over-display something concerning environmental actions.	Diffenderfer & Baker (2010)

Source: Designed by the authors.

Table 4. Greenwashing variables (strategies) – block 2

#	Variable	Statement	Authors
V12	Partial environmental responsibility	Replacing solid wood with replenished MDF panels doesn't attest to environmental responsibility.	Cassilha et al. (2004)
V14	Partial green attributes	Advertising the use of reforestation wood, such as Pinewood or Eucalyptus, in pieces of furniture adds environmental responsibility to the company.	Cassilha et al. (2004)
V16	Greenwashing awareness	I am aware of the environmental damage caused by products that are not totally green.	Chen & Chang (2013)
V19	Lack of evidence	I get demotivated about purchasing a product when I notice the lack of ecological action appreciation in furniture companies.	Dias (2009)
V20	Evidence of the so-called green brand	I ignore campaigns with an environmental appeal that advertise the brand with the use of a green speech.	Dias (2009)
V21	Distorted green speech	I use social networks to report when I acquire products that don't represent the real green speech.	Lyon & Montgomery (2013, 2015)
V22	Green camouflage over communication	I don't trust in "green camouflage" when companies appeal to communication to sell the idea of being environmentally correct.	Palazzo et al. (2016); Lyon & Montgomery (2013, 2015)

Source: Designed by the authors.

Tables 5 and 6, below, show the variables related to environmental marketing that contributed to designing the statements that enabled to complement the contents used in the research tool, which were also raised in the area literature.

Table 5. Environmental marketing variable – block 3

#	Variable	Statement	Authors
V08	Interest in green information	I am interested in the authenticity of sustainable information	Walsh & Mitchell (2010)
V09	Preference for environmental products	I prefer companies that clearly display their environmental objectives	Barbieri & Silva (2011); Dias (2009)
V11	A green guidebook generates environmental credibility	I believe in products that clearly display environmental actions guided by some Green Guidebooks through the identification of processes	Diffenderfer & Baker (2010)
V13	Interest in the product's origin	I look for information about the "green" source of the raw material of the furniture pieces I buy	Cassilha et al. (2004)
V15	Clear display of sustainable actions	I change my mind and buy from companies that clearly display their environmental actions	Chen & Chang (2013)

Source: Designed by the authors.

Table 6. Environmental marketing variable – block 4

#	Variable	Statement	Authors
V17	The image of the consumer is safeguarded	I refuse to accept products that harm my image of a mindful consumer	Chen & Chang (2013)
V18	Environmental information appreciation	I appreciate information available about the manufacturing process and the environmental cause adopted by the company during the purchase of a furniture piece	Ottman (2017); Parguel et al. (2015)
V23	Interest in environmental actions	I follow up on practices of environmental activists in the search for companies' inadequate environmental actions	Lyon & Montgomery (2013, 2015)

Source: Designed by the authors.

Data processing in the first stage of the research, which was done through a theme analysis, encompassed six processes, according to Nowell et al. (2017): data familiarization, generation of codes, search for topics, review of the topics identified, classification of the topics identified, and report systematization. In these processes, the code frequency count was used as an index for category information coding and highlighting of new variables, which identified four variables about greenwashing and three new variables for the research concerning environmental marketing, as highlighted in Tables 7 and 8, respectively.

Table 7. Greenwashing variable

#	Variables	Variable Explanation
V24	Green induction buying	I am persuaded to buy products when they are linked to other green products
V27	Environmental cause engagement	The lack of engagement to environmental causes happens when I do not understand the process used
V28	Green attitudes in small actions	I connect small actions, such as recycled paper, to green attitudes in companies
V29	Green graphic display as an attraction	I am attracted by products that display graphic information that explores landscapes, water, and foliage that resembles the environment

Source: Designed by the authors.

Table 8. Environmental marketing variables

#	Variables	Variable Explanation
V25	Green seal as purchase attraction	Product label display or green seal leads the consumer into purchasing sustainable products
V26	Brand-associated trust	I trust the brand when the process used to reach sustainability is clear
V30	Advertisement encourages the mindful purchase	Announcing green actions in the media encourages mindful shopping

Source: Designed by the authors.

For the second step of the research, data processing was done through electronic spreadsheets, in which data were tabulated, and the standard frequency, mean, and deviation were calculated. In descriptive-quantitative researches, according to Field (2009) and Costa (2011), when a certain variable has a value that is higher than the mean value, its degree of importance is characterized comparing the other variables, for means that are higher than 3, on a 1-to-5-point scale, showing that there is some agreement as to what will be measured. Moreover, SD is used to show how much the values from which the mean was extracted are either close or distant from the mean itself, that is, to check whether there is inconsistency/mismatch (difference in the replies), for, on a 1-to-5-point scale, when many respondents check the extreme answers, it means the SD will be high. Therefore, values around 1 mean a low SD, the confirmation of means found as positive, and that there is little reply difference.

The research's internal validity and reliability were checked through peer review by four doctor researchers who are specialized in marketing and environmental sustainability. The research's external validity lies in the rich and dense description that tried to understand the perception of a group of individuals in-depth, avoiding ways to generalize the findings for the population (Merriam, 1998). Results and discussions will be presented below.

4 RESULTS AND DISCUSSION OF THE RESULTS

This section will show the results and the analyses of the data collected to reply to the objective suggested in the research.

4.1 Environmental marketing variables

During the in-depth interview, which is the 1st step of the research, the first statement in the interview asked the interviewees to express their point of view concerning the entrepreneurial strategies used for environmental display and what could either distort or undermine the environmental message. The intention here was to start an open and smooth dialogue so that the responding managers could express their understanding about how environmental marketing has been explored and how the green message is shown.

From the accounts shared, we could see that the interviewees had experiences related to the topic suggested in their own daily life activities. The interviewers pointed out that not every consumer could, actually, use the advertisement adopted by companies due to the lack of awareness concerning the environmental cause. Therefore, for the managers, the use of green advertisement does not influence the consumers' purchasing decision and the lack of consumers' knowledge about the green cause is what maximizes their lack of engagement.

These are unsettling results, for, according to Ottman (2017), appeals concerning the green cause must be encouraged, even if they are individualized. For such, environmental marketing must direct motivational and communicative actions according to the target audience. The green product must establish individual stimuli that are related to time, effort, and money. This way, it will have local consequences and can maximize greater actions and influence others to adhere to the cause.

The second statement used in the 1st step of the research addressed the environmental certification as a booster and trigger for choosing products to understand the importance attributed to the certifications that concern sales promotion.

As a reply, managers associate positive aspects to the use of green seals and pointed out that, for the consumers who have some knowledge related to the environmental cause, certification is important, for these consumers value the criteria used for certification and, consequently, the choice for certified products will happen for these individuals.

Then, the interviewees were asked how they perceive the exploration of the environmental appeal of the furniture market during the purchase. Through the answers, we observed that advertisement in the furniture sector is still unclear and the use of reforestation boards for manufacturing furniture pieces stands out, the same time it is told whoever demands such proof, for example, the international market. For the respondents, generally speaking, this day-by-day appeal is still not being properly explored.

To Bonilla-Bedoya et al. (2017), this concerns a weak point in the national market, for the international market demands a new posture concerning the use of native wood. Cassilha et al. (2004) also add that other issues are involved in the production process, such as the generation of waste and the use of resources that are still dealt with separately. That is why the adoption of adjusted raw material would be an item in the sustainability process. Environmental responsibility in these steps would mobilize the productive chain as a whole and could strengthen the national market.

Upon considering the variables adopted for the analyses described in the previous section, the 2nd step of the research showed that the highest number of responses is on V9 – Preference for environmental products. The second item mentions the interest in V8, green information (52.4%). These results mean that the consumers tend to prefer products that have environmental characteristics and that they are interested in the information, as highlighted in Table 9.

Table 9. Higher number of statements concerning fully agree – environmental marketing

Variables	Variables	Fully Disagree		Partly Disagree		Neither agree nor disagree		Partly Agree		Fully Agree	
		F	%	F	%	F	%	F	%	F	%
V09*	Preference for environmental products	8	3.5	9	3.9	36	15.6	57	24.7	121	52.4
V08*	Interest in green information	6	2.6	13	5.6	38	16.5	53	22.9	121	52.4
V26*	Brand-associated trust	5	2.2	5	2.2	32	13.9	77	33.3	112	48.5
V30*	Advertisement encourages mindful purchase	7	3	5	2.2	34	14.7	77	33.3	108	46.8
V11*	A green guidebook generates environmental credibility	3	1.3	7	3	36	15.6	80	34.6	105	45.5
V18*	Environmental information appreciation	11	4.8	15	6.5	44	19	69	29.9	92	39.8
V15*	Clear display of sustainable actions	3	1.3	10	4.3	52	22.5	77	33.3	89	38.5
V25*	Green seal as purchase attraction	8	3.5	15	6.5	45	19.5	86	37.2	77	33.3

Source: Research data.

The third variable that stood out was "brand-associated trust" (V26) which, ranging from partly agree (33.3%) to fully agree (48.5%), shows the reliability attributed to the brand when the process used by the furniture company to reach sustainability is clear. Thus, the importance of brand association might maximize changes of attitude and reinforce the optimist image for the green path (Guo et al., 2017; Veiga-Neto et al., 2014).

V30 – "advertisement encourages mindful purchase" – comes in fourth place. This way, it confirms the relevance of the work developed by environmental marketing if it is directed to media advertisements concerning green actions. In this context, it confirms studies pinpointed here concerning the role of environmental marketing in the responsibility to advertise positive practices concerning environmental issues, as well as guiding the media in the dissemination of good practices (Dias, 2009).

The use of the green guidebook that mentions sustainable actions and directs environmental practices that are consistent with reality, presented a strong agreement. It confirms the thoughts of Diffenderfer & Baker (2010), who bring the use of green guidebooks as a reference in the display of environmental attributes by avoiding the practice of greenwashing and building some credibility.

The use of the green seal as an environmental marketing strategy also showed some relative agreement, which indicates the seal's relevance, especially for international demand that requires strict criteria during the production steps (Veiga-Neto et al., 2014; Cassilha et al., 2004).

From this perspective, every variable that was analyzed confirms attitudes related to the environmental marketing used as recommended by the authors, which concerns the analysis framework used in this research. The disagreement of these variables would typify the practice of greenwashing.

Table 10 shows that, from the consumers' perception, the veracity of information about environmental cause is still not a full determinant to influence its consumption way. The variables concerning Interest in environmental actions (V23) and Interest in the product's origin (V13), were slightly significant. The results confirm statements from the sector's managers.

Table 10. Higher number of statements concerning fully disagree – environmental marketing

Variables	Variables	Fully Disagree		Partly Disagree		Neither agree nor disagree		Partly Agree		Fully Agree	
		F	%	F	%	F	%	F	%	F	%
V23*	Interest in environmental actions	60	26	43	18.6	64	27.7	36	15.6	28	12.1
V13*	Interest in the product's origin	44	19	51	22.1	64	27.7	38	16.5	34	14.7

Source: Research data.

Table 11 shows the mean and the standard deviation attributed to each variable in the study and that is related to environmental marketing. In this sense, and by taking into account statements by Field (2009) and Costa (2011), V26 – "associate brand trust with information displayed" was characterized by its level of importance, with a mean of 4.24 and a standard deviation of 0.923, which means that the respondents' perception confirms the statement from the accounts of the managers interviewed when they said that clear consumer information ends up passing credibility in the processes adopted.

Table 11. Data: means and standard deviation – environmental marketing variables

Variable name	N	Mean	Standard Deviation
V26 – Brand-associated trust	231	4.24	0.923
V11 – A green guidebook generates environmental credibility	231	4.20	0.901
V09 – Preference for environmental products	231	4.19	1.064
V30 – Advertisement encourages mindful purchase	231	4.19	0.971
V08 – Interest in green information	231	4.17	1.060
V15 – Clear display of sustainable actions	231	4.03	0.950
V18 – Environmental information appreciation	231	3.95	1.116
V25 – Green seal as purchase attraction	231	3.90	1.047
V17 – The image of the consumer is safeguarded	231	3.33	1.222
V13 – Interest in the product's origin	231	2.86	1.313
V23 – Interest in environmental actions	231	2.69	1.334

Source: Research data.

Another relevant meaning is attributed to the variable concerning V11 – "belief in the display of environmental attributes that use a green guidebook". Therefore, the result confirms studies by Diffenderfer & Baker (2010).

Variable V9, "preference for environmental products", showed a higher response variation. This variable does not express how deep the involvement is. It only informs a trend that should be worked out adequately by marketing to reach better results, both organizational and environmental. Generally speaking, it means that few environmental stimuli encourage the consumer to choose the cause or green products through environmental marketing.

Variable V30 has the same mean as the previous variable, that is, 4.19. However, it has a lower standard deviation of 0.971, which confirms the importance of this variable for furniture consumers and was raised in the 1st step of the research. It tried to check the perception that is favorable to "advertisement as a purchase trigger", that is, for the interviewees, media action is positive to encourage mindful shopping, which was confirmed by the respondents. In this context, the benefits and the results that are directed through environmental marketing can maximize choices and promote more involvement of consumers and even employees in companies (Veiga-Neto et al., 2014).

Concerning Variable V8, it had a mean of 4.17 and a standard deviation of 1.060. The variable concerning "interest for green information" shows a positive index that refers to the information about sustainability. Thus, the veracity of information is a positive point that is attributed to companies. Therefore, fighting off wrongful attitudes in environmental marketing that may cause greenwashing actions by camouflaging actions that are inadequate for the environment undermines the identification by part of the consumers (Walsh & Mitchell, 2010).

Concerning Variable V15 – "I trust in companies that generate credibility" – the respondents prefer sustainable actions that are displayed clearly. The statement concerning "I change my mind and buy from companies that clearly display their environmental actions" shows the importance of the consumers' perception. Researchers Chen and Chang (2013) pointed out that green appeal is seen with disbelief when it does not transpire credibility. Therefore, the trust would be a premise to capture consumers that are vigilant about the environmental cause (Chen & Chang, 2013).

Variable V18, "environmental information appreciation", had a mean of 3.95 and a standard deviation of 1.116. This statement brought in a paradox, for the interviews in the 1st step concluded that environmental information appreciation at the moment of purchasing a piece of furniture was ignored, whereas in the 2nd step there was a meaningful agreement from the consumers. The results show some discrepancy between the managers and the consumers' view, which means that society is more aware of the green cause and that the managers from this sector do not know about consumers' perception. This paradox may influence the strategies and the organizational image directly, for the organization which does not use green marketing as an educational strategy may be losing their room in the market.

Variable V25, which concerns "the use of green seals as a purchase attraction" had a mean of 3.90 and a standard deviation of 1.047. This variable is seen as a differential by the managers who were interviewed in the research, for, through the seal, the company expresses characteristics that belong to the product by informing the actions and meeting the norms and the standards of environmental certification. Therefore, for the company, this information is a sales attraction. This feeling was confirmed by the consumers participating in the research.

4.2 Environmental marketing variables perceived as greenwashing

Next, the interviewed professionals (managers) (1st step) were questioned about what could jeopardize the consumers' credibility by describing greenwashing in pro-environmental actions performed in organizations. In this sense, the interviewees associate the organizations' credibility with an ethical attitude and the adoption of certified raw material, confirming statements by Barbieri & Silva (2011) and Dias (2009). Therefore, variable V13, "Interest in the product's origin", which was a study by Cassilha et al. (2004) about the "green" origin of furniture raw material, may awaken interest in the consumer who is attentive to environmental causes, which strengthens environmental marketing.

The variables highlighted as potential greenwashing practices, which were observed in the 1st step of the research, highlight 4 points of relevance in the use of environmental marketing seen as greenwashing, as shown in Table 8.

Therefore, the data show the points which must be considered by the study area market, presenting new paths and management strategy. Table 12 shows relevant data to be described and analyzed.

Table 12. Number of statements concerning fully agree – Greenwashing

Variables	Variables	Fully Disagree		Partly Disagree		Neither agree nor disagree		Partly Agree		Fully Agree	
		F	%	F	%	F	%	F	%	F	%
V04	Ecological falsehood	9	3.9	11	4.8	25	10.8	42	18.2	144	62.3
V16	Greenwashing awareness	5	2.2	20	8.7	31	13.4	60	26	115	49.8
V06	Camouflaged green actions	12	5.2	26	11.3	45	19.5	63	27.3	85	36.8
V12	Partial environmental responsibility	28	12.1	13	5.6	60	26	47	20.3	83	35.9
V28	Green attitudes in small actions	10	4.3	17	7.4	41	17.7	83	35.9	80	34.6
V03	Belief in green advertisement	8	3.5	24	10.4	41	17.7	87	37.7	71	30.7

Source: Research data.

The results in Table 12 show that there is an agreement in Variables V4 (Ecological falsehood), V16 (Greenwashing awareness), V6 (Camouflaged green actions), V12 (Partial environmental responsibility), V28 (Green attitude in small actions), and V3 (Belief in the green advertisement). It means that falsely using green attributes interferes with the credibility of the company that intends to show a differential concerning environmental issues (Ottman, 2017). Therefore, using terms that refer to the green cause without showing internal procedures may be characterized as greenwashing, herein identified as the variable that stands out with the highest number in the statement, with 62.3% of high agreement level. Moreover, each variable shows:

a)   V16: greenwashing perception is noticed by the consumers;

b)   V06: the identification of greenwashing is attributed to the lack of detailed information; thus, the environmental commitment that is partially shown generates disbelief and may contribute to the lack of credibility since it camouflages actions that could weaken the companies' environmental actions (Dahlstrom, 2011; Rahman et al., 2015; De Vries et al., 2015). V06, or camouflaged green actions, also represents greenwashing actions and 36.8% of the respondents point out this practice;

c)   Variable V12 attributes green characteristics to parts of a piece of furniture. Thus, a step of the process meets the environmental issue. However, this practice cannot be generalized for the entire organization. The attributes must be either partly or totally analyzed and identified according to certification and displayed in an adequate way. The assurance of a product's environmental characteristics is found in its environmental certification. A product's information may ensure an adequate process by building credibility and avoiding generalizations about the product by actually emphasizing the characteristics and processes taken that ensure the responsibility adopted (Barbieri & Silva, 2011);

d)   Variable V28, which was also part of the 1st step, pointed that connecting small actions, such as using recycled paper, to the green attitude in companies may lead to the practice of greenwashing by companies that partly adhere to green and display such action emphatically and are specifically limited to it;

e)   Variable V03 explains that the use of expressions that lead to green may enable the practice of greenwashing. Therefore, it is important to understand that the agreement of this variable maximizes consumers to understand that words that suggest sustainability, reforestation, recyclable, biodegradable, and reusable depict green. However, they may not represent the full picture (Walsh & Mitchell, 2010; Chen & Chang, 2013).

Table 13 show the variables with a higher number of the statement concerning fully disagree, observing the least relevant variables in the identification of greenwashing.

Table 13. Highest number of statements concerning fully disagree – Greenwashing

Variables	Variables	Fully Disagree		Partly Disagree		Neither agree nor disagree		Partly Agree		Fully Agree	
		F	%	F	%	F	%	F	%	F	%
V21	Distorted green speech	72	31.2	46	19.9	65	28.1	30	13	18	7.8
V02	Green media appeal	65	28.1	35	15.2	52	22.5	52	22.5	27	11.7

Source: Research data.

Variable V21 showed that consumers do not gather to show and share reports about furniture companies that practice greenwashing actions. In her studies, Ottman (2017) shows that the use of the internet for research and information sharing is growing, not to mention

the ease of access. Therefore, social media can be a relevant tool to meet an audience that is more demanding and aware of green (Lyon & Montgomery, 2013).

V02 shows that graphic display with images that resemble nature is not attractive to associate products to the ecological image. Therefore, the investment in green appeals for the visual communication of the product does not necessarily lead to purchasing or adhering to the green cause.

Table 14. Data: means and standard deviation – Greenwashing variables

Variables	N	Mean	Standard Deviation
V04 – Ecological falsehood	231	4.30	1.089
V16 – Greenwashing awareness	231	4.13	1.078
V28 – Green attitudes in small actions	231	3.89	1.096
V03 – Belief in green advertisement	231	3.82	1.088
V06 – Camouflaged green actions	231	3.79	1.201
V27 – Environmental cause engagement	231	3.63	1.095
V12 – Partial environmental responsibility	231	3.62	1.342
V10 – Appealing green label	231	3.55	1.152
V14 – Partial green attributes	231	3.54	1.160
V07 – Frailty in green actions	231	3.46	1.274
V22 – Green camouflage over communication	231	3.42	1.173
V19 – Lack of evidence	231	3.37	1.175
V05 – Product's green certificate	231	3.29	.1237
V29 – Green graphic display as an attraction	231	3.02	1.256
V24 – Green induction buying	231	2.93	1.207
V20 – Evidence of the so-called green brand	231	2.77	1.255
V02 – Green media appeal	231	2.74	1.383
V01– Vague label information	231	2.49	1.194
V21– Distorted green speech	231	2.46	1.267

Source: Research data.

Table 14 shows the variables' means and standard deviation. The variable concerning "ecological falsehood" (V04) comes first, with a mean of 4.30 and a standard deviation of 1.08, which shows its importance, according to Field (2009) and Costa (2011), who said that "the use of the word sustainability is hollow when the company hides internal procedures that can jeopardize the environment" is true from the consumers' perception. To Boff (2017), the word sustainability used by some organizations is attributed as ecological falsehood in ads since it uses a green mask to fool consumers and, oftentimes, it can hide issues related to nature aggression.

V16 had a mean of 4.13 and a standard deviation of 1.078. This variable confirms that the consumers are aware of the harm to the environment that is caused by products that are not totally green. In their studies, Chen & Chang (2013) show that the negative perception concerning environmental risks interferes in the consumers' behavior and the purchasing decision when they refuse the product or service based on risk identification.

The highest standard deviation (response amplitude) identified in the 30 (thirty) variables researched was variable V02, which concerns green media appeal and had an SD of 1.383 and a mean of 2.74. Based on that, linking promotional material to elements that resemble nature and which could lead to a green choice does not affect the respondents' attention in the research. The statement "I link an ecological picture to the company when the visual communication contains images of landscapes or forests" could show signs of greenwashing practice appealing to shallow environmental attitudes.

Variables V21 and V01 were selected in this order due to the fact they had a meaningful result, for their lower means represent a disagreement of the statements from the respondents. In these variables, following up on environmental practices, vague label information, and reporting when consumers feel they are being fooled, show that the consumers' behavior upon checking on inadequate actions is still not effective, even if social networks can be accessed by a growing number of people, the respondents do not use them to promote actions and the absence of this attitude in this sense may maximize the practice of greenwashing, even if the organizations do not intend to. The statement in the questionnaire (V01): "I avoid products whose labels have vague expressions about environmental practice, such as "friends of nature" or "ecologically correct" is indifferent to most respondents. The use of these sentences may not call their attention. Thus, avoiding these products because consumers may think the company is greenwashing is still not part of the respondents' attitudes.

4.3 Greenwashing practices

The fourth question on the script dealt with green expressions that can weaken the environmental speech. According to the respondents, the consumer may be adhering to the product that carries a green name from the brand without noticing its importance or searching for information about that product. The fact the company presents something related to green or to the indiscriminate use of the green term induces, appeals, and ends up leading the consumer into the green cause without analyzing in detail what it refers to and how it is worked out. This concern is supported by Chen & Chang (2013).

Generally speaking, consumers may have other demands and needs at the same time they must be active in their environmental participation by valuing pro-environmental actions. Laws and certifications lead to new practices and emphasizing an action based on another may weaken corporate attitudes internally and that may reflect externally, which may undermine organizational credibility (Ottman, 2017).

The sixth statement discussed what impairs the development of pro-environmental actions. According to the interviewees, although they are related to the topic suggested and have executive positions, they agree that there is an educational gap concerning environmental actions that favor the lack of consumers' environmental awareness. Through their replies, the lack of consumers' knowledge was spontaneously identified as the main point. According to these professionals, this undermines their engagement in environmental actions. Thus, the practice of greenwashing as an environmental marketing strategy is not emphasized by the interviewees in the reply analysis, even if the statements pertained to the topic.

It is important to note that environmental marketing must touch the consumers by informing them and leading them to promote choices that are favorable to the environment. Generating positive actions requires work that is specified in this sense. Induction must take place sensibly by encouraging the consumer to promote positive attitudes and which are not induced with the necessary information, and by valuing sustainability and the environmental context.

5 CONCLUSIONS

The variables that mostly explained about environmental marketing for the practice of greenwashing were: "preference for environmental products", "interest in green information", "brand-associated trust", "green purchase incentive advertisement", and "a green guidebook generates environmental credibility". In this context, the greenwashing variables that were the most representative for the interviewees were: "ecological falsehood", "greenwashing awareness", "camouflaged green actions", "partial environmental responsibility", "green attitude in small actions", and "belief in the green advertisement".

Through these variables, we could see that the preference for environmental products exists and consumers are aware of greenwashing. However, they do not work actively and

they do not use tools such as social networks to report or work together with the government and institutions to supervise on behalf of the environment.

The managerial implications of this research show that managers and organizations should know their difficulties to acknowledge greenwashing practices, the dimensions to measure greenwashing, the variables of greenwashing, and of environmental marketing that are involved in the marketing process of their organizations and which are perceived by consumers. From these variables, organizations will be able to develop strategies to strengthen their entrepreneurial image and link the environmental appeal to products and brands assertively.

However, one of the limitations in this research refers to the geographical aspect and to the size of the companies analyzed in the qualitative step undertaken, since the study was restricted to Northeastern Brazil and furniture micro-enterprises. Another limitation was the use of the descriptive and non-inferential quantitative analysis due to multivariate data analysis techniques.

As a suggestion for future studies, the empiric application of the tool used in this research is intended in different contexts, such as covering other regions in the country, other business areas, and other comparative studies that can contribute to the development and growth of the area knowledge and the tool used in the research.

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APPENDIX A – In-depth interview questions

1. Which strategies to promote the environmental message do you currently see in the furniture market? What can impair or distort this image?

2. In your opinion, what pushes consumers' credibility away from the pro-environmental actions performed by organizations in the furniture market?

3. Is the use of certification or green seal enough to promote sales? Why?

4. Which "green expressions" may weaken the environmental speech?

5. Do media explore the environmental appeal in the furniture market? How does it work?

6. What impairs the development of pro-environmental actions in the furniture market?