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Consumers' Perceptions of Green Advertising by Consumer Goods Companies

A Percepção dos Consumidores Quanto à Propaganda Ecológica de Empresas de Bens de Consumo

Percepción de los Consumidores Sobre la Publicidad Ecológica de las Empresas de bienes De Consumo

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KEYWORDS

Green advertising.
Cognitive responses.
Instagram.

Abstract: This article aimed to analyze and classify comments from Instagram® users after exposure to ecological advertisements of sustainable companies, according to the Cognitive Responses Theory. We used a qualitative approach to analyze comments on posts of six sustainable consumer goods companies operating in Brazil, totaling the analysis of 212 comments through coding. The study indicated that 86.4% of the cognitive responses from users were classified as supportive arguments when commenting on the companies' green advertisements; among those, 82.6% were oriented to the message conveyed. In contrast, when analyzing the counterarguments, most responses referred to the product (63.1%). This shows that the target audience has a positive view of ecological advertisements, provided that the companies that perform Green Marketing offer quality products/services and reinforce the message conveyed. The research approach and method used can be replicated in different studies, considering the relevance of social media for the corporate image and strategic positioning of sustainable companies.

PALAVRAS-CHAVE

Propaganda ecológica. Respostas cognitivas. Instagram.

Resumo: Este artigo teve como principal objetivo analisar e classificar comentários de usuários do Instagram® após a exposição a propagandas ecológicas de empresas sustentáveis, de acordo com a Teoria das Respostas Cognitivas. Foi utilizada uma abordagem qualitativa ao analisar comentários em publicações de seis empresas sustentáveis de bens de consumo com atuação no Brasil, totalizando a análise de 212 comentários por meio de codificações. Dessa forma, o estudo indica que 86,4% das respostas cognitivas dos usuários, ao comentar sobre as propagandas ecológicas das empresas, foram classificadas como argumentos de apoio e, dentre essas, 82,6% foram orientadas à mensagem passada. Em contrapartida, ao analisar os contra-argumentos, pode-se perceber que a maioria das respostas remetiam ao produto (63,1%). Isso demonstra que o público-alvo tem uma visão positiva das propagandas ecológicas, desde que as empresas que realizam o Marketing Verde ofereçam produtos/serviços de qualidade e reforcem a mensagem passada. A abordagem e o método de pesquisa utilizados podem ser replicados em diferentes estudos, tendo em vista a relevância das mídias sociais para a imagem corporativa e posicionamento estratégico das empresas sustentáveis.

PALABRAS CLAVE

Publicidad ecológica. Respuestas cognitivas. Instagram.

Resumen: El objetivo principal de este artículo fue analizar y clasificar los comentarios de los usuarios de Instagram® tras la exposición a anuncios ecológicos de empresas sostenibles, según la Teoría de la Respuesta Cognitiva. Se utilizó un enfoque cualitativo al analizar los comentarios en publicaciones de seis empresas de bienes de consumo sostenible que operan en Brasil, totalizando el análisis de 212 comentarios a través de la codificación. Así, el estudio indica que el 86,4% de las respuestas cognitivas de los usuarios, al comentar los anuncios ecológicos de las empresas, se clasificaron como argumentos de apoyo y, de estos, el 82,6% se orientaron al mensaje transmitido. Por otro lado, al analizar los contraargumentos, se observa que la mayoría de las respuestas se refieren al producto (63,1%). Esto demuestra que el público objetivo tiene una visión positiva de los anuncios ecológicos, siempre que las empresas que realizan Marketing Verde ofrezcan productos/servicios de calidad y refuercen el mensaje. El enfoque y metodología utilizados pueden ser replicados en diferentes investigaciones, dada la gran relevancia de las redes sociales para la imagen corporativa y el posicionamiento estratégico de las empresas sustentables.

Introduction

Environmental issues have been widely discussed at the global level, particularly through raising awareness about the influence of human activity on nature (Amoako, Dzogbenuku, Doe & Adjaison, 2020). In this context, great attention is given to the environmental accountability of organizations, leading companies to start changing the way they perform their activities. Terms such as 'Green Marketing' and 'Environmental Marketing' are frequently used to refer to these topics (Papadas, Avlonitis, Carrigan & Piha, 2019).

Based on these changes to environmental values, consumers have become more concerned about life and the environment, using their purchasing power to acquire environmentally friendly products or choose ecologically committed brands (Campos, Palma, Neutzling, Zucatto & Slongo, 2013; Thakkar, 2021). In addition, suppliers put pressure towards integrating the organizational culture with the environment, leading companies to observe new trends and develop new strategies seeking to minimize the environmental impact of their activities (Thakkar, 2021).

Within the scope of business management, the corporate environmental integration approach is vital for competitive success (Papadas, Avlonitis, Carrigan & Piha, 2019). According to a research carried out by Nielsen Company (2019), 42% of Brazilian consumers are changing their consumption habits in order to reduce their impact on the environment, and 30% of the interviewees are concerned with the ingredients used in products.

Considering this scenario, academic production both in Brazil and abroad is being widely explored when it comes to Green

Marketing. A study by Dangelico and Vocalelli (2017) analyzed international publications on this topic and found peaks of production in 2012, and a study on the Brazilian academic scenario (Cruvinel et al., 2020) showed a high volume of production in 2017. In addition, there have been special calls for papers related to sustainable consumption and Green Marketing in periodicals such as the 'Journal of MacroMarketing', the 'Journal of Consumer Behaviour', and the 'Journal of the Association for Consumer Research', indicating the relevance of this subject in international literature.

A large portion of international research approach Marketing in relation to ecologically correct proposals, and promotion is a widely discussed topic (Dangelico & Vocalelli, 2017). With the development and commercialization of new green products (Cruvinel et al., 2020), these studies have emphasized the relationship between environmental concerns and consumption by looking at product packaging and focusing on the importance of showing adequate labels and the materials used for producing the packages (Dangelico & Vocalelli, 2017).

Brazilian studies on Green Marketing frequently focus on topics such as 'green products', 'consumer behavior', 'environmental issues', and 'environmental concerns' (Torrente & Freire, 2020). Advertisement is a basic and very important element in this field of study, but it has not been well explored in Brazilian research (Torrente & Freire, 2020).

Decisions regarding the purchase of green products are based mostly on green advertising (Kong & Zhang, 2012). However, consumers' expectations are high regarding this type of product. Therefore, communication must focus on conveying their environmental characteristics (Testa, Iraldo, Tessitore &

Frey, 2011). It is not enough for a company to seek an emotional response from clients based only on its corporate image. It is also necessary to present technical details that attract and convince more consumers (Testa, Iraldo, Tessitore & Frey, 2011).

This is partly due to consumers' mistrust regarding Green Marketing, which is a consequence of claims that do not reflect the company's actual conduct (Pimonenko, Bilan, Horák, Starchenko & Gajda, 2020). False and exaggerated information about the production process, product characteristics, or even the organizational culture are presented in order to obtain a competitive advantage. This type of conduct is known as 'greenwashing' and may affect the company's profitability and result in serious ethical damage (Pimonenko, Bilan, Horák, Starchenko & Gajda, 2020; Szabo & Webster, 2021).

In this context, studies have investigated how the elements of ecological advertising – purpose of the information, false claims, lack of information, or even product design – affect the purchase intention of green products (Groening, Sarkis & Zhu, 2018; Schmuck, Matthes & Naderer, 2018; Luo, Sun, Shen & Xia, 2020; Van Tonder, Fullerton & de Beer, 2020; Szabo & Webster, 2021). However, there have not been analyses of the response given by consumers on social media regarding the green communication they have encountered, which is an important factor to help classify this content as positive or negative and help position companies who use Green Marketing as a strategy.

Given the increase in the use of Green Marketing strategies by organizations, as well as the relevance of ecological advertising in this context, the research problem in this study is: What are the perceptions of consumers regarding the ecological advertising published on social media by consumer goods

companies?

The goal of this research is to analyze and classify comments made on Instagram® after the presentation of ecological advertising by sustainable companies in order to identify and categorize supporting arguments, counterarguments, and, at a later stage, the thought process used when making each comment, based on the cognitive response approach. This theory is used in academic research focused on advertisement analysis from the perspective of the target audience (Belch & Belch, 2014). However, there is a gap in literature regarding its use in analyzing green advertising.

Theoretical Elements of the Research

Green Marketing and Ecological Advertising

The term 'Green Marketing', also known as 'Environmental Marketing' and 'Ecological Marketing', gained prominence in the end of the 1980s. However, it had been discussed before during the Ecological Marketing workshop organized by the American Marketing Association (AMA) in 1975 (Polonsky, 1994). According to Kotler and Armstrong (2007), the expression emerged from the expansion of the concept of Marketing from sales to a larger process.

The pollution and energy conservation issues caused by large industries led to the first discussions on environmentalism, a predecessor of Green Marketing (Pereira & Ayrosa, 2004). This movement was marked by two major waves in the United States: the first happened in the 1960s and 70s and was led by environmentalists and concerned citizens; the second happened in the same period and was promoted by the American government, which enacted laws to regulate industrial practices (Kotler & Armstrong, 2007).

In one of the pioneer studies related to Green Marketing, Peattie and Charter (1992) addressed the differences between the environmentalism seen in 1970 and the 'green' narratives that started around 1990. The authors stated that, in the past, society focused only on the negative effects caused to the environment by companies. However, with the development of Green Marketing, business started being seen as part of the solution through a dynamic relationship with society and the environment.

Following the same logic, researchers such as Davis (1993), McDaniel and Rylander (1993), Bhat (1993), Polonsky (1994), and Ottman and Books (1998) reported on the concept of Green Market, the innovations and opportunities generated by its use, and its importance for the strategic planning of companies in the face of increasing ecological concerns and the emergence of 'green consumers'. McDaniel and Rylander (1993) emphasized that environmental concern must not be seen as temporary, but as a long-term factor, leading to a need to develop viable strategies to build effective communication.

Ecological Marketing may be defined as the set of activities that generate and facilitate exchanges that satisfy human needs and desires with minimum harm to the environment (Polonsky, 1994). This trend has led marketing professionals to stop looking only at internal production processes or external consumer relations and start analyzing the impacts of production and consumption on quality of life and on the sustainable development of society (Amoako, Dzogbenuku, Doe & Adjaison, 2020).

According to Thakkar (2021), Green Marketing has both an environmental and a social dimension. Therefore, it must be implemented more vigorously than traditional marketing. It relates not only to the promotion

or advertising of products with environmentally friendly characteristics, but also to the incorporation of a wide range of activities, including the development and modification of products and changes in productive processes, packaging and the advertising profile (Papadas, Avlonitis, Carrigan & Piha, 2019).

Therefore, in order for an organization to obtain a competitive advantage, it needs to identify its green consumers, as well as which product characteristics influence their purchase behavior and which aspects they consider when acquiring a product (Khandelwal & Bajpai, 2011; Papadas, Avlonitis, Carrigan & Piha, 2019; Sharma, 2021). One of the ways to achieve that is by adopting strategic ecological advertising in order to promote consumer awareness regarding environmental issues, clearly communicating the company's values, and building logical relationships between the company's business practices and reduced environmental impact (Enoki et al., 2008; Kumar, 2017).

Advertising is one of the most effective ways to raise consumer awareness regarding environmental issues and inform how the company's products help improve this situation (Kumar, 2017). Green products have added commercial value due to their educational potential and to the promotion of attributes such as environmental awareness and environmental compatibility. This happens because they are non-toxic, durable, and biodegradable, since they must be produced from recycled materials, conserve natural resources in the extraction process, be energy efficient, and have as little packaging as possible (Xie, Huo & Zou, 2019).

Ecological advertising, also known as green or environmental advertising, can be used by companies in order to maintain

markets and gain new ones, acting persuasively and using communication and promotion techniques (Silva & Santos, 2011; Giacomini, 2019). According to Guimarães (2006), there are three types of ecological appeal in this type of advertising: demonstrating the relationship between the product or service and the environment; promoting a 'green' way of living without highlighting a specific product or service; or displaying a corporate image of environmental accountability. In his research, the author concluded that for-profit companies do not emphasize the ecological attributes of products, but use the environmental agenda to develop their corporate image.

Organizational image and locus of control are considered the factors exerting the most influence in green purchase behavior (Wu et al., 2015; Sharma, 2021). In turn, Testa et al. (2011) stated that companies should not only strengthen their corporate image, but also attract and convince consumers by providing the functional details of products or services advertised, since customers have different levels of environmental knowledge and tend to distrust corporate communications.

In this context, Kumar (2017) indicated that there are different intentions behind green advertising. The more evident intention is to inform consumers on the companies' approach regarding environmental issues, involving the communication of their environmental values, vision and mission, including information related to how they obtain raw materials, the possibility of recycling or reusing their products, and the environmental impact of their waste.

On the other hand, green advertising has changed its approach as a strategy to convince consumers to purchase environmentally correct products by using abstract and overloaded environmental information

(Kumar, 2017; Giacomini, 2019). This type of approach increases the chances that skeptical or confused consumers who do not identify with the green narrative will disrupt strategies directed at the target audience (Kumar, 2017, Schmuck, Matthes & Naderer, 2018).

These false or exaggerated claims have been used by organizations to describe unproven benefits and are known as 'greenwashing' (Mostafa, 2009; Parguel; Benoît-Moreau & Larceneux, 2011; Szabo & Webster, 2021). According to the authors, this approach leads consumers to become skeptical regarding green labels and advertisements, which affects the trust relationship with brands that offer these products and inhibits their consumption.

Therefore, it has become necessary to analyze how consumers react to ecological advertising (Schmuck, Matthes & Naderer, 2018). A large portion of companies have adopted green advertising since the end of the 1960s, but it is necessary to reassess how these efforts have been made and the perceptions of green consumers regarding these strategies (Dangelico & Vocalelli, 2017; Sharma, 2021).

In this study, the advertisements analyzed are considered 'ecological advertising' because they include environmental and ecological information related to a brand or to a specific action performed by it. We used the Cognitive Response Approach (Belch & Belch, 2014) to examine the cognitive responses of consumers when they come across ecological advertising.

Cognitive Response Approach

According to Kotler and Keller (2006, p. 566), advertising is "any paid form of presentation and non-personal promotion of ideas, goods, or services by an identified advertiser" and can happen through mass

communication media such as television, radio or magazines, requiring knowledge on the capacity of each media type in terms of coverage, frequency and impact.

Online publicity can be considered one of the most important types of advertising, second only to television advertising (Fuchs, 2018). Social media enable a wide reach and segmentation of advertising and provide a more secure avenue for advertisers, since there is a large monitoring of online behavior and the influence of computational algorithms (Kumar & Gupta, 2016; Fuchs, 2018). The targeted action is seen more clearly in this type of advertising, but only a small part of the audience responds to the advertisement (Lock & Ludolphy, 2020). Therefore, it becomes relevant to analyze the strategies adopted by organizations in their digital advertisements and classify them based on the consumers' responses (Varnali, 2019; Lock & Ludolphy, 2020).

According to Belch and Belch (2014), consumer perception is formed through the information they receive from advertisements, packaging, promotions, and other actions. In particular, advertisements often employ tactics such as recommendations from specialists, characters or celebrities, positive reference groups, and social approval or acceptance (Kotler & Keller, 2006; Grewal, Bart, Spann & Zubcsek, 2016).

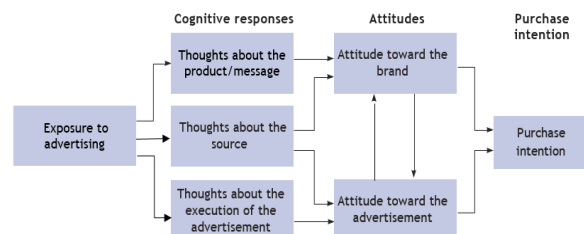
In order to understand the thought process of the target audience when coming across the message conveyed, it is necessary to examine the consumers' cognitive responses (Petty & Tormala, 2004; Belch & Belch, 2014; Lee Burton, Gollins, McNeely & Walls, 2018). This enables the identification of how an advertisement can determine purchase intention and brand loyalty (Belch & Belch, 2014), as well as the influence of repeated exposure during this process (Lee Burton, Gollins, McNeely & Walls, 2018). According to Lee Burton et al. (2018), consumers who see

an advertisement 10 or more times have greater purchase intention than those who had less contact with it.

The content of cognitive responses is partly determined by factors related to the persuasion situation, including the environment, the characteristics of the source, the content of the communication, the frequency of exposure, and other factors that influence the efficacy of publicity (Kong & Zhang, 2012; Belch & Belch, 2014). In addition, consumers' trust in a given product or brand can be influenced by the characteristics of the advertisement, such as structure, duration, number of arguments, and complexity (Lee Burton et al., 2018).

Advertisers must consider the different possible interpretations and reactions of the audience regarding the content shown, since there is no immediate feedback from the recipients (Briñol, Petty & Tormala, 2004; Belch & Belch, 2014). Belch and Belch (2014) divided cognitive responses into three categories: thoughts about the product or message; thoughts about the source; and thoughts about the execution, as shown in Figure 1.

Figure 1
Cognitive Response Model



Source: Belch and Belch (2014, p. 168).

The thoughts about the product or message are related to the product or service or to the arguments used in the message. Therefore, responses could be counterarguments or supporting arguments. In the first case, recipients oppose the point of

view of the message, and in the second case, they reaffirm the content of the message (Belch & Belch, 2014).

The thoughts about the source are related to the messenger in the advertisement and are divided into two types: depreciation of the source, in which the message is not accepted because it refers to negative thoughts regarding the organization or the messenger; and favorable reception by the consumer, which tends to generate positive thoughts and support the source. Therefore, messengers must be able to convince, attract and generate credibility among the target audience.

The thoughts about the execution of the advertisement involve factors directly associated with the consumer, which evidence affective reactions and visual effects, creativity, quality, and colors, for example. This way, the cognitive response approach is able to identify the consumer's final perception of a message, whether it is acceptance or refusal (Belch & Belch, 2014).

Methodological Elements of the Research

This study is of the descriptive type, which, according to Gil (2010), seeks to describe the characteristics of a given population, phenomenon, or relationship between variables, including investigating the opinions, attitudes and beliefs of a population. Data collection in this study happened through a qualitative approach. Creswell (2014) stated that this approach brings research closer to the reality of the research subjects, since it seeks to capture the target phenomenon based on the perspective of the people involved in it.

In order to analyze the perceptions of consumers regarding ecological advertisements published on the social media pages of consumer goods companies, this study adopted the cognitive response theory

(Belch & Belch, 2014). According to Belch and Belch (2014), the main goal of this approach is to find responses that are triggered by a certain message, and how this determines purchase intention of brand loyalty.

The analysis performed through internet data has great potential, since it enables the extraction of several possibilities. The internet is considered a rich environment for conducting research, even though some may see it as simplistic (Soares & Stengel, 2021). The relationships between companies and digital communities changed the reality of consumers. Therefore, it has become important to analyze the dynamics of organizations through the internet, where social groupings are organized into networks (Kozinets, 2015).

The goal of this study is related to the communication of sustainable consumer goods companies and the consumers' perception of them. The analysis selection was based on organizations in the Brazilian consumer goods market that are part of the 'Global 100' ranking of the 100 most sustainable companies in the world in 2021, according to Corporate Knights (2021), a Canadian research and media company focused on clean capitalism.

This classification was chosen because it is the most complete and recent indicator of the environmental impact of organizations that is open to the public. This ranking of the most sustainable companies in the world includes companies with gross revenue of at least US\$2 billion, evaluating them based on 12 key performance indicators: energy productivity, GHG productivity, water productivity, waste productivity, capacity for innovation, percentage of tax paid, CEO to average worker salary, pension fund situation, safety performance, employee turnover, leadership diversity, and clean capitalism payment link.

In addition, participating organizations

must disclose at least 75% of the priority sustainability indicators in their respective sectors (Corporate Knights, 2021). Considering the above, the companies selected for the analysis were Adidas, HP, Lenovo, Natura, Samsung, and Unilever, as seen in Table 1. This selection took into consideration the companies in the consumer goods sector with the best positions in the ranking and with activities in the Brazilian market.

Table 1
Classification of the companies selected in the Global 100 ranking

Company	Ranking	Overall score	Country of origin
Natura	42	67.9%	Brazil
HP	50	67.2%	USA
Samsung	60	64%	South Korea
Adidas	76	59.6%	Germany
Lenovo	78	59.3%	China
Unilever	79	59.2%	United Kingdom

Source: Elaborated by the authors based on Corporate Knights (2021).

Instagram® was used to collect green advertisements published by these companies because it was the fastest growing social media platform in 2020, with 1.16 million users in the world, and because it integrates the means to employ marketing strategies by organizations (Souza, 2020). In addition, it ranked fourth in the ranking of companies with the largest number of active users in the world in 2021 (Statista, 2021), and all companies selected to compose this study have an active profile on the platform. The usernames and other profile information for each of the analyzed companies are listed in Table 2.

The selection was made based on the Brazilian profile of each company, and the two most recent ecological advertisements for each brand, along with their respective comments, were collected. We adopted two

advertisements as the standard quantity for analysis because the pages for HP and Lenovo had only two ecological advertisements published on Instagram until the moment of data collection, which happened on June 28, 2021.

Table 2
Profile information for each company on Instagram®

Company	Instagram® username	Number of followers	Number of publications up to June 2021
Adidas	@adidasbrasil	4.3 million	2,014
HP	@hpbrasil	38.4 thousand	196
Lenovo	@lenovobrasil	103 thousand	649
Natura	@naturabrofficial	3.2 million	1,795
Samsung	@samsungbrasil	2.3 million	2,284
Unilever	@unileverbrasil	52.1 thousand	127

Source: Elaborated by the authors based on the profile information for each company.

We selected the 20 first comments after the publication of each advertisement in order to avoid analyzing biased comments made in response to previous comments. In addition, the number of 20 comments in each post was defined in order to reduce the discrepancy in the number of categories analyzed in one advertisement in relation to another, since three advertisements did not reach 20 comments from users (Advertisement 4 – HP; Advertisement 5 – Lenovo; Advertisement 11 – Unilever). Considering the above, there were 212 comments analyzed, which will be detailed in the following section in this article.

We adopted coding in order to analyze the research corpus. This involved collecting screen captures of all advertisements to analyze and screening the comments made in each of them. We then created an Excel spreadsheet containing images of the

advertisements, their respective captions, and the 20 comments selected. At first, we developed three categories with the initial code for each advertisement: (1) supporting arguments (favorable or positive comments), (2) counterarguments (unfavorable or negative comments), and (3) other (comments that were unrelated to the research goal, which will be detailed in the following section of this article).

After this step, we used the basic categories of cognitive response following the theory of Belch and Belch (2014) for the analysis and categorization of the comments: (a) thoughts about the product, (b) thoughts about the message, (c) thoughts about the source, and (d) thoughts about the execution of the advertisement. This process was performed by two of the authors using Microsoft Excel, and then revised by a third author in order to discuss the coding adopted and reach a consensus.

Results Presentation and Discussion

We analyzed two ecological advertisements for each of the six companies in the study, totaling 12 advertisements analyzed. The first step of the analysis was the classification of the comments into three categories (supporting arguments, counterarguments, and other). Afterward, we classified the comments based on the subcategories of the cognitive response approach proposed by Belch and Belch (2014).

For each advertisement, we analyzed the 20 first comments, except for those that did not reach this minimum number of comments from users (advertisements 4, 5 and 11). It is important to note that every advertisement had more than 20 comments (Table 3). However, some of the comments were replies from the

company or from other users based on previous comments. We considered only direct comments related to the advertisement for the analysis.

Using the internet for data collection involves ethical considerations (Soares & Stengel, 2021). Authors such as Boyd and Crawford (2011) question the use of public data from social media websites, and whether there is a need to request permission from users in order to conduct ethical research. Kozinets (2015) recommends checking the information and requesting permission to use it from post owners, as well as maintaining the anonymity of the source.

However, according to Soares and Stengel (2021), the increasing number of internet users and frequency of conducting research in online environments – with millions of followers – make it difficult to follow norms that were established years ago in a different social context. This study uses comments as a way of exemplifying and better understanding the results, but maintains the anonymity of the authors of the social media comments analyzed. In addition, we analyzed the authenticity of the profiles who made the comments in case it was necessary to identify and exclude potentially fake profiles from the analysis. Table 3 shows the main characteristics of each advertisement in order to facilitate the understanding of the posts selected to compose the research corpus.

Table 3
Information on the advertisements analyzed

Advertisement	Date of posting	Number of comments	Format	Company
P1	05/26/2021	88	Photos	Adidas
P2	05/28/2021	119	Video	Adidas
P3	04/22/2021	44	Photos	HP
P4	05/10/2021	40	Photos	HP
P5	04/19/2021	42	Photo	Lenovo
P6	04/22/2021	112	Photos	Lenovo
P7	06/06/2021	138	Video	Natura

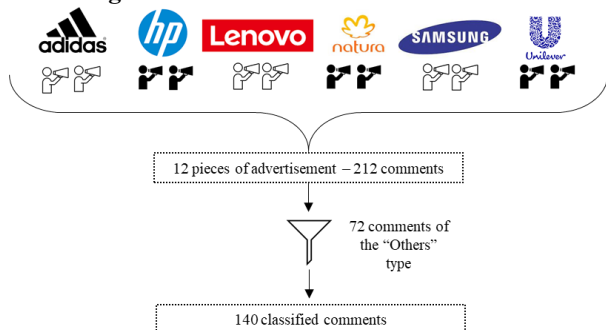
P8	06/08/2021	184	Video	Natura
P9	06/06/2021	157	Video	Samsung
P10	06/14/2021	183	Video	Samsung
P11	06/01/2021	68	Photos	Unilever
P12	06/05/2021	84	Photos	Unilever

Note: ‘P’ followed by a number refers to the code of the advertisement.

There were 212 comments analyzed, of which 72 (34%) were classified as ‘other’ because they had no relevant information for the analysis. A recurring example of comment in this category is complaints about the services provided by the organization that are not related to the topic of advertisement, as represented schematically in Figure 2.

Figure 2

Screening of collected comments



In total, 51 comments, representing 70.8% of the ‘other’ category, were considered ‘complaints’, such as the following examples: “There’s no technical assistance, there’s no support service that works”; “I’d like to know when you’re going to address my **missing shipment**”. “I’m completely **unassisted** in this situation **#TERRIBLESERVICE**”; and “calling your central and getting answered by **unprepared employees in a bad mood that keep stalling me**”.

Of the 140 (66%) remaining comments, 121 (86.4%) were classified as supporting arguments, and 19 (13.6%) as counterarguments. Table 4 shows the classification of the comments based on the cognitive response approach by Belch and

Belch (2014).

Table 4

Classification of comments

Type of thought	Supporting arguments	Counter-arguments
About the product	9	12
About the message	100	5
About the source	11	2
About the execution	1	0
Total	121	19

It is important to emphasize that the ecological advertisements collected on the Instagram® profiles of the organizations present a corporate image of the company that is associated with environmental accountability. None of them focused on advertising a product and its specific characteristics, corroborating the studies of Guimarães (2006), who found that a considerable number of companies use Green Marketing in order to advertise a positive corporate image.

In contrast, Testa et al. (2011) stated that, in order to attract consumers and convince them of the green message conveyed, it is necessary to advertise information related to a product and how it helps reducing environmental impacts.

Supporting Arguments

Most of the arguments (86.4%) were favorable in relation to the ecological advertisements. Figure 3 shows examples of advertisements that achieved a large number of positive comments.

Of the 121 favorable comments, a large portion (100, or 82.6%) was classified as thoughts about the message, as seen in the following examples: “Look how **interesting!** Now we can help **save the planet.**”;

“Congratulations, this is beautiful, it’s respecting the environment. (Omo taking care of people’s futures)” and “Excellent initiative”.

Figure 3
Advertisements with a large amount of supporting arguments



Source: Instagram® profiles of the companies Adidas Brasil, Unilever Brasil and Natura Brasil (2021).

In these cases, the target audience reinforced the message conveyed. The communication of the organization’s values and the advertising of actions that reduce their environmental impact helped raise consumer awareness (Guimarães, 2006; Enoki et al., 2008; Kumar, 2017).

According to Endo and Roque (2017) and Sharma and Jha (2017), individuals tend to accept and consume products from brands that have similar values to their own; at the same time, they reject those that contradict their beliefs and interests and convey a negative image.

Transparency and awareness of environmental accountability processes generated supporting arguments by Instagram® users, even though those were not the main attributes of their products (Guimarães, 2006).

In turn, thoughts about the source and about the product represented 9.1% and 7.4%, respectively, of the supporting arguments. All favorable comments containing thoughts about the source were directed to the organization or to the brand represented in the

advertisement, for instance: “I’m very proud of this company. Congratulations Natura!”; “The best company”; and “I LOOVE Samsung man, perfect as usual, right”.

The comments containing thoughts about the products emphasized quality based on usage experience, such as in the following comment:

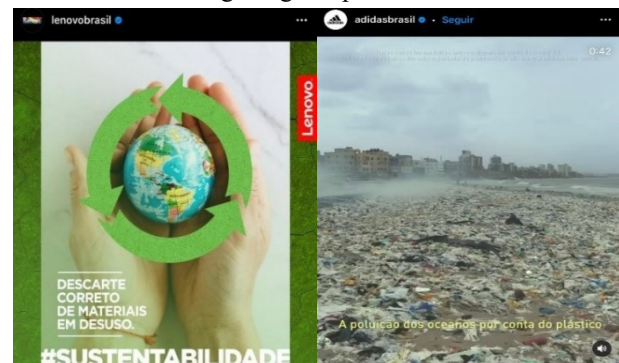
This line is wonderful for strengthening hair!! Every winter my hair starts to fall out more than normal, so I use the patauá shampoo and conditioner and that’s enough, my boyfriend uses the tonic and the finishing oil to make his hair grow faster, it’s also working very well, his hair has become stronger and is growing a lot.

Counter-arguments

A large portion of the counterarguments (63.1%) contained thoughts about the product. Figure 4 shows advertisements indicating the correct way to dispose of unwanted materials.

This type of publication had negative comments regarding the quality of the products, such as in the examples below: “And where can I dispose of your laptop? Since it’s already useless after two months of use”; and “What’s the point of so many cute advertisements if you don’t deliver the products, we clients paid for. It’s absurd”.

Figure 4
Advertisements on garbage disposal



Source: Instagram® profiles of the companies Lenovo Brasil and Adidas Brasil (2021).

Users condemned the promotion of environmental campaigns while these companies do not provide quality service or do not offer an adequate product in their perception. This demonstrates that, in many cases, consumers are not against the environmental strategy in itself, but believe it should only be adopted after companies provide a good quality product at a minimum. In this context, these consumers use the marketing actions (green advertisements) as a way to complain about the products.

Lastly, in comments containing thoughts about the message, most of the counterarguments addressed the adoption of animal testing. Even when organizations publicized an environmental program or other ways to help the environment, they were questioned about this issue: “Sure, but when are you going to stop testing on animals?”; and “What about animal testing? Are animals not part of the environment too?”.

These comments demonstrate that consumers are becoming increasingly more exposed to information regarding the brands, and mistrust green claims when they suspect a brand does not follow all the adequate pillars to help the environment and the animals. This mistrust can be worsened by the greenwashing committed by some companies (Schmuck, Matthes & Naderer, 2018; Pimonenko, Bilan, Horák, Starchenko & Gajda, 2020; Szabo & Webster, 2021).

Final Remarks

Companies have been increasing the use of Green Marketing as an organizational strategy in order to raise consumer awareness of their posture regarding current environmental issues (Silva, Urda, Merlo & Dias, 2015). This study classified comments made in response to ecological advertisements published on Instagram® based on the Cognitive Response Approach (Belch &

Belch, 2014). The goal was to analyze the behavior and perceptions of the target audience regarding Green Marketing strategies adopted by consumer goods companies.

Most of the comments related to ecological advertisements contained supporting arguments (86.4%) and thoughts about the message, indicating that users are aware of the environmental cause promoted by companies and that reinforcing the corporate image is, indeed, the most used strategy in this form of communication (Guimarães, 2006; Wu et al., 2015; Sharma, 2021). In contrast, counter-arguments predominated in thoughts about the products (63.1%), contradicting the statements of Testa et al. (2011) regarding the need for a detailed presentation of green products offered by companies.

However, this study found that counterarguments related to the products happen because they do not meet the customers' expectations. This means that companies promoting environmental actions and reinforcing their corporate image based on ecological advertising must primarily ensure that the product offered has good quality and meets consumer expectations. Otherwise, the green aspect could detract from the consumers' perception of the brand.

This research has some limitations that must be considered. The analyses were conducted with only six companies and based on comments made by users on social media. Therefore, it is not possible to generalize the findings beyond the context of this study, nor to state that all comments were made by consumers of each brand. In addition, the study focused on consumer goods companies due to the similarities in ecological advertisements made by organizations within the same sector, and was based on Corporate Knights, the global ranking that is known and adopted by these companies.

Due to the limited number of ecological

advertising available from these companies, it was necessary to use different formats of advertisements for the analysis. Some advertisements were in video format, some were sequences of pictures, and some were a single picture. In addition, a larger investigation involving more companies from other sectors would be able to clarify whether the perceptions of the target audience regarding ecological advertising on Instagram® correspond to our findings. Future research could seek to compare comments made on Instagram® to comments on other social media, such as Facebook® and Tiktok®, which have users in different age groups.

Although the focus of the analysis were advertisements published by consumer goods companies, the findings refer to companies in different segments, providing a more comprehensive and holistic view of the information collected. Furthermore, the model proposed to analyze the comments could be used by research in other knowledge fields. Lastly, this study could contribute to the development of communication strategies and advertising material related to the environment and sustainability to be used by companies on Instagram®.

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